

## INDIGENOUS ETHNO-MEDICINAL PRACTICES AMONG THE KANDHA AND SANTAL OF ODISHA



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**AMITY HUMANITY FOUNDATION**  
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Bhubaneswar-751003, Odisha.

**REPORT ON**

**INDIGENOUS ETHNO-MEDICINAL PRACTICES  
AMONG THE KANDHA AND SANTAL OF ODISHA**

*Prepared By*

**SCHEDULED CASTES AND SCHEDULED TRIBES  
RESEARCH AND TRAINING INSTITUTE (SCSTRTI)**

UNIT – VIII, CRPF SQUARE, NAYAPALLI  
BHUBANESWAR-751003  
ODISHA

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PLOT NO.: 32, VIP AREA, IRC VILLAGE, NAYAPALLI  
BHUBANESWAR-751015, ODISHA

## *Preface*

Native healing practices center on balancing mind, body, and spirit within the community context. The tribal peoples are custodian of unique traditional knowledge systems and their ambient flora and fauna. The tribal Odisha has some traditional health care practices. Their habitat is very rich in plant biodiversity as well as in ethnic diversity and has great traditional knowledge based on plant resources.

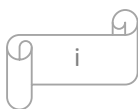
A survey on folk medicinal plants and folk healers of Kandha and Santal tribes of Odisha was conducted in 2013-14 with the technical supports from the Amity Humanity Foundation, Bhubaneswar in four districts like Kandhamal and Rayagada, for the Desia Kandha, Kutia Kandha and Dongria Kandha sections of the Kandha community and Mayurbhanj and Keonjhar for the Santal community. Information was collected based on interview and field studies with local healers within the community. Identification of medicinal plants was done by the indigenous healers. Study was mainly with plants used to cure diseases and to enquire about different healing systems. Their Traditional healing practices focus on benefits to the emotional, spiritual, psychological and cultural aspects of the tribal group.

The method of using therapeutic agents to cure common ailments depends upon their environment which consists of plants, animals and other naturally occurring substances, their distribution and availability. The treatment by using those materials is often assisted by magico-religious activities and mysticism. In the community perceptions worship of nature, appeasement of ancestral spirits and due offerings including sacrifices to other deities are also directed towards restoring individual and community wellbeing which become part of their ethno-medicinal practices.

The use of herbs to treat diseases is almost universal among societies and is often more affordable than purchasing expensive modern pharmaceuticals. The WHO estimates that 80 per cent of the population of some Asian and African countries presently uses herbal medicine for some aspects of primary health care. Both the tribes under study is rich in indigenous health care practices and their healing techniques have not been scientifically validated till date. Thus, the traditional treatment system of our tribal people should be scientifically validated and acknowledged.

We are hopeful for usefulness of the study. The outcome of the study may help the scholars, administrators, planners, social activists and field level workers, those who deal with and work for the development of tribes.

***Director,  
SCSTRTI, Bhubaneswar***



## Acknowledgement

This research was supported by **Ministry of Tribal Affairs, GOI, New Delhi and Sch. Tribes & Sch. Castes Development Department, Government of Odisha**. We extend our sincere thanks to **Dr. H. K. Panda, IAS**, the then Secretary, MOTA, GOI, New Delhi and **Shri Surendra Kumar, IAS**, Commissioner-cum Secretary, Govt. of Odisha, who provided insight and encouragement that greatly assisted the research.

We are extremely thankful to the **Amity Humanity Foundation, Bhubaneswar and its Research Team, headed by Dr. C Satapathy** for extending technical support in data gathering, analysis and preparation of report.

We are grateful to **Prof. (Dr.) K. K. Mohanti**, former Director, SCSTRTI, Bhubaneswar and **Prof.(Dr.) N. Ch. Das** for assistance and suggestions for finalization of research design, tools and technique, methodology and for review and comments that greatly improved the manuscript.

We would also like to show our gratitude to **Prof. (Dr.) P. Panda**, Former Director, SCSTRTI, Bhubaneswar for sharing wisdom in editing this research report.

We thank the Research personnel of SCSTRTI including **Mr. S. C. Mohanty, OSD, Mr. A. K. Gamango, Dy. Director, Mrs. A. Mall, Dy. Director, Mrs. S. Rautray, Asst. Director (R), Ms. K. Pattanaik, Asst. Director (R), Mrs. S. Das, Asst. Director (R), Mr. S. K. Mohapatra, AD (Stat.), Dr. P. Pattanaik, Curator, Mr. M. K. Samantaray, Librarian and Mr. P. C. Das, SA, Publications, SCSTRTI** for sharing views and extending technical support. Also, we thank **Mr. M. P. Dhanee, AD (Admn.), and Mr. K. Acharya, Dealing Assistant, SCSTRTI** for the administrative support and assistance. Our special thanks to **Mr. T. Sahoo, OSD, SCSTRTI**, Nodal Officer of this Research Project, for providing research inputs and coordinating at all stages of the research.

We thank **Mr. Trinath Rao**, OWS, Special Officer, Dongari Kondh Development Agency, Chatikona, Rayagada District and his staff for logistic supports for the field study.

Last but not least, we are immensely grateful to the **Esteemed Persons of Kandha and Santal communities**, who spared their valuable times and shared their traditional wisdom and provided data for the research.

**Director,  
SCSTRTI, Bhubaneswar**



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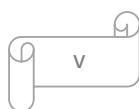
**Ms. S. Panda**

## Acronym

<b>APL</b>	Above Poverty Line
<b>BF</b>	Big Farmer
<b>BPL</b>	Below Poverty Line
<b>ITK</b>	Indigenous Technical Knowledge.
<b>KI</b>	Key Informants
<b>MF</b>	Marginal Farmer
<b>PTG</b>	Particularly Vulnerable Tribal Group
<b>SC</b>	Scheduled Caste
<b>SCSTRTI</b>	Scheduled Castes and Scheduled Tribes Research and Training Institute
<b>SF</b>	Small Farmer
<b>SHG</b>	Self Help Group
<b>ST</b>	Scheduled Tribe
<b>OBC</b>	Other Backward Classes

## GLOSSARY

<b>Ancestor</b>	Anyone or anything from whom a person, animal or plant is descended or evolved
<b>Clan</b>	Group of lineages with common ancestor.
<b>Community</b>	Group of people living in one place or having we feeling and horizontal solidarity.
<b>Ethno</b>	Scientific description of human race and culture with particulars of their origin, language, manners, customs, religion etc.
<b>Genus</b>	Group of animals or plants with common structural characteristics usually containing several species.
<b>Ghost</b>	Disembodied spirit.
<b>Healer</b>	Person doing profession for performing practices to restore the health.
<b>Herb</b>	Non- woody seed bearing plant or plant with leaves, seed or flowers used for medicine etc.
<b>Herbal</b>	It describes herbs & their culinary & medicinal properties.
<b>Indigenous</b>	Native or belonging naturally to a place.
<b>Kandha</b>	A scheduled tribe generally lives in forest & hilly areas concentrated in the Kandhamal and Baud and Rayagada districts of Odisha.
<b>Magico-religious</b>	Treatment through power of apparently usually treatment supper natural force to make things happen.
<b>Malnutrition</b>	Lack of foods necessary for health.
<b>Patient</b>	Unhealthy person under treatment.



<b>Region</b>	Geographical area or division having defined boundaries or characteristics.
<b>Ritual</b>	Religious or Solemn ceremony involving a series of action performed.
<b>Santal</b>	A scheduled tribe concentrated in forest & hilly areas of Mayurbhanj and Keonjhar district of Odisha.
<b>Shrub</b>	Woody plant smaller than tree and usually branched from near ground.
<b>Species</b>	Group of animals or plants within genus.
<b>Therapeutic</b>	Contributing to the cure of diseases.
<b>Treatment</b>	Medicinal care or attention to patients.
<b>Tribe</b>	An endogamous group comprising of exogamous social units / groups tied to one another with kinship relations and usually having common culture and dialect and common profession with or without recognized leader and marital and consanguine ties.

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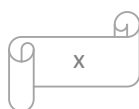


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## EXECUTIVE SUMMARY

**E**thno-Medicine is a subject of study of the traditional medicinal practices adopted by various ethnic groups, and especially by indigenous peoples. The method of using therapeutic agents to cure common ailments depends upon their environment which consists of plants, animals and other naturally occurring substances, their distribution and availability. The treatment by using those materials is often assisted by magico-religious power and mysticism. The ethno-medicinal approach proves useful particularly for the study of indigenous therapeutic agents and for development intervention. Indigenous medical system also lays reasonable focus on understanding of witchcraft, magico-religious beliefs and illness caused by supernatural forces and on specialists, such as folk healers, and shamans. In the community perceptions worship of nature, appeasement of ancestral spirits and due offerings including sacrifices to other spirits and deities are also directed towards restoring individual and community well-being which become part of their ethno-medicinal practices.

The traditional medicinal practice adopted by various ethnic groups was analyzed with regard to preparation of medicine from plants, animals and minerals for the treatment of patients in their locality. The synthesis of study provides wider area for understanding of healers, healing practices and their patients. The study adds information regarding socio-economic status of both healers and patients to understand their lifestyle, environment, faiths, beliefs that depend upon each other to view ethno- medicinal world of tribes more closely.

Under the aegis of MOTA, GOI and ST and SC Development Department, Odisha this research project “Indigenous Ethno Medicinal Practices among the Kandha and Santal tribes of Odisha” was assigned in the year 2013-14 to the Scheduled Caste and Scheduled Tribe Research and Training Institute (SCSTRTI) Bhubaneswar Odisha. The latter conducted this study with technical support from Amity Humanity Foundation, Bhubaneswar.

### Objectives:

The study was designed to investigate into the objectives like, (i) to explore and understand native categories and explanatory models of illness including etiologies, symptoms, causes of sickness and courses of treatments, (ii) to understand and elaborate the meaning of the illness and on the symbolism of the curing rituals performed by the folk healers in indigenous medicinal culture, (iii) to document various therapeutically agents like plants, animals and minerals in treatment, (iv) to assess the overlap between magic and nature that is present in

indigenous cultures of the tribes, and (v) to explore the usefulness of the ITKs for their incorporation in Ayurvedic health treatment.

### **Study Design:**

The study was confined to two tribes namely the Kandha and Santal as per TOR. The study was designed to investigate into variables and contents of the objectives taking healers and patients as sample respondents. The healer for the study was decided as a sample individual practicing traditional treatment with a minimum period of five years in the locality or outside and the patients, who received treatments from the healers for not less than two diseases by the time of interview, comprise the sample respondent for the study.

### **Study Coverage and Data Collection:**

The study covers four districts, out of which two districts like Kandhamal and Rayagada for the Desia, Kutia and Dongria Kandha communities and other two districts such as Mayurbhanj and Keonjhar undertaken for the Santal, respectively. The study was undertaken covering 85 healers, 425 patients, and 16 knowledgeable persons or key informants.

Keeping the requirements of the set objectives separate interview schedules for healers, patients and Knowledgeable Persons were developed pretested and administered in the field for data collection. The views of the healers and the patients were supported by data collected through 10 case studies. The gathered information was analyzed and presented in respect of two tribes namely Kandha and Santals separately.

### **Findings:**

Odisha has the second highest proportion of scheduled caste and tribal people in India. Tribal communities constitute almost half of the state's poor. The literacy rate in these communities is the lowest in the country. The health status of tribes of the state is far from satisfaction. One of the ascribed reasons of ill health of tribes is non-practice of modern health care practices. The tradition bound tribes depend very much on traditional healers. From generation to generation, the traditional healers in tribal areas are treating the patients following herbal and magico-religious treatments. Each tribe follow different methods of treatment while use of plant, animal and mineral composition almost remain same with variation in composition. The two important tribes of Odisha namely, Kandha and Santal are

widely known for their traditional healing practices. In order to have better understanding about the indigenous Ethno-Medicinal Practices the present was conceived and conducted.

### **Kandha Healers& Patients**

For the purpose of study, a total of 45 Kandha (Desia, Kutia and Dangaria) healers along with 225 patients were contacted from 60 villages in 5 blocks. The criteria of choosing healers was minimum of five years of healing experience and that of patients as being treated by the healers for minimum of two diseases. Their opinions are presented separately below.

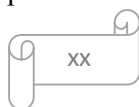
### **Kandha Healers**

The Kandha healers belonged to as much as 13 clans, majority of them being Saraka, Pujari, Jani and Mandal. Most of them are above 31 except 5 who are younger up to 30 years. All healers were male members and most of them (93.33%) were married. Among them 60 % healers were non-literates, 24.44% studied up to primary level, 11.11% up to high school standard.

Majority of them lived in small family with only one or two earning members. All are marginal and small farmer with agriculture as the mainstay. Majority of them belonged to BPL category. The healers, beside treatment were also engaged in preparation of medicine, cultivation of medicinal plants and marketing of medicines to a limited extent.

On the basis of healing practices, 40 % were identified as bone setters, 91.11% herbal practitioners, 40 % magical healers and 17.87% were tantric. The healers practiced multiple types of treatments and were not confined to single one. Parent (father), self-decision and guru (Master healers) were the sources of influence to bring them into the line of traditional healing practices. They learned skill of healing from their fathers and gurus and in few cases by self-effort. Annually, majority of them treated about 100 patients and in few cases number was little more. All the healers treated women patients without any restriction.

The Kandha healers had mentioned about 51 frequently occurring diseases in their localities to which they attended. The most frequently occurring diseases were, bone fracture, piles, epilepsy, ghost attack, snake bite, scorpion bite, dog bite, metal fatigue, chicken pox, cholera, dysentery, extended pain, irregular menstruation of women, cough, malaria, gastritis, mastitis etc. The causes of diseases were, poor health, malnutrition, poor sanitation, physical



weakness, climate change, ghost attack and outside contact. The failure to cure the patients has been reasoned out as late treatment, irregular in taking medicine, God's wish and destiny. The healers suggested rituals for curing of diseases and these were mostly performed in the respective house of the patients and in few cases in the place of the healers and the costs were met by the patients.

Many of the healers groomed their sons in this line of traditional healing because of family tradition, to earn and to keep their name and fame in future. Some were also interested to serve the community by this method. Majority of the healers were satisfied in their healing profession considered on the basis of income, popularity and feelings for community. Many healers held the position of leadership in their community and were consulted in the issues of community functions, religious functions, conflict, marriage settlement and community work.

On receiving of patients for treatment, the healers usually enquired about his contact with suffering persons, work without rest, mental status, physical weakness and displeasure of God due to unethical deeds. The healers identified the diseases by visible symbols on body of the patient, temperature, dieting pattern, urine test and facial expression. After being satisfied by the response of the patients, the healers used to start treatment and gave medicines and suggested ritual measures.

The study has covered individual healers with respect to their treatment methods, magical treatment, use of therapeutically agents, their application etc. Summary of the treatments of individual healers revealed that in total the healers treated about 53 diseases and the major diseases were malaria, dysentery, bone fracture, hydrophobia, metal fatigue, disorder of menstruation, back bone pain etc. The patients of snake bite, dog bite, scorpion bite, chicken pox, jaundice, stomach pain, fever, and head ache and ghost attack were treated by magical treatments. On an average, 50-60 patients of stomach pain, 60-65 head ache 50-60 chicken pox, 40-45 jaundice, 20-25 ghost attach were treated by the healers last year.

The procedure of magical treatments consisted of steps like, treatment before sun rise and after sun set, chanting of mantras, touching of different parts of body, taking of vegetarian food, and intake of herbal medicines. The logics to support magical treatments mentioned were wonders of God and Goddess, magic works where other treatments fail, easy application, less

cost, environment friendly and no need of taking neither medicine nor rest for the patients losing wage for the day. Some healers combined magical treatment with that of herbal ones to obtain quick and better results.

The plant origin therapeutically agents were used by all of them which numbered to 120 and that of animal nine and mineral six. The healers were quite satisfied in their profession and desired to expand the volume with help of financial support particularly for cultivation of medicinal plants in their villages. The fees for treatment were mostly negotiable on the basis of affordability of patients followed by fixed rate in some cases.

### **Patients and their Reaction:**

Opinions were pooled from 225 Kandha patients of 60 villages and five blocks of Kandhamal and Rayagada districts for the study. The respondents are mostly from small families comprising of 21 clans and majority of them belong to Saraka, Mankad, Jani, Santa, Mandal, Hikaka, Danga, Teriki, and Mayura clans. They are in the age group of up to 30 years and 31-50 years. Of the total patients, 65.11% were married and 60.89% males. Most of them (64.00%) are non-literates and only 4 of them had education above high school, while 18.22% studied up to primary level, 8.44% middle school and 7.54% up to high school.

Agriculture is their mainstay followed by wage earning and to very limited extent forest produce. Most of them belonged to marginal and small farmer group. The income level of patient respondents varied between Rs.20, 000 and Rs. 50,000 per year and. Almost all of them were under economic category of BPL.

The preference for traditional healers was based for the reasons likes well proved treatment, confidence of cure, less cost, easy availability of healers, absence of ill effect, close proximity, communicability through own language and compatibility with life style. Quite a good number of patients have the knowledge about the local Kaviraj but they preferred to approach Govt. hospitals for treatment being refused by the local healers. Out of the sample, 33.78% availed allopathic treatment, 1.78% homeopathy, 2.67% Ayurvedic while all of them had availed traditional healing treatment for two or more diseases. They did not restrict themselves to any particular treatment method and tried with combination of treatments till recovery from the disease. The patients as a whole failed to identify diseases themselves and



approached to healers being influenced by their family members for treatment. In very few cases it was their own decision to opt for traditional healing treatment.

According to the patients, to start with the treatment, the healers examine temperature, pulse rate, different parts of body, enquired about their food and sleep, past suffering, frequency of urination. The sample patients mentioned that diseases like fever, dysentery, diarrhea, cough, hair fall, malaria, toothache, ghost attack etc were cured to the maximum extent. The cases of bites (snake, dog, and scorpion) were cured in all cases. The patients were hardly informed about causes of diseases and composition of medicines. The payment most cases was decided through negotiation and in some cases as per fixed rate.

### **Case Studies: Kandha Healers**

The project conducted five case studies taking Kandha healers from the area under investigation. All the healers were found to be practicing herbal as well as magical treatments. Case studies are presented in separate chapter under 'Case Studies. Case Study has covered five Kandha healers namely Shree Shyam Wadaka, Shree Ramchandra Mallick, Shree Rabana Majhi, Shree Rishu Mallick.

With analysis of their personal, social and economic status, special emphasis had given to elaborate the healing treatments that they performed, rituals they suggested to perform, unique experience they had experienced, therapeutically agents they used, aspiration they cherished and future planning for the healing profession along with photographs.

### **Santal Healers**

The sample in case of Santal healers and patients were drawn from 8 blocks and 37 villages. The healers were from 8 important clans but majority of them belong to Murmu and Sore clans. As far as personal profile is concerned, most of the samples were above 31 years of age, male by sex (100%), married and non-literate up to 45%. About 10% of samples were educated above high school while 25% had education up to high school standard and 12.5% up to middle school level. Majority of sample were found to be living in nuclear family system having 3 to 6 members in average with 1 to 2 earning members. The major occupations of the sample were found to be agriculture in addition to healing practices. On possession of land, majority came under small and marginal and BPL category categories. In

case of professional engagement beside treatment, they were also involved in preparation of medicine, cultivation of medicinal plant and marketing of medicine to a limited extent.

The healers were classified into three categories like bone setter, herbal and magical practice. In addition, about 17.5% dealt with malnutrition and 10% with guni (tantra and mantra). Father was the main influencing source to put an individual in to healing profession followed by self-decision and guru (the master healer). They learn healing practices from their parents who were/are also healers, and master (guru) to be in healing profession. Majority of the healers treated 100 patients on an average per year while only 25% treated more than 150 patients. The study enlisted as much as 54 diseases that used to occur throughout the year and the important of them were disorder of menstruation, metal fatigue, snake bite, stomach pain, epilepsy, malaria, jaundice, hydrophobia, skin disease and dysentery.

The causes of diseases as perceived by the healers were poor health, malnutrition, angeriness of ancestral ghost, bad deeds of a person, poor environment, climatic change and many more matters. About 80% of the healers were very much satisfied with their healing profession in the area under study. At times the healer failed to cure the patients and assigned the reasons like irregularity of taking medicine, born with sign of object, late treatment and Gods 'desire.

The fees for treatment of patients varied from healer to healer and location to location. In most cases they had fixed rate or followed the rule of negotiation. For rituals, in majority cases, patients paid the cost and it was performed in their respective houses.

About 50% of the samples groomed their children to become healers because of their family occupation and 20% to serve the tribe while 10% wished to retain their name in future. The healers also held leadership position and were consulted in the matters of social functions, community functions, religious activity, community conflict, sales and purchase of land and development work.

On arrival of the patient, the healers first used to enquire about mental, displeasure of God, contact with suffering patient and inheritance reasons. The enquiries provided them a base to start treatment. Visible physical symbol, urine test, dieting pattern and body temperature are the major criteria that healers did to identify diseases before start of treatment. The steps of treatment were, giving of medicine, enquiring about past medicine and performance of

rituals. Such steps helped them to know the stages of the diseases from where to start treatment.

Individual healers and their healing practices have been dealt separately. The summary table of diseases and treatment done by the Santal healers reveals as many as 54 diseases that were identified and treated. Out of these diseases, metal fatigue, epilepsy, piles, hydrophobia, dysentery, jaundice, malaria, stomach pain, disorder of menstruation and snake bite were frequent in the area under study. The important diseases under magical treatment were found to be, snake bite, wasp bite, scorpion bite, dog bite, hypnotism, evil eye on others and ghost attack.

The majority of sample healers used a numbers of plants, herbs, shrubs to prepare medicine to treat the diseases. The study listed as much as 150 plants in the study area which were used as basic materials in preparation of herbal medicine for one disease and other. The healers collect medicinal plants from nearby forest, process them and preserve for treatment. All the healers were devotee of one God or Goddess of their locality where they used to perform rituals and offer hen to satisfy God or Goddess for early cure of patients and success in their endeavor.

The ITK's are used by the healers for the disease of skin, piles, dysentery, jaundice, metal fatigue, extended pain, diabetics and other diseases. Not only plant but also animal and mineral origin therapeutically agents were used by the healers to cure the patient. The study listed therapeutically agents of animal like cow, guana, swan, bat, turtle and pigeon etc. and that of metal like copper, silver and others. The plants used for medicinal purpose as mentioned by the healers were as much as about 100 in number. The animal and mineral origin agents were mentioned to be 21 and 8 respectively.

All the healers under study have no restriction to treat women patients. The women and children related diseases like, disorder of menstruation, breast disease, skin disease, fits and fever were also treated by the tribal healers.

For magico-religious treatment, no uniform ritual procedure was followed but was performed before sunrise with chanting of mantra, use of different flowers, touching of different parts of body and distribution of Prasad and scarification of hen. The logic in support of magical treatment were mentioned to be easy and quick recovery, less cost, no need of taking medicine nor rest, without any complication or side effect and because of inability of herbal

medicines to cure disease. Many of the healers combined magical and herbal treatments to treat the patients for quick result.

### **Patients and their Reaction:**

Among the sample of 200 Santal patients belonging to as many as 11 clans maximum were from Hansda, Tudu Baske, Marandi and Murmu clans. The sample mostly lived in extended family system with average family size of 3-5 members and one or two earning members. Majority of the sample were within the age group of up to 30 and 31 to 50 years of age. The sample consisted of 70% male and 30% female. 84% of them were married and 42% were found to be non-literates, 33% studied up to high school, 12.50% up to middle school, 7.5% up to primary level and rest 5% had college education. Agriculture is their mainstay. Majority of them were marginal and small farmers with income below Rs. 50,000/-. Majority of them came under BPL category.

So far as confidence on types of treatments received by the sample, their dependency on traditional healing practices topped the list followed by Ayurvedic, allopathic and homeopathic treatment. The patients mostly approached the healers of their own or influenced by parents. They opined that at the beginning of the treatment the healers usually examine body temperature, pulse rate and enquired about food, sleep, past suffering, ghost fear etc. They on whole mentioned of 32 important diseases being treated by the healers and the maximum were being tooth pain, bone fracture, epilepsy, burning, snake bite, malaria, sever pain, stomach pain, nasal bleeding and others. In most cases the patients were cured. The payment of fees for treatment in maximum cases was fixed by the healers and in few cases payment was made as per fixed rate or through negotiation. All the patients had been treated by the local healers for minimum of two diseases or more. The reasons of preference for local leaders were expressed to be, less cost, easy approachability, compatible with life style, without any ill effects, better result, proximity of healers, and free interaction in Santali language. The patients admitted that local healers were more effective in treatment of snake bite, dog bite, scorpion bite, ghost attack and chicken pox. In their opinion where all types of treatments fail magical treatment succeeds.

Majority of the sample were aware of existence of Kaviraj of the area and about 44.50% of them had approached Govt. health centres for treatment.

### Knowledgeable Persons and their Opinion:

Opinion of as much as 16 knowledgeable persons or key informants of the survey localities were gathered to assess their response about the traditional healers and their healing practices. The investigation was designed on the objectives like, knowing of their socio-cultural background, leadership traits, acquaintance with traditional healing practices, magical treatments and above all the healers and their healing practice.

Majority of the Knowledgeable Persons (KP) were in age group of 30-50 years, with enough experience in dealing with tribes, well acquaintance with people of the locality. All the KPs were literates and studied up to middle and high school level. Almost all of them were from ST communities and very few from OBC and general cast. They were in farming occupation and few of them had small business. They possessed leadership traits and were consulted in the matter of treatment, social function, and cultural activities, development programs, family conflict, political matter and business respectively.

They opined that majority of the patients in the locality used to be cured by the local healers. Also in a few critical cases the healers were unable cure the patients suffering from various diseases. However, the people have full confidence on the healers and traditional methods of treatment.

According to the KPs the diseases like (i) Cough and cold (ii) Snake bite (iii) Dog bite (iv) Bone fracture (v) Scorpion bites (vi) Non-milk secretion of lactating mother (vii) Birth control (viii) Spirit affected patients (ix) Blood vomiting after being frightened (x) Smooth delivery (xi) Period disorder of women (xii) Prevention of miscarriage (xiii) Abortion (xiv) Night blindness (xv) High fever of children (xvi) Chicken pox (xviii) Hydrophobia and (xviii) Planet effect (Saturn, *graha dosh*) were fully cured in the area of survey. Further accident cases and bone fracture were cured to full satisfaction of the patients

To cure these diseases the healers adopted both herbal and magical treatment as supplement to each other. The respondents revealed that those who opted for herbal healing treatment were influenced by elder healers, father, or by self-decision in some cases. In case of bone setting, they practiced to remain with guru see the operation and learn. They are required to go to forest many times, identify plants, locate location, season of growth and collect root,

leaves, stems, flowers and even whole plants for preparation of medicines. In case of animal or insect bite, they apply herbal medicines and recite mantras. These mantras are very secret and they never disclose to anybody except those who became their disciples.

In practicing magical treatments the healers offered themselves to God and Goddess. The healers regularly worshipped God and Goddess and offered fruits and flowers without deviation before taking food till their patients were out of danger. Some healers spent 7 or 14 or 21 days in temple with vegetarian meal once per day and devoted full time in prayer and worshipping. Some expressed to have received instructions in dream to undertake magical treatment. Sometimes, they used to go to local cremation ground at night, sit in meditation and chant the mantras. Some claimed to have interaction with the spirit. All tribes believed about existence of spirits and their evil deeds. After reciting mantras for 108 times, they used to return from cremation ground and declared to have controlled the spirit. According to them the curability could be faster with Animal sacrifice like poultry bird or goat (black) or sheep whatever available within their reach. Also the tribes and their healers strongly believed in rituals Treatment. They performed it with sincerity as far as possible. In magical treatment rituals are must while in herbal was optional. But in case of combination of herbal and magical treatment the rituals were bound to be followed. The diseases for which rituals were performed are, eye disease, chicken pox, cut wound, ghost attack, planet effect, evil eye, animal bite (snake, dog, scorpion etc.) and hydrophobia. They believed that the magical and herbal treatments of the healers were curing thousands of tribes since time of immemorial.

### **Adoptability and Applicability:**

The study identified the adoptability and acceptability of ITKs among the Kandha and Santal tribes and suggested the scope of such knowledge used by the healers as follows.

The methods applied by the tribal healers in diagnosis of diseases is an important dimension for acceptability of practices. The treatment of bone fracture, magical treatment, recitation of mantras in curing patients are the interesting part that need detail investigation and packaging for wider adoptability.

The preservation of ITK of tribal healers needs elaborate recording of practices at different locations in different seasons. The composition of medicines from different materials such as

plants, animals and minerals origin and used by the healers by both communities needs thorough investigation, analysis in terms of cause and effect relationship for wider adoptability.

The disease related to women like irregular menstruation, milk secretion, mastoids, easy delivery, abortion etc. are effectively performed by the traditional healers. These valuable practices are cost effective and have wider scope for acceptability. The need for separate intensive and systematic study is underlined.

The curing of dog bite, snake bite, scorpion bite patients, methods adopted in magic-religious treatment has been the special interests of the anthropologists. This part of treatment should find special place in the research domain of anthropologists.

The restoration and reintegration of an individual patient into the community life has been ritually initiated by the healer after the patient is duly considered recovered from ailment. The unequal reciprocity between the healer and the patients family in form of service and gifts respectively are being rationalized and cherished in community forum. The healer periodically appeases the supernatural entities to ward-off the evils and acquire blessings in favor of life and property of the community and to keep the community members safe. This reestablishes the social status of the healer. However, the village communities nearer to urban centers revealed the decline status of the healers compared to the healers of relatively inaccessible areas. This could be due to the fact that the modern health services are distanced and the healers have plenty of medicinal resources in bio-sphere of inaccessible villages where the ethno-medicinal knowledge and techniques still in vogue.

More analytical studies may be conducted for full exploration of these hidden treasures for benefits of common people in general and tribes in particular.

### **Way Forward:**

As departure from the study, the following way forward are suggested.

- i. Efforts should be made development of herbarium through participation of tribal healers to preserve roots, stems, leafs, flowers, fruits etc. of herbal- medicinal plants with proper labeling for use in herbal treatment as well as for facilitating further research.
- ii. Steps should be taken to find out rationally of herbal treatment through lab analysis methods to know the chemical composition of plants, shrubs, herbs used by tribal

healers. The ingredients of animals and mineral origin used in the herbal treatment also need to be chemically analyzed.

- iii. The study harvests its strength from case studies on healing practices through participant observations method on data collection. Thus it is felt for making more of such case studies
- iv. Impact assessment study on dose, time of applications, interval and methods of intake, improvement in health status of the patients etc. in herbal treatments needs standardization for benefits of patients and common man.
- v. Magico-religious treatment curing in bite of snake, scorpion, dog etc. need details assessment in terms of effectiveness of ethno medicine and their utilitarian value. The *mantras* recited at the time of curing the patients need to be translated into commonly used language that bear the testimony of the culture of identification, process of diagnosis, phases and duration of treatment and process of reintegration of ailed into community life as a productive person.
- vi. The study advises for collection more of case studies of diverse nature on healing practices through observation method and FGD method of data collection. This would provide deeper understanding of the culture of healing practices and the culture of balancing strategies adopted by the healers on behalf of the community. This would provide platform for the development intervention for health and sanitary management in local areas. Thus, the community and local specific health measures can be thought of.
- vii. The most interesting part of the study is diagnosis of diseases. The methods used by the healers like urine test, facial expression, counting pulse rate observing the change of voice, recoding the recent movement history of the patient prior to illness etc. need thorough investigation and documentation.
- viii. The associated healing information and belief system with facts would provide scope to understand the barriers to and stimulants of development intervention. Further to impart the effective health management training it becomes essential to understand the role of the healers' community health. The trained healers can be taken to confidence for minor ailments and can also be considered as a preventive human resource agent. The elite healer can act as a facilitator for community well-being.
- ix. To adopt holistic approach in order to understand the ethno-medicinal knowledge and technique of the tribal communities in community specific terms of a micro ecology,



it is high time to document traditional healers' knowledge system before it is too late.

- x. For improving the health status of the tribal population an effective research team should be formed to study their health hazards and socio-cultural problems which are directly or indirectly linked with their health problems. The need for well-established on health related ITKs library at district and state level is well understood.
- xi. The impact of climate change needs long time observation in respect of occurrence of disease, nutrition intake and availability of medicinal plants specifically of seasonal nature. For seasonal ailments there are seasonal medicines and nature is the big inventory of it.
- xii. Study suggests to organize state level seminar involving healers for exchange of ideas and validating composition of ethno medicines for wider use.



# CHAPTER I

## INTRODUCTION

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# INTRODUCTION

Survival of mankind has been subjected to nature made and as well as man made factors. It is a fact that as one examines population of the entire globe he can observe that most of them still can not take for granted its ability to meet basic needs for food, water, shelter and other factors essential for survival. With the rise of health science often we lament for the reason of differential survival and threat to survival. Thus, in many parts of developing nations pervasive lack of resources and presence of diseases constitute an exceedingly heavy burden. It is more so among the tribal communities inhabiting the hills and forests in developing nations like ours where magico-religious based ethno-medicinal practices lead over other practices and traditional healers are the only hopes. It has also been reported by the shamans dictateterms over community as he is considered to be the costodian of the community well-being.

In contemporary world of health management, the medicinal practices are reported to have followed certain kinds of medical pluralism among almost all cultural groups. With the rise of western medical sciences, the *hitherto* culturally defined age-old traditional treatment practices of various ethnic groups remained marginally altered. As of today, ethno-medicine has assumed a significant role in the contextual frame of pluralism of diagnosis, healing practices and cure. Among tribal communities the process of diagnosis of health disorder encompasses the socio-cltural aspects. Any biosocial crisis has its own diagnostic value. Thus, the diagnosed entity is culturally defined with its uniqueness, both by the health seekers and the health providers. Among indigenous communities the health seekers –the patients and the health providers - the healers, although share common belief system, the concerned community members treat their providers as inventory of knowledge and thus accept the advice of the healers unquestionably. The cultural meaning of health disorder and its causes are normally attributed to the metaphysical phenomena identified by the healers from patient's symptoms and associated manifestations.

Functionalists connote the health in good condition as eunomia that differentiate the distinguishing condition of disorder, social ill health as dysnomia (Radcliffe-Brown1968:182). Of late, with the growth of science and rationality about the biosocial

dimension of health disorder, the field scientists started correlating the aspects like social demography, social epidemiology, and culture of cleanliness, culture of hygiene, ageing and etho-psychiatry with the health disorder. Like many transitional communities of third world nations, like India, the tribes by and large are treated as indigenous communities. Thus, the traditions of ethno-medicinal practices current among them and the changes that arise in the venerable practices due to external influence and internal process of accommodation obviously refer to entire gamut of medical anthropology. The tribal communities perceive their biological ailment as well as the associated socio-cultural dimensions of health as unique. These are distinctly different from the modern physician's process of diagnosis and treatment. Contrast to the modern doctors, the traditional healers treat the body in terms of health and illness being conditioned by wide range of tangible and intangible factors. The tangible factors are the product of local environment such as living and non living entities such as plants and animal products, earth, salt, charcoal etc and the intangibles / metaphysical entities that include malevolent and benevolent spirits being identified from biocultural contents of micro-ecology of the concerned community.

Thus, medical anthropology as an emerging branch of anthropology focuses on the sentient body, the native experiences and perception and sound explanation of health and ailment. Through cross-cultural comparison of ground realities, the medical anthropologists attempt to generate theoretical arguments on the world of healing and the associated developing agencies who try to set *modus operandi* for the implementation of planned strategies. While doing so it is expected that we need not ignore the emic and etic view points because virtue lies not in their explanatory but in their exploratory values (Fortes 1945).

Earlier studies reveal that concepts and etiology of disease and illness and the system of medical care and treatment among tribal communities are defined within their socio-cultural context. With a view to comprehend the health seeking-behavior and community based traditional remedies, it is important to investigate the processes - the way tribal communities recognize the conditions as illness and adopt strategies to cease increasing bodily imbalance before action taken to neutralize and then overcome it. Varieties of illness among the tribal communities are the constructs of belief and knowledge, which vary with the time and the space. The studies on indigenous ethno-medicinal practices are reported to have originated primarily on two principles: first, the belief about the nature of health, the cause of illness,

the remedies and the curing techniques used by healers and the second; the traditions adopted by the tribals to deal with sickness and maintenance of the order of good health.

The discussion on issues of ethnomedicinal practices and the role of healers tries to comprehend the concept in the context of changing tribal society, indigenous culture and ethno-medical system as a sub set of the socio-cultural system. Further, it tries to meet the requirement of theoretical as well as operational dimension of ethno medicinal practices *in situ*. Thus, the operational definition of the concepts like ethnic, tribe, culture, environments, morbidity and traditional medicines have become essential to explain the health and hygiene seeking behaviour of the tribes of Odisha. To substantiate, a few case studies among the Kandha and Santal have been taken. .

### **1.1. Concepts: Ethnic, tribe, culture, environment, morbidity, health and hygiene**

The project “Indigenous Ethno-Medicinal practices among the Kandha and the Santal of Odisha” is a study of multi-dimensional in nature and is of wider interest. India houses around 630 scheduled tribes spread over all the states in the country. Odisha as a part of it, houses only 62 scheduled tribes recognized by the union government. The topic requires a deep understanding of native mind-set to describe their Ethno-Medicinal practices. For any social science research some operational definitions on concepts are required in order to make the readers to have a clear understanding.

#### **Ethnic:**

Ethnic refers to unique genetic and acquired markers of a group. It includes biological and cultural meaning to identify a group as a distinct group from among the societies in the contemporary world. It is defined as relating to a population subgroup (within a larger or dominant national or cultural group) with a common national or cultural tradition. The synonyms are racial, race related, ethnological and genetic inherited. The ethnic people use plant extract, decoction and powder obtained from different plant parts like roots, stem, leaves, flower, and fruits to cure such ailments / diseases. The traditional ethno-botanical knowledge plays an important role in primary healthcare needs of tribal people. People preferred to consult the healers to diagnose their problem, despite of knowing some medicinal plants themselves.

### **Tribe:**

It is one of the largest endogamous groups - a unit of sociopolitical organization consisting of a number of clans or other groups who share a common ancestry and culture. Among them there exist a social division based on traditional norms consisting of families or communities linked by social, economic, religious, or kin ties and dialect. A tribe may have a socially recognized leader whose position is hereditary and who acts as insignia of the group. It can also be stated as any aggregate of people united by ties of descent from a common ancestor, customs and tradition etc.

### **Culture:**

Culture is the man made part of his environment .It is some totality of way of life .It is supra individual in nature. It is a product of group transactions for centuries that made man a human. Historically an indigenous community is a culture bearing group and a retainer of its self created knowledge system. The healer in a tribal community is not only an inventory of knowledge including medicinal knowledge system. Since healer is the product of his culture, his knowledge is an integral part of the community.

As we quote the definition 'Culture consists of patterns, explicit and implicit, of and for behaviour acquired and transmitted by symbols constituting the distinctive achievements of human groups, including their embodiments in artifacts, the essential core of culture consists of traditional (i.e. historically derived and selected) ideas and especially their attached values; culture system may, on the one hand, be considered as products of action, and on the other as conditioning elements of further action' (Kroeber and Kluckhohn 1952 : 161). For anthropologists culture is the integrated system of learned behaviour patterns which are characteristic of the members of a society and which are not the result of biological inheritance. Culture is not genetically predetermined; it is non-instinctive. It is the result of social invention and is transmitted, managed and maintained solely through communication and learning.

### **Environment:**

It is the sum total of all surroundings of a living organism, including natural forces and other living things which provide conditions for development and growth as well as of danger and damage.

### **Morbidity/Illness:**

The concept of illness among the tribe is defined as a short term phenomenon and a body conditions that require rest and food supplement greater than the usual intake and disease as a short and long term phenomenon which either impairs a part of the human body as the whole

The World Health Organization has estimated that 80% of population of the developing countries relies on herbal medicines for treatment. In India about 10,000 plant species are used medicinally and 7500 species of plants used by ethnic communities.

body to perform its usual chores and requires the administration of medicines and fortification of mind or soul with the unseen forces the spirits, god and goddess etc. The demarcation line between ill health and disease is being very thin. The definition of 'Morbidity Rate' refers to 'the frequency with which a disease appears in a population. In western references the morbidity rates are used in actuarial professions, such as health insurance, life insurance and long-term care insurance, to determine the correct premiums to charge to customers'.

### **Ethno-medicine:**

Ethno-medicine is the healing component of traditional knowledge system and became essential for the community. Ethno-medicine refers to beliefs and practices relating to diseases which are the products of indigenous cultural development and are not explicatory derived from the conceptual framework of modern medicine. It's a sub-field of medical anthropology and deals with traditional medicine, not only those have written sources but especially those, whose knowledge and practices have been originally transferred over centuries.

Ethno-medicine focuses on the nature and illness as it is conceived by the natives, their own method and criteria for classifying disease, the cure and cause, types of therapists and healers who seek to alleviate illness and their skills and social roles, preventive measures, the relationship between medicine and religion, cultural aspects of medicine.

In 1968 the term ethno-medicine was applied by Hughes (1968) which refers to "those beliefs and practices are not relating to disease which are the product of indigenous cultural development derived from the conceptual framework of modern medicine". It embodies the

natives' perception of health, disease, illness or sickness, their methods and criteria for classifying disease.

In a similar view Fabrega (1975) opined that the scope and preview of ethno-medicine is vast and challenging as it deals not only with an illness- its genesis, mechanism, descriptive features, treatment and resolution but also with how members of different cultures think about disease and organise themselves towards medical treatment and social organisation of treatment.

According to World Health Organization (2002:7) Traditional medicine refers to health practices, approaches, knowledge and beliefs incorporating plant, animal and mineral based medicines, spiritual therapies, manual techniques and exercises, applied singularly or in combination to treat, diagnose and prevent illnesses or maintain well-being. There are different names or synonyms of Traditional medicine. They are like Alternative medicine, Complementary medicine, Natural medicine, Herbal medicine, un-conventional medicine, Indigenous medicine, Folk medicine, Ethno medicine, etc.

The tribals inherit rich traditional knowledge about the medicinal uses of flora investigated and apply this knowledge for making crude phytomedicines to cure infections, a number of ailments ranging from simple cold to other complicated diseases. Traditional knowledge forms the basis for origin of not only alternative medicine but also paved way to evolution of a gamut of new and novel modern medicines. As for example, Similipal Biosphere Reserve (SBR) in Mayurbhanj district of Orissa is the most luxuriant forest and rich in medicinal plant resources.

### **Health and hygiene:**

Both are condition or practice conducive to the preservation of health and cleanliness. The science that deals with the promotion and preservation of health is termed as health package, also called hygienic –the conditions and practices that serve to promote or preserve health, as those followed for personal hygiene. Hygiene is a set of practices performed for the preservation of health. While in modern medical sciences there is a set of standards of hygiene recommended for different situations, what is considered hygienic or not can vary between different cultures, genders and groups. Some regular hygienic practices may be considered good habits by a society while the neglect of hygiene can be considered disgusting, disrespectful or even threatening. Sanitation involves the hygienic disposal and



treatment by the civic authority of potentially unhealthy human waste, such as sewerage and drainage.

India houses ST population to the extent of 8.2% of the total population of India. About a half of the autochthonous people of the world with about 635 tribal groups and subgroups including 75 Particularly Vulnerable Tribal Groups (PVTGs) live in India. The state of Odisha occupies a unique position in the tribal map of India having 62 scheduled Tribes including 13 PVTGs. According to 2011 Census the tribal population Odisha is 8,145,081, which constitutes 22.1% of the state's ST population and 9.7% of the ST population of country. The tribal concentrated districts of Odisha are Malkangiri (57.4%), Mayurbhanja (56.6%), Raygada (55.8%), Sundargarh (50.19%) and Nabarangapur (55%). There is a paucity of comprehensive health research among the tribal population of India. Most of the studies are isolated and fragmentary in nature. There is an urgent need for initiating the area specific, tribe specific, action oriented health research in consonance with the felt needs of the tribal communities. The research should be mission oriented, having practical applications and directed towards improving the quality of life of tribal people. The health scenario of Tribe of Odisha presents a kaleidoscopic mosaic of various communicable and non communicable diseases in consonance with socio-economic developments in the state. The wide spread poverty, illiteracy, malnutrition, absence of safe drinking water and poor sanitary conditions, poor maternal and child health services, ineffective coverage of national health and nutritional services, etc. are the major contributing factors for dismal health in tribal communities of Odisha.

There is a heavy burden of communicable, non communicable and silent killer genetic diseases prevalent in tribal communities of the state. Many of the infectious and parasitic diseases can be prevented with timely intervention, health awareness and information, education and communication (IEC) based skilled activities. In spite of the tremendous advancement in the field of preventive and curative medicine, the health care delivery services in tribal communities especially in Odisha are still poor and need amelioration and strengthening with sustenance on the guidelines suggested to achieve the targeted goals of health for all in India. Unless locality specific, tribe specific and need-based health care delivery system is evolved, which is appropriate, acceptable, accessible and affordable, the goal of health for all would remain a Utopian dream.

Health beliefs are the products of specific cultural, historical and political context and medical anthropology seeks to understand particular notions of ill health, curing, help seeking and sickness management within these larger knowledge systems.

### **Approaches in medical anthropology:**

Medical anthropology examines the interaction between culture and biology what is popularly called as biological approach. How people through culture construct illness and find meaning in it is the essence of interactive approach. The critical approach of medical anthropology investigates how social conditions especially politico-economic forces shape the experience of health and sickness. Thus, broadly there are three approaches.

Ethnologists and cultural / medical anthropologists agree that the understanding of sickness and attempts of healing are dependent on cultural understanding of people within a historical context, as well as social, political, economic, ecological conditions and also the environment they inhabit (Hah1995)./

### **1.2. Historical perspectives of traditional medicinal practices by the tribal communities with respect to cultural diversity**

Ayurveda, the earliest concepts of health care in Indian sub-continent were found as ‘sermons in stones’. The first written word in India’s healing tradition is found in Vedas which have numerous references to diseases, medicinal herbs and therapeutic rituals. Medicinal references are found mainly in the Atharvaveda (AV) and to a much smaller extent, in the Rigveda (RV). The latter is a religious text which contains mythological stories illustrating the healing acts of Gods. There is mention of number of diseases, good health, medicinal herbs, fertility, anatomy of the human body and therapeutic rituals. There is also mention about external and internal diseases. The external category accounted for broken limbs, wounds and blood loss from different locations of the body. However, the Vedic attitude to diseases was influenced by the belief that they were punishments awarded by incensed Gods. The healing ritual was conducted by a physician to recite appropriate chants, performed rituals and applied herbs as talisman or as oral preparations. Curative herbs were often assigned divine status and reverence for plant life was enjoined. In the Vedic tradition, symptoms and diseases were also believed to be capable of being transferred. The tribes also have similar beliefs.

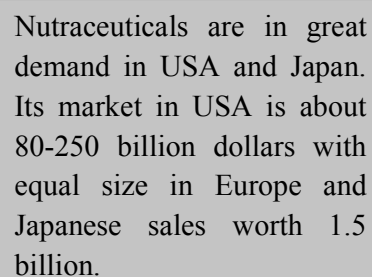
At present there is discussion about Ayurvedic and tribal medicine at different forums to find out important methods of healing for mankind. Ayurveda, the ancient medical system of India, which flourished traditionally is often translated as the "science of life." It is an *instruction* for healthy and disease free life. In Ayurvedic system, medicinal treatment based on holistic approaches, there is a dominance of the three dosha (*tridosha*) systems: vata pitta and kapha and panchmahabhutas. In ancient period plants have symbolic significance as well as specific therapeutic attributes. The therapeutic attributes were based on closed observation of nature and interpretation of those observations in terms of relatively simple systems of categorization and correlations. This ancient period extended until the development of the investigative techniques associated with modern science. The next period was that of early science, which affected India and China, as well as most of the world, during the 19<sup>th</sup> century and the beginning of the 20<sup>th</sup> century. During this period crude analysis of plants could be carried out, the idea of reporting specific medical cases or collecting many case histories of similar nature arose, and herbal medicines were described in terms of botanical names, Chemical constituents, and reported the use for diseases defined by modern medicine. The third period, which we are now working within, involves the development of advanced scientific analysis, with the ability to find individual chemical constituents, test them in sophisticated 'laboratory experiments, and then attempt the difficult task of validating traditional claims by clinical trials. In Tribal medicinal system, tribal people use several herbs for treatment of various diseases. The Tribal medicinal system is differ than Ayurvedic system are due to, lack of education, and lack of good awareness about medicinal plants makes consumers easy victims of marketing exploitation and herbal myths. Another recent error is due to lack of knowledge about photochemistry (Dwivedi and etal. 2011).

Nature always stands as a golden mark to exemplify the outstanding phenomena of symbiosis. In the western world, as the people are becoming aware of the potency and side effect of synthetic drugs, there is an increasing interest in the natural product remedies with a basic approach towards the nature. Throughout the history of mankind, many infectious diseases have been treated with herbals. Herbal medicines are currently in demand and their popularity is increasing day by day. About 500 plants with medicinal use are mentioned in ancient literature and around 800 plants have been used in indigenous systems of medicine. A number of scientific investigations have highlighted the importance and the contribution of many-plant families i.e. Asteraceae, Liliaceae, Apocynaceae, Solanaceae, Caesalpinaceae, Rutaceae, Piperaceae, Sapotaceae used as medicinal plants. In India around 20,000 medicinal

plant species have been recorded recently but more than 500 traditional communities use about 800 plant species for curing different diseases. Medicinal plants play a vital role for the development of new drugs. The bioactive extract should be standardized on the basis of active compound. The bioactive extract should undergo safety studies. Almost, 70per cent modern medicines in India are derived from natural products. Medicinal plants play a central role not only as traditional medicines but also as trade commodities, meeting the demand of distant markets. India has a very small share (1.6per cent) of this ever-growing global market. To compete with the growing market, there is urgency to expeditiously utilize and scientifically validate more medicinally useful plants (Dwivedi and etal. 2011).

**Medicinal Plant:** Herbal medicine include herbs, herbal materials, herbal preparations and finished herbal products that contain as active ingredients parts of plants, or other plant materials, or combinations. Traditional use of herbal medicines refers to the long historical use of these medicines. Their use is well established and widely acknowledged to be safe and effective, and may be accepted bynational authorities.

The World Health organization (WHO) has defined herbal medicines as finished labeled medicinal products that contain as active ingredients aerial or underground parts of plants or other plant material or combination there on whether in the crude state or as plant preparations. The same WHO document adds that medicines containing plant material combined with chemically defined active substances, including chemically defined, isolated constituents of plants, are not considered to be herbal medicines. The goal of health for all cannot be achieved without herbalmedicines.



Nutraceuticals are in great demand in USA and Japan. Its market in USA is about 80-250 billion dollars with equal size in Europe and Japanese sales worth 1.5 billion.

Herbal medicinal, as defined by WHO, can be classified into three categories as under.

- i) Phytomedicines or photo phytopharmaceuticals sold as over the counter (OTC) products in modern dosage forms as tablets capsules and liKuids for oral use.
- ii) Dietary supplements containing herbal products, also called nutraceuticals available in modern dosage forms. These two types of herbal medicines are used by consumers in developed countries and those in urban areas of developing countries. These herbal medicines are gradually occupying increasing shelve space in modern pharmacies.

iii) Herbal medicines consisting of crude, semi-processed or processed medicinal plants. These have a vital place in primary health care in developing countries.

In India, the Similipal forest area of Mayurbhanj district in Odisha is dominated by a number of tribes such as Kol, Santal, Bhumij, Mankidias and Khadias who depend on the forest for their food to medicine. It is reported that ethno medicinal uses of 32 potential medicinal plants belong to 24 families of medicinal plants used for ailments of various diseases like leucorrhoea, spermatorrhea, piles, sore throat, rheumatism, elephantiasis etc. by Kol tribe living in some villages situated in and around Similipal Biosphere Reserve.

In order to have a clear concept of medicinal plants the under noted terms pertaining to it must be taken into consideration.

### **Herbal Medicine Scenario in India**

The turnover of herbal medicines in India over the counter products, ethical and classical formulations and home remedies of AYURVEDA, UNANI and SIDHA system of medicines is about a billion dollar with a meager export of about \$80 billion. Three of the 10 most widely selling herbal medicines in the developed countries, namely preparations of *Allium sativum*, *Aloe barbadensis* and *panax* species are available in India.

About 1500 Plants with medicinal uses are mentioned in ancient texts and around 800 plants have been used in traditional medicine with or without standardization. In 1989 WHO developed standardization principles were ratified by the 6th International conference of Drug Regulatory Authorities held at Ottawa. The salient features of W.H.O guidelines are:

1. Qualities assessment: Crude plant material, plant preparation; finished product. Stability self life.
2. Safety assessment: Documentation safety based on experience or/and Toxicology Studies.
3. Assessment of efficacy: Documented evidence of traditional use or/and activity determination (Animals, human).

### **Tribal System of Treatment**

The tribal society has largely depended upon traditional medicine, mainly based on medicinal herbs commonly found in the area for treatment of disease generally it in the area and for melting contingencies such as snake and insect bites.

Tribal system of treatment is a strange mixture of magic and medicine, of faith in super natural elements and in medicinal herbs. With spread of education and literacy and with greater facilities for availing modern medical treatment, the belief that diseases are caused by hostile spirit angered by violation of some taboos is no longer dominant in the mind of the tribal that used to have in the past. But this is not true of their faith in curative properties of herbs which is still unshaken. The first choice of tribal people is if the herbs are available and the medicine man is around, to get them treated in the indigenous way.

The most common diseases are malaria, cold and cough, fever, typhoid, diarrhoea and dysentery. Diseases related to abdominal disorders like diarrhoea and dysentery are also very common. The sufferings from these in most cases continue up to one week. By and large, in treatment of most common diseases predominantly allopathic medicines are used followed by herbal medicines.

One of the important reasons for prevalence of intestinal diseases at remote rural areas is the lack of safe drinking water. The situation is likely to improve with the installation of hand pumps. But where this facility is not available, people have to be depending upon unasked, unhygienic sources like river water wells, ditches and nallahs and therefore incidence of such disorders is high. Diseases caused by malnutrition such as anemia and night blindness are also common. So also are cases of liver disorders such as jaundice, perhaps caused by addition to drinks.

Understanding the magnitude of different health problems, different national and international bodies have been implementing various health related programmes. To mention a few of them are Primary Health Care, Comprehensive Health Care, Basic Health Services and Community Health Care etc. Besides this, in Indian context various commissions and committees like the Bhore Committee in 1966, the Srivastav Committee in 1975, the New Draft Health Plan of Government of India in 1977, the glorious Alma Ata Declaration in 1978 and "Health for All" by 2000 A.D. have substantially contributed in bringing a revolution while providing health services to all.

### **1.3 Tribal health status in India and Odisha including reproductive child health**

#### **Health Problems of Tribe**

Tribal communities in general and PVTGs in particular are highly disease prone. Also they do not have required access to basic health facilities. They are most exploited, neglected, and highly vulnerable to diseases with high degree of malnutrition, morbidity and mortality (Balgir, 2004). Their misery is compounded by poverty, illiteracy, ignorance of causes of diseases, hostile environment, poor sanitation, lack of safe drinking water and blind beliefs, etc. The chief causes of high maternal mortality rate are found to be poor nutritional status, low haemoglobin (anaemia), unhygienic and primitive practices for parturition. Average calorie as well as protein consumption is found to be below the recommended level for the pregnant as well as lactating women. Some of the preventable diseases such as tuberculosis, malaria, gastroenteritis, filariasis, measles, tetanus, whooping cough, skin diseases (scabies), etc. are also high among the tribals. Some of the diseases of genetic origin reported to be occurring in the Indian tribal population are sickle cell anaemia, alpha- and beta-thalassemia, glucose-6-phosphate dehydrogenase (G6PD) deficiency, etc. (Balgir, 2004b). Night blindness, sexually transmitted diseases are well known public health problems of tribals in India.

The health problems of the tribal population in Odisha are at an alarming situation. The Health Strategy of Orissa in 2003 indicates that the tribal people suffer from special health problems disproportionately such as malaria, sexually transmitted diseases, tuberculosis, nutritional deficiency diseases, genetic disorders like glucose-6-phosphate dehydrogenase (G6PD) deficiency, sickle cell anaemia, etc. There have been continuous efforts by the State Govt. to reduce the health problems of the Tribe. But, still the tribals suffer from many diseases. The achievements in health sector do not appear to be at a satisfactory level because of illiteracy, poverty, lack of safe drinking water and non-coverage of tribal population under different national health programs etc. To substantiate the issue of tribal health problem, some major diseases of the tribal population like upper respiratory tract infection, malaria, diarrhoeal disorder, intestinal parasitism and others are discussed as follows.

**Upper Respiratory Tract Infection:** The presence of upper respiratory tract infection is commonly prevalent among the tribes namely: Bonda, Didayi, Kandha and Juang. The

disease causes high infant mortality which is related to inadequate vaccination, lack of early diagnosis and prevention.

Odisha Health Strategy (2003): The Odisha Health Strategy (2003) indicates that the tribal people suffer disproportionately from malaria, sexually transmitted diseases, tuberculosis, genetic disorders like G6PD deficiency, sickle cell anaemia as also nutritional deficiency diseases. These are some of the special health problems attributed to these communities. The situation analysis of health indices of the tribal population in Odisha are worse than the national average: Infant mortality rate 84.2; under five mortality rate 126.6; children under weight 55.9; anaemia in children 79.8; children with acute respiratory infection 22.4; children with recent diarrhoea 21.1; women with anaemia 64.9 per 1000. A high incidence of malnutrition has also been documented in the tribal dominated districts of Odisha. Hence Odisha Health Strategy (2003) has advocated for improving the health status of tribal population by reducing mortality and morbidity.

### **Malaria**

Though the tribal communities constitute nearly 8% of the total population of India, they contribute 25% of the total malaria cases and 15% of the total Pf cases, leading to 30-50% malaria deaths in India. So malaria is the foremost public health hazard of Odisha. This states about 23% of national malaria statistics. More than 60% of tribal population of Odisha lives in high-risk areas for malaria. Various epidemiological studies and malariometric surveys carried out in tribal population including PTGs reveal a high transmission of *Pfalciparum* in the forest regions where Tribes live. The control of malaria in forest areas has always been unattainable due to technical and operational problems. A prospective study in Malkangiri, Kandhamala and Keonjhar districts, shows rate of malaria about 14.2% among Bondo, 14.4% in Didayi, 10.5% in Kandhaha and 9.5% in Juanga PTGs with the high Pf rate in Bondo (93.5%), Didayi (92.7%), Juang (91.2%) and in Kutia Kondh (92.7%) PTGs. The spleen rate in children between 2 to 9 years was also high in Bondo (25.8%), Didayi (35.1%), Juang (24.4%) and in Kutia Kondh (26.3%) tribal population in Orissa (Balgir, 197). (RMRC: 2003).



### **Diarrhoeal Disorders**

Water-borne communicable diseases like gastrointestinal disorders including acute diarrhoea are responsible for a higher morbidity and mortality due to poor sanitation, unhygienic conditions and lack of safe drinking water in the tribal areas of the country. In a cross sectional study conducted by RMRC, among 4 PTGs such as Bondo, Didayi, KutiaKandha and in Juanga of Odisha, the diarrhoeal diseases including cholera was found to occur throughout the year attaining its peak during the rainy season (From July to October. The acute diarrhoeal problem was basically due to the poor environmental hygiene, lack of safe drinking water, improper disposal of human excreta which was further aggravated by low literacy, low socioeconomic status coupled with blind cultural belief, lack of access to medical facilities leading to serious public health problem encouraging faeco-oral transmission of enteric pathogens.

### **Intestinal Parasitism**

Intestinal protozoan and helminthic infestations are the major public health problems and were observed among Bondo (44.6%), Didayi (44.9%), Juanga (31.9%) and Kutia Kandha (41.1%) PTGs of Odisha. Most of these infections are due to indiscriminate defecation in the open field, bare foot walking and lack of health awareness and hygiene Pradesh (Balgir, 1977).

### **Micronutrient Deficiency**

The situation analysis of health indices of the tribal population in Orissa is worse than the national average: infant mortality rate 84.2, under five mortality rate 126.6, children under weight 55.9, anaemia in children 79.8, children with acute respiratory infection 22.4, children with recent diarrhoea 21.1, women with anaemia 64.9 per 1000. A high incidence of malnutrition has also been documented in tribal dominated districts of Orissa. This scenario presents a very grim picture about the general health and quality of life of the tribal people in Orissa. Thus there is an urgent need to combat the health problems and take the rehabilitative measures to alleviate the sufferings of the dwindling masses in the state of Orissa.

### **Skin Infection**

Skin problems like scabies is a major health problem amongst the PTGs because of overcrowding and unhygienic living conditions as also close contacts and lack of health awareness. RMRC's study in 2003, reported that 20.6% of Bondo, 6.9% of Didayi, 10.7% of Juanga and 15% of Kutia Kandhaha PTGs were affected with scabies of both infective and noninfective.

Other communicable diseases such as tuberculosis, leprosy, yaws and venereal diseases, though have been described as significant health problems in several major tribal populations of the country and so also in Odisha.

### **Silent killer genetic diseases:**

Sickle cell gene is widely prevalent among the tribal population in India. These have been investigated in over 100 tribal population spread over different parts of the country. The prevalence rate varies widely (0.5 to 45%) among different Tribes. Interestingly this gene is restricted amongst the Tribes of central, western, southern and eastern India and is conspicuously totally absent in north-east India. There are many primitive Tribes who have been identified to be in high-risk group.

Majority of the tribals of Odisha have a common gene pool that is relatively unmixed with other nontribal population scenario. Genetic disorders are gaining prominence and have profound health implications in morbidity status of tribals in Odisha. Sickle cell anemia and glucose-6-phosphate dehydrogenase (G-6-PD) enzyme deficiency are the two important genetically determined disorders, which play an important role in human health and disease. Out of the 62 scheduled Tribes in the state of Odisha, 18 Tribes are significant in population. The distribution of sickle cell disorders varied from zero to 22.4% among 18 major Schedule Tribes studied in Odisha. High frequency of the disorders was observed among the Gond (22.4%), Bhatra (18.1%), Paraja (14.8%), Kharia (7.4%) and Saora (7.3%) Tribes, while Bhuyan, Kissan, Kolha, Lodha and Oraon Tribes lacked them (Balgir, 1997).

### **Reproductive health:**

The dominant role that a tribal woman plays within her family set-up and outside goes against her own physical well-being. She is overburdened with work at home as well as field.

Also she is undergoing a pregnancy and/or lactating coupled with grossly inadequate food intake at the same time. Inadequate nutrition result in serious negative energy balance which over a period of time leads to severe weakness, emaciation, low work output, predisposition to infection, hence the high incidence of morbidity and mortality among tribal women.

Before the girl has acquired full social and sexual maturity and growth in terms of height, weight and pelvic girth carries with it the obvious obstetric risks resulting more often than not in miscarriage fetal deformities and death. Thus, overwork, emaciation, early child bearing are all responsible for the extremely high maternal mortality rate. Iron deficiency anemia accounts for 15-30 percent of maternal deaths in India where 60-70% of women are found to be anemic (Hb below WHO min, STD of 10mg percent). Iron deficiency disorder (IDD) are prevalent in tribal areas falling in the goiter belt. Iodine deficiency in pregnancy results in poor fetal brain development giving birth to certain, deaf, mutes mentally sub normal children with specific defects and poor coordination.

The infant mortality rates (per 1000 live births) were very high in four primitive tribes, namely, Bondo (139.5), Didayi (131.6), Juang (132.4) and in Kutia Kandha (128.7) with high maternal mortality rate (per 1000 female population) in Bondo (12), Didayi (10.9), Juang (11.4) and Kutia Kandha (11.2) tribe. The life expectancy was low in Bondo (48.7), Didayi (57.1), Juang (49.6) and Kutia Kandha (50.7 years). The crude birth rate (per 1000 population) was also low in Bondo (18.3), Didayi (24.3), Juang (22.3) and Kutia Kandha (21.6) with the high crude death rate (per 1000 population) in Bondo (19.2), Didayi (23.7), Juang (21.2) and Kutia Kandha (20.9) population. The average number of pregnancies was found to be 5.09 in Kutia Kandha tribe. The unhygienic and primitive parturition practices were mainly responsible for high maternal mortality. Among Kutia Kandha tribe, the delivery was conducted by the mother herself in a half squatting position holding a rope tied to roof of the house. This helps her in applying pressure to deliver the child. In complicated labour, obviously, it might lead to maternal as well as child mortality. The respiratory diseases including upper respiratory tract infections were more commonly prevalent in Bondo (14.9%), Didayi (16.6%), Juang (8.3%) and in Kutia Kandha (13.6%) tribe, which accounted for a high infant mortality due to inadequate vaccination, lack of early diagnosis and treatment and prevention (ICMR, 1984).

Therefore, the Ministry of Health and Family Welfare (MoHFW) have launched several initiatives by like the Janani Suraksha Yojana (JSY), Janani Sisu Surakshya Karyakram, Mamata Scheme, Mo Masari for pregnant mothers and National Ambulance Services under the National Health Mission (NHM) that have led to improvement of maternal and child health in the state. State government aims to bring down maternal and infant mortality rates drastically in the 10 most backward districts of the state. But these schemes have to be properly implemented by the state government for these backward and tribal concentrated districts.

### **Tribal health culture**

Tribal communities are mostly forest dwellers. Their health system and medical knowledge over ages known as 'Traditional Health Care System' depend both on the herbal and the psychosomatic lines of treatment. While plants, flowers, seeds, animals and other naturally available substances formed the major basis of treatment, this practice always had a touch of mysticism, supernatural and magic, often resulting in specific magico-religious rites (Balgir, 1997).

A contributory factor to resultant illnesses and deaths is the absence of sanitary latrines in a large numbers of households of the underprivileged, especially the tribals. The unhygienic conditions in the tribal settlements are made worse by the accumulation of garbage and prevalence of flies and mosquitoes which transmit disease. The Government initiative in the matter of cleanliness and the building of toilets is expected to create a healthy environment, but it would take some time.

Health problems and health practices of tribal communities have been profoundly influenced by the interplay of complex social, cultural, educational, economic and political practices. The study of health culture of tribal communities belonging to the poorest strata of society is highly desirable and essential to determine their access to different health services available in a social set up.

WHO notes, that "inappropriate use of traditional medicines or practices can have negative or dangerous effects" and that "further research is needed to ascertain the efficacy and safety" of several of the practices and medicinal plants used by traditional medicine systems. Core

disciplines which study traditional medicine include ethno-medicine, ethno-botany, and medical anthropology.

The ethno-medicinal system or traditional medicine has two universal categories of disease etiology-natural and un-natural (supernatural) causes. Natural illness explains illness in impersonal systematic terms. Thus, disease is thought to stem from natural forces or conditions such as cold, heat and possibly by an imbalance in the basic bodily elements. Un-natural illness is caused by two major types of supernatural forces. Occult causes which are the result of the evil spirits or human agents using sorcery and spiritual causes which are the results of penalties incurred for sins, breaking taboos or caused by God. In the scientific arena, Ethno-Medicinal studies are generally characterized by a strong anthropological approach, more than a bio-medical one. The focus of these studies is on the perception and context of use of traditional medicines, and not their bio-evaluation. Ethno medicine refers to the study of traditional medical practice. It can encompass methods of diagnosis and treatment.

Herbalism is a traditional medicinal or folk medicine practice based on the use of plants and plant extracts. Herbalism is also known as botanical medicine, medicinal botany, medical herbalism, herbal medicine, herbology, botanical medicine and phytotherapy. Sometimes the scope of herbal medicine is extended to include fungi and bee products, as well as minerals, shells and certain animal parts. Many plants synthesize substances that are useful to the maintenance of health in humans and other animals. These include aromatic substances, most of which are phenols or their oxygen-substituted derivatives such as tannins. Many are secondary metabolites, of which at least 12,000 have been isolated a number estimated to be less than 10% of the total. In many cases, these substances (particularly the alkaloids) serve as plant defense mechanisms against predation by microorganisms, insects, and herbivores. Many of the herbs and spices used by humans to season food yield useful medicinal compounds. The scientific and medical communities' state that herbal treatments may be risk the well-being or life of the patient when used in lieu of standard medical treatments (Singh and Subhalaxmi, 2013).

Health Maintaining and Disease Curative Ethnomedicinal and Religious Practices by the Santals of Keonjhar District reveals that Odisha Ethno medicine is a sub-field of medical anthropology and deal with the study of traditional medicines, not only those that have

relevant written sources (e.g. Traditional Chinese medicine-Ayurveda) but especially those knowledge and practices which have been orally transmitted over the centuries. The term traditional medicine describes medical knowledge systems, which developed over centuries within various societies before the era of modern medicine. The traditional medicines include practices such as herbal medicine, Ayurvedic medicine, Unani medicine, acupuncture, and traditional Chinese medicine. In the scientific area, no ethno medical studies are generally characterized by a strong anthropological approach more than bio-medical one.

#### **1.4 Statement of problems**

In the vast biodiversity of medicinal and aromatic plants there exist naturally in forest of various districts. More than 1500 medicinal herbs are being used as medicines. The ayurvedic system of medicines is the part of cultural life and heritage of tribal people. Tribal people since ancient times using these herbs against various ailments and serving a lot to the mankind in a big way. A survey has been done for treatment of skin diseases and it is revealed that tribal have great wisdom of the various uses of the healing herbs viz. Malaria, diarrhea and skin diseases. The tribal are the major source for the supply of raw drug materials to different pharmaceuticals. The study reports that 18 plants species used for skin diseases medicines are prepared in the form of powder, decoction, paste and juice. It is estimated that 70% to 80% to the people of village's chiefly dependent on traditional health care system so that we should also be made this knowledge for sustainable utilization.

An ethno botanical survey of some tribal areas revealed that 34 plant species are used by tribal people of Malkngiri district of Odisha. The use of traditional medicine is observed to be widespread and prevalent over modern medicine (Pattnaik, et. Al 2007).

The world Health Organization has pointed out that traditional medicine is an important contributor to health goal. Today according to WHO as many as 80% of the world's population depend on traditional medicines and in India 65% of the population in the rural areas use Ayurveda and medicinal plants to help meet their primary health care needs.

The tribal population of the State has been focal point of the administration for all round development. There has been constant effort for transfer of technologies into the tribal living

system to increase their status. The resistance for change has been experienced in all developmental fields, because of non-permeability of cultural traits.

In spite of establishment of modern health care centers, the Tribe sticks to their traditional methods of treatment. Their perceived causes of illness are, religious, socio-cultural, environmental and magical-religious in nature. In preparation of medicines, the Tribe use therapeutically agents of plants, animal and mineral origin. Since generations they use herbal ingredients to cure the patient and practice magical treatment. Success and failure in treatments although experienced, they attribute them the causes of God's wishes. The tribal zone of the state is rich in medicinal plants and Tribe make use of them. The chemical composition, rationality in use, dose quantity and time of application of these traditional medicines are yet to be standardized. The logic behind preference of Tribe for traditional healing practices are, (i) less costly (ii) easily available (iii) no ill effect (iv) easy to use (v) easy accessibility and (vi) environment friendly. Keeping all these concepts and their operational applicability in view, the study was designed to investigate into the indigenous ethno-medicinal practices of two important Tribes of Odisha, namely, the Santal and Kandha. The present study is a step forward to explore the medicinal world of the Tribe, particularly Santal and Kandha.

### **1.5 Rationale of the Study**

India is a welfare state. Here the administrative policies have direct bearing on the people's economic life eventually leading to several issues in health related sector. In contrast to traditional health care system, the official health care system is based on modern science and technology separating it from broader social and cultural concerns and influences. It is evident that the state-supported modern medical system does not generally recognise the traditional medical systems.

With this backdrop it was suggested that the commissioning of research study on "Indigenous Ethno-Medicinal Practices among Kandhas and Santals of Odisha" would complement to the existing knowledge on the ethno-medicines. This study is one of the best though projects to discover the traditional medicinal practices that exist among the tribals in Odisha state since generations. There are 62 Tribes in the state. Each tribe has its own significance in dealing with traditional medicinal practices. The study is confined to two Tribes, namely the 'Kandha'

and the 'Santal'. There is need to make a broad based study with limited objectives in order to go into details of the practices adopted by both the Tribes. The findings of the present study will highlight the traditional ways of treating diseases, rituals performed by the healers, therapeutic agents used in the preparation of medicines, simple methods of diagnosis of diseases, magical ways of treatment, living environment and socio-economic condition in which both healers and patients reside and take care health system.

India is a welfare state. Constitution mandates the state to provide basic health care to all its citizens. Accordingly on the basis of population norms health care service units were established. It has been reported from a few studies that cost of health care for tribal family is beyond its reach and to meet such requirements the tribal families fall in debt trap (Rao 1998). It is also observed that hunger and disease are closely related the low wage, indebtedness, reduced consumption level low level of productivity restricted scope of employment etc is a reflective of how the development process has largely bypassed the tribal communities. With evidences of increasing landlessness and the market price of the essential goods (except rice which is given free of cost to all families below poverty level) the tribal illness has serious economic consequences on their fragile incomes. Here the administrative policies have direct bearing on the people's economic aspects eventually leading to several issues in health related sector. In contrast to traditional health care system, the official health care system is based on modern science and technology separating it from broader social and cultural concerns and influences. It is evident that the state-supported modern medical system does not generally recognise the traditional medical systems. Public policy for the welfare of tribal people living in scheduled areas of Odisha was based on the belief that "the basic purpose of development is to enlarge people's choices to create an enabling environment for people to enjoy life, healthy and creative lives that if economies expands but human lives shrives there can be very dangerous political and economic explosions.

Several studies have proved that traditional societies do not get the most needed psychological security in modern medical system as it ignores the cultural components of disease and treatment prevailing in a given society. John Bryant (1988) sees the involvement of the individual and the local community in primary health care not as a social nicety; rather as a medical necessity. But services that are delivered from the outside have little effect unless absorbed by the individual and the community. It has been revealed that the diverse



and deep-rooted social and cultural phenomenon of a society play important and many a time decisive role in deciding acceptance or non-acceptance of particular health care option.

“Self cure is the best cure”. Almost all the tribal communities till today believe this parlance and practise the make use of “healing herbs”. The existing undocumented tribal healing practices, act as an answer to a host of their illness, further needs to be researched and documented with a view to explore, explain and experience the scientific elements behind this. The present research investigation and estimate of indigenous medicine will help find the medicinal properties of the herbs and other forest based produces used by the tribal for healing their diseases, which can be put into prospective practice for use in Ayurvedic and other modern medicines so as to address cause of tribal illness locally.

Traditional knowledge system is important for modern societies, not only because traditional knowledge itself is a valuable aspect of cultural heritage and should be protected in its own right, but also because of its great value in modern development, especially regarding the sustainable use of forests, ecosystem services and management. It is an urgent task to record the posterity, whatever is valuable in the tradition of the tribes, their way of life and their knowledge of the plants before all these disappear. Thus, a study regarding nature and extent of acceptance of modern health care facilities among the tribal group was felt essential, so that a holistic approach covering the social and cultural environment of the people can be forwarded towards policy planning.

With this backdrop it was suggested that the commissioning of research study on “Indigenous Ethno-Medicinal Practices among Kandhas and Santals of Odisha” would complement to the existing knowledge on the ethno-medicines. This study is one of the best though projects to discover the traditional medicinal practices that exist among the tribes in Odisha state since generations. There are 62 Tribes in the state. Each tribe has its own significance in dealing with traditional medicinal practices. The study is confined to two Tribes, namely the ‘Kandha’ and the ‘Santal’. There is need to make a broad based study with limited objectives in order to go into details of the practices adopted by both the Tribes. The findings of the present study will highlight the traditional ways of treating diseases, rituals performed by the healers, therapeutic agents used in the preparation of medicines, simple methods of diagnosis of

diseases, magical ways of treatment, living environment and socio-economic condition in which both healers and patients reside and take care health system.

### **1.6 Objectives of the Study**

The broad objective of the study is to estimate the extent of traditional healing system among the tribals in Odisha. This will be documented in respect of the practices among two major tribes of Odisha, the Kandha and Santal. The objectives of the study in details are as follows.

1. To explore and understand native categories and explanatory models of illness including etiologies, symptoms, courses of sickness and treatments.
2. To understand and elaborate the meaning of the illness and the symbolism of the curing rituals performed by the folk healers in indigenous medical cultures.
3. To document the various therapeutical agents (plants, animals, minerals) in treatment.
4. To assess the overlap between magic and nature that is present in indigenous cultures of the Tribe.
5. To explore the usefulness of the ITK for their incorporation in Ayurvedic health treatment.

### **1.7 Delimitation of the Study**

The study is based on sound planning, design and objectives to investigate into the world of traditional medicinal practices existing among the Kandha and Santal Tribes in Odisha. Also the delimitation includes the following.

The study is of short duration. Limited funds provided to undertake the study. Paucity of time and fund constraint would not permit the research team to make full observation on seasonality of diseases and their treatment methods, particularly magical treatments in which mantras are chanted to cure the diseases.

### **1.8 Organization of report**

The report of the study is designed following the international standard to delineate different chapters in addition to executive summary, forward, contents of subjects and tables. The report is organised in to 9 chapters such as Introduction, Review of Literature, Research Methodology, Area, People and Culture (Kandha&Santal), Field Findings Kandha and Santal, Adoptability and Applicability, Case Study, Knowledgeable Person (Field Findings) and Conclusion & Way Forward,. Besides, in the end part of the report there are Bibliography and Annexures including a set of research tools, like schedules and questionnaires.

## **CHAPTER II**

# **REVIEW OF LITERATURE**

## CHAPTER II

### REVIEW OF LITERATURE

There is considerable body of literature on health seeking behaviour among tribal societies and folk or peasant cultures. The study of regional variations in human health, the effect of environment on health and the holistic causes of disease goes by many names, medical geography, physical anthropology, medical sociology, epidemiology and medical anthropology. A study on medical system and health is very interesting in the Indian context because this country possess an inverse heterogeneity is medicinal belief and practices. Besides the well known and wide spread medical systems, there are various types of localized folk and tribal medical belief and practices often based on magic and sorcery.

The findings of different earlier studies are a knowledge source of medicinal plants, which contributed significantly to the health care system of tribal community. The objective of reviewing the literature is to place this study in an historical perspective and to relate its findings to earlier knowledge on the topic and to suggest further investigation. Here the review covers books, articles in journals and newspapers, historical records, government reports, theses and dissertations, etc. Thus studies related to tribes, traditional method of treatment, healing process conducted in India and abroad have been referred in this present study.

The study of ethno medicine or tribal medicine is contextual worldwide. In Europe Frazer initiated the study on the interrelationship of magic and medicine. He compiled diversified data from the different countries of the world and presented that magical measures had a significant role in the life of the primitive tribal people trying continually to ward off the evil influence of diseases. Following this many scholars, such as Thurston (1907), Krishna Iyar (1941) and Elwin (1955) worked on this particular subject matter and as a result of which a wide-ranging literature on the primitive medicine system was developed. Thurstan (1907) described the belief in connection with charms, magical spell, witchcraft and sorcery for disease and protecting people from evil spirits.

Close relationship between man and plant is as old as evolution of life on the earth. Man utilizes plants for several purposes such as food, fodder, shelter, medicine, sacred use and many other aspects. The indigenous knowledge of plant use which is called ethno botany has

been the focus of many scientists throughout the world. The international approach to study ethno botany has always been dealt with Tribes, who are the treasurers of such knowledge. The important Tribes of Odisha such as Santals and Kandhas are more familiar with use of plants for various purposes. According to these Tribes, plant resources serve them as major sources of economic use, food, fodder, medicine, and miscellaneous use. The use of plants as source of medicines and human sustenance has been vogue since antiquity.

The curative properties of herbs attracted the human beings and that gave rise the idea of treatment. Earliest mention of plant used for medicinal purpose is found in the Rigveda. Subsequently such mentions were found in Atharva Veda. Charak and Sushruta brought out the medicinal use of plants in their work Charak Sanhita and Sushruta Sanhita which are considered as the valuable assets in our world of health care and treatment.

During Buddhist period the ideas of herbal based medicinal use was more enlighten. The Great Indian Epics of Ramayana and Mahabharata also provide information about use of plants for curative purpose. Besides, in course of time many literatures were written on herbal treatments.

In other parts of the world, like Egypt, China, Arabia, Persia etc had similar experience of herbal treatment. The Greek Physician Pandanius Dioscorides in first century A.D. compiled a book **De Material Medica** in 77 B.C. in which he described 500 medicinal plants under the category of Aromatic, Culinary and Medicinal. The work is considered to be finest treatise of medicinal plants.

In the middle age, the contributions of Otto Brunfels of German (1532-77 A.D.) Hieronymus Bock Leanart doftuch and Valerious are of worth mention that enriched our medical science by incorporating herbal plants into it. The other continental scholars of this period are, Charles Ecluse, Mathias Obel (1560-70) of Netherlands.

During the 17<sup>th</sup> century botanists from Asia, Africa and America elaborated the uses of medicinal plants. The book micrograohia of Robert Hook (1665) is well known. In 1753 Carl Linnaeus published Species Plantarum with description of 6000 plants from all parts of the world.

The 20<sup>th</sup> century witnessed enormous increase of botanical research leading to series of discoveries, new concepts and new fields. The historical records show that at least 3000 species have been used as food and fodder. The present day knowledge of edible plants has been generated from aboriginal and forest dwelling people around the world. Out of these 1000 species have been domesticated.

## 2.1 Studies on ethno-botany outside India

Studies on ethno-botany and medicinal properties of plants are many. In all the cases, the Tribe and tribal zones are given importance in investigation.

Richard Evans Schulte of Harvard University can rightly be attributed as the pioneer in the study of ethno-botany. His work from 1660-96 covers a wide spectrum of plant studies like food, for medicine, folklore, socio-religious etc.

Gunter (1945) worked on the ethno-botany of Western Washington and wrote about food plants with elaboration. F.R. Irvine made study on supplementary and emergency food plants in West African countries.

Besides the economic use of plants, the ethno-musicology of different Tribe was also the subject of different studies. W. Kaufmann had conducted a detailed research on the musical instruments made out of plants. He published his work "The Musical Instruments of the Hill Meria, Jhoria and Bastar Meria Gond Tribe" in 1961. E.L. Core has described the use of plants among southern Appalachian aborigines. D.J. Osborn had studied the medicinal and other use of plants in Egypt and has described 28 important species that were in wide use. A. Safi Ahmed of the University of Khartoum had studied about the medicinal plants of Sudan and published his findings in 1970. J.A. Duke had described the abundant use of plants by the Choco and Cuna Indians. N.C. Turner and M.A.M. Bell (1971) had studied Ethno-botany of the Indians of Vancouver Islands.

The use of addictive and hallucogenic plants was well studied by M.A. Martin (1975) published the book "Cannabis and Culture".

In Europe, use of herbal medicine dates back to the period of  
Hippocrates (460-270 B.C.),  
Aristotle (380-320 B.C.),  
Theophrastus (370-287 B.C.)

B. Malinowski (1974) in his book **Magic Science and Religion** reported about the use of plants, by primitive people. Beside medicinal and

economic use, the plants are also used for various socio-religious purposes. Mallinowski (1974) in his essay magic, science and religion has described that there are no people, however, primitive without religion and magic. In every primitive community there has been found two clearly distinguishable areas, the sacred and the profane. In other words, the domain of magic and religion also come under that of the science. It goes without saying that people often depend on various plants for medicine, magic and religion purpose. Thus magic-religious uses of some plants have their importance in both tribal and non-tribal communities.

H.K Beatrice (1975) studied the ethno-botany of the Hawaiian Islands and the University of Hawaii.

J.F. Morton (1975&1977) has worked on the folk medicine of Venezuela, Central and Latin America. He had shown his findings of how these folk remedies influence present day America.

Bandoniet *et al.* (1976) have surveyed Argentine medicinal plants through their folklore and phytochemical screening, and have described the folk use and phytochemical information on 44 different species.

M. Cantorea (1970) has listed out 43 species of plants from Philippines and has described them in terms of medicinal, pharmaceutical as well as folklore use.

Dolores and Lottore (1977) have studied the plant use of Mexican Indians. E.S. Ayensuhad studied the medicinal plants of West Africa and West Indies.

A.S. Elmi (1980) has studied the traditional medicinal values of plants that are used to cure diseases in Somalia.

S. Camazine and R.A. Bye (1980) studied the uses of plants by the Zuni Indians of New Mexico.

Morgan (1981) has studied the Ethno-botany of Turkana, Kenya in relation to the use of plants and by the pastoral people and their livestock.

J.A. Hart (1981) has discussed the plants of Cheyenne Indians.



M. Shemluck (1982) has studied the use of compositae by the Amercian Indians in the U.S.A. and Canada.

Zeven and Wet (1982) have reported about 160 species of cultivated plants of Indian origin. Davis E. Wade (1983) has worked on sacred plants and Ethno-botany and published many monographs. In addition to Arnold and Gulumian (1984) have described the medico-ethno-botany of the Vandas, one of the Primitive Tribe of South Africa. Merlin (1989) has shown that the diverse uses of *tiplants* (*Cordylinefruticosa*) in many Asian countries.

Johns and Kimanani (1991) have given a chemical ecological model that provides insight into the evolution of medicine.

A.R. Vickery (1994) has described about 36 plants for herbal remedies in British Isles.

Chun-lin and Jieru (1995) have discussed as many as 57 cultivated and 122 edible plants of Jinuo nationality in South West China.

Manandher (1995) has noticed 44 wild unrecorded plant species of Nepal.

## **2.2 Indian studies**

In India too many scholars have done remarkable work on ethno-botany. After a thorough review of a large number of studies, S.K. Jain (1963) is found to be categorized as the front ranking worker on ethno-botany in India. He has worked on different aspects of ethno-botany, covering Central and Northeastern India. In his ethno-botanical accounts he has described various uses of plants for food, medicine, wooden instruments and home appliances. His studies also include the folklore of plants. Jainas also made some collaborative studies.

De (1964, 1965); with Tarafdar (1970); with Banerjee (1974); with Dam (1979); with Borthakur (1980); Mudgal, Guha, Pal and Das (1984) have made various etho-botanical study among the Tribe of North Eastern India.

Jain (1981) in his **Manual of Ethnobotany** describes Glimpses of Indian Ethnobotany.

Jain (1991) in his **Dictionary of Indian folk Medicine** described medicinal plants of India.

Jain and Fillips (1991) have published pioneering books on the field of ethno-botany.

Jain and Saklani (1992) in cross-cultural ethno-botanical study of Northeast India have shown the similarity and dissimilarity in ethno-botanical use of 28 plants among the different ethnic societies of northeast India.

Jain and others (1995) have dealt with 41 plants which are used by the Tribes of India and Amazonia for similar diseases.

### **Contribution of Indian Scientist to study of Medicinal plants:**

Besides Jain and his associates, other Indian scholars who have made noteworthy contribution to ethno-botany are also important.

Ahluwalia (1952) has studied the medicinal plant of Kangra valley of Punjab and has suggested their exploitation by rotation, which gives sufficient time for natural regeneration.

Dee & Hansaw (1954) have studied on the plants materials used by primitive people for fertility.

Sengupta (1956) has studied on the nutritive values of tribal beverages.

Biswas (1956) has mentioned the use of vegetable drugs in the treatment of leucoderma.

Das & Sharma (1959) have made an attempt to study the traditional methods of treatment of leprosy among the Mikirs through the use of various plants.

Gupta (1960) has enumerated 101 useful and medicinal plants of Nainital in the Himalayas.

Behera (1962) has discussed various food habits of rural India tribal folk.

De (1962) has studied some medicinal plants through folklore of the people of Bhagirathi valley.

Randhawa (1964) has studied on the tree cults, and tree worship in the Buddhist-Hindus sculpture.

Gupta (1964) has made a survey on some medicinal and aromatic plants of the Chamba forest of Himachal Pradesh.

Sengupta (1965) has worked on the tree symbols used for worship.

Sengupta & Parmar (1967) have compiled a bibliography on Indian folklore and its related subject.

Agarwala (1970) has made a study on ancient Indian folk cults.

Shah and Joshi (1971) have studied ethno-botany in the Kumaon region and have reported about 76 wild species.

Kapoores *et al.* (1971) have studied the medicinal plants put to use at the various religious shrines of India.

Gupta (1971) has also studied some medicinal aromatic plants of the Vandal ranges of Himalayas.

Pal and Banarjee (1971) have reported 22 species of lesser known food plants used among the tribals of Andhra Pradesh.

Pal (1973) also studied about the folklores associated with plants, for the treatment of eye.

Gadgil & Vortak (1973, 1976) have studied sacred groves situated in the Western Ghats of India.

Bhatnagar *et al.* (1973) have conducted some ethno-botanical studies on the flora of Ghatigaon forests near Gwalior.

Banarjee (1974) has observed ethno-botanical plants of the Araku valley in Visakhapatnam.

Thothathri (1974) has reported about some useful plants of the Andaman & Nicobar Islands.

Hajara (1974) has mentioned the sacred grooves of Mawphlong of Shillong.

Bhandari (1974) has studied the plants used as food in Rajasthan deserts.

Mehera *et al.* (1975) have studied on the folk uses on plants for decoration.

Shah (1975) has studied on some plant drugs from the hill districts of Uttar Pradesh.

Devberman (1976) has conducted a study on tribal drinks prepared from plants.

Deb (1976) has presented an account of some cultivated and wild edible plants from Tripura.

Raghunathanan (1976) has surveyed the tribal areas of Nilgiri hills and has reported on some useful medicinal plants.

Sithole (1976) has made a study of the plants found in the sculptures of ancient Indian temples.

RaiChaudhury *et al.* (1977) have made a thorough study on the ethno-botanical uses of herbaria.

According to Basu (2000), health is a prerequisite of human development and is essentially concerned with the well being of common man. The UNDP human development index (HDI), comprises three component i.e health, education, income. Health is a function not only of medical care but also the overall integrated development society or like cultural, economic, educational, social and political. According to him the tribal population has distinctive health problem governed by their habitat, difficult terrains and ecologically variable riches. The primitive tribal groups of India have a special health problem and genetic abnormality like sickle cell anaemia, G-6-PD red cell enzyme deficiency and sexually transmitted diseases. Regarding child bearing and maternal mortality he states that crude birth practices are found to exist in tribal groups like Kharia, Gond, Santals and Kutia Kandhas of Odisha.

The studies on disease of tribal have been concentrated in Anemia, malaria, deficiency of micro nutrient, sickle cell disorder and many other communicable and non communicable diseases. ICMR bulletin (2003) has reported various types of disease of different Tribe residing in Odisha. The observations of ICMR (2003) about disease of Tribe are cited here with.

The ICMR further stated that demographic status of the Primitive Tribe has shown a declining or static trend. The demographic data of Juang primitive tribe of Odisha revealed a marital fertility rate of about 6 and life expectancy at birth 35.9 years<sup>25</sup>. A study carried out recently by RMRC, Bhubaneswar amongst four Primitive Tribe of Odisha, revealed an infant mortality rate (per 1000 live birth) of 139.5 in Bondo, 131.6 in Didayi, 132.4 in Juanga and 128.7 in Kandhaha (Kutia); a maternal mortality rate (per 1000 female population) of 12 in Bondo, 10.9 in Didayi, 11.4 in Juanga and 11.2 in Kandhaha tribe; the life expectancy of 48.7 years in Bondo, 57.1 years in Didayi, 49.6 years in Juanga and 50.7 years in Kandhaha; the crude birth rate (per 1000 population) of 18.31 in Bondo, 24.3 in Didayi, 22.3 in Juanga and 21.6 in Kandhaha tribe and the crude death rate (per 1000 population) of 19.2 in

Bondo, 23.7 in Didayi, 21.2 in Juanga and 20.9 in Kandha population. The average number of pregnancies was found to be 5.09 in Kutia Kandha tribe. The unhygienic and primitive parturition practices were mainly responsible for high maternal mortality. It was observed that among Kutia Kandha the delivery was conducted by the mother herself in a half squatting position holding a rope tied down from the roof of the house. This helped her in applying pressure to deliver the child. In complicated labour, obviously it might lead to maternal as well as child mortality.

Sunita and Subhalaxmi (2003) in their book, “Medicinal Plants” have mentioned that medicinal plants as part of culture of Indians in general and Tribe in particular. According to their estimation 25000 effective plant based formulations used in folk medicines and around 10000 designed formulations are available in the indigenous medical text. It is also reported in their studies that around 70% medicinal plants are found in tropical areas spread across the Western and Eastern Ghats, the Vindhya, Chhottanagpur Plateau. They further stated the distribution of medicinal plants by habits. Out of 386 families and 2200 genera in which medicinal plants are recorded are distributed like, Trees 33%, Herbs 32%, Shrubs 20%, Climbers 12% and others 3%. About 90% of medicinal plants used by the industries are collected from wild, while over 800 species are used in production of by industries and less than 20% species of plants are under commercial cultivation. The break up of medicinal plants by their parts utilized is reported as Bark 14%, Wood 3%, Stem 6%, Seeds 7%, Fruits 10%, Flowers 5%, Leaves 6%, Roots 29%, Rhizomes 4% and whole plant 10%.

**Bara (2004)** about Restriction and Taboo stated that In Dongria Kandha society maternal and child, mortality is caused due to their ignorance, illiteracy and strong traditional belief system. Cases of abortions and

stillbirths are reported due to lack of awareness of the mothers and their preoccupation with their works. They are not much careful about the general precautions and preliminary health care during early pregnancy and gestation period as a whole, which leads to further complications. Some of them fall pray to malnutrition due to lack of balanced diet. Extra or nutritious food is never a regular habit of an expectant mother. This is due to their ignorance,

**Medicinal plants used by parts (%)**

1. Whole plant	10.00
2. Rhizomes	4.00
3. Roots	29.00
4. Leaves	6.00
5. Flowers	5.00
6. Seeds	7.00
7. Stem	6.00
8. Wood	3.00
9. Bark	14.00

poor economic conditions, combined with the prevailing social customs and food habits. It is reported by all the mothers who were interviewed that as soon as the gestation period starts many of them stop taking even regular food due to nausea and vomiting whereas others abstain from taking non-vegetarian food except dry fish. Non-vegetarian food is an occasional item available to them. The pregnant woman is restricted to take pork. They believe that non-vegetarian food items will harm the baby or cause indigestion. They also fear that the baby may overgrow and cause difficult delivery. Pregnancy is anormal and causal occurrence after the marriage of a woman. No special attention is given to the pregnant woman who continues her normal household and outdoor duties till the occurrence of labour pain. She also takes her normal food during this period, which is not at all different from that taken normally by other members of the family barring some restrictions of a few food items. Occasionally, seasonal fruits like pineapple, banana, jackfruit, mango, orange etc. form a part of her extra diet when ever available. Snacks like biscuits, fried rice, flattered rice, cake etc. are given to her incase of few well to do families.

Panigrahi and Sahoo (2005) in a study of health system reform in the tribal region of Odisha concluded that reproductive health of community at a micro level visualized from the prospective of time and space. He also suggested for alternative institutional arrangement for adoption of flexible mechanisms to establish a decentralized need based reproductive health system.

Mohanti K.K, Mohapatra, P.C, Samal.J (2006) in their study of Tribe of Koraput mention that Kandhas belief in God and Goddess, their main Deity is DharaniPenuwho is regarded as most powerful one. The other Deities are Jatrakudi, Sitapenu. The God of wealth and Birnapenu, the God of rain. (Mohanti K.K, Mohapatra, P.c, Samal.J (2006) Tribe of Koraput, SabaraKhetra, Koraput).

Health & family welfare GOI (2005-2006) indicated 9 indicators of health profile in which reported infant mortality is up to 62.10%, Neo-natal mortality (39.9%), child mortality 35.8%. The report estimated that the health of tribe is at a bad situation.

N. Pattnaik (2005) in his book, the Santal world of super natural beings indicates that Santal gives a different picture together. Their culture is full of folktales, folkore and myths and

their customs & tradition, mores & values, sanctions & standards, ethos and world view are from those folktales.

Rahmatullah et al (2010) in their study “Medicinal Formulation of a Kandha Tribal Healer- A Tribe on the Verge of Disappearance in Bangladesh” observe that Kandha Tribe is the small tribe of Bangladesh with a population about seven hundred facing extinction. They have their own tribal healers although there is little documentation of their traditional medicinal practices and formulations. In their study on ethno medicinal survey on traditional healers of Kandha tribe found a total of 24 formulations covering 34 plants. Besides medicinal plants the Kandha healers also use body hairs of Asiatic black bear (*Ursus thibetanus*) and bats (*Pteropus giganteus*). For treatment of fever & shivering the most common illness treated by Kandha healers are cuts and wounds, skin diseases, helminthiasis, fever, respiratory problems (coughs, asthma), gastrointestinal disorders (stomach pain, constipation, diarrhoea), burning sensations during urination, various types of pain (headache, body ache, toothache, ear ache), conjunctivitis, poisonous snake, insect or reptile bites, jaundice, and bone fractures.

Minakshi Dwivedi et al (2011) of National Facility for Tribal and Herbal Medicine IMS, BHU stated that Ayurveda, the ancient medical system of India, which flourishes traditionally is often translated as the "science of life," It is an *instruction* for healthy and disease free life. In Ayurvedic system, medicinal treatment based on holistic approaches, there is a dominance of the three dosha (*tridosha*) systems: vata pitta & kapha and panchmahabhutas. There is the ancient period in which plants have symbolic significance as well as specific therapeutic attributes. The therapeutic attributes were based on closed observation of nature and interpretation of those observations in terms of relatively simple systems of categorization. This ancient period extended until the development of the investigative techniques associated with modern science. The next period was that of early science, which affected India and China, as well as most of the world, during the 19th century and the beginning of the 20th century. During this period crude analysis of plants could be carried out, the idea of reporting specific medical cases or collecting many case histories of similar nature arose, and herbal medicines were described in terms of botanical names, Chemical constituents, and reported the use for diseases defined by modern medicine. The third period, which we are now working within, involves the development of advanced scientific analysis, with the ability to

find individual chemical constituents, test them in sophisticated 'laboratory experiments, and then attempt the difficult task of validating traditional claims by clinical trials. In Tribal medicinal system, tribal people use several herbs for treatment of various diseases. The Tribal medicinal system is different than Ayurvedic system are due to, lack of education, and lack of good awareness about medicinal plants makes consumers easy victims of marketing exploitation and herbal myths. Another recent error is due to lack of knowledge about photochemistry. Through this Paper we want to present a comparative study between Ayurvedic and Tribal medicinal system.

P K. Singh et al (2011) further added from National Facility for Tribal and Herbal Medicine IMS, BHU that drug trials, commonly known as clinical trials, are scientific tests made on human volunteers. Such trials are carried out in 3 phases. In the first phase, studies are carried out on volunteers to determine the safety of the drug. In the second phase, on persons having the disease or medical condition to determine whether the drug has some level of therapeutic effect. In the last phase, trials are long-term studies on patients to determine whether the drug will be truly effective in normal medical settings. India, a country with the largest pool of patients suffering from cancer, diabetes and other maladies, has become the global hub for carrying out clinical trials at random. According to the Confederation of Indian Industry (CII) study, clinical trials in India in 2002 generated \$70 million in revenues. The outsourcing of clinical trials is likely to go up as the patent regime has taken effect in January 2005. CII predicts that it would to \$200 million by 2007. The Government has noted that by participating in clinical trials, India will benefit scientifically; research on new drugs will be accelerated, new drugs will be made available to Indians at the same time it becomes available to the developed world. The herbal clinical methods are very popular and effective in curing several diseases in rural and dense forest areas. Further the research is required in large scale to find ethnomedicinal uses of tribal medicinal plants, their active constituents and revalidation of uses through clinical analysis.

Minakshi Dwivedi (2011) stated from National Facility for Tribal and Herbal Medicine IMS, BHU that nature always stands as a golden mark to exemplify the outstanding phenomena of symbiosis. In the western world, as the people are becoming aware of the potency and side effect of synthetic drugs, there is an increasing interest in the natural product remedies with a basic approach towards the nature. Throughout the history of mankind, many infectious



diseases have been treated with herbals. Herbal medicines are currently in demand and their popularity is increasing day by day. About 500 plants with medicinal use are mentioned in ancient literature and around 800 plants have been used in indigenous systems of medicine. A number of scientific investigations have highlighted the importance and the contribution of many-plant families i.e. Asteraceae, Liliaceae, Apocynaceae, Solanaceae, Caesalpinaceae, Rutaceae, Piperaceae, Sapotaceae used as medicinal plants. In India around 20,000 medicinal plant species have been recorded recently but more than 500 traditional communities use about 800 plant species for curing different diseases. Medicinal plants play a vital role for the development of new drugs. The bioactive extract should be standardized on the basis of active compound. The bioactive extract should undergo safety studies. Almost, 70 per cent modern medicines in India are derived from natural products. Medicinal plants play a central role not only as traditional medicines but also as trade commodities, meeting the demand of distant markets. India has a very small share (1.6 per cent) of this ever-growing global market. To compete with the growing market, there is urgency to expeditiously utilize and scientifically validate more medicinally useful plants.

Anamika Jain, Shailja Jain and Avinash Tiwari (2011) in the study Medicinal Plant (Coral jasmine) as Functional Food: A Dimension of Agriculture Research observed that It is a well established fact now that a number of plants/ herbs/shrubs and their parts are being used for the treatment of several ailments. Coral jasmine (*Nyctanthes arbor-tristis* Linn) is one such medicinal plant. It is a common hardy wild shrub having a strong potential of being used as a therapeutic drug/supplement in many diseases. It is also commonly known as Harsinghar, Parijat and Night jasmine. The decoction of its leaves is widely used for the treatment of rheumatism, sciatica, arthritis, fevers and various painful conditions. Besides, its leaves have been found to have anti-inflammatory, antibacterial and antidiabetic activity. This plant is cultivated in several areas of India, flourishing wild in sub-Himalayan regions such as Assam, Bengal, and in some areas like Rajasthan, Madhya Pradesh. Apart from so many other uses, the leaf extract of this plant is very frequently being used for the treatment of knee joint pain and arthritis. There are a number of studies reported in the literature on the therapeutic importance of this drug. Aqueous extract of the leaves has been observed to possess anti-edema activity. In this paper an attempt has been made to review the various studies carried out towards therapeutic activity of Coral Jasmine. Towards end, an attempt is also made to use the leaf decoction (aqueous) as a supplement in food for the treatment of joint pains. The study is still in progress; however, some preliminary results on the

sensory evaluation of the supplement prepared with different concentrations have been reported.

Mahananda (2011) in his article tribal communication technology first stated that oral communication technique of Kandha belong to their cultural activities. The Kandha people express their cultural identity and distinctiveness in their social development. It provided humanity with a new means of communication that literally inscribed in stone, the spoken word. Communication could now span both space and time. Space, because writing could be sent from one place to another. Time, because writing could preserve the words for generations to come. Since the art of writing was discovered, nearly every form of writing material has been used. Some were intended to ensure permanence while others were simple and inexpensive but temporary. From the wax notepad of the school boy to the grand inscriptions on monuments, almost everything we know about antiquity is derived from writings such as those written on animals, vegetables and minerals.

Human beings have suffered from various diseases from antiquity (Sofowara, 1982) and have used medicinal plants, animal parts and mineral formulations for treatment of diseases for thousands of years (Hill, 1989). With the advent of modern or allopathic medicine, the traditional medicinal practices became subjects of derision and were mostly dismissed as superstitions or quackery. However, indigenous communities of practically every country of the world has clung to their own traditional medicinal practices despite the promises of allopathic medicines, either because they lacked access to allopathic medicines, or still used their own ancient formulations out of their own choices. Recent years are witnessing a resurgence of interest among the scientists and allopathic doctors about traditional medicinal practices. This has been due to a number of factors like comparatively high price of allopathic medicines, lack of accessibility to allopathic practitioners and modern hospitals by particularly the rural population of developing countries, emergence of drug-resistant vectors to many allopathic drugs, non-curability of many emerging and old diseases with allopathic drugs, and finally, a recognition that many important allopathic drugs like aspirin, atropine, ephedrine, digoxin, morphine, Quinine, and tubocurarine have been discovered following close observations of the traditional medicinal practices of indigenous peoples (Gilani and Rahman, 2005).

Dash and Dash (2009) in their ethno-botanical study in 78 Kandha villages of Kandhamal and Ganjam district adopted interview, observation and interaction methods of data collection. They stated that not much anthropological work has been conducted in Bangladesh. Even a decade or two ago, it was believed that the country has only about a dozen Tribe including the Chakmas, Marmas and Murongs residing in the southern hilly forested regions of the country, and the Garos, Khasias, Manipuris and the Santals inhabiting the northern semi-forested regions. However, recent and more extensive anthropological researches are indicating that Bangladesh may have more than 100 indigenous communities within the country (usually mentioned as Tribe). The vast majority of these Tribe are small, and many have become partly or totally assimilated within the mainstream Bengali-speaking population (Murmu, 2009). Not much is known about these smaller Tribe, some of them being on the verge of extinction. Practically, studies are absent on the tribal medicinal practices. Yet this knowledge is important, because the Tribe, mainly from living within or in close proximity to forests, have over the centuries, accumulated a vast amount of experience on the medicinal properties of plants, animals, birds and other species found within or near their habitat.

To document the traditional medicinal practices of the various large and small Tribe of Bangladesh before they become irretrievably lost, we had been conducting ethnomedicinal surveys among the various Tribe for the last few years (Rahmatullah et al, 2009, 2010, 2011, 2012a‘c; Seraj et al, 2011).

The Kanda healer used a total of 34 plant species in his 24 formulations. These plant species included two species, which Bangladesh National Herbarium botanists were not able to identify. The botanists at Bangladesh National Herbarium mentioned that the flora of Sylhet Division (of which Sylhet district forms a part) are yet to be explored in details, so these two plant species could be new species. The Kanda names for these two plant species were talmoli and bajramoli. Notably, talmuli in the Bengali language is the Bengali name for *Curculigoorchoides*. However, since this is a common plant in Bangladesh, the Herbarium should not have had any difficulty in identifying this plant. So it appears more probable that talmoli (in the Kanda language) represents a new plant species, and probably unique to the Sylhet area. The 32 identified plant species used by the healer were distributed into 29 families, with the Acanthaceae family providing the maximum number of plants at three. As stated by authors the following plants are used for curing of various diseases.

1. The leaves of Justiciagendarussa were used for treatment of helminthiasis diseases of children.
2. Opuntiadillenii used for treatment of burning sensation during urination and as well as for treatment of constipation.
3. The plants like Terminaliabellerica, Terminaliachebula and Zingiberofficinale are used for cough, cold and allied diseases.
4. Achyranthesaspera used for treatment of Asthma.
5. The most widely used plant was seeds of Pipernigrum used for five of the 24 formulations.

In one formulation, the Kandha healers use body hair from mammals in combination with plant parts. The body hair of Asiatic black bears & bats are used with roots of A. aspera and S. sophora. According to Khare Ayurveda used plants is bitter, pungent, heating, laxative, stomachic, carminative and useful for the treatment of vomiting, bronchitis, heart disease, piles, itching abdominal pains, ascites, dyspepsia, dysentery and blood diseases.

Nadkarni, (2005) observed that paste of roots of A. aspera used by the healer for snake bit & reptile bits.

Pullo.Rao, D. (2012) in his study of socio-economic status of STs in Vishakhapatnam District, AP reported data collection from primary source covering 138 households through multi stage sampling technique. He covered socio-economic parameters like sex, age, education, caste, religion, occupation etc. He studied different Tribe and concluded that low income group need special attention for development of agriculture, health care, drinking water and road communication.

K. Dhanalaxmi (2012) reported about Tribal culture in Medieval Andhra stating that tribal economy is characterized by methods of primitive cultivation, cattle rearing, religion, beliefs and rituals. Some of the women particularly women folk of yerukals adopt fortune telling and magical means of achieving wealth.

Sudha (2012), her paper on “legal provisions for tribal are blooming” stated that Gonds, Santals, Mundas, Bhils, Orans, and Minas are the important Tribe of country who have special way of life. Socio-economic status of Tribe hasn't much change although a number of

projects has been initiated. The SC/ST is made poor by land alienation and displacement of due to establishment of town's and cities.

Shankar (2012), in describing problem of education of tribal students in rural areas of Tripura, stated a number of suggestions to improve through education teachership, language, vocational training and mid-day-meals.

Hazra (2012) in his study, impact assessment of watershed programme empowering the 300 tribal women taking 200 samples from four watersheds, highlighted that gender focus on sensitive manner of watershed can be capitalized on sustainable basis.

Chakrabarty and other (2012) describe rituals associated with disease and treatment of Santals in Keonjhar district of Odisha. Folk medicines are associated with rituals and beliefs. This is naturally done by the Ojha or medicine- man. Besides, using herbal medicines the Santals try to cure disease through magico-religious beliefs and practices. This study also revealed that the Santals of Sonatangri believe supernatural forces for disease causation and sick remedies through magico-religious practices. 'Evil eye' is considered to be a cause for certain ailments particularly in children. They offer prayers and sacrifices as per direction of the medicine man to appease the supernatural power believed to be responsible for the disease. A ritual called BhujniBatiyani is practiced by the Santals of Sonatangri for well being of the villagers. They believes that by observing this rituals they will be able to protect and keep themselves away from the effect of all epidemic diseases. Bhujni, also known as 'Jungi' among the Santals of West Bengal, is a malevolent female deity existing in the Santal pantheon where, 'Batiyani' means 'leaving appart'. Thus the ritual 'BhujuiBatiyani' stands as leaving apart Bhujni from the village. This ritual generally takes place in the month of April which according to Santal almanac is known as 'chaitBonga'. But the day and date of the observation of the ritual is not fixed. For this purpose, on the penultimate night of the day of the ritual, the unmarried boys of the village assemble at the residence of the majhi (traditional village headman of the Santal).

The parts of the various medicinal plants they collected from the forest are namely: the flower or baha of Bhiru; the root or rehet of Bablaie. Acaciacatechu;Urupkuturrehet, the root of Guhiri; the root of Iter, Dunduket or Gardiniaturgid, PosoorfTetrantheramonopetala, Hat or Cisusquadrangularis.

P.C Hembram (2014), in the Santal world view has explained that Santal worship *Bonga Buru* for socio-cultural upliftment. Their culture is full of folktales, folklore, myths etc. and their customs and traditions, mores and values, sanctions and standards, ethos and world view from these folk tales.

The reviews relating to literature specifically medicinal plant and their use by the tribal population are many. Most of the literatures under references provide some basic information on medicinal properties of plants and other materials of nature used by the different tribal communities. The knowledge from these literature will give new impetus to the traditional system of health care studies. All these valuable information support the scholars to plan their studies accordingly.

In summerising the reviews collected in relation to the present survey reveal the followings.

1. The medicinal value of plants has been recognised in all parts of the world through different ages of development.
2. There are plenty of evidences about curative value of plants in all parts of the world.
3. The tribals show little interest on the modern health care system as they do believe in their traditional way of healing and this is more so among the elder people.
4. The tribes are excellent users of plants of medicinal values as they have easy access to plant kingdom considered important from treatment point of view.
5. The tribals of different parts of India adopt traditional healing practices using plant resources available in their environment.
6. The tribals practice rituals in magical treatment in addition to use of medicinal plants.
7. The Kandha and Santal of Odisha make use of medicinal plants that have not only antiseptic value but also clottingregenerative and healing practices.
8. Tribal traditional healing practice should be examined by the medical scientists so that both can be benifitted.
9. Tribal health strategies should include recognition of the native healers and time tested ethno medicinal practices.

## **CHAPTER III**

# **RESEARCH METHODOLOGY**

### CHAPTER III

## RESEARCH METHODOLOGY

This chapter deals with details of research design and procedures followed in conducting the present study. The research project has been undertaken with the set of objectives of finding out the traditional healing practices of the Kandha and Santal the healers in treating the patients for generations together.

**3.1. Selection of district:** The study was confined to two Tribes namely, the Santal and the Kandha who are widely spread over the state territory and are also distributed in the bordering districts of neighbouring states. The Kondhas and Santals have been selected because Kondhs are widely spread over vast area Odisha, Andhra, West Bengal and Jharkhand. The communities spread over a wider area are supposed to have undergone change due to acculturation process. In Odisha, the Kondhs inhabit in the south and central parts of Odisha with its concentration in Kandhamal district while the Santals spread over the bordering districts of West Bengal, Jharkhand and Odisha with its high concentration in Mayurbhanj district of Odisha. The Kondhs and Santals are also seen substantially representing the demographic structure of the districts like Rayagada and Keonjhar respectively. The district having highest concentration of particular tribe was selected to conduct the study. Besides their migration history, both these ethnic groups have occupied significant position in the tribal history of India. Based on last census (2011) the districts like Mayurbhanj and Keonjhar were selected for Santal tribe and Kandhamal and Raygada for Kandha Tribe for the study.

**3.2. Selection of respondents:** For the purpose of study both healers and patients constituted the sample. It was decided to select Santal healers @ 20 per district of Mayurbhanj and Keonjhar and @ 15 healers per district belonging to Desia and Kutia Kandha of Kandhamal district and Dongria Kondha of Raygada district. The total healers of both Santal and Kandha tribes came to 85 and patient to 425.



**3.3. Criteria of selecting healers and patients:** On the basis of the following criteria stratified random sampling method was followed for the selection of healers.

1. Healers having at least five years of experience in healing practices.
2. Gaining popularity in the community for treating patients.
3. Operating at village level for treatment of diseases.
4. Well acquainted with local language and culture in addition to their tribal language of *Olchiki/Kui and Kuvi*

Similarly, for selection the patients, one who has received treatment of the traditional healers at least for two diseases were taken. Accordingly 5 patients per healer were selected to form the sample size.

The sample size comprises of a total of 510 respondents including traditional healers and 425 patients from two tribal communities namely; the Santal and the Kandha as detailed in table 3.3.1.

**Table 3.3.1 Sample size of the study**

Tribe	District	Healers	Patients
<b>1. Santal</b>	Mayurbhanj	20	100
	Keonjhar	20	100
<b>2. Kandha</b>			
(i) Donaria	Raygada	15	75
(ii) Desia	Kandhamal	15	75
(iii) Kutia	Kandhamal	15	75
<b>TOTAL</b>	<b>4</b>	<b>85</b>	<b>425</b>

**3.4 Development of tools for data collection:** Data were collected as per objectives of the study administering the tools such as interview schedule, field observation, interaction at individual and group level.

Interview schedules were canvassed among the healers for collecting information on the socio-economic and personal profile of the healers, healing as profession, meaning of illness, treatment and associated rituals, therapeutical agents and their use in preparation of

medicines, overlap between magic and nature present in the indigenous culture of Tribe, usefulness of ITK in Ayurvedic treatment and leadership traits of the healers.

Interview Schedules were administered among the patients for collection of data on socio-economic and personal profile, diagnosis of illness, disease and curative measures, and response on the treatment by healers.

### **3.5 Variables under study**

Data on socio-economic profile of the healers and patients were gathered on the variables like clan and family composition, age, gender and educational status, occupation and economic category.

The health cure practices of the traditional healers were investigated using variables such as healer experience, expertise, and specialisation in treatment of illness, sources of learning and training, common diseases occur and their reasons in the locality, types of treatments applied and fees charged, if any; women treatment, ritual cure, use of ayurvedic system and ITK and level of satisfaction on their treatments.

The responses from the patients were collected through the interview schedules using variables such as knowing the diseases, appointment with the healers and treatment received, application of medicines and herbs and rituals, payment of fee and access to other source of treatments.

**3.6 Pre-testing of Schedules:** The interview schedules for the healers and patients were developed taking many factors and using different variables into consideration. Schedules in English were translated into local language for administration in the field. To know validity of schedules a pilot study was undertaken in the field for testing among the healers and patients. On the basis of the response so obtained the final schedules were modified to make these more specific and objective oriented.

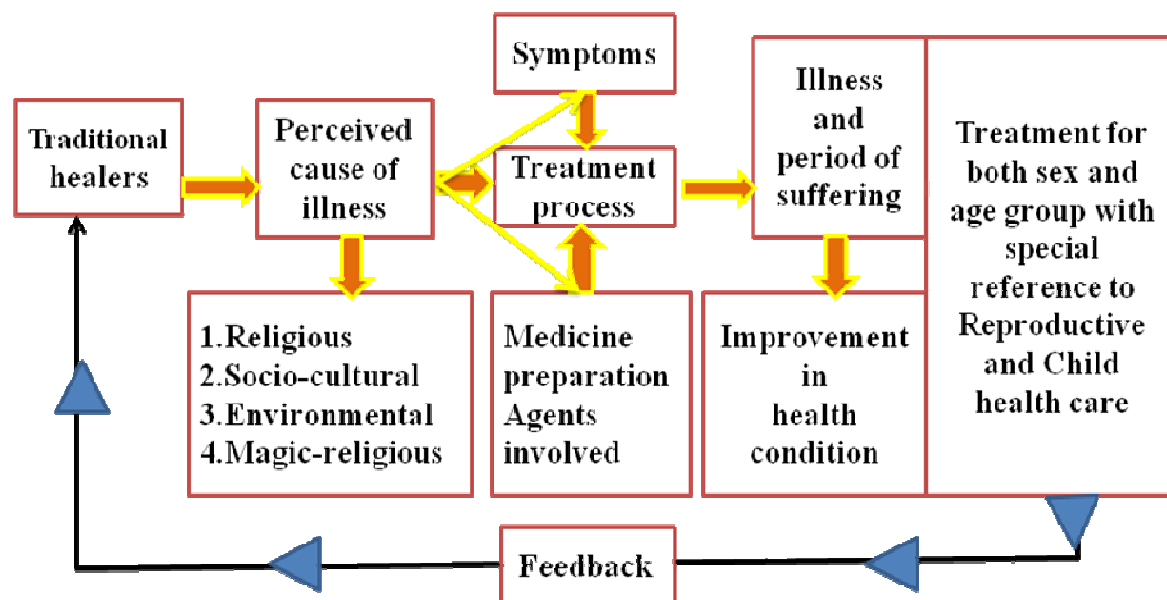
**3.7 Field Survey:** The field survey was conducted during March to June 2014 in selected districts by the trained investigators. All the six investigators were trained with input of anthropological data and references. In the beginning local knowledgeable persons of Kandha and Santals were taken into confidence to help in interview as interpreters. The interpreters were extremely helpful in conducting interview and recording of data. In the beginning for

interviewing and recording of data from each sample took about three hours which became easier later with progress of interview.

**3.8 Data analysis:** Adopting coding and decoding methods, the data were systematically arranged and tables formed and analysed applying simple statistical measures.

### Conceptual Framework of the Study

The diagram presented below sketches a conceptual framework of the study which is self explanatory.



A map showing the study area placed below indicates the operations of the traditional healing system among the Kandha and Santal tribes in the Raygada, Kandhamal, Mayurbhanj and Keonjhar districts of Odisha.



**CHAPTER IV**

**AREA, PEOPLE AND CULTURE**

**(Kandha and Santal)**

## CHAPTER IV

# AREA, PEOPLE AND THE CULTURE

## 4.1 Geographical location

### 4.1.1 Tribes of Odisha and their Geographical Locations:

The tribal population in state of Odisha occupies a considerable and unique space in India. The size of their population, typical life style and vastness of their culture influence the governance of the state. The scheduled tribes (ST) population of the state of Odisha is 8,145,081 (Census 2011). They constitute 22.1% of the total population of the state and 9.7% of the total tribal population of the country. Malkangiri district has the highest population of the STs (57.4%) followed by Mayurbhanj (56.6%), Rayagada (55.8%). Puri district has the lowest ST population (0.3%). The decadal growth rate of ST population in rural Odisha is 30.3% and in urban 14.1%. Out of 62 scheduled tribes living in Odisha, Kondh is the most populous tribe followed by Gond. The other major tribes living in Odisha are Santal, Kolha, Munda, Soren, Shabar, Bhottada, Bhumij, Bhuiyan, Oran, Paraja and Kisan. The tribes speak their native dialect although most of are convergent with neighbouring Odiya language. They dwell in traditional places surrounded by hills and forest. Each of these 62 scheduled tribal groups has its own indigenous customs, rich traditions and above all a typical approach to life.

The Particularly Vulnerable Tribal Groups (PVTG) in Odisha includes Bonda, Chuktia, Bhunjia, Didayi, Dongria Kondh, Jaung, Hill Kharia, Kutia Kandha, Langia Soura, Paudi Bhuyan, Lodha, Biohor and Mankidia. These communities are considered as special category in view of their marginalisation process, pre-agricultural economy, stagnant or declining demographic structure and distinct social, cultural and occupational practices and traits. The occupational structure of the tribes woven around forest and forest related activities. Food gathering, hunting and fishing are major activities for earning their livelihood. The cultural activities of tribes are well known, interesting and unique.

Socio-cultural levels of tribes have been classified on the basis of their location, stage of transition, assimilation and other factors as follows.

**Table: 4.1.1 Socio-Cultural levels of STs in Odisha**

1.Particularly Vulnerable Tribal Groups(PTGs)	Birhor, Bonda,ChuktiaBhunja,Didayi, DongriaKondha, Hill-Kharia,Juang,KutiaKondha,LangiaSaora,Lodha,Mankiridia,PaudiBhuyan,Saora
2.Tribes in Transition	Santal,Kharia,Oraon,Kissan
3.Assimilated tribe	Savar,Gond,Bathudi, Bhuyan,Saunti

(Source: Ota and Mohanty, 2010, Population Profile of Scheduled Tribes in Orissa, p.13)

#### **4.1.2 Mayurbhanj District:**

With the size of land, the district Mayurbhanj forms around 6.68% of total geographical area of the state. It is the largest district of Odisha by area. The district is landlocked and hilly. Its frontiers touch two states viz Bihar and West Bengal. It is flanked by Keonjhar and Bihar in the West, West Bengal to its East, district of Balasore to its South and West Bengal and Bihar to its north. Also with an area of 1641.89 sq.km under forests, it is the district with largest area under forest in the state. The district is known worldwide for its unique form of dance ‘the Chhau and the Jhumar’. Another thing that is typical of Mayurbhanj is ‘The Mudi’, the puffed rice which is a very popular diet of the place. Mayurbhanj district is mainly inhabited by the tribals who constitute 57.67% of its population, Bhumijas and Kolhas being the chief among them.

**Geography of Mayurbhanj District:** Located between 85° 40 minutes to 87° 11 minutes East longitude and 21° 16 minutes to 22° 34 minutes North latitude, Mayurbhanj is the largest district in Odisha covering 10418 sq.km. The geography of Mayurbhanj can be divided into three natural divisions. The first one, being the hilly terrains that cover the centre of the district running across most of the region. Mostly comprising the Simlipal Mountains, the hill divides the district into the rest two separate geographical regions, Western and Eastern. The Eastern part is made up of fertile slopes that stretch from the foot hills to the sea. The Western part is mainly made up of plain lands with gentle slopes and rocky hills.

The climate of Mayurbhanj district is sub-tropical. An oppressive hot and humid summer follows by the monsoon between June and November. A cold winter characterizes the general climate of Mayurbhanj. May is the hottest month when the mean daily maximum temperature rises up to 47° Celsius. December is usually the coldest month of the year when the mean daily minimum temperature comes down to 4° Celsius. The higher reaches of the Similipal experiences frosting during the peak of winter.

The District is covered by a group of hills known as the Similipal Range and the remaining portion is covered by undulating plains raising and falling in gentle slopes. The famous Similipal National Park and Sanctuary is a tiger reserve located in the central part of the district of Mayurbhanj. Stretches of leafy green forest served with a network of perennial streams and its refreshing climate contribute so much to make the district an ideal habitat for tropical flora and fauna. Valuable forest growth which includes trees, like Sal, Piasal, Teak, Asan, Mahua, Bamboo and other indigenous species provide tremendous developmental potential for exploration and harness to the benefit of the local people. The varied range of natural forest products like resin, bamboo, sal and siali leaves, mohua flowers, orchids, medicinal plants and herbs hold a great source of employment.

The livestock sector is closely associated with agriculture and it plays an important role in the district economy in terms of income and employment. It is the most important occupation subsidiary to cultivation among small and marginal farmers, women and landless agricultural labourers. Most of the people in the rural areas rear livestock and poultry. Against the ICMR recommendation of 250 grams per capita consumption per day, use of milk in the district is 22 grams, which is less than half of the state consumption of 47 grams – the national consumption level per day being 214 grams.

#### **4.1.3 Keonjhar District:**

The Keonjhar District emerged as one of the Districts on 1<sup>st</sup> January, 1948. The District is bounded by Mayurbhanj District and Bhadrak District to the east, Jajpur District to the south, Dhenkanal District and Sundargarh District to the west and West Singhbhum district of Jharkhand state to the north. Covering a geographical area of 8240 sqkms, the Keonjhar district lies between 21° 1' N to 22° 10' N latitude and 85° 11' E to 86° 22' E longitude.

*Geography of Keonjhar District:* Geographically the district is divided into two widely dissimilar tracts the lower Keonjhar and the upper Keonjhar. The former is a region of valleys and low lands, while the latter includes mountains highlands with a general slope from north to south. The average elevation in its central part is about 500 metres. About half of the area of this district spreading about 4043 sqkms is covered by forests of northern tropical moist deciduous type and contains Sal, Asan, Piasal, etc. The river Baitarani comes out of Gonasika hills and flows to the north touching the border of Singhbhum district of Jharkhand.



The soil is mostly red throughout the district and in the south there is a small patch of black cotton soil. The climate of the district includes oppressively hot summer with high humidity.

The climate of the district includes oppressively hot summer with high humidity. Summer generally commences in the month of March. Temperature begins to rise rapidly attaining the maximum in the month of May. During the summer maximum temperature recorded is around 38 degree Celsius. The temperature in the month of December is lowest that is near about 11 degree Celsius. Sometimes it even drops down to 7 degree Celsius. The average annual rainfall is 1534.5 mms. The Fauna of Kendujhara district are Elephant Cattle, Buffaloes, Goats, Horses, Ponies, Mules and Donkeys, Dogs and Rabbits and Pig and the flora appears confined to the plateaus are Sal Jamun, Ashoka, Rai, Salia bamboo. Kanta bamboo, Kendu, Sandal, and Akasii.

#### **4.1.4 Kandhamal District:**

Kandhamal revenue district came into existence on 1<sup>st</sup> January, 1994, after Phulbani district was divided into Kandhamal and Boudh districts of Odisha. The Kandhamal is bestowed with the beauty of nature. It has wild life, scenic beauty, healthy climate, and serpentine ghat roads for the tourists. It has attractions, like panoramic coffee gardens, pine jungles, Ghat roads, hills and water falls, virgin forest and typical tribal village life.

**Geography of Kandhamal District:** Kandhamal district lies between 19<sup>0</sup> 34 minutes and 20<sup>0</sup> minutes north latitude and in between 80<sup>0</sup> 30 minutes and 84<sup>0</sup> 48 minutes east longitude. Psychologically the entire district lies with high altitude zone with inaccessible terrain of hilly ranges and narrow valley tracts which guides the socioeconomic conditions of people and development of district.

It is bounded by Boudh district in the north, by Raygada district in the south, by Ganjam district and Nayagarh district in the east and by Kalahandi district in the west. Total geographical area covered by Kandhamal district is 8021 sqkms that accounts for around 7.14 percent of the total area of the state.

Almost 66 percent of the land area of the district is covered with dense forests and towering mountains rich in green meadows at the attitude of 2000 feet to 3000 feet, the terraced valleys thronged with these colorful tribal in their natural heritage, dancing and sporting has its own

appeal. The important crops grown in the district during kharif season is Paddy, Maize and Niger. In irrigated areas, crops like Potato, Vegetable and Mustard are grown. The soil in the District is mostly Red-laterite group, having organic matters contents. Kandhamal district has a subtropical dry climate.

The small hamlets dotted throughout the district are covered with thick impenetrable forest and the winding streams and torrents intersect the hilly tract. The hills of this sub-division are a part of the Eastern Ghats. Kandhamal district has a sub tropical dry climate. Maximum temperature recorded is around 45 degree Centigrade and minimum temperature as nearly 2degree Centigrade. Flora of this district are kendu leaves, Piasal, Sisoo, Bandhan, Gambhar, Kurum, Salai, Karada and Barabakalia, Teak. The fauna of this district are Goats, Horses, Ponies, Mules and Donkey, Cattle, Dogs and Rabbits, Hens, Ducks and Elephant.

#### **4.1.5 Rayagada District:**

Situated to the south of Odisha the district of Rayagada was carved out of erstwhile Koraput on 2<sup>nd</sup> October 1992. With a long and glorious historical records evident by copper plates, rock inscriptions as well as different coins the district is basically a tribal district and is inhabited by approximately 57.52% tribes, the Kandhas and Saoras being the main tribal group. It is also one of the mineral rich districts of Odisha. It is flanked on the south by the borders of Andhra Pradesh and district of Koraput, in the west by Kalahandi, in the east by Gajapati, and Kandhamal in the north.

**Geography of Rayagada District:** Situated between 19<sup>0</sup>10 N 83<sup>0</sup>25 E latitude and 19.17<sup>0</sup>N 83.42<sup>0</sup> E longitude, Rayagada covers a total land area of 7580 sq.km. Rayagada is based 207 metres (679 feet) above sea level. It enjoys extreme climate with summer temperature closing 36<sup>0</sup>C and the winter temperature dropping to 12<sup>0</sup>C. It receives ample rainfall in the monsoons, average rainfall being 1285.2 mm per annum. Most of the area remains covered under forests. More than 4785 sq km or 63% of the district is covered with forest of deciduous type. The district is surrounded by small hill ranges that are abound with meandering waterfalls and sal forests alike.

The Rayagada and Gunpur subdivisions of Rayagada district are the most fertile belt. It has large tracts of forest in the Gunpur and Bisam-Cuttack tahasils containing some of the most valuable species of timber. Two major rivers such as Indravati, Jhanjabati and their tributaries drain this division. The 3,000 feet plateau area is now mostly denuded of forest. Here the hills are either covered with low shrubs or bared with disfigured patches of barren land spoiled due to shifting cultivation. The Rayagada district has rivers like Vansadhara and the Nagavali and many perennial streams. The principal species commonly found in the forest are Timber, Fire wood and Minor forest produces like Tamarind, Hill Brooms and different types of fibres, Oil Seeds, Medicinal Plants and Kendu Leaves etc. Koraput district is mostly having the forest growth with Climax species 'Sal'. The flora of the district also includes rosewood, piasal, sanghvan, haldi and rosewood. The Podu (Shifting Cultivation) is rampant making a good area denuded. Large-Scale forest clearings by tribals are seen due to increase in demand for timber and fire-wood. The fauna of the district comprises of the panther, leopard, tiger, hyena, jackal and wild dogs, Wild Asian Water buffalo, black bear, gaur, black bucks, spotted deer, sambar and barking deer, peafowl, red jungle fowl and grey jungle fowl, green pigeon and duck. The Fauna are Cattle, Buffalo, Goat, Sheep, Pig, Rabbit, Ducks, Cross Bred.

**Table: 4.1.2 The Comparative features of the Districts under study**

Sl. No.	Particulars	Name of the Districts			
		Keonjhar	Mayurbhanj	Kandhamal	Rayagada
1.	Sub division	3	4	2	2
2.	Tahasils	13	26	12	11
3.	Blocks	13	26	12	11
4.	Municipality/ Corporation	4	1	1	1
5.	N.A.C	1	3	1	2
6.	Gram Panchayat	287	384	153	171
7.	Forest (Sq. Km)	2,525.08	4392	5,709.83	4,785.36
8.	Villages	2132	3950	2587	2667
9.	Police Stations	24	33	18	12
10.	Temperature	11.7 <sup>0</sup> -38.2 <sup>0</sup> C	03 <sup>0</sup> -42 <sup>0</sup> C	2 <sup>0</sup> -45 <sup>0</sup> C	12 <sup>0</sup> -36 <sup>0</sup> C
11.	Rainfall	1534.5 mm	1600.6 mm	1427.9 mm	1285.9 mm
12.	Area	8,303 sq.km	10,418 sq.km	8,021 sq.km	7,073 sq.km
13.	Total Population	1801733	2519738	733110	967911
14.	Male	906487	1256213	359945	471960
15.	Female	895246	1263525	373165	495951
19.	Literates	1052518	1369397	399786	407735
20.	Male Literates	605119	794171	233900	241959
21.	Female Literates	447399	575226	165886	165776
22.	% of Tribal Population	45.45	58.72	53.58	55.99

(Reference: 2011 Data)

## **4.2 Tribes of Odisha: Kandha and Santal**

### **4.2.1 Kandha Tribe**

The Kandhas form numerically the largest group among the 62 Tribe of Odisha. The Kandhas belong to the Protoaustraloid admixture. The main divisions are into Kutia or the hill Kandhas and plain dwelling Kandhas, the large owners are known as Raj Kandhas. The Kandhamal district in Odisha has 55% Kandha population and was named after the tribe. The Kandha language ‘Kui’ is closer related to Telgu than Gondi.

They are known for their culture heritage and value, which center on respecting nature. Amongst the Kandhas, MaliahKandha is the majority group and they speak dialect ‘Kui’

language of dravidian origin. Liquor is considered as a social necessity for Kandhas and therefore consume by them irrespective of sex and age. Dress pattern uses of ornaments by women, social get together are the special features of the Tribe. Dharani or the earth Goddess is considered the Supreme Being among the Kandhas. SHE is all powerful and highest of all deities. The Kandha tribal celebrate various festivals round the year for better yield of crops of which chaitraparba and the meriaparba are the most important.

There are three main sub-groups of Kandha i.e., Dongria Kandha, Kutia Kandha and Desia Kandha. The other subsidiary sub-groups are Nanguli Kandha, Malua Kandha, Sitha Kandha and Parga Kandha.

According to the area of habitation Kandha are classified into 3 classes, Kutia, Dongria and Desia. The Kutia Kandhas are found mainly Kotagarh, Tumulibandha and Belghar area. The Dongria live in high lands of hilly area. The Desia or Oriya Kandhas live in plain areas with in non- tribal people.

Kandha is one of the important Tribes of Odisha. Kandha are identifying from their names. Those living on hilly tops are named as Kandha. They speak Kui language without any script. The common sur names of Kandhas are Pradhan, Mallick, Konhar and Majhi. Those who worship deities have sur name like Dehuri, Jharkar, Jani etc. The Kandha are Hindu, but follow their own way of living. In the past they were valiant warriors. They had played important role in freedom movement.

They are very fond of drinking sago palm juice and dead palm juice (Tadi). Local herbs and roots are added to the juice to increase its alcoholic contents. Sometimes *Mahua* flowers are collected and liquor is prepared to meet the requirement on special occasion. Liquor is considered as food and at the same time a ritualistic food to satisfy deities and spirits. It is considered as a social necessity by the Kandhas and therefore consumed by them irrespective of sex and age. The Kandhas are agriculturist. They generally produce cash crops like turmeric, ginger, mustard, Niger, black gram, arrowroot etc. The Dongria section of the Kandha communities are expert horticulturist and produce fruits like bananas, pine apple, orange, jack fruits etc. They keep buffaloes for sacrifice, but the Desia Kandhas mainly use the buffaloes for ploughing their field. Barter system is still the method of exchange among the Kandhas. The Kandhas believe in "*Dharani*" the earth goddess-the Supreme Being. She is

all powerful and the highest of all deities. She is represented by a block of stone erected in a hut. She is responsible for the growth of vegetation and other produce of land. She used to be satisfied with human blood which was called "*Maria*" by the *Dongriasection* and "*toki*" puja by the *Kutia* section of the Kandhah community. This custom has been suppressed since long by the Bristishers and in lieu of it buffalo is sacrificed at present. The Kandhas worshippers of ancestors are called "*DUMBAS*". These ancestor spirits appear in dreams when they desire to receive periodic worship. There are various deities and spirits who are different in different localities inhabited by the various sections of the *Kandhas*. Apart from these spirits they believe in the existence of ghosts. They are controlled by *shamans*. They also believe in white and black magics. They are fatalists and believe in chance and luck. They celebrate various festivals round the year for better yield of crops. Two festivals such as Chaitraparab observed before sowing paddy and other millets and "*Meriah*" or "*Kedu*" festival in the month of February / March are the most important. The Dongria Kandhas exhibit their talents in their art and crafts.

The diet survey in Desia Kandha villages shows that most of the crops grown in shifting cultivation and low land, all the games killed in and edible roots and tubers, fruit and flowers collected from the surrounding forest as well as fish caught in the nearby stream are consumed by them. For them alcoholic beverage is also a source of nutrition. They depend on a rice or rice gruel diet. Wild mango, jackfruits, amala, kendu etc. are taken. Egg is used more as ritual purpose rather than food. Sacrificed Buffalo meat is taken. They use stream and river water for many daily purposes. During summer they hallow out cisterns in the beds of the stream or corner of the paddy filed to get water. Brick and cement plastered wells and tube wells are also found in their village. Monkeys, elephants, snakes and reptiles are never eaten by Kandhas. Pork and chicken are not eaten by females. Men take food only in special occasion. There are little taboos during pregnancy. Anything available may be taken during pregnancy unless diagnosis of ill health causes a priest to forbid an items being displeasing to one of the deities. Pumpkins and certain roots are forbidden to eat. Lactating women do not take greens or tomatoes as this cause diarrhea of their babies. Molasses or sweet food and meat of wild animals are denied to nursing mothers.

**DongriaKandha:** The Dongria Kandha, section of the Kandha tribe, is found in the Niyamgiri hill ranges of the Eastern Ghats and particularly in the Rayagada and Koraput

districts. Dongria Kandha people speak in *kui*, which is of Dravidian linguistic ancestry. A Dongria Kandha village is situated in a gentle slope at the foot hills or in shelf in the steep hills. The houses are built close to one another on either side of the village street. They are expert horticulturists and grow jackfruit, mango, pineapple, banana, citrus fruits, ginger, and turmeric. Besides horticulture, they earn their livelihood through shifting cultivation along hill slopes, collection of materials from forests, animal husbandry and wage-earning. The Dongria Kandhas are patrilineal and patriarchal; they have nuclear families, extended families, lineage and clans. Although marriage by negotiation appears to be more prestigious, they too have other ways of selecting marriage partners, such as the marriage by capture, exchange, or service. Their economies centre round the *dongar* - hill slopes of shifting cultivation and the *dongaris* the abode of their deities and supernatural beings. It provides them also with a metaphor for their worldview.

The secular and sacerdotal chieftainship continues to enjoy confidence and esteem. The *Bismajhi*, *Barika*, *Pujari*, *Disari*, *Bejuni*, *Jhateni* and *Gouda* are the other village functionaries who play specific roles in various contexts. The theological pantheon of the *Dongria Kandha* has the *Dharnipenu'*, the earth goddess, at the apex and in addition there are a large number of village deities, ancestral cults, household deities, and spirits (both benevolent and malevolent). Deities and spirits are propitiated for their blessings, and rituals and ceremonies are observed throughout the year. *Dongria Kandhas* employ traditional knowledge of the causes and cure of diseases and ailments, and consult their *Disari*, the medicine man, at times of need.

### Origin of DongriaKandha

Dongria Kandha is numerically the most preponderant tribe of Odisha. They inhabit the lofty Niyamgiri hill ranges in the district of Rayagada. For being the denizens of hills, forests and high lands (*Dongar*), their neighbours name them Dongria but, they call them selves '*Dongran Kuan*' or '*Drilli Kuan*.' Earlier there were no settlements around the Niyamgiri hill ranges. The Dongria Kandhas were residing in the pockets of Lanjigarh area of Kalahandi district and in some other places on the hills. People from these areas were casual visitors to Niyamgiri hill ranges. They were visiting the place for hunting and food gathering. Since recent past the locality is considered as area very rich in natural resources and a fertile land for food production. After visiting this area many times, Dongrias settle down permanently.

During the initial period they never went to the peak of the mountain, as such places were regarded as the abodes of Niyamraja's kin. Niyamraja was the sole protector of Dongria Kandha and accordingly he was highly esteemed in Dongria tradition. It was through his approval that one can settle for a certain time or forever in Niyamraja's abode.

There are myths associated with the Dongria settlement which are considered important right from the selection of a site and ways and means to settle in that place. Mythical attributes create a strong sense of conviction among the Dongria Kandha that they were direct or indirect progeny of Niyamraja. The entire Dongria world is said to be the kingdom of Niyamraja where he reigned supreme. The patch of 115 Sq. Kms rugged mountain regions is named Niyamgiri (*Niyam*) hills. The entire Niyamgiri comprises of four blocks enumerated in Revenue Administration after Independence, such as: Bissam Cuttack, Kalyansinghpur, and Muniguda of the Rayagada district and Biswanathpur in Kalahandi district. Out of these blocks Bissam Cuttack, Kalyansinghpur and Muniguda are highly populated with Dongria Kandha. People of all these areas considered Niyamraja as their God as well as ancestral kin. This primitive tribe strikes as a very important community for their simplicity and quick in observation and sensibility. In every activity this primitive tribe reveals a corporate life. They help each other in economic activities, drink, dance and sing in congregation. Religious ceremonies and festivals are performed communally. Crime is practically nil and adultery is uncommon where as individual behaviour is marked by honesty and truthfulness. The Dongria live amidst nature. To the Dongria, the native is the greatest impeller, the scenery around forming the grand arena where the human drama of vicissitudes of mortal life is staged. As sons of nature the Dongrias love to live in their natural adobe for away from the maddening crowds of civilization. Dongria strongly believe in the existence of a large number of supernatural beings who exercise control on various aspects of their mundane life. Their patheon is composed of Gods, Deities and Spirits both benevolent and malevolent. "Dharani Penu" or Jhankar" is their benevolent supreme goddess.

#### Language:

The Dongrias belongs to the Dravidian linguistic group. G. A. Garrison had written "The Kandhas are Dravidian tribe in the hills of Odisha and neighbouring districts. The name which they use themselves is "Kui" and their language should accordingly be dominated Kui. (Thurston, Edgar, 1909)



But the language spoken by the Kandha appears to have mainly two local variations - "Kuvi" spoken by a majority of undivided Koraput, Kalahandi and Bolangir and "Kui" spoken by Kandha who live in the Boudh, Kandhamal district. "Kuvi" appears to have original structure composition while "Kui" is an acculturated and transformed form of Kuvi language. The Kandhas of Koraput and Rayagada districts, the other tribal communities such as Kandha-Paraja, Kandhaa-Paraja, Penga-Paraja, Jatapu-Dora and Kandhao-Dora speak Kuvi with a admixture of Telugu. But the DongriaKandhas of Rayagada district inhabiting on the Niyamgiri hill ranges in three blocks such as Kalyansinghpur, Bissam Cuttack and Muniguda speak Kuvi.

### **Flora & Fauna:**

The Dongria Kandhas cannot imagine life without the forest. For them it is more than mere collection of trees, bushes, creepers and wildlife. It has been the focus of their social and religious life as well as their greater economic asset since time immemorial. It is their home and habitat, a symbol of their freedom of movement both as groups and as individuals, such as the recreational ground of youths for dance and song.

The extensive practices of shifting cultivation and wanton destruction of forests have rendered the wild animals scarce in the area. However, some Panthers (*PantheruPardus*), Leopard-cats (*Feilsbengolensis*), Spotted deer (*MuntiacusMutjik*), Sambars(*Cervus Unicolor*), Wild Boars (*Sus-Scrofa*), Common Monkey (*PreshytisPhayrei*), StrippesSKuirrels(*Ratufa Bicolor*), Indian Porcupines, Hares, Bears, Grey and red jungle fowls, Peacocks and Green Pigeons are found in distant forests where people go for collection of forest produce and for communal hunt. Venomous snakes are found in large numbers and causes of snake bits are very common. Wild birds and parrots destroy standing crops. The Dongrias ward off such animals and birds by indigenous methods.

### **Kutia Kandha:**

The Kutia Kandha is a sub-section of the Kandha tribal group of Odisha and they are mainly concentrated in Belghar area of the Balliguda subdivision in Kandhamal district. Their habitat is located in the north-eastern fringe of the Eastern Ghats and contains hills, rivers and streams. The Kutia villages are situated in the foothills or in the valleys surrounded by densely forested high hills. Patrilineality, patriarchy and patrilocality prevail in *Kutia Kandha*

villages. They have nuclear and extended families, lineage, clans and clan exogamy regulates marriage. The secular functionaries are the *Mutha Majhi*, *Pat Majhi*, *Bis Majhi* and *Chhatia*; while the *Jani* is the sacerdotal head. The *Kutia Kandhas* are polytheists and believe in a large number of deities, spirits, supernatural elements, both benevolent and malevolent. They propitiate their deities and spirits through performance of rituals for their blessings. They observe various ceremonies and festivals throughout the year and perform magico-religious rituals as per the prescription of the *Jani*.

The techno-economic base of the *Kutia Kandha* is centred on the sylvan forest eco-system. They practice slash-and-burn cultivation, otherwise known as *poduchas'*, horticultural plantations, animal husbandry and wage-earning and also grow crops in wet land for their livelihood. The *Kutia Kandha* women play a significant role in socio-economic, socio-religious and socio-cultural system maintenance.

### Language

The *Kutia Kandha* identify themselves in the ***Kui*** language group as ***Kueoja*** or ***Kuiladu***, the suffix- 'eoja' and 'adu' referring to male and female persons respectively.

### Family

Family is the basic social unit of the *Kutia Kandha* and it is the foundation of their social organization. Since it is the basic unit, it controls the social behavior of the members as also the use of cultivated land and its possession. In *Kutia Kandha* society generally the nuclear family type is predominant. Joint family system is practically nil where as polygynous families are found in many villages. Nuclear family consists of parents and their unmarried children. Their society permits and it is customary that the older widow's parents stay with the youngest son irrespective of his marital status. The father/husband is the formal representative of the family and considered as head of the household, where as in the family consisting of old parents and the youngest son, the youngest son becomes the head of the household. The *Kutia Kandha* family is both patriarchal and patrilineal. The head of the family takes socio-cultural decisions in consultation with other adult members of the family. But in case of economic matters, the head of the family consults his wife before taking the final decision. In this primitive community the property is distributed equally among the sons except the youngest son. The daughters do not get any share from the parental property. Any

family without a child can adopt son from others. But the first preference is given to own brother's Son- in- law. They call *Ghar-join-sachenje*.

#### **Traditional belief and cure:**

The Kandha worship the goddess to cure measles, chickenpox and a few other diseases. They also sacrifice animals and offer liquor to their deities for curing certain diseases and increasing the fertility of the soil. A good number of plant species are also worshipped for various reasons. In their sacred places, the Kandha plant some useful shrubs and trees. The health of Kandha people has been invariably connected with socio-cultural and magico-religious practices since ancient times. They have developed indigenous way of healing practices to protect their health against various kinds of diseases. There is a popular belief prevalent among them is that some of the diseases are caused by evil spirits as well as malevolent deities for which they observe specific rituals to appease them. In case of debility or some complicating sickness, the priest makes diagnosis through trance to find the malicious spirit seeking termination of pregnancy. The ritual action is taken by the family to put the matter right. The most feared members of the community seek to manipulate the powers of evil for their individual gains. For unseen attacks occur against men, the cause may be jealousy of someone who is more fortunate or powerful, or unduly aggressive, greedy or quarrelsome. In case of women sexual jealousy between two wives of one husband, childless woman against a childbearing proudly woman who openly mock the barrenness the sorcery follows the method of secretly obtaining shed hair, nail pairing, soil from the victim's foot print or sputum or some possession. Transformation into a tiger or snake with intent to cause harm to others is believed to be a power possessed by certain evil-intentioned persons.

For Kandha the entire family is sick when one member suffers. And the entire village is sick when one family suffers. If ritual sacrifice is required to restore a broken relationship with the deities, the whole village is involved. So on the appointed day, no one goes for the work.

Verrier Elwin described the diviner priest of the Soara Tribe which applies equally to other tribes of this study. He has the power not only to diagnose the source of the trouble of disease, but also to cure it. He is a doctor, as well as a priest, psychologist as well as magician, the repository of tradition, the source of sacred knowledge. His primary duty is that of divination, he seeks the cause in trance and dream. The priest has good grasp of

theological principles. He is equally equipped with knowledge of local geography, history, and economics, circumstance, genealogy of the family members and village gossip. In the state of trance all this knowledge and experience come to use and expressed in a dramatic performance which often has a genuine healing effect.

#### **4.2.2 Santal Tribe**

The Santal are the largest tribal community of India. They are distributed in the states of Bihar, Chhatisgarh, Jharkhanda, West Bengal, Odisha and Tripura. Santals are the most numerous of the Tribe of the Austro-Asiatic race to which Munda, Hoe, Kharias, Bhuyas and some other Tribes belong. The Santals have been more tenacious of their language. They even use a script invented just 80 years ago. The Santali script is relatively recent innovation. The Ol Chiki script invented by Pandit Raghunath Murmu was an epoch-making invention, which provided appropriate writing symbols to the Santals. The origins of scripts of most other Indian languages derive from the hoary past and the story of their origin has been a matter of historical research.

The Santals are divided into 12 patrilineal totemic clan (pari) mainly Hansda, Murmu, Kinku, Hambram, Soren, Marandi, Tuduboske, Besra, Puria, Charry and Bedia which are further divided into several khunt or sub clan.

Out of sixty two Tribes of Odisha, Mayurbhanja district houses forty five Tribes. Santals are found in other districts like, Keonjhar, Balasore, Sundargarh and Dhenkanal. Among the people of different races and functional affinities Santals are given the place of honor that numerically stand foremost in the population of the state.

They are an agricultural tribe from the time immemorial. They have cleared forest, toiled the land and produced food. Beside agriculture they also domesticate animals like cows, buffaloes and pigs. They are also good hunters.

The Santals might have learned the immense utility of Sal tree (*Shorea robusta*), Mahua trees (*Madhuca latifolia*) and Kusuma tree (*Adina cordifolia*) from their ancestors for their sustenance these trees are significant from two angles i.e. socio-religious and economic. They collect various kinds of root, leaves, flowers, fruits, stems, and resin from the forest which are consumed by them as food or medicines in their day to day life.

“Marangburu” or “Bonga” is the supreme deity of the Santals. They believe spirits (bonga) who handle different aspects of the world and who must be placated with prayers and offerings in order to ward off evil influences. The spirit operates at the village, household, ancestor and sub-clan level along with evil spirit that cause diseases and can inhibit village boundaries, mountains, water, tiger and the forest. A characteristic of Santal village is a sacred grove on the edge of the settlement where many spirits live and where a series of annual festivals take place. The most important spirit is Marang Buru (Great Mountain) who is invoked where offerings are made and who instructed the first Santal in the brewing of rice beer. Marang Buru’s consort is the benevolent Jaher Era (lady of the grove)

The Santal culture is depicted in the painting and artwork on the walls of their houses. The music, dance, song are of worth mention in the map of the culture of India. Santali culture is highly respected by the scholars.

At present many of Santal people are educated and occupied important positions in public and private sectors. Their socio-economic status has increased and many development programmes are implemented for them by the state and national governments. The salient features of the Santal tribe are;

- 1. Location (Major)** : Mayurbhanj, Balasore, Keonjhar
- 2. Language** : Santali (Mundari)
- 3. Major Occupation** : Cultivation, Industrial Labour, Mining, Quarrying
- 4. Major Festivals & Rituals:** Erok-sim, Hari-har-sim, Iriguldi-sim, Jantkar, Saharai, Magha-sim, Baha
- 5. Religion** : Autonomous Tribal Religion Offering during worship is made within the pictorial boundary known as *khondas* a mark of the mundane relationship of the supernatural power.
- 6. Hygienic and cleanliness:** Known for their concern with personal hygienic and cleanliness of their surroundings, the santal tribal are known for their great adoration of beauty. The santal community is devoid of any caste. They believe in super natural beings and ancestral spirits.

**7. Other Distinct Socio-Cultural Features:** The Santals are divided into several totemic exogamous clans, *Paris*. Each clan is further divided into sub-clans, maximal lineages, *Bansa*, and minimal lineages, *Kutum*. The kinsmen, at the level of broad groups refer to each other as *kutumpele*, lineal kins and *bandhupela*, affines. They observe *Janam Chatiar*, purificatory ritual on the seventh or ninth day of birth, and *natyam*, name giving ceremony within one year. Death rites are observed within ten to twenty days of death. The common types of marriages permitted in their society are, by negotiation, by elopement, by intrusion and by service. Junior levirate, sororate and remarriage of widows are also permitted in their society. Both Burial and cremation are practiced. A chicken is dedicated to the dead body. *Sing Bonga*, Sun God otherwise called *Thakur* or *Dharamis* their Supreme Deity who is revered as the creator of the universe. Their important village deities are *Marang Buru*, *Monreko*, *Tureiko*, *Jaher Era*, *Gosani Era* and *Manjhi Haram*. Besides there are a number of other deities like hill and forest deities, earth goddess (*Basumata*), ancestral spirits (*Hapranko Bonga*), household spirits (*Abe Bonga*) etc. The traditional village council is headed by the secular chief, *Majhi* assisted by *Paramanik*, the deputy chief, *Naik*, the village priest, *Jog Majhi*, the Moral Guardian, and *Gadet*, the messenger. At the inter-village level they have inter-village council called *Pirha* or *Pargana*. Priesthood is not appropriated by a particular clan group or a section but is owned by the family members of the first settlers of the village. Occasionally selection of a successor of the old priest is held if he leaves no issue (male child). Such a selection is made mainly by a divinated person and it is undisputed.

**8. Food & drink:** Rice is the staple food of Santal. They eat beef, pork and meat of other animals. They are fond of taking watered rice with curry, like green leaf and vegetables such as brinjal, potato, sweet potato, papaya, tomato, ladies finger, gourd, pumpkin, etc. Their rice diet is supplemented by cereals like, *ragi*, *suan*, *gulchi*, *kngu*, maize and pulses, like black grams. They like to take non-veg food, such as curries of fish and dry fish, meat, chicken, carb etc. During festive occasions they take rice cakes along with mutton and chicken curry. Their food is also supplemented by the forest foods, like honey, yams, fruits (mango), flowers (*mahul*), tubers, green leaves. They drink various types of beer and liquor such as *mahua* liquor, rice beer. Both males and females love to drink *handia*, rice beer. They also like the drink of date plam juice. The Santal males like to chew tobacco. They roll some tobacco in a piece of dried sal leaf and smoke it. They are also fond of smoking the *bidi* and cigarettes.

**9. Traditional belief and cure:** The Santals believe that the village deities and their ancestors' spirits play a vital role in the day to day life. Also they do believe in witchcraft and bala magic. As they believe so, the Witches or Diensposses evil powers to cause harms to others and bring diseases and natural calamities. The culture bound Santals people take help of *Naike*, *KudamNaike*, *Ojha* (traditional Magico-religious healers), who converse with the spirits through trance and cures illness. The husband of a pregnant wife never kills any animals and participates in any funeral ceremony. Thus he is prohibited to touch any corpse. The pregnant woman is not allowed to go to the forest alone. She is refrained from weeping on the death of a relative. This is believed so that her prospective baby is safe from the eyes of the evil spirits. They believe that the spirit of the dead remains in the house and may cause harm to family members and villagers until the death rituals are performed

**4.3 Tribal Health culture:** The tribes through the world preserve their own identity and practices. In case of health practices they follow traditional healing methods utilizing plant, animal and minerals. From the early to recent human beings all tribes are being dependent upon nature for their primary needs as they are born and brought in forest. They are living as long and terrains generational interaction with nature was summarized with indigenous knowledge system which serves their mundane needs as well as crisis situations including health. In India majority of tribes rely upon their own way of healing system and indigenous health seeking practices in the event of diseases and these indigenous knowledge community referred to as the strength or value of their society.

The tribe is highly reserved in nature so the collection of information is very difficult task. Ethno-medicine refers to the study of traditional medical practices which is concerned with cultural interpretation of health seeking practices. The practice of ethno medicine is a complex multi-disciplinary system constituting the use of plants, spirituality and the natural environment and has been the source healing for people for millennia (Krippner 2003). In India it is reported the traditional healers use 2500 plant species and medicines (Pel, 2001). About 90 medicinal plants are used in 17 various health problems highest being for wound healing (12%) in treatment of oral mode with ingredients of honey, common salt and milk (Karuppusamy 2007). Richness of the biodiversity of Similipal Sanctuary in Mayurbhanja district of Odisha is internationally well acknowledged. Out of around 1076 species recorded so far from Similipal Biosphere Reserve, more than 200 species are attributed with medicinal uses (Rout, 2000).

Summarizing the findings of many authors and keeping situation of study areas in view the use of different plants for curing different diseases by the tribes have been cited herewith.

**Table: 4.3.1 Traditional medicines used against diseases / ailments**

Sl. No	Ingredients	Method of preparation of Medicine	Administration	Remarks
<b>(Uni and Plant based)</b>				
1	Are	The gum is collected by insertion.	Surface application of the gum on affected part twice a day to treat <u>sore</u>	The sore is cleaned with salt water before application of gum.
2	Beri		The twig is used as tooth brush twice a day to contain <u>toothache</u>	Cold water & sour fruit avoided
3	Bisalyakarani	A few leaves are pressed in between the palms	Surface application of the pressed mass on <u>bruise</u>	Bruise is kept away from dust & water.
4	Danghumcharji	A few seeds are grinded to a fine paste with little water.	Surface application of the paste on penis at night time to check early	Hot food & animal protein is avoided.
5	Dongjel Dukta	The bark is pounded with water and boiled.  A piece of dukta (dry) is chewed and the saliva is collected.	The warm pounded mass is placed on <u>deep wound</u> .  Surface application of the Saliva on <u>hornet / wasp / bee sting</u> .	Sour food, fermented beverage & dry fish are avoided  -
6	Gaba	-	Surface application of the warm oil on abdomen to relieve from <u>delivery pain</u> .	Kudanboi / Bejuni attends the patient
7	Grururi	A small piece of root is grinded to a paste.	Surface application of the paste on <u>snake bite</u> once only.	Kudan / Kudanboi attends the patients



Sl. No	Ingredients	Method of preparation of Medicine	Administration	Remarks
8	Iswarajata	The root is grinded to a fine paste and whipped with water.	Oral administration to contained <u>non-secretion</u> of <u>milk</u> of a nursing mother.	The Kudanboi / Baguni attends the patient
9	Jada		The warm oil is massaged over the abdomen twice a day to contained <u>stomachache</u> .	Chili, dry fish & constipating foods avoided.
10	Kadali	21 small pieces of pith are soaked in a glass of water for one hour.	The water is taken orally once only to mitigate <u>delivery pain</u> .	Bejuni handles the patient.
11	Kakatbdang	With a little water the root is rubbed against the rough stone to get a paste like mass.	The paste is applied on the corner of nail to cure <u>nail infection</u> .	The affected nail is cleaned with warm water first
12	Kaaranjaa	-	The warm oil is massaged over the abdomen to cure <u>spleen inflammation</u> .	Non-Veg food is avoided.
13	-do-	-	The <u>com</u> is cleaned with a knife and warm oil is put on it	Dry fish and dry meat is avoided.
14	Kurumkunjdin	The root is washed well and pounded to extract juice	Fresh juice is applied on the eyes four to five times a day to cure <u>eye infection</u> .	Chilly, smoke & sun ray is avoided. An expert medicine man attends the patient.
15	Kutamba	The bulb (onion like object) is roasted.	The roasted bulb is pressed hard on the <u>corn</u> .	-do-

Sl. No	Ingredients	Method of preparation of Medicine	Administration	Remarks
16	Lamda	Two pieces of root and one piece of bark is wet grinded to a paste.	A spoonful of paste is taken orally twice a day to check <u>swelling of scrotum</u> . One piece of root is tied around neck also.	Animal protein, pumpkin, potato, gourd & brinjal are avoided.
17	Mahula	The oil is warmed.	The warm oil is applied twice on <u>infection at the comer of mouth</u> .	Green vegetables, papaya & milk yielding roots are taken in great quantities.
18	Oralbalgin	A piece of root is grinded to a paste.	A little of the paste is taken orally and rest of the paste is applied on the body to cure <u>malaria</u> .	Cold wind, soaked rice, rice beer and non-veg. food items are avoided.
19	Paraka	The latex is collected.	The <u>ringworm</u> is scratched with a piece of stone or <i>neemwood</i> . The latex is applied over it.	Dry fish/ meat is avoided.
20	Pulta	A few leaves are pounded well.	The pounded mass is placed on the forehead twice day to contain <u>headache</u> .	-
21	Sargi	The dry resin is powdered and put on live charcoal.	The smoke is inhaled through mouth twice a day to cure <u>sore, throat</u> .	Cold water, pulpy fruits & cool breeze is avoided.

Sl. No	Ingredients	Method of preparation of Medicine	Administration	Remarks
22	Surgaigin	The bud is plucked to get resinous fluid.	The fluid is applied on eye lid twice a day to cure <u>eye infection</u> .	Smoke, hard sun ray and chilly are avoided. An expert medicine man attends the patient.
23	Utaal	A narrow funnel is made out of the leaf.	The nozzle of the funnel is put into the nose and pressed gently to check <u>nose bleeding</u> .	It is 'Pressure Therapy' and is used by an expert medicine man.
24	Valia	A few nuts are warmed.	The warmed nuts are rubbed against the skin with little mohua oil to check <u>heel cracking and skin flaking</u> .	Fatty / oily food items are prescribed to the patient.
<b>(Multi &amp; plant based)</b>				
25	Gulbang, Resang & Grururi	The roots of the three plants are grinded to a paste with little water.	The paste is taken orally twice a day for a month to mitigate <u>asthma</u> .	Ripe pulpy fruits, smoke, fog, dust & chill wind are avoided.
26	-do-	-do-	A spoonful of the mix is taken once a day for two weeks to cure <u>rheumatism</u>	-do-
27	-do-	-do-	A spoonful of the mix is taken thrice daily in empty stomach for two weeks to cure <u>stomachache</u> .	Chilly, dry fish & constipating food items are avoided

Sl. No.	Ingredients	Method of preparation of Medicine	Administration	Remarks
28	Oralbajin, Khabe, Madure & Amengsang	Equal volumes of the roots are grinded with little water to a paste and filtered to get the extract. Warmed.	A spoonful of the liKuid is orally administered along with the surface application of the rest of the fluid on the affected limb to cure <u>paralysis</u> .	A traditional medicine man attends the patient.
29	Grururi, Limba, Danghumcharji & Tusharnaj	The roots of the first three & fruit of the last (the medicine man decides their proportion) are grinded to get a sticky mass. The mass is made into several small balls and dried.	Two balls are stirred with a cup of Mohua liquor and taken thrice daily for cure from <u>tuberculosis</u> .	Non-veg. food items, potato, bamboo soots, pumkin& soaked rice are avoided.
30	Bhang & Sujang	A little of the former is grinded with a finger long root of the latter.	The paste is taken once a week at night to check early orgasm.	Hot & non-veg. Food items are avoided.
31	Kimbhekgilngad, Tarbajit & Sursurji	The roots of the three (proportions of the ingredients is decided by the traditional medicine man) are grinded and mixed with a cup of milk or mohualiKuior. Whipped well.	A cup of the mixed is taken once only for <u>termination of unwanted pregnancy</u> .	A female traditional provider treats the patient.
32	Dongjel, Kamburi & Laangre	The bark of the former two along with the root of the third one are pounded & boiled in water. The water is decanted.	The warm pounded mass is placed over the <u>deepwound</u> & tied loosely with a piece of clean cloths.	Soaked rice & dry fish/ meat is avoided
33	Krarjame, Khare & Amengsang	A finger long amengsang and a piece of khare bark is grinded with oil of krarjame.	The oily paste is applied on <u>scabies</u> once a day after bath for at least seven days.	The patient is advised to take sufficient green leaves & ragi.

Sl. No	Ingredients	Method of preparation of Medicine	Administration	Remarks
34	Susubadangjin, Salap, Kadabtidar, Tamla, Sulsuldijap, Angtadu & Pitakandhaa	A small twig of the former, a piece of the latter along with the roots of other plants is pounded to a paste like mass.	After setting the fractured bone the paste is applied on the limb. Bamboo splits are placed over it & tied firmly with a piece of cloth.	Fish, meat & liquor are avoided. Ragi, root crops & pulses are taken in sufficient quantities.
35	Predangma & Dukta	A piece of dry Dukta is stuffed inside a very narrow funnel made out of the dry leaf of the former. Ignited.	It is used as a chiroot and a mouth full of smoke is blown into the eyes of the patient twice daily to cure <u>night blindness</u> .	Traditional medicineman attends the patient.
36	Kare & Sugel	Equal quantities of roots of both are grinded with a little water.	The paste is taken orally twice a day in empty stomach for one day only for <u>deworming the stomach</u> .	Pulpy fruits, puffed rice and jiggery are avoided.
<b>(Uni and Animal based)</b>				
37	Gadhia Naka	The dried Gadhia Naka is rubbed against dry rough surface.	The rubbed portion is inhaled deeply to get relief <u>from pain due to embedment of fish bone into the inner wall of the throat</u> .	-
38	Bira Hada		The birahada is worn around neck to get rid of <u>fear from seen and unseen forces</u> .	The treatment is based on 'Touch Therapy'.

Sl. No	Ingredients	Method of preparation of Medicine	Administration	Remarks
39	Bagha Dudha	A few dry flakes of milk of a tigress are dissolved in water.	The dissolved milk is taken orally during nighttime to checkmate the <u>no secretion of milk of a nursing mother</u> .	A traditional female provider treats the patient.
40	Sambiri Kumbulan	The sambiri kumbulan is killed and dried under the sun.	The dried object is tied around neck for protection against <u>spirit intrusion</u> .	It is a preventive medicine based on 'Touch Therapy'.
41	Bhalu Basa	The bhalu basa is warmed.	The warmed basa is massaged around the joint to get relief from <u>joint pain, sprain and rheumatism</u> .	Fomenting of the affected joint is avoided.
42	Kai	A few kai is pressed between the palms.	The sticky mass thus obtained is inhaled deeply thrice a day to get relief from <u>nose stiffening</u> .	Exposure to cold wind and water is avoided.
<b>(Multi - both Plant and Animal)</b>				
43	Samakjing & Chhelimuta	A fistful of the samakjing leaf is grinded to a paste and whipped with a cup of Chhelimuta. Filtered.	Two drops of the fluid are put into the affected ear to get rid of <u>ear pain</u> .	Consumption of custard apple is avoided.
<b>Other ingredients</b>				
44	Tamba paisa or Tambamudi	An old brass / copper ring or coin is tied to a thread along with a small pouch containing seven grains of unboiled rice ( <i>aruarice</i> ).	The thread is worn around the neck to contain <u>mouth infection</u> .	The treatment is based on 'Touch Therapy'

N.B.: The names of the diseases are given in underlined words at column-IV of the Table 4.3.1.

**CHAPTER V**  
**FIELD FINDINGS**  
**(KANDHA AND SANTAL)**

## CHAPTER V

### FIELD FINDINGS

The project covered two important tribes of Odisha namely Kandha and Santal and studied the traditional healing practices adopted by the healers. Altogether 85 healers were selected resonating 45 from Kandha and 40 from that of Santal. The socio-economic status of the sample healers were examined covering different aspects as has been presented below.

#### PART: I Healer

**1. Clans of the sample:** Each tribe belongs to a definite clan. They believe that their well being is guided by the blessings of clan. Their day to day activities, like religious functions, cultural functions, health care etc. are performed according to their clans. The distribution of sample according to the clans is given below.

**Table 5.I.1** Clan Composition of Tribal Healers (N=85)

Sl. No.	Clan	Desia Kandha	Dongria Kandha	Kutia Kandha	All Kandhas	Santal	Total
1.	Bisu Majhi	0	01	0	01	-	01
2.	Disari	0	02	0	02	-	02
3.	Mandal	0	05	0	05	-	05
4.	Jani	0	05	0	05	-	05
5.	Pujari	0	02	0	02	-	02
6.	Mankad	04	0	02	06	-	06
7.	Nagasya	03	0	01	04	-	04
8.	Saraka	04	0	03	07	-	07
9.	Bharatdwaja	04	0	0	04	-	04
10.	Ganda	0	0	03	03	-	03
11.	Bangurka	0	0	03	03	-	03



Sl. No.	Clan	Desia Kandha	Dongria Kandha	Kutia Kandha	All Kandhas	Santal	Total
12.	Gunjika	0	0	02	02	-	02
13.	Padmajuka	0	0	01	01	-	01
14.	Hansda	-	-	-	-	6	6
15.	Murmu	-	-	-	-	10	10
16.	Kisku	-	-	-	-	2	2
17.	Hembram	-	-	-	-	10	10
18.	Soren	-	-	-	-	6	6
19.	Marandi	-	-	-	-	4	4
20.	Tudu Baske	-	-	-	-	2	2
Total		15	15	15	45	40	85

The sample contained 45 Kandha healers and their sub-tribe groups are Desia Kandha, Dongria Kandha and Kutia Kandha. Out of Kandha healers maximum belong to Mandal, Jani, Saraka, Mankad, Nagasya. Maximum of Santal healers are found in the clan groups of Murmu, Hembram, Soren and Hansda. Altogether 13 clans of Kandha and 7 clans of Santal, in total 20 clans were found in the sample.

**2. Personal Profile of the sample:** The personal profile of the sample consisted of four important parameters like age, sex, marital status and educational attainment. The distribution of the sample over these parameters is presented in the table given below.

**Table 5.I.2 Personal Profile of tribal healers (N=85)**

Particulars	Kandha	%	Santal	%	Pooled	
1. Age group (Year)					f	%
(i) 19 to 30	5	11.11	5	12.50	10	11.76
(ii) 31-50	22	48.89	15	37.50	37	43.53
(iii) 51-72	18	40.00	20	50.00	38	44.71
<b>Total</b>	<b>45</b>	<b>100.00</b>	<b>40</b>	<b>100.00</b>	<b>85</b>	<b>100.00</b>
<b>2. Sex</b>						
(i) Male	45	100.00	23	57.50	68	80.00
(ii) Female	0	0.00	17	42.50	17	20.00
<b>Total</b>	<b>45</b>	<b>100.00</b>	<b>40</b>	<b>100.00</b>	<b>85</b>	<b>100.00</b>
<b>3. Marital Status</b>						
(i) Married	42	93.33	40	100.00	82	96.47
(ii) Unmarried	3	6.67	0	0.00	3	3.53
<b>Total</b>	<b>45</b>	<b>100.00</b>	<b>40</b>	<b>100.00</b>	<b>85</b>	<b>100.00</b>
<b>4. Educational Attainment</b>						
(i) Illiterate	27	60.00	18	45.00	45	52.94
(ii) Primary	11	24.44	3	7.50	14	16.47
(iii) Middle School	2	4.45	5	12.50	7	8.23
(iv) High School	5	11.11	10	25.00	15	17.65
(v) Above High School	0	0.00	4	10.00	4	4.71
<b>Total</b>	<b>45</b>	<b>100.00</b>	<b>40</b>	<b>100.00</b>	<b>85</b>	<b>100.00</b>

Results reveal that

- (i) In the sample maximum respondents are found in age group of 51 to 72 years. The study found out that youngest healer is at the age of 19 and oldest at the age of 72 year. This reveals that healers are found in all age groups among the Kandha and the Santal.
- (ii) Of the 85 of sample healers 68 (80%) were male and 17 (20%) were female. It is inferred that healing profession among the Santal tribe accommodates both male and female. In other words the tribal societies allow their women to treat the patients.
- (iii) It is observed that maximum respondents are married (96.47%) and very few are bachelors (3.53%).
- (iv) On educational scaling it is observed that 52.94% of the total respondents are non-literate, 16.47% have read up to primary level, 8.23% up to middle school, 17.65% up to high school and 4.71% have earned education beyond high school level. It is concluded that healers

come from all educational levels because of their believe, profitability in profession and need of the community.

**3. Family Background:** The family background of individuals influences their activities, decision making process, progressiveness and many other aspects. The study examined three important aspects of family background, i.e., type of family, size of family and size of earning members per family.

**Table 5.I.3 Family Background of the Tribal Healers (N=85)**

Family Background	Kandha	%	Santal	%	Pooled	
1. Types of family					Frequency	%
(i) Extended	41	91.11	30	75.00	71	83.53
(ii) Nuclear	4	8.89	10	25.00	14	16.47
<b>Total</b>	<b>45</b>	<b>100.00</b>	<b>40</b>	<b>100.00</b>	<b>85</b>	<b>100.00</b>
<b>2. Size of family</b>						
(i) Up to 2 members	3	6.67	6	15.00	9	10.59
(ii) 3-4 members	17	37.78	14	35.00	31	36.47
(iii) 5-6 members	17	37.78	11	27.50	28	32.94
(iv) 7 & Above members	8	17.77	9	22.50	17	20.00
Average Members per family	<b>4</b>	<b>-</b>	<b>5</b>	<b>-</b>	<b>4.5</b>	<b>-</b>
<b>3. Size of earning member</b>						
(i) One	19	42.22	28	70.00	47	55.29
(ii) Two	14	31.12	10	25.00	24	28.24
(iii) Three	6	13.33	2	5.00	8	9.41
(iv) More than three	6	13.33	0	0.00	6	7.06
Average earning members per family	2.68	<b>-</b>	1.35	<b>-</b>	<b>-</b>	<b>-</b>

**Results:**

- (i). In the sample of healers, maximum (80%) live in small family and few (20%) have extended family composition.
- (ii). In majority cases the tribal families are of medium sized ranging from 3-4 and 5-6 members per family. It is obvious that extended family system accommodates relatively more members. Because of this their social strength and position always remain high.
- (iii). Majority tribal families have one or two earning members per family. In few cases the size of earning members goes up to three and four depending upon situation.

**4. Occupation:** Operationally the study defined occupation as the source from which the family derives income to live. At present every family in rural areas have primary and secondary occupation. The distribution of sample on primary and secondary occupation is presented in table below.

**Table 5.I.4 Occupation of the sample healers (N=85)**

Occupation	Kandha		Santal		Pooled	
	Primary	Secondary	Primary	Secondary	Primary	Secondary
1. Healing	6	23	4	22	10	45
2. Agriculture	35	13	30	10	65	23
3. Service	0	0	2	2	2	2
4. Business	1	0	2	0	3	0
5. Wage earnings	3	4	2	4	5	8
6. Forest Produce	0	5	0	2	0	7
<b>Total</b>	<b>45</b>	<b>45</b>	<b>40</b>	<b>40</b>	<b>85</b>	<b>85</b>

**Result:**

- (i). Among the Kandha healers most of them (35) depend on agriculture as the main source of earning followed by healing practices, wage earning & business. To supplement family income they depend on healing practices, agriculture, forest produce and wage earning.

(ii). Among the Santal healers 30 out of 40 primarily depend on agriculture followed by healing, service, business and wage earning. To supplement family income they depend on healing practice, agriculture, wage earning, forest produce and service.

On the whole the primary occupations of the sample healers are agriculture (76.47%) and healing practices (11.76%) while secondary occupations are healing, agriculture and wage earning. The results as a whole shows that agriculture, healing practice and wage earning are three important occupations that they adopt with variation as primary or secondary means of living.

**5. Economic Background:** Economic condition alone exerts maximum influence of individuals in deciding his activities, plans, programs and other day to day functions. The traditional healers under study are not exceptional to these phenomena. In finding out the economic conditions of the sample healers in respect to possession of land, material possession and economic category the following results were obtained.

**Table 5.I.5 Economic condition of the sample healers (N=85)**

Land (acre)	Kandha	%	Santal	%	Pooled	
					Frequency	%
1. Landless	0	0.00	3	7.50	3	3.53
2. 0.1-2.5 (Marginal)	21	46.67	17	42.50	38	44.71
3. 2.6-5.0 (Small)	22	48.89	12	30.00	34	40.00
4. 5.1-8.5 (Large)	2	4.44	8	20.00	10	11.76
<b>Total</b>	<b>45</b>	<b>100</b>	<b>40</b>	<b>100.00</b>	<b>85</b>	<b>100.00</b>
<b>Material Possession</b>						
1. Radio	9	20.00	8	20.00	17	20.00
2. TV	5	11.11	6	15.00	11	12.94
3. Bicycle	27	60.00	30	75.00	57	67.06
4. Auto. Mobile	1	2.22	6	15.00	7	8.23
5. Power tiller	1	2.22	0	0.00	1	1.18
6. Bullock cart	0	0	3	7.50	3	3.53
7. Water Pump	0	0	8	20.00	8	9.41
8. Mobile	13	28.89	32	80.00	45	52.94
9. Plough	45	100.00	40	100.00	85	100.00
10. Table Fan	0	0.00	11	27.50	11	12.94
<b>Economic Category</b>						
1. APL	5	11.11	6	15.00	11	12.94
2. BPL	39	86.67	34	85.00	73	85.88
3. Antodaya	1	2.22	0	0.00	1	1.18
<b>Total</b>	<b>45</b>	<b>100.00</b>	<b>40</b>	<b>100.00</b>	<b>85</b>	<b>100.00</b>

**Results:**

- (i) The sample healers on possession of land belong to different categories of the farm families. The classification is based on the specification of state Govt. The sample distribution reveals that 3.53% are landless, 44.71% marginal, 40% small and 11.76% are large farmers. There is none among Kandha healers in the category of landless, while in case of Santal landless families account for 7.50%. The majority healers are either marginal or small farmers. Because of small land holdings and limited incomes there is tendency among the healers have innate quality to expand healing practices to earn more.
- (ii) Material possession among the tribes is limited and that too are with relatively well to do families. The result shows that all families under survey have ploughs and 67.06% have bicycle for movement. The other worth mention materials like mobile phone, radio, TV, Table fans are found with 52.94%, 20.00%, 12.94% and 12.94% respectively. The use of mass media like radio and TV are gaining popularity among the sample. However, the use of mobile phone by the sample is noteworthy. It indicates the information seeking tendency of the tribal population in the state.
- (iii) Economic category has been the point of concern at different levels. Majority of the sample belong to BPL category and possess BPL cards. The sample under APL category is only 12.94% and that too under Antodaya is very negligible.

**6. Personal Engagement:** The personal engagement in this study has been operationalized as the degree to which sample healers remain engaged to earn livelihood. In addition to healing or treating patients, other activities in relation to healing profession was also enquired which yielded the following information.

**Table 5.I.6 Personal Engagement of the sample healers (N=85)**

Particulars	Kandha	%	Santal	%	Pooled	
					Frequency	%
(i) Treatment of Patient	43	95.55	22	55.00	65	76.47
(ii) Preparation of medicine	43	95.55	26	65.00	69	81.18
(iii) Cultivation of medicinal plant	4	8.89	8	20.00	12	14.12
(iv) Marketing of medicine	5	11.11	3	7.50	8	9.41

The results show in table is based on multiple responses. Treatment of patients, preparation of herbal medicines, cultivation of medicinal plants and marketing of medicines are interrelated. Normally those who are in traditional healing profession they undertake multiple activities relating to the practices. Results shows that 76.47% treat the patients, 81.18% remain engaged in preparing medicine, 14.12% also cultivate medicinal plants while only 9.41% do marketing of the medicines. None is found to be confined to only one activity. The inference is that, once one assumes the responsibility of treating patients he under takes related activities.

**7. Classification of Healers:** All healers neither treat all diseases nor undertake all treating activities. Many are specialized on particular aspects or more than one. The sample healers according to their treating practices are classified as follows.

**Table 5.I.7 Types of Healers on basis of treatment (N=85)**

Type of treatment	Kandha	Santal	Pooled	
			Frequency	%
(i) Bone setter & Herbal	24	22	46	54.12
(ii) Bone setter & Magical	7	8	15	17.65
(iii) Herbal and Magical	9	6	15	17.65
(iv) Bone setter, Herbal & Magical	5	4	9	10.58
<b>Total</b>	<b>45</b>	<b>40</b>	<b>85</b>	<b>100.00</b>

The sample contains more of bone setters with herbal treatments (54.12%). Treating of bone fracture needs herbal pastes and medicines and therefore bone setters cannot be separated from herbal treatment. About 17.65% are found practicing herbal and magical treatments while all three types like bone setting, herbal and magical treatments are practiced by only 10.58%. During field investigation it is learnt that, earlier some healers were doing only magical treatments but now they have opted to herbal in addition to magical to earn more money.



**8. Source of Influence for opting to healing practices:** An individual takes decision to opt for healing profession after being confirmed about the future of the practice. There are many people in tribal society who exert influence over individuals to take up healing practices. Besides own decision, the influence of others also counts much. The study examined that who are the influencing sources of sample healers in this context and the results so obtained are cited in table.

**Table 5.I.8 Source of influence for taking up of traditional healing practices (N=85)**

Major Source of influence	Kandha	%	Santal	%	Pooled	
					Frequency	%
(i) Father	17	37.78	14	35.00	31	36.47
(ii) Family Members	0	0.00	4	10.00	4	4.71
(iii) Relatives/ Community elders	1	2.22	4	10.00	5	5.88
(iv) Self decision	21	46.67	10	25.00	31	36.47
(v) Teacher	6	13.33	8	20.00	14	16.47
<b>Total</b>	<b>45</b>	<b>100.00</b>	<b>40</b>	<b>100.00</b>	<b>85</b>	<b>100.00</b>

The results reveal that decision of the father and self are two important sources for sample respondents to opt for healing practices. The role of community leader and other family members is very negligible in this context. The teacher locally known as *guru* also plays significant role in influencing individuals to opt for healing practices. In most cases, those who are healers and at old age; they influence their sons to be in healing profession. More over teacher (16.47%) very often try to locate their disciples. All these factors sometimes influence a person to take up healing profession.

**9. Annual Treatment of Patients:** The healers in tribal areas do not maintain records as who are treated with what results. It is so because many are non-literate (52.94%). At present some healers are found to be sensitive to this point for highlighting their popularity. In finding out information about number of patients treated per year the following information were recorded on the basis of their memory recall.

**Table 5.I.9 Patients treated per year (N=85)**

Patients treated per year (Number)	Kandha	Santal	Pooled
(i) Total No. of patients treated last year	3250	3350	6600
(ii) Average No. of patients treated last year per healer	72	83	78
(iii) Disease of the patients treated in highest number	Jaundice	Epilepsy	-
(iv) Disease of the patients treated in lowest number	Cholera	Fever	-
(v) No. of patients relied in traditional and modern treatment	1040 (32%)	1072 (32%)	2112
(vi) No. of patients relied on Herbal and Magical treatment	585 (18%)	536 (16%)	1121
(vii) No. of patients relied on modern treatment only	72 (2.22%)	95 (2.84%)	167

(Base year: 2012-13)

The Kandha and Santal healers opined that they treated almost equal number of the patients last year. Kandha healers reported to have treated maximum of jaundice and that of Santal Epilepsy cases. In minimum case the Santal healers mentioned treating fever as against Cholera of Kandha healers. Number of patients relied on herbal and magical treatment is reported to be 585 (18%) and 536 (16%) in case of Kandha and Santal respectively.

**Table 5.I.10 Inventory of Common Diseases treated by Kandha and Santal healers**

Sl. No.	Odia name of the disease	English name of the disease	Disease name in Santal language	Disease name in Kandha language
1.	Abu	Tumour	Duhu	Broma
2.	Agarjiva	Dislocation of bone		Prenuvringa
3.	Akhidhara	Conjunctivitis	Mendak/ Maindbysau	Kanga apha
4.	Amla	Acidity	Srahapa	Srahapa
5.	Anta daraja	Back bone pain	Danda nova	Deti nova
6.	Anthuganthibata	Rheumatism	Thitnathanj bat	Mendagani nova
7.	Anthuganthibyatha	Joint pain	Dordo (HarmoHaso)	Mendagani nova
8.	Arsha	Piles	Izadkaaleka	Pindarirug
9.	Basanta	Small pox	Basonta/ Mariguti	Kaubiheni
10.	Bata	Epilepsy	Haluman buy	Batoa/Gadanomeri
11.	Bata jwara	Filaria	Lutkum/Fulaubemar	Sidinamenisori
12.	Beenchi	Eczema	Chinga	Gimipidka
13.	Bhatudi	Wart	Uju	Batoa
14.	Bhotalagiba	Ghost attack	Dan vutlagaore	Pideri pita/penuranja
15.	Bichhakamudiba	Scorpion bite	Bind kininjbijerbisra	Salerikospa
16.	Bisakhaiba	Intake of poison	Bisjunre	Osotinba
17.	Chandaroga	Balad disease	Chadrak	Tapal/dagadaga
18.	Charmaroga	Skin disease	Punradad	Kasa
19.	Chutijhadiba	Hair fall	Up nuruk	Burijelba
20.	Dadma	Dysentery		Jidapinga or sirupukri
21.	Dahanilagiba	Evil spirit	Dan vutlagaore	Daska
22.	Dantabindha	Tooth ache	Regreg	Padubikali
23.	Dhalachau	Leucosis	Sukalichhau	Lingipritka
24.	Dhatukhaya	Metal fatigue	Haris	
25.	Ecsira	Scrotal hydrocele	Dadehe	Mesa/Mesu
26.	Galua	Swelling in chick	Pakneint	Rapandi

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Sl. No.	Odia name of the disease	English name of the disease	Disease name in Santal language	Disease name in Kandha language
27.	Garmi	Mania	Gurmi	Kanda
28.	Ghaa	Ulcer	Kausa	Soju/prada/madevi
29.	Guni	Hypnotism	Ajha	Klega
30.	Hadabhanga	Bone fracture	Jan rapudok	Prenuvringa
31.	Hadaphuti	Chicken pox	Basonta	Bineni
32.	Haija	Cholera	Hawaduksemeramlachodak	Raju
33.	Jalantaka	Hydrophobia	Jalantak	
34.	Jhada	Dysentery	Chidir	Bandra
35.	Jwara	Fever	Tan rua	Sidinamerigori
36.	Kalajai	Black mole	Bhatuli	Kalimanda
37.	Kamala	Jaundice		
38.	Karkata	Cancer		
39.	Karnabindha	Ear ache	Luturhaso	
40.	Karnapachiba	Otorrhoea	Luturghao	
41.	Kasa	Cough	Khog	Depoka
42.	Khadyabhaha	Malnutrition	Hormovagidono	
43.	Kurmi	Worm disease	Patwaa	
44.	Kustharoga	Leprosy	Murhutjanm	Kiding/Kudhi
45.	Madhumeha	Diabetes	Bahumut	
46.	Malakantaka	Constipation	Birmaha	Mundabati
47.	Malaria	Malaria	Palirua/ Bandarby	Pilinomeri
48.	Milimila	Measles	Talsa/ Milmilia	Gunda
49.	Mirigijwara	Mirigi Fever	Hanahaguguh	
50.	Mundabindha	Headache	Bohokhaso	Torga/ Sepa
51.	Murchharoga	Fainting disease	HalmenaJalme	Bovmiava
52.	Najarlagiba	Put an ill eye on others	Gidraaahao/Haihasit/Ahaa	Kanudibyasn
53.	Nasaraktsraba	Nasal bleeding	Sepa	Kanudiba
54.	Pakastalipradaha	Gastritis	Lachhaso	Brohiava/ Tutunab
55.	Pakhyaghata	Paralysis	Bayebara/Banmara	Slernadibyn
56.	Petabyatha	Stomach pain	Lachhaso/ Bindkai	Tutu nova

Sl. No.	Odia name of the disease	English name of the disease	Disease name in Santal language	Disease name in Kandha language
57.	Pihudajwara	Pihuda fever	Rengusrua	Maskanakuri
58.	Pita banti	Secretion of bile in vomiting	Hadhatsisir Ulabebej	Tepka
59.	Raja jakhama	Tuberculosis	T.B. namreRajraj	
60.	Raktahinata	Anaemia	Hadhusum/Hamusnuha	Rakajupri
61.	Rutusraba	Disorder of menstruation	Dele	Madupada
62.	Sarpadansana	Snake bite	Sanamlekanbingerbisra	Srasukaspa
63.	Stanaroga	Breast disease	Toa anjedok	Srangunomergori
64.	Swapnadosa	Night pollution	Sapannalapila	Krinja
65.	Swasaroga	Asthma	Pakspaks	Kadinga
66.	Taralajhada	Diarrhoea	Laodokok	Gadhipukri
67.	Thanda	Esunphulia	Reyarlagho	Jiliinba / Tirga
68.	Thariba	Trembling	Thartharas	Karenga/ Tirga
69.	Ucharaktachapa	High blood pressure		

**10. Causes of Diseases in locality.** The healers know much about diseases that they treat and also have good ideas about the causes of diseases. The reasons attributed are based on their experience and observation. The study attempted to enlist the reasons of occurrence of diseases in the locality as experienced by the healers of both the tribe, i.e., Kandha and Santal.

**Table 5.I.11 Causes of diseases of the locality (N=85)**

Reasons	Kandha	%	Santal	%	Pooled	
					Frequency	%
1. Malnutrition	18	40.00	15	37.50	33	38.82
2. Poor sanitation	18	40.00	8	20.00	26	30.59
3. Wrath of God	4	8.89	7	17.50	11	12.94
4. Bad deeds of person	4	8.89	8	20.00	12	14.12
5. Social Contact	6	13.33	2	5.00	8	9.41
6. Poor Environment	10	22.22	8	20.00	18	21.18
7. Non performance of religious function	6	13.33	2	5.00	8	9.41
8. Witchcraft	9	20.00	3	7.50	12	14.12
9. Ancestor ghost/evil spirit	4	8.89	12	30.00	16	18.82
10. Climatic Condition	30	66.67	6	15.00	36	42.35

The Kandha and Santal healers have different views about the causes of diseases. Taking pooled data into consideration it is revealed that climate change, malnutrition, poor sanitation and poor environment are the important causes for suffering of tribal population from different diseases. The other succeeding reasons are ancestral ghost, Witchcraft, bad deeds of persons, wrath of God and Goddess and non-performance of religious functions. Malnutrition, climatic condition and poor sanitation as cause of diseases are more realized by the Kandha healers than that of Santal. Witchcraft is more pronounced by the Kandha healers while ghost attack is of more concerned of the Santal healers. The causes of diseases are multi

dimensional. Malnutrition, climatic condition, poor sanitation and environment add to the causes of diseases.

**11. Reasons of Non-Cure.** The healers desire the curability of diseases and wellbeing of the patients. But when treatment fails to cure the patients, the healers cite various reasons. The survey draws the opinion of the healers about the reasons for which their treatment did not respond. The following table shows the reasons of non-cure of the diseases treated by the healers.

**Table 5.I.12 Reasons of non-cure**

Reasons	Kandha	%	Santal	%	Pooled	
					Frequency	%
1. Late treatment	36	80.00	10	25.00	46	54.12
2. Irregularity in taking medicine & Wrong administration of doses	20	44.44	11	27.50	31	36.47
3. God's wish & Born with sign of object	6	13.33	25	62.50	31	36.47

Majority of the healers (>50%) opined that late treatment of diseases is the cause of non curability followed by irregularity in taking medicine and born with sign of object and wishes of God. The possibility of wrong diagnosis and administration of wrong medicine cannot be overruled. God's wish and born with object are two religious arguments of the healers in favour of failure.

**12. Fee for Treatment:** The healers do healing practice and earn their livelihood. The fee for treatment is not same everywhere which varies from healers to healers. The study estimated the system of payment for treatment by the patients to both the Kandha and Santal healers as indicated in table below.

**Table 5.I.13 Fee for treatment (N=85)**

Treatment charge	Kandha	%	Santal	%	Pooled	
					Frequency	%
1. Fixed rate	8	17.78	12	30.00	20	23.53
2. Negotiation	14	31.11	8	20.00	22	25.88
3. Affordability of patients	7	15.56	4	10.00	11	12.94
4. Depending up on nature of diseases	13	28.89	6	15.00	19	22.35
5. Duration of treatment	6	13.33	8	20.00	14	16.47
6. Gift	7	15.56	2	5.00	9	10.59
7. Free treatment	11	24.44	0	0.00	11	12.94

As shown in table, in 25.88% cases the treatment fees were paid at a negotiated price. While 23.53% charged fixed rate for treatment, 22.35% decided fees on the basis of nature of diseases. However, affordability of patients is considered by 12.94% while charging the treatment fees and 10.59% accept gifts. Mostly the gifts are paid in shape of kind such as goats, sheep or poultry birds. About 12.94% mentioned of offering the free treatment to the patients.

**13. Grooming of future healers:** The traditional healers are strong believers of their tradition. They try to upkeep their healing practices. Many healers groom their successors for various reasons. The reasons cited for grooming of future healers as mentioned by the respondents are reflected in the following table.



**Table 5.I.14 Grooming of new healers (N=85)**

Particulars	Kandha	%	Santal	%	Pooled	
					Frequency	%
1. Family occupation	7	15.56	20	50.00	27	31.76
2. Profitable	2	4.44	8	20.00	10	11.76
3. Service to tribes	12	26.67	8	20.00	20	23.54
4. Future credibility	24	53.33	4	10.00	28	32.94
<b>Total</b>	<b>45</b>	<b>100.00</b>	<b>40</b>	<b>100.00</b>	<b>85</b>	<b>100.00</b>

Grooming of future healers is a proud practice with tribal healers. The respondents opined that they groom for the reasons of future credibility (33%), as family occupation (mostly priests) (32%), service to tribe 24%) and also profitable (12%) at village level. During the course of field investigation the sample mentioned that grooming is necessary to keep name and fame of the family in community. Whatever the case may be almost all healers wish that any of their off-springs should in line of healing practices.

**14. Satisfaction about healing practices:** Personal interest and satisfaction are the important factors behind any enterprise and that too in case of healing practices. The satisfaction in case of present study was operationalized taking the variables of (i) profitability (ii) fruitful engagement and (ii) service to humanity. On measuring the satisfaction of the sample healers on a three point scale like very much, much and little satisfaction the following results were obtained.

**Table 5.I.15 Satisfaction about healing practices (N=85)**

Particulars	Kandha	%	Santal	%	Pooled	
					Frequency	%
(i).Very much satisfied	25	55.56	32	80.00	57	67.06
(ii).Satisfied	14	31.11	6	15.00	20	23.53
(ii).Not satisfied	6	13.33	2	5.00	8	9.41
<b>Total</b>	<b>45</b>	<b>100.00</b>	<b>40</b>	<b>100.00</b>	<b>85</b>	<b>100.00</b>

Data reveal that on healing practices as much as 67.06% are very much satisfied, 23.53% only satisfied and 9.41% are not satisfied. The satisfaction as mentioned was considered on the basis of profitability, engagement and service to own community. Those who mentioned not satisfied (9.41%) viewed it in terms of non-profitability and less popularity to attract patients.

**15. Enquiring about illness:** It is normal practice that before treating the patients the healers have to know the reasons of illness. The methods of enquiry about illness vary from healer to healer. To know exactly what questions healers put to patient before treatment was ascertained as reflected in table.

**Table 5.I.16 Enquiring about illness (N=85)**

Particulars	Kandha	%	Santal	%	Pooled	
					Frequency	%
1. Contact with other suffering patient	14	31.11	12	30.00	26	30.59
2. Hard work without rest	33	73.33	16	40.00	49	57.65
3. Mental worry	11	24.44	14	35.00	25	29.41
4. Displeasure of God	13	28.89	6	15.00	19	22.35
5. Inheritance reason	2	4.44	8	20.00	10	11.76
6. Climatic reason	6	13.33	4	10.00	10	11.76

The response is multiple as one cites more than one reason for illness. The most frequently asked questions of the healers to the patients before treatment are mentioned as whether hard work without rest, contact with suffering persons and mental disturbances. The question regarding displeasure of God and inheritance reasons are enquired by 22.35% and 11.76% of healers respectively. The climatic change as reason of illness is also enquired by 11.76% of healers.

**16. Methods of identifying diseases.** Healers try to assess the magnitude of diseases by applying different methods. Some healers are so expert that by simply seeing the patients (like dysentery, cholera mostly contagious diseases) they know the diseases and some require methodical approaches for identification of diseases. In finding out the important methods followed by the sample healers in ascertaining the diseases the following information were obtained.

**Table 5.I.17 Methods of identifying disease (N=85)**

Particulars	Kandha	%	Santal	%	Pooled	
					Frequency	%
1. Body temperature& pulse rate	13	28.89	4	10.00	17	20.00
2. Visible symbols	43	95.56	38	95.00	81	95.29
3. Dieting pattern	14	31.11	12	30.00	26	30.59
4. Urine test	12	26.67	17	42.50	29	34.12
5. Facial expression	11	24.44	1	2.50	12	14.12

The analysed data is based on multiple responses. The healers by looking to body and physical state of patients ascertain disease (95.29%) while by enquiring about dieting pattern some conclude about the diseases (30.59%). About 34.12% of healers conduct urine test by traditional methods and 20% examine the body temperature and pulse rate for diagnosis the diseases. The results assure that both modern and traditional methods are followed in identification and diagnosis of diseases by both the groups of healers.

**17. Magical Treatment of different diseases:** Tribal people believe in supernatural power and prefer to be cured by their healers. There is some diseases/illness which they believe to be cured by the magical treatments. The healers also do practice magical treatment. An attempt was made to enlist diseases/illness cured by the magical treatments.

**Table 5.I.18 Magical treatment of different diseases (N=85)**

Diseases	Kandha	Santal	Average
1. Snake, Dog & Scorpion bite	67	38	53
2. Chicken pox	52	35	44
3. Jaundice	41	27	34
4. Stomach pain	53	24	39
5. Fever	38	32	35
6. Headache	63	43	53
7. Ghost attack	22	19	21
8. Hydrophobia	11	22	17

It was estimated that on an average the healer respondents extended maximum number of magical treatment to 53 cases for animal/insect bites patients and equal number of cases for headache. While the average number of magical treatment for diseases like chicken pox, fever, stomach pain, jaundice, between 44 to 34 cases, for treatment of ghost attack and hydrophobia diseases the numbers are reduced to 21 and 17 cases, respectively. The illness/diseases cured through magical treatment by both categories of tribal healers are quite high.

**18. Logic in favour of Magical treatment:** The healers have beautiful logics in favour of magical treatment. On interaction with the healers during field survey many of them argued as the human beings are created by God, it is His desire to be cured by magical way or by super power. The reasons cited by the sample in favour of magical treatments are as follows.

**Table 5.I.19 Logic in favour of Magical cure (N=85)**

Reasons	Kandha	%	Santal	%	Pooled	
					Frequency	%
1. Wishes of God & Goddess	12	26.67	8	20.00	20	23.53
2. Magic works where other methods fail	10	22.22	11	27.50	21	24.71
3. Magic curing based on eye witness	05	11.11	9	22.50	14	16.47
4. Easy to apply	10	22.22	12	30.00	22	25.89
5. No cost/ less cost	07	15.56	11	27.50	18	21.18
6. Environmental friendly	05	11.11	8	20.00	13	15.29

The table contains multiple response analysis. The arguments in favour of magical treatments are easy to apply (26%), magic works where other treatment fails(25%), wishes of God and Goddess (24%)work through magical treatment,nocostor less cost (21%) and environment friendly(16%).

**19. Combination of Treatments.** The healers in survey area combine different methods to treat the patients. In many cases it becomes trial and error method. They combine herbal treatment with magical ones, if the cases of the patients are complicated and difficult. In finding out the combined approach for treatment of patients by the healers, the following results were obtained.

**Table 5.I.20 Combination of treatments (N=85)**

Treatment method	Kandha	%	Santal	%	Pooled	
					Frequency	%
1. Herbal	11	24.44	13	32.50	24	28.24
2. Magical	15	33.34	8	20.00	23	27.06
3. Herbal and Magical	09	20.00	6	15.00	15	17.65
4. Naturopathy and Magical	10	22.22	13	32.50	23	27.05
<b>Total</b>	<b>45</b>	<b>100.00</b>	<b>40</b>	<b>100.00</b>	<b>85</b>	<b>100.00</b>

Findings reveal that about 28.24% of the healers stick to only herbal treatment, 27.06% to magical treatment while 17.65% combine herbal with that of magical ones. About 27.05% practice magical treatment with that of naturopathy. On the whole 44.70% of the sample healers practice combined methods of treatment.

## **PART: II Patients & their responses**

Traditional healing system establishes a close relationship between the healers and patients. The results of treatment can be better understood from the patients. On this hypothesis as much as 425 patients were selected @ 5 per healer from the groups of healers of Santal and Kandha tribes. The patients were selected confirming to the criteria of being at least treated for two diseases by the traditional healers. The data regarding response of the patients on various aspects of the study are presented herewith.

**1. Clan of the sample patients.** Like healers the patients are also very much linked to their clan structure. The patients never do or practice anything that goes against their clan value. The distribution of the sample patients over different clans are presented in the following table.

**Table 5.II.1 Clan composition of the sample patients (N=425)**

Name of Clan	Desia Kandha	Dongria Kandha	Kutia Kandha	All Kandhas	Santal	Total
1.Pujari	0	05	0	05	-	05
2.Mandal	0	11	0	11	-	11
3.Jani	0	23	0	23	-	23
4.Bisu Majhi	0	03	0	03	-	03
5.Shrambuku	0	03	0	03	-	03
6.Hikaka	0	11	0	11	-	11
7.Wadaka	0	03	0	03	-	03
8.Disari	0	04	0	04	-	04
9.Santa	0	12	0	12	-	12
10.Mankad	22	0	14	26	-	36
11.Gunji	11	0	0	11	-	11
12.Ghasi	03	0	0	03	-	03
13.Danga	11	0	0	11	-	11
14.Saraka	03	0	35	38	-	38
15.Nagasya	06	0	01	07	-	07
16.Jaraka	08	0	0	08	-	08
17.Teriki	11	0	0	11	-	11
18.Gonda	0	0	01	01	-	01

Name of Clan	Desia Kandha	Dongria Kandha	Kutia Kandha	All Kandhas	Santal	Total
19.Andanga	0	0	09	09	-	09
20.Admajuka	0	0	04	04	-	04
21.Mayura	0	0	11	11	-	11
22.Hansda	-	-	-	-	35	35
23.Besra	-	-	-	-	13	13
24.Kisku	-	-	-	-	08	08
25.Pauria	-	-	-	-	10	10
26.Soren	-	-	-	-	29	29
27.Marandi	-	-	-	-	32	32
28.Tudu Baske	-	-	-	-	21	21
29.Hembram	-	-	-	-	16	16
30.Murmu	-	-	-	-	25	25
31.Charrey	-	-	-	-	07	07
32.Bedia	-	-	-	-	04	04
<b>Total</b>	<b>75</b>	<b>75</b>	<b>75</b>	<b>225</b>	<b>200</b>	<b>425</b>

Results:

(i) A look at the table reveals that there are 32 clans on which the sample patients of Santal and Kandha tribes are distributed. Out of the Kandhapatients, maximum belong to the clan of Sarakar followed by Mankad, Jani, Santa, Danga, Hikaka, Mandal, Gunji, Teriki and Mayura. The least represented clan is Gonda.

(ii) In case of Santal patients maximum belong to the clan of Hansda followed by Marandi, Soren, Murmu and Tudu Baske. However, the least presented clan is Bedia.

It is only matter of chance that whoever come under survey may belong to a particular clan.

**2. Personal profile of the sample patients:** Personal profile under study included age, sex, marital status and educational attainment of the sample patients. The analysis reveals the following information.



**Table 5.II.2 Socio personal profile of the patients (N=425)**

Socio-Personal variables	Kandha	%	Santal	%	Pooled	
1. Age					Frequency	%
(i) 20 to 30	105	46.67	78	39.00	183	43.06
(ii) 31 to 50	88	39.11	65	32.50	153	36.00
(iii) 50 & 65	32	14.22	57	28.50	89	20.94
<b>Total</b>	<b>225</b>	<b>100.00</b>	<b>200</b>	<b>100.00</b>	<b>425</b>	<b>100.00</b>
<b>2. Sex</b>						
(i) Male	147	65.33	140	70.00	287	67.53
(ii) Female	78	34.67	60	30.00	138	32.47
<b>Total</b>	<b>225</b>	<b>100.00</b>	<b>200</b>	<b>100.00</b>	<b>425</b>	<b>100.00</b>
<b>3. Marital Status</b>						
(i) Married	137	60.89	168	84.00	305	71.76
(ii) Unmarried	88	39.11	32	16.00	120	28.24
<b>Total</b>	<b>225</b>	<b>100.00</b>	<b>200</b>	<b>100.00</b>	<b>425</b>	<b>100.00</b>
<b>4. Education</b>						
(i) Illiterate	144	64.00	84	42.00	228	53.65
(ii) Primary	41	18.22	15	7.50	56	13.18
(iii) Middle school	19	8.44	25	12.50	44	10.35
(iv) High School	17	7.56	66	33.00	83	19.53
(v) Above high school	3	1.33	10	5.00	13	3.06
(vi) Technical	1	0.44	0	0.00	1	0.24
<b>Total</b>	<b>225</b>	<b>100.00</b>	<b>200</b>	<b>100.00</b>	<b>425</b>	<b>100.00</b>

**Results:**

- (i) The sample patients are within of age group of 20-30 years (43.06%), 31-50 years (36.00%) and 50-65(20.96%) years. In other wards the sample patients are selected from all age groups justifying the selection of appropriate sample.
- (ii) Out of the total sample, 67.53% are male and rest 32.47% are female. It shows that sample contains both male and female respondents which ensure response from all sexes.
- (iii) The analysis shows that out of the total sample, 71.76% are married and rest 28.24% are unmarried.
- (iv) On educational attainment as much as 53.65% are found to be non-literate, 13.18% studied up to primary level,10.35% up to middle school,19.53% high school and 3.06% obtained college education. It is also noted only one person has received technical education. Inference is that patients from all educational groups received traditional healing treatmentsimplying their strong believe in tradition and traditional way of health care.

**3. Family background:** Family background is considered to be basic to each and every individuals and individuals work as per culture of the family. This factor is more prominent in case of tribal families. The study examined family background of the sample in terms of type, size and strength of earning members per family.

**Table 5.II.3 Family type & size (N=425)**

Family Composition	Kandha	%	Santal	%	Pooled	
1. Type of family					Frequency	%
(i) Nuclear	182	80.89	164	82.00	346	81.41
(ii) Extended	43	19.11	36	18.00	79	18.59
<b>Total</b>	<b>225</b>	<b>100.00</b>	<b>200</b>	<b>100.00</b>	<b>425</b>	<b>100.00</b>
<b>2. Size</b>						
(i) Up to 3	38	16.89	60	30.00	98	23.06
(ii) 4-6	186	82.67	125	62.50	311	73.18
(iii) 7 & above	1	0.44	15	7.50	16	3.76
<b>Total</b>	<b>225</b>	<b>100.00</b>	<b>200</b>	<b>100.00</b>	<b>425</b>	<b>100.00</b>
<b>Average number per family</b>	<b>4.6</b>	<b>-</b>	<b>4.5</b>	<b>-</b>	<b>4.55</b>	
<b>3. No. of earning member per family</b>						
(i) One	86	38.22	120	60.00	206	48.47
(ii) Two	100	44.44	50	25.00	150	35.29
(iii) Three	35	15.56	23	11.50	58	13.65
(iv) Four	3	1.33	7	3.50	10	2.35
(v) Five	1	0.44	0	0.00	1	0.24
<b>Total</b>	<b>225</b>	<b>100.00</b>	<b>200</b>	<b>100.00</b>	<b>425</b>	<b>100.00</b>
<b>Average earning member per family</b>	<b>1.8</b>	<b>-</b>	<b>1.6</b>	<b>-</b>	<b>1.7</b>	

The family back ground of the sample reveals social status of the patients as under.

(i) Majority of the sample live in nuclear family system (81.41%) against 18.59% of extended families. The tribal families are mostly of nuclear family system.

(ii) The family size of the tribal family is within four to six in most cases while 23.06% have up to three members only. Beyond seven members per family is found with only 16 (3.76%) sample.

(iii) In majority cases sample patients have one to two earning members per family and in few cases (13.65%) have 3 earning members. However four to five earning members is found with very negligible percentage of sample patients. The study shows that higher the number (4/5) of earning members in patient families, the lower is the dependency on traditional healing system.

**4. Occupational Structure:** Occupation in the rural areas is mostly land based. But recently due to extensive construction and planting activities many are opting for wage earning to get ready payment. The dependency on forest produce although has reduced but it is there in a limited scale. The occupational structure of the patient sample was studied in terms of primary and secondary ones which are presented in table as under.

**Table 5.II.4 Occupation of the sample patients (N=425)**

Occupation	Kandha		Santal		Pooled	
	Primary	Secondary	Primary	Secondary	Primary	Secondary
1. Agriculture	200	20	158	39	358	59
2. Service	4	10	8	3	12	13
3. Business	1	15	6	14	7	29
4. Wage earnings	16	160	28	120	44	280
5. Forest Produce	4	20	0	24	4	44
<b>Total</b>	<b>225</b>	<b>225</b>	<b>200</b>	<b>200</b>	<b>425</b>	<b>425</b>

Out of 425 samples agriculture is reported to be primary occupation of 358 (84.23%) followed by wage earning, service, and business and forest produce. In case of secondary occupation wage earning tops the list followed by agriculture including shift cultivation, forest produce, business and service. The primary and secondary occupation gets inter-changed over time depending on market, social needs and availability of resources.

**5. Land Possession:** Land is attached with social and economic values of the tribes. Possession of land in own name also provides social security. During recent years the state Government has emphasized on the land possession of tribes throughout the state. On the basis of possession of land the rural families are categorized as marginal, small and large farmers. The distribution of sample patients on land category is given below.

**Table 5.II.5 Land in possession (Acre) of the patient sample (N=425)**

Land possession	Kandha	%	Santal	%	Pooled	%
Landless	63	28.00	36	18.00	99	23.29
0.1-2.5 (Marginal farmer)	76	33.78	85	42.50	161	37.88
2.6-5.0 (Small farmer)	63	28.00	64	32.00	127	29.88
5.1 to 8.5 (Large farmer)	23	10.22	15	7.50	38	8.95
<b>Total</b>	<b>225</b>	<b>100.00</b>	<b>200</b>	<b>100.00</b>	<b>425</b>	<b>100.00</b>

A look at the table reveals that 23.29% of the sample are landless, 37.88% come under marginal category, 29.88% small farmer and 8.95% large farmers. On the whole the sample contains a good number of landless patients. In other words majority come with marginal and small farmers categories.

**6. Material Possession:** Possession of materials of worth mention is also an indicator of economic status. The study examined the material possession of the sample as shown in table.

**Table 5.II.6 Material Possession of the sample patients (N=425)**

Material possession	Kandha	%	Santal	%	Pooled	%
1. Radio	44	19.56	54	27.00	98	23.05
2. TV	34	15.11	84	42.00	118	27.76
3. Bicycle	121	53.78	155	77.50	276	64.94
4. Bullock cart	38	16.89	48	24.00	86	20.25
5. Plough	225	100.00	200	100.00	425	100.00
6. Cell Phone	19	8.44	140	70.00	159	37.41
7. Power tiller	2	0.89	9	4.50	11	2.59
8. Water Pump	13	5.78	56	28.00	69	16.23

As mentioned in table all the sample have plough in possession as they do agriculture. During interaction it was ascertained that many of them possess iron ploughs provided by the state Govt. Next important possession is bicycle as it is essential for movement in rocky areas. It is observed that about 37.41% have cell phones indicating their shift towards modernity. More over radio and TV are possessed by 23.05% and 27.76% of sample respectively indicating their exposure to mass media and information world. Material possession reveals a shift from traditional way of living to modern one. It is fact that life style of tribal families is also changing.

**7. Economic Category:** Economic categorization is in operation in each and every state to provide official benefits. During interaction in the field it was ascertained that most of the patients sample (90.35%) had received BPL cards as per the classification.

**Table 5.II.7 Economic category of the patient sample (N=425)**

Particulars	Kandha	%	Santal	%	Pooled	%
1. APL	7	3.11	23	11.50	30	7.06
2. BPL	214	95.11	170	85.00	384	90.35
3. Antodaya	4	1.78	7	3.50	11	2.59
<b>Total</b>	<b>225</b>	<b>100.00</b>	<b>200</b>	<b>100.00</b>	<b>425</b>	<b>100.00</b>

The distribution of sample on economic category reveals that maximum of them belong to BPL groups (90.35%) and in few cases APL and Antodaya families among the patients noticed.

**8. Treatment Received.** The patients were selected on the basis of being treated by the healers for at least two diseases. Besides traditional healers, Govt. hospitals, dispensaries, homeopathic clinic and Ayurvedic centers are opened for them. The approaches of the patients to different places of treatments have been examined as follows.

**Table 5.II.8 Treatments availed (N=425)**

Treatment category	Kandha	%	Santal	%	Pooled	%
1. Allopathic	76	33.78	42	21.00	118	27.76
2. Homeopathy	4	1.78	12	6.00	16	3.76
3. Ayurvedic	6	2.67	54	27.00	60	14.12
4. Traditional	225	100.00	200	100.00	425	100.00

As shown in table, all the samples have been treated by the traditional healers. Besides, they have also availed treatments at Govt. hospitals/ dispensaries to an extent of 27.67%, Ayurvedic 14.12% and very few at homeopathic clinics (3.76%). It is evident that when the patients fail with traditional healers for successful treatment, they approach allopathic and other means of treatment.

**9. Advise to contact traditional healers:** Before starting of treatment the patient normally enquires about credibility of the healers and affordability. More over for similar treatment

they wish to contact the patients to be sure of success. In finding out as who influence them to approach particular healers for treatment the following results were obtained.

**Table 5.II.9: Advice received to contact healers (N=425)**

Particulars	Kandha	%	Santal	%	Pooled	%
1. Family member	154	68.44	76	38.00	230	54.12
2. Relatives	10	4.44	28	14.00	38	8.94
3. Friend	15	6.67	6	3.00	21	4.94
4. Village leaders	2	0.89	20	10.00	22	5.18
5. Similar patient	8	3.56	38	19.00	46	10.82
6. Self-decision	36	16.00	96	48.00	132	31.06

The analysis reveals that family members mostly parents influence the sample patients to approach the traditional healers because of their experience and knowledge. Self-decision is found to be influential factors up to 31.06%whereas the role of relatives, friends and village leaders is found to be very negligible.The influence of similar patients counts up to 10.82%. The conclusion is that the patients approach traditional healers for treatment being influenced byfamily members and self-decision.

**10. Methods of diagnosis:** The tribal healers have their own methods of diagnosis of diseases based on their experiences and learning. The patients were requested to indicate the methods that the healers adopt to diagnosis the diseases, which yielded the following information.



**Table 5.II.10 Diagnosis of disease (N=425)**

Diagnosis	Kandha	%	Santal	%	Pooled	%
1. Ttemperature/ Pulse	37	16.44	80	40.00	117	27.53
2. Parts of body	109	48.44	30	15.00	139	32.71
3. Enquired about food, sleep etc.	52	23.11	50	25.00	102	24.00
4. Enquired about past suffering/disease	12	5.33	46	23.00	58	13.65
5. Enquired about hereditary reasons	0	0.00	20	10.00	20	4.71
6. Enquired about ghost attack	0	0.00	40	20.00	40	9.41
8. Enquire about frequency of urination	39	17.33	55	27.50	94	22.12

As contained in table, the healers mostly checkup the parts of the body, pulse rate and temperature, enquire about food and sleep for diagnosis of diseases. Further, in many cases they enquire about frequency of urination for confirmation about the diseases along with past suffering if any. Information regarding hereditary causes and ghost attack are also enquired by 4.71% and 9.41% of the sample, respectively. In short, at village level with limited facilities the healers try to access the reasons of diseases from various angles.

### **11. Illness and curability level:**

The field investigation gathered information on the diseases of the patients and their cure. The following table explains the extent of the diseases occurred and cured after receiving the treatments from the traditional healers.

**Table 5.II.11 Illness and curability (N=425)**

Disease	(Kandha)		% of curability	Santal		% of curability
	Treated	Cured		Treated	Cured	
1.Snake bite	18	11	61.11	21	16	66.66
2.Fever	190	112	58.94	7	5	71.42
3.Stomach pain	60	34	56.67	34	27	79.41
4.Jaundice	35	21	60.00	9	4	44.44
5.Dysentery	130	110	84.61	48	38	79.16
6.Bone fracture	28	22	78.57	61	52	85.24
7.Malaria	72	42	58.33	28	15	53.57
8.Diarrhoea	120	95	79.16	-	-	-
9.Gastritis	48	31	64.58	53	45	84.90
10.Cough	125	100	80.00	-	-	-
11.Scorpion bite	30	21	70.00	38	32	84.21
12.Chicken pox	32	21	65.62	-	-	-
13.Tuberculosis	15	8	53.33	32	12	37.50
14.Headache	77	60	77.92	34	25	73.52
15.Toothache	50	38	76.00	67	54	80.59
16.Ear ache	52	41	78.84	-	-	-
17.Back bone pain	35	25	71.42	-	-	-
18.Ghost attack	49	41	83.64	34	22	64.70
19.Cancer	06	02	33.33	09	03	33.33
20.Hair fall	110	86	78.18	-	-	-
21.Piles	-	-		13	9	69.23
22.Dhatu	-	-		33	22	66.67
23.Skin disease	-	-		33	21	63.63
24.Hydrophobia	-	-		9	4	44.44
25.Arthritis	-	-		12	8	66.66
26.Blood pressure	-	-		28	17	69.71
27.Joint pain	-	-	-	42	27	64.28

28.Paralysis	-	-	-	20	11	55.00
29.Pregnancy –immature delivery	-	-	-	64	21	32.81
30.Nasal bleeding	-	-	-	54	32	59.24
31.Spondalylsis	-	-	-	18	7	38.88
32.Burning	-	-	-	56	27	48.21
33.Esunophullia	-	-	-	31	19	61.29
34.Epilepsy	-	-	-	49	32	65.30
35.Brain malaria	-	-	-	18	10	55.55

(Base year 2010-2013)

A total of 425 patients were treated by the traditional healers. As per expression, the extent of curability from ailments varies from 71% to 80% in case of diseases like bone fracture, diarrhea, dysentery, stomach pain, headache and toothache. The extent of curability is reported to be highest (84.61%) for treatment of dysentery among the Kandha patients and for bone fracture among the Santalpatients. The success of treatment of the malaria, a frequently occurring common disease, among the Kandha is up to 58.33% and that of Santalis 53.57%.

**Table 5.II.12 Range of curability of diseases treated by healers of Kandha and Santhal**

Percentage of curability	Treated by Kandha healers	Treated by Santal healers
31-40	Cancer	TB, Cancer, Immaturedelivery, Spondylosis
41-50	-	Jaundice, Hydrophobia, Burning
51-60	Fever, Stomachpain, Jaundice, T.B., Malaria, Gastritis	Malaria, Paralysis, Nasal bleeding, Brain malaria
61-70	Snake bite, Scorpion bite	Eosinophilia, Epilepsy, Snake bite Ghost attack, Piles, Dhatu, Skin disease, Anthracites, Blood pressure, Joint pain
71-80	Bone fracture, Diarrhoea, Cough, Headache, Toothache, Earache, Back bone pain, Hair fall	Stomach pain, Dysentery, Headache, Toothache
81-90	Dysentery, Ghost attack	Bone fracture, Gastritis, Scorpion bite, Dog bite

## 12. Visiting of Ayurvedic and Govt. hospital (N=425)

The selection of the sample patients was based on the criteria of being treated by the traditional healers for at least two diseases. Besides Govt. hospitals, dispensaries and ayurvedic clinics etc. are opened for them. Moreover, when patients fails with one (their first treatment) then try at other places. Instances were there when a patient was not cured by allopathic treatment he came to traditional healers and got cured. Looking at the situation, the approaches of the patients to different sources of treatment was examined.

**Table 5.II.13 Visiting of Govt. Health care centers (N=425)**

Visit of Health care centers	Kandha		Santal		Pooled	%
	Frequency	%	Frequency	%		
(i) Ayurvedic hospital	107	47.56	89	44.50	196	46.12
(ii) Govt. Hospital	118	52.44	111	55.50	229	53.88
<b>Total</b>	<b>225</b>	<b>100.00</b>	<b>200</b>	<b>100.00</b>	<b>425</b>	<b>100.00</b>

A about 53.88% of the sample patients availed modern treatment at Govt. hospitals and 46.12% availed treatment at Ayurvedic hospitals. There is a shift among the tribes in general from traditional ways of treatment to modern ones. Over the time changes in health care practices are taking place in tribal communities. The conclusion is that there is a shift among tribal population from traditional ways of treatment to modern ones. Over times changes are taking place as change is the law of nature.

**13. Reasons of preference to traditional healing practices:** It is fact that by tradition and culture tribes sticks to their own healing practices. But the question is that why tribes stick to traditional methods of treatment when better and efficient treatment is available in Govt. hospitals. The reasons are many and diversified.

**Table 5.II.14 Reasons of preference for traditional healer over govt. health care centres (N=425)**

Reasons	Kandha	%	Santal	%	Pooled	%
1. Easily accessibility	64	28.44	63	31.50	127	29.88
2. Close proximity	77	34.22	28	14.00	105	24.71
3. Less cost	89	39.56	120	60.00	209	49.18
4. No ill effect	70	31.11	50	25.00	120	28.24
5. Compatible to life style	28	12.44	80	40.00	108	25.41
6. Easily availability of medicine	66	29.33	37	18.50	103	24.23
7. Well proven result in treatment	96	42.67	44	22.00	140	32.94
8. Confidence of cure	82	36.44	90	45.00	Proximity 172	40.47
9. Able to express own problem	54	24.00	22	11.00	76	17.88

The tribal population stick to traditional methods of treatment because of long lasting and deep rooted confidence based on the considerations like less cost, well proven result, easy accessibility, absence of residual effect, compatibility with life style, close proximity, easy availability of medicine and ability to interact with healers in own language. However, there are some specific advantages of indigenous treatment which the tribal do not wish to leave.

**CHAPTER VI**  
**GLIMPSES OF INDIVIDUAL HEALERS**  
**(KANDHA AND SANTAL)**

## CHAPTER VI

# GLIMPSES OF INDIVIDUAL HEALERS (KANDHA AND SANTAL)

## 6: Individual healers and their practices

### 6.1 Desia Kandha (Kandhamal District)

#### Healer No. 6.1.1

##### 1. Name & Address: Sadananda Mallick

Village: Kutikia  
Panchayat: Kutikia  
P.O: Kutikia  
Pin Code: 762110  
Block: Baliguda  
District: Kandhamal  
Ph. No.: 8763528612

##### 2. Healer at a glance:

1. Age	45years
2. Education	10 <sup>th</sup>
3. Religion	Hindu
4. Family type	Joint
5. Family size	4
6. Earning member	2
7. Practice	Since 1987
8. Average patient per year	150-200
9. Practice	Herbal treatment and magical treatment
10. Practice Learned from	Grand father
11. Specialization	Jaundice, dysentery, conjunctivitis, hydrophobia, snake bite, scorpion bite, stomach pain, fever.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.1.1.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weakness, weight loss.	Examination of patient
2.	Akhi dhara	Conjunctivitis	Symptoms such as thrilling of eye lids, eye becomes red colour and occasional tear comes from eyes.	Eye estimation
3.	Jalantaka	Hydrophobia	Exaggerated sensation at the bite spot excitability, loss of sensation in an area of the body, loss of muscle function, pain occur on the site of the bite, swelling.	Examination of patient
4.	Sarpa dansana	Snake bite	<u>Nausea and vomiting</u> , <u>fainting</u> , <u>tachycardia</u> and cold, clammy skin.	Examination of patient
5.	Peta byatha	Stomach pain	Pain occurs at night, spread to other part of body gradually, vomiting.	Examination of patient
6.	kamala	Jaundice	Yellowness in eyes, excess of urination & look yellow in colour, weakness in body.	Visible body symbols
7.	Bichha dansan	Scorpion bite	Exaggerated sensation at the bite site excitability. Pain occurs at bite point.	Examination of patient

**4. Rituals suggested and performed for curing of diseases:**

**Table: 6.1.1.2 Rituals suggested and performed for curing of diseases**

Name of Disease	Steps followed in performing the rituals
Put an ill eye on others	<ol style="list-style-type: none"><li>1. After taking bath morningworship to Goddess of village temple.</li><li>2. Then offering fruits like banana, coconut and other worship material like vermilion, ghee, incense, raw rice, sandal wood etc.</li><li>3. After puja, he distributes Prasad to everybody.</li></ol>



## 5. Use of therapeutic agents in treatment of patients

### A. Plants in preparation of medicine:

**Table: 6.1.1.3 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Patala garuda	<u>Rauvolfia serpentina</u>	Snake bite	Root		✓		
Gangasiuli plant	<u>Nyctanthes arbortristis</u>	Fever	Leaf		✓	✓	
Kaladudura plant	<u>Datura metel</u>	Stomach pain	Flower		✓	✓	
Bana Kolathia plant	<u>Tephrosia purpurea</u>	Dysentery	Root		✓	✓	
Mayura chulia plant	<u>Celosia argentea</u>	Dysentery	Root		✓	✓	
Kadamba plant	<u>Anthocephalus chinensis</u>	Snake bite	Bark		✓	✓	

### B. Animal in preparation of medicine: Not used

### C. Minerals in use of medicines:

**Table: 6.1.1.4 Minerals in use of medicines**

Name of mineral	Used for which disease	What Portion of mineral used in preparation of medicines	Process		Consumable form	
			Burning	Soaking	Food	wear
Copper	Put an ill eye on other	All	✓			✓

## 6. Magical treatment:

**Table: 6.1.1.5 List of diseases for which magical treatments are done**

Local name of disease	English name of disease	Magical treatments adopted
Najar lagiba	Put an ill eye	chanting

## 7. Use of Ayurvedic medicines with local treatments (ITK):

**Table: 6.1.1.6 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Sarpa dansan	Snake bite	Root of <u>Rauvolfia serpentina</u> + black pepper
2.	Jwara	Fever	Juice of <u>Nyctanthes arbortristis</u> + honey

**Healer No. 6.1.2**

**1. Name & Address: Syamsundar Mallick**

Village: Kutikia  
Panchayat: Kutikia  
P.O: Kutikia  
Pin Code: 762110  
Block: Baliguda  
District: Kandhamal  
Ph. No.: 8895401318

**2. Healer at a glance:**

1. Age	65years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	5
6. Earning member	5
7. Practice	Since 2008
8. Average patient per year	35-50
9. Practice	Bone setter, herbal treatment and magical treatment
10. Practice Learned from	Guru (Simanchala das)
11. Specialization	Bone fracture, earache, joint pain, disorder of menstruation, malaria, diarrhoea, gastritis, stomach pain, skin disease
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.1.2.1 Diseases treated by the healer**

Sl. No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Hada bhanga	Bone fracture	Pain occurs in the injured area that gets worse when the area is moved or pressure is applied. Loss of function in the injured area.	Examination of patient
2.	Kana bindha	Ear ache	Pain in side ear, headache, sleeplessness.	Examination of patient
3.	Kasa	Cough	Discharge of sputum of white color from mouth.	Examination of sputum
4.	Malaria	Malaria	Headache, backache, high temperature, shivering & vomiting.	Examination of patient
5.	Peta byatha	Stomach pain	Pain occurs in belly at night & spread to other parts of body gradually, vomiting.	Examination of patient
6.	Anthu ganthi bytha	Joint pain	General symptoms include fatigue, severe pain occurs in joints, difficult to move.	Examination of patient
7.	Stree roga	Disorder of menstruation	Abdomen pain, weakness, headache, pain in different organs of body, loss of appetite & constipation.	Urine test
8.	Tarala jhada	Diarrhoea	Occur frequent loose motion, watery stool, light harness or dizziness due to dehydration.	Examination of patient
9.	Charma roga	Skin disease	Scabies, figures are affected, itching effect & pus formation.	Visible body symbols
10.	Pakastali pradaha	Gastritis	Indigestion, constipation, burning sensation in chest, weakness, irritable.	Examination of patient

#### 4. Rituals suggested and performed for curing of diseases:

**Table: 6.1.2.2 Rituals suggested and performed for curing of diseases**

Name of Disease	Steps followed in performing the rituals
Put an ill eye on other	1. After taking bath in morning worship to Goddess of village temple. 2. Then offer fruits like banana, coconut, vermilion, ghee, incense, raw rice, sandal wood etc. 3. After puja complete, he distributes prasad to everybody.

#### 5. Use of therapeutic agents in treatment of patients

##### A. Plants in preparation of medicine:

**Table: 6.1.2.3 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Apamaranga plant	<u>Achyranthes aspera</u>	Diarrhoea	Root		✓	✓	
Banakolatha plant	<u>Atylosia scarabaeoides</u>	Diarrhoea	Root		✓	✓	
Mango plant	<u>Mangifera indica</u>	Diarrhoea	Bark		✓	✓	
Tulsi plant	<u>Ocimum sanctum</u>	Joint pain	Leaf		✓	✓	
Bel plant	<u>Aegle marmelos</u>	Cough	Leaf		✓	✓	
Lajakuli lata	<u>Mimosa pudica</u>	Cough	Root		✓	✓	
Dub grass	<u>Cynodom dactylon</u>	Joint pain	Leaf		✓	✓	
Hadajala plant	<u>Vitis quandrangularis</u>	Bone fracture	All		✓	✓	
Satabari plant	<u>Asparagus gracilis</u>	Stomach pain	Root		✓	✓	
Baruna plant	<u>Crateva adansoni</u>	Joint pain	Leaf		✓	✓	
Masani plant	<u>Ehertia laevis</u>	Cough	Leaf		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK):**

**Table: 6.1.2.4 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Anthu ganthi bytha	Joint pain	Leaf of <u>Ocimum sanctum</u> + <u>Cynodom dactylon</u> + black pepper
2.	Kasa	Cough	Leaf of <u>Aegle marmelos</u> + black pepper

**Healer No. 6.1.3**

**1. Name & Address: Bidyadhar Mallick**

Village: Kutikia  
Panchayat: Kutikia  
P.O: Kutikia  
Pin Code: 762110  
Block: Baliguda  
District: Kandhamal  
Ph. No.: 8763651404

**2. Healer at a glance:**

1. Age	56 years
2. Education	3rd class
3. Religion	Hindu
4. Family type	Joint
5. Family size	7
6. Earning member	1
7. Practice	Since 2010
8. Average patient per year	50-60
9. Practice	Herbal treatment
10. Practice Learned from	Self effort
11. Specialization	Stomach pain, dysentery, malaria, metal fatigue, jaundice, skin disease, epilepsy, small pox, chicken pox.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey, studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.1.3.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Peta byatha	Stomach pain	Pain occur in belly at night, spread to other parts of body gradually, vomiting	Examination of patient
2.	Kamala	Jaundice	Yellowness in eyes, excess of urination & look yellow in colour, weakness.	Visible body symbols
3.	Dhatu khyaya	Metal fatigue	Discharge of white substances in urine in concentrated form.	Urine test
4.	Malaria	Malaria	Headache, backache, high temperature, shivering & vomiting.	Examination of patient
5.	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weakness, weight loss.	Examination of patient
6.	Basanta	Small pox	Small and big round shape bulging red color scar mark spread on the body.	Examination of scar mark
7.	Hada puti	Chicken pox	Small bulging red color pimple mark size spread on the body.	Eye estimation
8.	Charma roga	Skin disease	Scabies, figures are affected, itching & pus formation.	Examination of patient
9.	Bata	Epilepsy	Wind formation in stomach, indigestion.	Eye estimation

**4. Rituals suggested and performed for curing of diseases:** None



## 5. Use of therapeutic agents in treatment of patients

### A. Plants in preparation of medicine:

**Table: 6.1.3.2 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Mehendi plant	<u>Lawsonia inermis</u>	Jaundice	Leaf		✓	✓	
Asoka plant	<u>Saraca asoca</u>	Stomach pain	Leaf		✓	✓	
Kalyni plant	<u>Catharanthus roseus</u>	Epilepsy	Leaf		✓	✓	
Basanga plant	<u>Adhatoda vasica</u>	Skin disease	Leaf		✓	✓	
Jaiphala plant	<u>Myristica fragrans</u>	Metal fatigue	Fruit		✓	✓	
Koi lekha plant	<u>Hygrophila auriculata</u>	Metal fatigue	Leaf		✓	✓	
Kumhi plant	<u>Careya arborea</u>	Chicken pox	Bark		✓	✓	
Kerenda koli	<u>Carissa carandas</u>	Dysentery	Fruit		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

### 7. Use of Ayurvedic medicines with local treatments (ITK):

**Table: 6.1.3.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Charma roga	Skin disease	Leaf of <u>Adhatoda vasica</u> + Ghee
2.	Kamala	Jaundice	Root of <u>Lawsonia inermis</u> + molasses
3.	Peta batha	Stomach pain	Leaf of <u>Saraca asoca</u> + honey

**Healer No. 6.1.4**

**1. Name & Address: Gopa Mallick**

Village: Parampanga  
Panchayat: Parampanga  
P.O: Parampanga  
Pin Code: 762109  
Block: Baliguda  
District: Kandhamal

**2. Healer at a glance:**

1. Age	60years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	3
6. Earning member	2
7. Practice	Since 1994
8. Average patient per year	40-50
9. Practice	Herbal treatment
10. Practice Learned from	Self effort
11. Specialization	Stomach pain, malaria, metal fatigue, headache jaundice, epilepsy, tuberculosis, tooth ache, Pistulla
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.1.4.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Peta batha	Stomach pain	Pain occurs in belly at night, spread to other parts of body gradually, vomiting.	Examination of patient
2.	Kamala	Jaundice	Yellowness in eyes, excess of urination & look yellow in colour, weakness.	Visible body symbols
3.	Dhatu khyaya	Metal fatigue	Discharge of white liquid substances in urine in concentrated form.	Urine test
4.	Malaria	Malaria	Headache, backache, high temperature, shivering & vomiting.	Examination of patient
5.	Bata	Epilepsy	Wind formation in stomach, indigestion.	Eye estimation
6.	Danta bindha	Tooth ache	Severe pains occur in root zone of teeth, headache, and sleeplessness, irritable.	Examination of patient
7.	Munda bindha	Headache	Defective eye sight, high blood pressure, sleeplessness, constipation, indigestion, fever.	Examination of patient
8.	Raja jakhma	Tuberculosis	Loss of weight, fever, cough, change of voice, pain in chest, spitting of mucus containing blood, weakness, burning sensation at feet & in palms.	Examination of patient
9.	Malakantaka	Pistulla	A hard lump may be felt around the anus, itchiness in the anus area. Pain while defecating, the anus area may be red and become sore.	Stool test

**4. Rituals suggested and performed for curing of diseases:** None

## 5. Use of therapeutic agents in treatment of patients

### A. Plants in preparation of medicine:

**Table: 6.1.4.2 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Mehendi plant	<u>Lawsonia inermis</u>	Jaundice	Leaf		✓	✓	
Jamu plant	<u>Syzygium cumini</u>	Stomach pain	Leaf		✓	✓	
Sisua plant	<u>Dalbergia sissoo</u>	Metal fatigue	Leaf		✓	✓	
Gangasiuli plant	<u>Nyctanthes arbortristis</u>	Malaria	Root		✓	✓	
Jhanjika plant	<u>Breynia rhamnoides</u>	Headache	Root		✓	✓	
Mohi plant	<u>Lannea coromandelica</u>	Tooth ache	Bark		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

## 7. Use of Ayurvedic medicines with local treatments (ITK):

**Table: 6.1.4.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Malaria	Malaria	Leaf of <u>Nyctanthes arbortristis</u> + mustard oil
2.	Peta byatha	Stomach pain	Bark of <u>Syzygium cumini</u> + honey

**Healer No. 6.1.5**

**1. Name & Address: Dilip Mallick**

Village: Parampanga  
Panchayat: Parampanga  
P.O: Parampanga  
Pin Code: 762109  
Block: Baliguda  
District: Kandhamal

**2. Healer at a glance:**

1. Age	35years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	8
6. Earning member	5
7. Practice	Since 2002
8. Average patient per year	50-60
9. Practice	Herbal treatment, bone setter and magical treatment
10. Practice Learned from	Guru (Lambodhar Darbhelai)
11. Specialization	Malaria, metal fatigue, Jaundice, tuberculosis, Snake bite, hydrophobia, asthma, cholera, epilepsy, bone fracture ,disorder of menstruation.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Disease treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.1.5.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Stree roga	disorder of menstruation	Abdomen pain, weakness, headache, pain in different organs of body, loss of appetite & constipation.	Urine test
2.	Kamala	Jaundice	Yellowness in eyes, excess of urination & look yellow in colour, weakness.	Visible body symbols
3.	Dhatu khyaya	Metal fatigue	Discharge of white liKuid substances through urine in concentrated form.	Urine test
4.	Malaria	Malaria	Symptoms include fever, <u>headache</u> , sweats, fatigue and vomiting.	Examination of patient
5.	Bata	Epilepsy	Wind in stomach, indigestion.	Eye estimation
6.	Sarpa dansana	Snake bite	Symptoms such as <u>fainting</u> , <u>tachycardia</u> , and cold, clammy skin, loss of sensation.	Examination of patient
7.	Jalantaka	Hydrophobia	Exaggerated sensation at the bite site excitability, loss of feeling in an area of the body, loss of muscle function, pain at the site of the bite swelling occur.	Examination of patient
8.	Raja jakhma	Tuberculosis	Loss of weight, fever, cough, change of voice, pain in chest, spitting of mucus containing blood, weakness, burning sensation at fit & palms.	Examination of patient
9.	Swasa roga	Asthma	Nasal congestion, indigestion, constipation, diarrhoea.	Examination of patient
10.	Haija	Cholera	Excess of dehydration and vomiting, weakness.	Examination of patient
11.	Hada bhang	Bone fracture	Pains occur in the injured area that gets worse when the area is allowed to moved or pressure is applied. Loss of function in the injured area.	Examination of patient

#### 4. Rituals suggested and performed for curing of diseases:

**Table: 6.1.5.2 Rituals suggested and performed for curing of diseases**

Name of disease	Steps followed in performing the rituals
Epilepsy	1. After taking bath in morning worship to Goddess Tarini in village temple. 2. Then offering fruits like banana, coconut and other worship material like sindur, ghee, incense, raw rice, sandal wood etc. 3. After puja, he distributes Prasad to everybody.

#### 5. Use of therapeutic agents in treatment of patients

##### A. Plants in preparation of medicine:

**Table: 6.1.5.3 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Patala garuda plant	<u>Rauvolfia serpentina</u>	Hydrophobia	Root		✓	✓	
Mahakala plant	<u>Trichosanthes bracteata</u>	Snake bite	Root		✓	✓	
Paja plant	<u>Litsea sebifera</u>	Tuberculosis	Root		✓	✓	
Gangasiuli plant	<u>Nyctanthes arbortristis</u>	Malaria	Leaf		✓	✓	
Mehendi plant	<u>Lawsonia inermis</u>	Jaundice	Root		✓	✓	
Badiaanla plant	<u>Phyllanthus fraternus</u>	Women disease	Fruit		✓	✓	
Tulsi plant	<u>Ocimum sanctum</u>	Asthma	Leaf		✓	✓	
Apa maranga plant	<u>Achyranthes aspera</u>	Cholera	Root		✓	✓	
Brahmi plant	<u>Bacopa monnieri</u>	Women disease	Leaf		✓	✓	

**B. Animal in preparation of medicine:**

**Table: 6.1.5.4 Animal in preparation of medicine**

Name of animal	Used for which disease	What Portion of animal used in preparation of medicines	Process		Consumable form	
			Burning	Soaking	Food	Drink
Beetle	Epilepsy	All	✓		✓	
Silk worm	Epilepsy	All	✓		✓	

**C. Minerals in use of medicines:**

**Table: 6.1.5.5 Minerals in use of medicines**

Name of mineral	Used for which disease	What Portion of mineral used in preparation of medicines	Process		Consumable form	
			Burning	Soaking	Food	Wear
Copper	Epilepsy	All	✓			✓

**6. Magical treatment:**

**Table: 6.1.5.6 List of diseases for which magical treatments are done**

Local name of disease	English name of disease	Magical treatments adopted
Bhuta lagiba	Ghost attack	Mantra
Guni	Guni	Omm cling cling .....
		Omm kuti kuti .....
		Palao palo .....
		Hanuman bira hanuman

**7. Use of Ayurvedic medicines with local treatments (ITK):**

**Table: 6.1.5.7 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Sarpa dansana	Snake bite	Root of <u>Trichosanthes bracteata</u> + black pepper
2.	Jalantaka	Hydrophobia	Root of <u>Rauvolfia serpentina</u> +black pepper + honey
3.	Raja jakhma	Tuberculosis	Root of <u>Pajaka plant</u> + ginger + honey
4.	Malaria	Malaria	Leaf of <u>Nyctanthes arbortristis</u> + honey + black pepper
5.	Swasa roga	Asthma	Leaf of <u>Ocimum sanctum</u> +black pepper + honey



**Healer No. 6.1.6**

**1. Name & Address: Sumasar Mallick**

Village: Parampanga  
Panchayat: Parampanga  
P.O: Parampanga  
Pin Code: 762109  
Block: Baliguda  
District: Kandhamal

**2. Healer at a glance:**

1. Age	60 years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	6
6. Earning member	1
7. Practice	Since 2004
8. Average patient per year	150-200
9. Practice	Herbal treatment
10. Practice Learned from	God
11. Specialization	Snake bite, hydrophobia and poison in take.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.1.6.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Sarpa dansana	Snake bite	Symptoms such as fainting, tachycardia, and cold, clammy skin.	Examination of patient
2.	Jalantaka	Hydrophobia	Exaggerated sensation at the bite spot excitability, loss of sensation in an area of the body, loss of muscle function, pain at the site of the bite, swelling occur.	Examination of patient
3.	Bisa khaiba	Poison intake	Symptoms include clammy skin, vomiting, headache.	Examination of patient

4. Rituals suggested and performed for curing of diseases: None

5. Use of therapeutic agents in treatment of patients

A. Plants in preparation of medicine:

**Table: 6.1.6.2 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Kaniar plant	<u>Thevetia nerifolia</u>	Hydrophobia	Root		✓	✓	
Kasmar plant	<u>Gmelina arborea</u>	Snake bite	Root		✓	✓	
Patalagaruda palnt	<u>Rauvolfia serpentina</u>	Snake bite	Root		✓	✓	

B. Animal in preparation of medicine: Not used

C. Minerals in use of medicines: Not used

6. Magical treatment:

**Table: 6.1.6.3 List of diseases for which magical treatments are done**

Local name of disease	English name of disease	Magical treatments adopted
Sarpa dansana	Snake bite	Chanting
Jalantaka	Hydrophobia	Chanting

7. Use of Ayurvedic medicines with local treatments (ITK):

**Table: 6.1.6.4 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Sarpa dansana	Snake bite	Root of <u>Rauvolfia serpentina</u> + ghee
2.	Jalantaka	Hydrophobia	Root of <u>Gmelina arborea</u> + honey

**Healer No. 6.1.7**

**1. Name & Address: Bikeswar Mallick**

Village: Kutikia  
Panchayat: Kutikia  
P.O: Kutikia  
Pin Code: 762110  
Block: Baliguda  
District: Kandhamal

**2. Healer at a glance:**

1. Age	50years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	4
6. Earning member	2
7. Practice	Since 2006
8. Average patient per year	80-100
9. Practice	Herbal treatment
10. Practice Learned from	Father
11. Specialization	Cough, headache, joint pain, disorder of menstruation, malaria, breast disease, dysentery, epilepsy, leucosis, eczema.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.1.7.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Dhala chau	Leucosis	White colour scar mark scattered throughout body and excess of itchiness occur in different parts of the body.	Visible scar mark
2.	Munda byatha	Headache	Defective eye sight, high blood pressure, sleeplessness, constipation, indigestion, fever.	Examination of patient
3.	Kasa	Cough	Discharge of white colour sputum from mouth.	Examination of sputum
4.	Malaria	Malaria	Headache, backache, high temperature, shivering & vomiting.	Examination of patient
5.	Stana roga	Breast disease	Discontinuous secretion of milk, problem arises to feed the child.	Examination of patient
6.	Anthuganthi bytha	Joint pain	General symptoms include fatigue, severe pain in joints, difficult to move else where.	Examination of patient
7.	Stree roga	Disorder of menstruation	Abdomen pain, weakness, headache, pain in different organs of body, loss of appetite & constipation.	Urine test
8.	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weakness, weight loss.	Examination of patient
9.	Bata	Epilepsy	Wind formation in stomach, indigestion.	Visible body symbols
10.	Beenchi	Eczema	Occurrence of wounds on toe.	Eye estimation

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicine:**

**Table: 6.1.7.2 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Ghikuanri plant	<u>Aloe vera</u>	Dysentery	Leaf		✓	✓	
Gangasiuli plant	<u>Nyctanthes arbortristis</u>	Breast disease	Leaf		✓	✓	
Mango plant	<u>Mangifera indica</u>	Women disease	Bark		✓	✓	
Jamu plant	<u>Syzygium cumini</u>	Women disease	Bark		✓	✓	
Gaba plant	<u>Ricinus communis</u>	Malaria	Leaf		✓	✓	
Masani plant	<u>Ehertia laevis</u>	Cough	Leaf		✓	✓	
Dantari kanta plant	<u>Acacia pennata</u>	Breast disease	Leaf		✓	✓	
Kaincha plant	<u>Abrus precatorius</u>	Disorder of menstruation	Seed		✓	✓	
Bai gaba plant	<u>Jatropha gossypifolia</u>	Eczema	Leaf		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK):**

**Table: 6.1.7.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Jhada	Dysentery	Bark of ( <u>Syzygium cumini</u> and <u>Mangifera indica</u> ) + cloves
2.	Malaria	Malaria	Leaf of <u>Nyctanthes arbortristis</u> + ghee

**Healer No. 6.1.8**

**1. Name & Address: Sambaru Mallick**

Village: Tandapadar  
Panchayat: Parampanga  
P.O: Parampanga  
Pin Code: 762109  
Block: Baliguda  
District: Kandhamal

**2. Healer at a glance:**

1. Age	47years
2. Education	2 <sup>nd</sup>
3. Religion	Hindu
4. Family type	Joint
5. Family size	4
6. Earning member	1
7. Practice	Since 1992
8. Average patient per year	50-60
9. Practice	Herbal treatment
10. Practice Learned from	Father and self effort
11. Specialization	Otorrhoea, asthma, dysentery, diabetes, tuberculosis, Pistulla , jaundice.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 5.5.1.8.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Swasa roga	Asthma	Nasal congestion, indigestion, constipation, diarrhoea.	Examination of patient
2.	Kana pachiba	Otorrhoea	Pain in ear and elimination of pus from ear.	Examination of patient
3.	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weakness, weight loss.	Examination of patient
4.	Madhumeha	Diabetes	Weakness, excessive hunger, burning sensation in urination.	Ants surrounded in urine
5.	Raja jakhma	Tuberculosis	Loss of weight, fever, cough, change of voice, pain in chest, spitting of mucus containing blood, weakness, burning sensation at feet & in palms.	Examination of patient
6.	Malakantaka	Pistulla	A hard lump may be felt around the anus, itchiness occur in the anus area. Pain while defecating, the anus area may be red and become sore.	Stool test
7.	Kamala	Jaundice	Yellowness in eyes, excess of urination and yellow in colour, weakness in body.	Visible body symbols

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicine:**

**Table: 6.1.8.2 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Apamaranga plant	<u>Achyranthes aspera</u>	Diabetes	Root		✓	✓	
Kain plant	<u>Nymphaea alba</u>	Tuberculosis	Root		✓	✓	
Mango plant	<u>Mangifera indica</u>	Dysentery	Bark, leaf		✓	✓	
Champa plant	<u>Michelia champaca</u>	Tuberculosis	Root, bark		✓	✓	
Mehendi plant	<u>Lawsonia inermis</u>	Jaundice	Root		✓	✓	
Tulsi plant	<u>Ocimum sanctum</u>	Asthma	Root, fruit, leaf		✓	✓	
Banana plant	<u>Musa sapientum</u>	Pistula	Fruit		✓	✓	

**B. Animal in preparation of medicine:**

**Table: 6.1.8.3 Animal in preparation of medicine**

Name of animal	Zoological name	Used for which disease	What Portion of animal used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Bat	<u>Pipistrellus pipistrellus</u>	Asthma	Flesh	✓		✓	
Oyster	<u>Pinctada margaritifera</u>	Otorrhoea	Flesh	✓		✓	
Bug	<u>Abax coleoptera</u>	Pistula	Flesh	✓		✓	



**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK):**

**Table: 6.1.8.4 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Swasa roga	Asthma	Leaf of <u>Ocimum sanctum</u> + flesh of <u>Pipistrellus pipistrellus</u> + ghee + long pepper + dried ginger
2.	Kana pachiba	Otorrhoea	Flesh of <u>Pinctada margaritifera</u> + mustard oil
3.	Malakantaka	Pistulla	Fruit of <u>Musa sapientum</u> + flesh <u>Abax coleopteran</u>
4.	Madhumeha	Diabetes	Root of <u>Achyranthes aspera</u> + alum + coconut
5.	Jhada	Dysentery	Bark of <u>Mangifera indica</u> + meat of <u>Pinctada margaritifera</u>

**Healer No. 6.1.9**

**1. Name & Address: Debasish Mallick**

Village: Parampanga  
Panchayat: Parampanga  
P.O: Parampanga  
Pin Code: 762109  
Block: Baliguda  
District: Kandhamal

**2. Healer at a glance:**

1. Age	35years
2. Education	9 <sup>th</sup>
3. Religion	Hindu
4. Family type	Joint
5. Family size	4
6. Earning member	1
7. Practice	Since 1998
8. Average patient per year	60-70
9. Practice	Bone setter
10. Practice Learned from	Self decision
11. Specialization	Bone fracture
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.1.9.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Hada bhanga	Bone fracture	Pain occurs in the injured area which gets worse when the area is allowed to move or pressure is applied. Loss of function in the injured area.	Examination of patient

**4. Rituals suggested and performed for curing of diseases:** None

## 5. Use of therapeutic agents in treatment of patients:

### A. Plants in preparation of medicine:

**Table: 6.1.9.2 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Gangasiuli plant	Nyctanthes arbortristis	Bone fracture	Leaf		✓	✓	
Patalgaruda plant	<u>Rauvolfia serpentina</u>	Bone fracture	Bark		✓	✓	
Palasa plant	<u>Butea monosperma</u>	Bone fracture	Bark		✓	✓	
Kusuma plant	<u>Carthamus tinctorius</u>	Bone fracture	Bark		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK):** None

**Healer No. 6.1.10**

**1. Name & Address: Sahadev Mallick**

Village: Kutikia  
Panchayat: Kutikia  
P.O: Kutikia  
Pin Code: 762110  
Block: Baliguda  
District: Kandhamal  
Ph. No.: 8895401318

**2. Healer at a glance:**

1. Age	30 years
2. Education	9 <sup>th</sup>
3. Religion	Hindu
4. Family type	Joint
5. Family size	4
6. Earning member	2
7. Practice	Since 2010
8. Average patient per year	80-100
9. Practice	Herbal treatment
10. Practice Learned from	Self effort
11. Specialization	Dysentery, pistulla, headache, anaemia
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.1.10.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weak, wet loss.	Examination of patient
2.	Malakantaka	Pistula	External & internal swelling in the anal region, loss of appetite, itching effect of anus, wind formation.	Stool test
3.	Munda byatha	Headache	Defective eye sight, high blood pressure, sleeplessness, constipation, indigestion, fever.	Examination of patient
4.	Siklim (Raktahinata)	Anaemia	Symptom includes shortage of blood, vertigo and feel of weakness.	Examination of patient

**4. Rituals suggested and performed for curing of diseases:** None

## 5. Use of therapeutic agents in treatment of patients

### A. Plants in preparation of medicine:

**Table: 6.1.10.2 Plants in preparation of medicine**

Name of plants	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Mehendi plant	<u>Lawsonia inermis</u>	Dysentery	Root		✓	✓	
Patalagaruda plant	<u>Rauvolfia serpentina</u>	Headache	Root		✓	✓	
Kusuma plant	<u>Carthamus tinctorius</u>	Anaemia	Flower		✓	✓	
Ananta mula plant	<u>Hemidesmus indicus</u>	Anaemia	Root		✓	✓	
Hinjala plant	<u>Barringtonia acutangula</u>	Headache	Root		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK):** None

**Healer No. 6.1.11**

**1. Name & Address: Sambu Majhi**

Village: Padikia  
Panchayat: Parampanga  
P.O: Parampanga  
Pin Code: 762109  
Block: Tumudibandh  
District: Kandhamal

**2. Healer at a glance:**

1. Age	31years
2. Education	5th
3. Religion	Hindu
4. Family type	Joint
5. Family size	3
6. Earning member	1
7. Practice	Since 2003
8. Average patient per year	90-100
9. Practice	Bone setter, herbal treatment
10. Practice Learned from	Guru (Dandapani Pradhan)
11. Specialization	Bone fracture, tooth ache, malaria, women disease, stomach Pain, smallpox, chicken pox, dysentery, hydrophobia, snakebite, poison in take, fever, scorpion bite.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.1.11.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Hada bhanga	Bone fracture	Pain occurs in the injured area which gets worse when the area is allowed to move or pressure is applied. Loss of function in the injured area.	Examination of patient
2.	Danta bindha	Tooth ache	Severe pain occurs in root zone of teeth, headache, sleeplessness and develop irritations.	Examination of patient
3.	Basanta	Smallpox	Small and big size round shape bulging red color scar mark spread different part on the body.	Examination of scar mark
4.	Malaria	Malaria	Headache, backache, high temperature, shivering & vomiting.	Examination of patient
5.	Peta byatha	Stomach pain	Pain occurs at night in belly, spread to other parts of the body gradually, vomiting.	Examination of patient
6.	Hada puti	Chickenpox	Small shape bulging red color pimple size like spread different part the body.	Examination of patient
7.	Stree roga	Women disease	Occur feeling weakness and body become black, continuous bleeding from genital organ.	Urine test
8.	Jhada	Dysentery	Frequent loose motion, watery stool, light harness or dizziness due to dehydration.	Examination of patient
9.	Jalantaka	Hydrophobia	Exaggerated sensation at the bite site spot excitability, loss of sensation in an area of the body, loss of muscle function, pain at the site of the bite, swelling occur.	Visible body symbols
10.	Sarpa dansana	Snakebite	Symptoms include as <u>nausea</u> and <u>vomiting</u> , <u>vertigo</u> , <u>fainting</u> , <u>tachycardia</u> and cold, clammy skin.	Examination of patient
11.	Bisa khaiba	Poison in take	Symptoms include clammy skin, vomiting, headache.	Examination of patient
12.	Bichha dansana	Scorpion bite	Exaggerated sensation occurs at the bite site. Pain occurs at the bite point.	Examination of patient
13.	Jwara	Fever	Depression, acute, inflammation of the nose, muscular pain.	Examination of patient

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicine:**

**Table: 6.1.11.2 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Mahakala plant	<u>Trichosanthes bracteata</u>	Hydrophobia	Root		✓	✓	
Mango plant	<u>Mangifera indica</u>	Dysentery	Root, leaf		✓	✓	
Tulsi plant	<u>Ocimum sanctum</u>	Malaria	Leaf		✓	✓	
Bel plant	<u>Aegle marmelos</u>	Dysentery	Leaf		✓	✓	
Patala garuda plant	<u>Rauvolfia serpentina</u>	Snake bite	Root		✓	✓	
Dub plant	<u>Cynodom dactylon</u>	Dysentery	Leaf		✓	✓	
Limba plant	<u>Azadirachta indica</u>	Small pox	Leaf		✓	✓	
Chireta plant	<u>Swertia angustifolia</u>	Malaria	Leaf ,stem		✓	✓	
Kanda alu plant	<u>Dioscorea belophylla</u>	Scorpion bite	Fruit		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK):**

**Table: 6.1.11.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Basanta	Smallpox	Leaf of <u>Azadirachta indica</u> + turmeric
2.	Malaria	Malaria	Leaf of <u>Ocimum sanctum</u> + honey
3.	Bicha dansana	Scorpion bite	Root of <u>Rauvolfia serpentina</u> + raw rice



**Healer No. 6.1.12**

**1. Name & Address: Ramachandra Mallick**

Village: Dadakangia  
Panchayat: Parampanga  
P.O: Parampanga  
Pin Code: 762109  
Block: Baliguda  
District: Kandhamal  
Ph. No.: 9437209683

**2. Healer at a glance:**

1. Age	38years
2. Education	9 <sup>th</sup>
3. Religion	Hindu
4. Family type	Joint
5. Family size	6
6. Earning member	1
7. Practice	Since 2000
8. Average patient per year	250-350
9. Practice	Bone setter, herbal treatment and magical treatment
10. Practice Learned from	Guru (laxmanananda saraswati)
11. Specialization disease,	Malaria, diarrhoea, metal fatigue, fainting jaundice, pistulla, ear ache, black mole, breast disease, balad disease, leucosis.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.1.12.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Malakantaka	Pistulla	Pain occur in the injured area which gets worse when the area is allowed to moved or pressure is applied. Loss of function in the injured area.	Stool test
2.	Kana bindha	Ear ache	Pain occur in ear, elimination of pus from ear.	Examination of patient
3.	Murchha roga	Fainting disease	Symptoms include loss of sense, weakness, dizziness from body.	Examination of patient
4.	Malaria	Malaria	Headache, backache, high temperature, shivering & vomiting.	Examination of patient
5.	Chanda roga	Balad disease	Symptoms include loss of hair gradually from head and lead to occurrence of more hair fall.	Eye estimation
6.	Dhatu	Metal fatigue	Discharge of white liKuid substances through urine in concentrated form.	Urine test
7.	Dhala chau	Leucosis	Symptoms include white patches develop through out body, itchiness.	Visible body symbols
8.	Tarala jhada	Diarrhoea	Occur frequent loose motion, watery like stool, light harness or dizziness due to dehydration.	Examination of patient
9.	Kamala	Jaundice	Occur yellowness in eyes, excess of urination, look yellow in colour, weakness.	Visible body symbols
10.	Stana roga	Breast disease	Discontinuous secretion of milk. Severe pain In breast. Unable to feed the child.	Examination of patient
11.	Kala jai	Black mole	Black colour round shape appears in different parts of body.	Eye estimation
12.	Hada bhanga	Bone fracture	Pain occurs in the injured area which gets worse when the area is allowed to move or pressure is applied. Loss of function in the injured area.	Examination of patient

#### 4. Rituals suggested and performed for curing of diseases:

**Table: 6.1.12.2 Rituals suggested and performed for curing of diseases**

Name of Disease	Steps followed in performing the rituals
Leucosis	<ol style="list-style-type: none"> <li>1. Healer and patient both after finish their bath in the morning and both go to the temple for worshipping to God.</li> <li>2. At worship place i.e. in the temple of lord Shiva, patient and healer do some oblation.</li> <li>3. Then healer chants mantra and offers water and bel leaf on behalf of patient to cure the disease.</li> </ol>

#### 5. Use of therapeutic agents in treatment of patients

##### A. Plants in preparation of medicine:

**Table: 6.1.12.3 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Gangasiuli plant	<u>Nyctanthes arbortristis</u>	Malaria	Root, leaf		✓	✓	
Mehendi plant	<u>Lawsonia inermis</u>	Jaundice	Leaf		✓	✓	
Kalara plant	<u>Momordica charantia</u>	Pistula	Leaf		✓	✓	
Palasa plant	<u>Butea monosperma</u>	Breast disease	Leaf		✓	✓	
Lajakuli lata	<u>Mimosa pudica</u>	Fainting disease	Root		✓	✓	
Bajramuli plant	<u>Sida cordata</u>	Bone fracture	Root		✓	✓	
Hinjala plant	<u>Barringtonia acutangula</u>	Diarrhoea	Leaf		✓	✓	
Hada bhanga plant	<u>Cissus quadrangula</u>	Ear ache	Stem		✓	✓	

**B. Animal in preparation of medicine:**

**Table: 6.1.12.4 Animal in preparation of medicine**

Name of animal	Used for which disease	What Portion of animal used in preparation of medicines	Process		Consumable form	
			Burning	Soaking	Food	Drink
Beetle	Ear ache	All	✓		✓	

**C. Minerals in use of medicines:**

**Table: 6.1.12.5 Minerals in use of medicines**

Name of mineral	Used for which disease	What Portion of mineral used in preparation of medicines	Process		Consumable form	
			Burning	Soaking	Food	Wear
Sulphur	Leucosis	All	✓			✓
Sura	Leucosis	All	✓			✓

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK):**

**Table: 6.1.12.6 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Tarala jhada	Diarrhoea	Leaf of <u>Mimosa pudica</u> + country liKuior
2.	Malaria	Malaria	Leaf of <u>Nyctanthes arbortristis</u> + black pepper + honey
3.	Malakantaka	Pistula	Leaf of <u>Momordica charantia</u> +ripe banana + guaghee.

**Healer No. 6.1.13**

**1. Name & Address: Bira Dandasuna**

Village: Dadakangia  
Panchayat: Parampanga  
P.O: Parampanga  
Pin Code: 762109  
Block: Baliguda  
District: Kandhamal  
Ph. No.: 9437209683

**2. Healer at a glance:**

1. Age	55years
2. Education	2 <sup>nd</sup> class
3. Religion	Hindu
4. Family type	Joint
5. Family size	5
6. Earning member	1
7. Practice	Since 2002
8. Average patient per year	20-25
9. Practice	Bone setter and herbal treatment
10. Practice Learned from	Father
11. Specialization	Bone fracture, malaria, metal fatigue, pistulla, jaundice
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.1.13.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Hada bhanga	Bone fracture	Pain occurs in the injured area that gets worse when the area is moved or pressure is applied. Loss of function in the injured area.	Examination of patient
2.	Kamala	Jaundice	Yellowness in eyes, excess of urination and look yellow in colour, weakness in body.	Visible body symbols
3.	Dhatu khyaya	Metal fatigue	Discharge of white liquid substances through urine in concentrated form.	Urine test
4.	Malaria	Malaria	Headache, backache, high temperature, shivering & vomiting.	Examination of patient
5.	Malakantaka	Pistula	A hard lump may be felt around the anus, itching effect in the anus area. Pain while defecating, the anus area may be red and become sore.	Stool test

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicine:**

**Table: 6.1.13.2 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Mehendi plant	<u>Lawsonia inermis</u>	Jaundice	Root		✓	✓	
Eswarajata plant	<u>Celosia cristata</u>	Metal fatigue	Root		✓	✓	
Tulsi plant	<u>Ocimum sanctum</u>	Malaria	Leaf		✓	✓	
Gangasiuli plant	<u>Nyctanthes aobortristis</u>	Malaria	Leaf		✓	✓	
Bajramuli plant	<u>Sida cordata</u>	Bone fracture	Root		✓	✓	

**B. Animal in preparation of medicine:**

**Table: 6.1.13.3 Animal in preparation of medicine**

Name of animal	Zoological name	Used for which disease	What Portion of animal used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Climbing fish	<u>Anabas testudineus</u>	Pistulla	Head	✓		✓	

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK):**

**Table: 6.1.13.4 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Malakantaka	Pistula	Head of <u>Anabas testudineus</u> + ghee
2.	Kamala	Jaundice	Root of <u>Lawsonia inermis</u> + black pepper
3.	Dhatu khyaya	Metal fatigue	Root of <u>Celosia cristata</u> + black pepper

**Healer No. 6.1.14**

**1. Name & Address: Dubura Majhi**

Village: Padikia  
Panchayat: Parampanga  
P.O: Parampanga  
Pin Code: 762109  
Block: Tumudibandh  
District: Kandhamal

**2. Healer at a glance:**

1. Age	50 years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	6
6. Earning member	5
7. Practice	Since 1984
8. Average patient per year	100-120
9. Practice	Herbal treatment
10. Practice Learned from	Self effort
11. Specialization	Malaria, stomach pain, headache, joint pain, fever, ear ache, jaundice, dysentery, epilepsy, leucosis.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all



**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.1.14.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Jwara	Fever	Depression, acute, inflammation of the nose, muscular pain.	Examination of patient
2.	Kana bindha	Ear ache	Symptoms include pain occur in ear.	Examination of patient
3.	Munda bindha	Headache	Defective eye sight, high blood pressure, sleeplessness, constipation, indigestion, fever.	Examination of patient
4.	Malaria	Malaria	Headache, backache, high temperature, shivering & vomiting.	Examination of patient
5.	Peta byatha	Stomach pain	Pain occur at night, spread to other part of the body gradually, vomiting.	Examination of patient
6.	Anthu ganthi bytha	Joint pain	General symptoms include fatigue, severe pain in joints, difficult to move.	Examination of patient
7.	Kamala	Jaundice	Yellowness in eyes, excess of urination and look yellow in colour, weakness in the body.	Visible body symbols
8.	Chhau	Leucosis	Symptoms include white patches spread throughout body, it chiness.	Examination of patient
9.	Bata	Epilepsy	Wind formation in stomach, indigestion.	Visible body symbols

**4. Rituals suggested and performed for curing of diseases:** None

## 5. Use of therapeutic agents in treatment of patients

### A. Plants in preparation of medicine:

**Table: 6.1.14.2 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Bhuinlimba plant	<u>Andrographis paniculatus</u>	Headache	Root		✓	✓	
Ghikuanri plant	<u>Aloe vera</u>	Headache	Root		✓	✓	
Bel plant	<u>Aegle marmelos</u>	Dysentery	Fruit		✓	✓	
Dub plant	<u>Cynodom dactylon</u>	Fever	Leaf		✓	✓	
Bel plant	<u>Aegle marmelos</u>	Jaundice	All		✓	✓	
Patala garuda plant	<u>Rauvolfia serpentina</u>	Stomach pain	Stem		✓	✓	
Satabari plant	<u>Asparagus gracilis</u>	Stomach pain	Root		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

## 7. Use of Ayurvedic medicines with local treatments (ITK):

**Table: 6.1.14.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Kamala	Jaundice	Root of <u>Aegle marmelos</u> + raw rice

**Healer No. 6.1.15**

**1. Name & Address: Lupi Mallick**

Village: Banimila  
Panchayat: Parampanga  
P.O: Parampanga  
Pin Code: 762109  
Block: Baliguda  
District: Kandhamal  
Ph. No.: 9439244957

**2. Healer at a glance:**

1. Age	60years
2. Education	5 <sup>th</sup> class
3. Religion	Hindu
4. Family type	Joint
5. Family size	6
6. Earning member	2
7. Practice	Since 2009
8. Average patient per year	60-70
9. Practice	Herbal treatment and magical treatment
10. Practice Learned from	Self effort
11. Specialization	Poison in take, pistulla, nasal bleeding, headache, fever, dysentery, jaundice, tooth ache, hydrophobia.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.1.15.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Bisa khaiba	Poison in take	Symptoms include clammy skin, vomiting, headache.	Examination of patient
2.	Malakantaka	Pistulla	External & internal swelling in the anal region, loss of appetite, itching of anus, wind formation.	Stool test
3.	Nasa rakta shraba	Nasal bleeding	Symptoms include bleeding from the nose, occurrence of pain in nose	Examination of patient
4.	Jwara	Fever	Depression, acute, inflammation of the nose, muscular pain.	Examination of patient
5.	Munda bindha	Headache	Defective eye sight, high blood pressure, sleeplessness, constipation, indigestion, fever.	Examination of patient
6.	Danta bindha	Tooth ache	Severe pain occurs in root zone of teeth, headache, sleepness, develop irritateness.	Examination of patient
7.	Jalantaka	Hydrophobia	Exaggerated sensation at the bite spot excitability, loss of feeling in an area of the body, loss of muscle function, pain at the site of the bite , swelling occur.	Examination of patient
8.	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weakness, weight loss.	Examination of patient
9.	Kamala	Jaundice	Yellowness in eyes, excess of urination and look yellow in colour, weakness in the body.	Visible body symbols

**4. Rituals suggested and performed for curing of diseases:**

**Table: 6.1.15.2 Rituals suggested and performed for curing of diseases**

Name of Disease	Steps followed in performing the rituals
Jalantaka	<ol style="list-style-type: none"> <li>1. After finish bath, patient goes to the temple to worship the Goddess Durga and Tarini.</li> <li>2. Then he/she offers fruit like banana, coconut and uses other material like vermilion, ghee, incense, raw rice, sandalwood.</li> <li>3. After puja, he/she distributes Prasad to everybody and takes blessing of priest.</li> </ol>

## 5. Use of therapeutic agents in treatment of patients

### A. Plants in preparation of medicine:

**Table: 6.1.15.3 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Ghikuanri plant	<u>Aloe vera</u>	Headache	Leaf		✓	✓	
Patala garuda plant	<u>Rauvolfia serpentina</u>	Hydrophobia	Root		✓	✓	
Dub plant	<u>Cyndoon dactylon</u>	Dysentery	Root		✓	✓	
Gil plant	<u>Caesalpinia decapetala</u>	Poison in take	Root		✓	✓	
Mohi plant	<u>Lannea coromandelica</u>	Tooth ache	Bark		✓	✓	

### B. Animal in preparation of medicine: Not used

### C. Minerals in use of medicines:

**Table: 6.1.15.4 Minerals in use of medicines**

Name of mineral	Used for which disease	What Portion of mineral used in preparation of medicines	Process		Consumable form	
			Burning	Soaking	Food	Wear
Copper	Hydrophobia	All	✓			✓
Brass	Hydrophobia	All	✓			✓

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK):**

**Table: 6.1.15.5 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Jalantaka	Hydrophobia	Leaf of <u>Rauvolfia serpentina</u> + black pepper

## **6.2 Dongria Kandha (Rayagada District)**

### **Healer No. 6.2.1**

#### **1. Name & Address: Basudev Mutuka**

Village: Chati kona  
Panchayat: Kurli  
P.O: Chati kona  
Pin Code: 765019  
Block: Bissam Cuttack  
District: Rayagada  
Ph. No.: 9861623057

#### **2. Healer at a glance:**

1. Age	47years
2. Education	10 <sup>th</sup>
3. Religion	Hindu
4. Family type	Joint
5. Family size	5
6. Earning member	1
7. Practice	Since 2002
8. Average patient per year	50-60
9. Practice	Bone setter and herbal treatment
10. Practice Learned from	Father
11. Specialization	Anaemia, epilepsy, paralysis, bone fracture, metal fatigue, jaundice, piles, dysentery, hydrophobia.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.2.1.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Arsha	Piles	Nasal congestion, indigestion, constipation, diarrhoea.	Stool test
2.	Rakta hinata	Anaemia	Symptom includes shortage of blood, vertigo and feel of weakness in body.	Examination of patient
3.	Pakhya ghata	Paralysis	Nerve disorder, motionless part of body, tear comes from eyes, difficult to close eyes.	Examination of patient
4.	Bata	Epilepsy	Wind formation in stomach, indigestion.	Examination of patient
5.	Jalantaka	Hydrophobia	Symptoms such as exaggerated sensation at the bite site excitability, loss of sensation in an area of the body, loss of muscle function, pain at the site of the bite is swelling form.	Eye estimation
6.	Dhatu khyaya	Metal fatigue	Discharge of white liquid substances through urine in concentrated form.	Urine test
7.	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weak, wet loss.	Examination of patient
8.	Kamala	Jaundice	Yellowness in eyes, excess of urination and look yellow in colour, weakness in body.	Visible body symbols
9.	Hada bhanga	Bone fracture	Pain in the injured area that gets worse when the area is moved or pressure is applied. Loss of function in the injured area.	Examination of patient

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicine:**



**Table: 6.2.1.2 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Arjun plant	<u>Terminalia arjuna</u>	Metal fatigue, Epilepsy	Bark		✓	✓	
Mehendi plant	<u>Lawsonia inermis</u>	Jaundice	Root ,leaf		✓	✓	
Pedipedika plant	<u>Abutilon indicum</u>	Jaundice	Root ,leaf		✓	✓	
Pitamari plant	<u>Naregamia alata</u>	Jaundice, Anaemia	Root ,leaf		✓	✓	
Satabari plant	<u>Asparagus recemosus</u>	Metal fatigue	Root		✓	✓	
Indra marisa plant	<u>Acalypha indica</u>	Piles	Leaf		✓	✓	
Bajramuli plant	<u>Sida cordata</u>	Bone fracture	Root		✓	✓	
Kerenda koli plant	<u>Carissa carandas</u>	Dysentery	Fruit		✓	✓	
Malang plant	<u>Dendrophthoe falcata</u>	Paralysis	All parts		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:**

**Table: 6.2.1.3 Minerals in use of medicines**

Name of mineral	Used for which disease	What Portion of mineral used in preparation of medicines	Process		Consumable form	
			Burning	Soaking	Food	Drink
Sulphur	Dysentery	All	✓		✓	

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK):**

**Table: 6.2.1.4 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Dhatu khyaya	Metal fatigue	Bark of <u>Terminalia arjuna</u> + root of <u>Asparagus recemosus</u> +black pepper
2.	Kamala	Jaundice	Leaf of <u>Lawsonia inermis</u> + root of <u>Abutilon indicum</u> + oil of mahula

**Healer No. 6.2.2**

**1. Name & Address: Bandisi Sikaka**

Village: Khambesi  
Panchayat: Kurli  
P.O: Kurli  
Pin Code: 765019  
Block: Bissam Cuttack  
District: Rayagada  
Ph. No.: 9668700773

**2. Healer at a glance:**

1. Age	60 years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	4
6. Earning member	4
7. Practice	Since 1995
8. Average patient per year	70-80
9. Practice	Bone setter and magical treatment
10. Practice Learned from	Self effort
11. Specialization	Epilepsy, jaundice, dysentery, hydrophobia, fever, tuberculosis, cancer, chicken pox, smallpox, women disease.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.2.2.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Jwara	Fever	Depression, distressing fever, acute catarrhal inflammation of the nose, larynx and bronchi, neuralgic and muscular pain, gastro-intestinal disorder, nervous disturbances.	Examination of patient
2.	Hada puti	Chicken pox	Small bulging red color pimple mark size spread on the body.	Eye observation
3.	Basanta	Smallpox	Small and big round shape bulging red color scar mark spread on the body.	Examination of scar mark
4.	Bata	Epilepsy	Wind formation in stomach, indigestion.	Examination of patient
5.	Jalantaka	Hydrophobia	Symptoms such as exaggerated sensation at the bite site excitability, loss of sensation in an area of the body, loss of muscle function, pain at the site of the bite is swelling form.	Eye estimation
6.	Stree roga	Women disease	Feeling weakness and body become black, continuous bleeding.	Urine test
7.	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weakness, weight loss.	Examination of patient
8.	Kamala	Jaundice	Eyes and skin color changes into yellow.	Visible body symbols
9.	Raja jakhma	Tuberculosis	Loss of weight, fever, cough, change of voice, pain in chest, spitting of mucus containing blood, weakness, burning sensation at feet & in palms.	Examination of patient
10.	Karkata	Cancer	Symptoms like fever, extreme tiredness or weight loss, dizziness, unusual bleeding.	Examination of patient

**4. Rituals suggested and performed for curing of diseases:** None

## 5. Use of therapeutic agents in treatment of patients

### A. Plants in preparation of medicine:

**Table: 6.2.2.2 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Aankul plant	<u>Alangium chinense</u>	Hydrophobia	Root		✓	✓	
Mehendi plant	<u>Lawsonia inermis</u>	Jaundice	Root ,leaf		✓	✓	
Pedipedika plant	<u>Abutilon indicum</u>	Jaundice	Root ,leaf		✓	✓	
Harada plant	<u>Cajanus cajan</u>	Tuberculosis	Fruit		✓	✓	
Bisalya karani plant	<u>Tridax procumbens</u>	Cancer	Root, leaf, fruit		✓	✓	
Niragundi plant	<u>Vitex negundo</u>	Epilepsy	Root, leaf, fruit		✓	✓	
Basanga plant	<u>Adhatoda vasica</u>	Epilepsy	Root, leaf, fruit		✓	✓	
Amarpoi plant	<u>Kalanchoe pinnata</u>	Dysentery	Leaf		✓	✓	
Limba plant	<u>Azadirachta indica</u>	Chicken pox	Leaf		✓	✓	
Girili plant	<u>Indigofera cassioides</u>	Cancer	Root, leaf, fruit		✓	✓	
Kantaleutia plant	<u>Amaranthus spinosus</u>	Women disease	Root		✓	✓	
Kumhi plant	<u>Careya arborea</u>	Chicken pox	Bark		✓	✓	

### B. Animal in preparation of medicine: Not used

**C. Minerals in use of medicines:**

**Table: 6.2.2.3 Minerals in use of medicines**

Name of mineral	Used for which disease	What Portion of mineral used in preparation of medicines	Process		Consumable form	
			Burning	Soaking	Food	Wear
Copper	Hypnotism	All	✓			✓
Iron	Ghost attack	All	✓			✓

**6. Magical treatment:** None

**Table: 6.2.2.4 List of diseases for which magical treatments are done**

Local name of disease	English name of disease	Magical treatments adopted
Guni	Hypnotism	Chanting
Bhuta lagiba	Ghost attack	Chanting

**7. Use of Ayurvedic medicines with local treatments (ITK):**

**Table: 6.2.2.5 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Jalantaka	Hydrophobia	Root of <u>Alangium chinense</u> + curd
2.	Basanta	Smallpox	Leaf of <u>Azadirachta indica</u> + turmeric
3.	Jhada	Dysentery	Leaf of <u>Kalanchoe pinnata</u> + black pepper

**Healer No. 6.2.3**

**1. Name & Address: Admi Wadaka**

Village: Khambesi  
Panchayat: Kurli  
P.O: Kurli  
Pin Code: 765019  
Block: Bissam Cuttack  
District: Rayagada  
Ph. No.: 9439046683

**2. Healer at a glance:**

1. Age	25years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	2
6. Earning member	1
7. Practice	Since 1999
8. Average patient per year	60-70
9. Practice	Bone setter, herbal and magical treatment
10. Practice Learned from	Father, self effort
11. Specialization	Epilepsy, jaundice, dysentery, hydrophobia, malaria, tuberculosis, snake bite, chicken pox, stomach pain, bone fracture.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.2.3.1 Diseases treated by the healer**

Sl. No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Malaria	Malaria	Headache, backache, high temperature, shivering & vomiting.	Examination of patient
2.	Hada puti	Chicken pox	Small bulging red color pimple mark size spread on the body.	Eye estimation
3.	Bata	Epilepsy	Wind formation in stomach, indigestion.	Eye estimation
4.	Jalantaka	Hydrophobia	Symptoms such as exaggerated sensation at the bite site excitability, loss of sensation in an area of the body, loss of muscles function, pain at the site of the bite, swelling form.	Examination of patient
5.	Sarpa dansan	Snake bite	Symptoms such as <u>nausea</u> and <u>vomiting</u> , <u>fainting</u> , <u>tachycardia</u> and cold, clammy skin.	Examination of patient
6.	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weakness, weight loss.	Examination of patient
7.	Kamala	Jaundice	Yellowness in eyes, excess of urination and look yellow in colour, weakness in body.	Visible body symbols
8.	Raja jakhma	Tuberculosis	Symptoms include pain in the chest, coughing up blood or sputum, fatigue, weight loss, fever, sweating at night.	Examination of patient
9.	Peta byatha	Stomach pain	Pain occurs at night, spread to other parts of body gradually, vomiting.	Examination of patient
10	Hada bhanga	Bone Fracture	Pain in the injured area that gets worse when the area is moved or pressure is applied. Loss of function in the injured area.	Examination of patient



#### 4. Rituals suggested and performed for curing of diseases:

**Table: 6.2.3.2 Rituals suggested and performed for curing of diseases**

Name of Disease	Steps followed in performing the rituals
Cut wound	1. After taking bath worshipping to God Niyam raja. 2. Then offering fruits like banana, coconut, vermillion, ghee, incense, raw rice, sandal wood. 3. After puja distribution of Prasad to everybody.

#### 5. Use of therapeutic agents in treatment of patients

##### A. Plants in preparation of medicine:

**Table: 6.2.3.3 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Babul plant	<u>Acacia nilotica</u>	Hydrophobia	Root		✓	✓	
Coconut plant	<u>Cocos nucifera</u>	Epilepsy	Root		✓	✓	
Harada plant	<u>Cajanus cajan</u>	Tuberculosis	Fruit		✓	✓	
Bisalya karani plant	<u>Tridax procumbens</u>	Cancer	Root, leaf		✓	✓	
Patalgaruda plant	<u>Rauvolfia serpentina</u>	Jaundice	Root, leaf		✓	✓	
Mango plant	<u>Mangifera indica</u>	Jaundice	Root, leaf,		✓	✓	
Limba plant	<u>Azadirachta indica</u>	Chicken pox	Leaf		✓	✓	
Jada plant	<u>Ricinus communis</u>	Chicken pox	Root, bark		✓	✓	
Baunsa plant	<u>Bambusa arundinacea</u>	Epilepsy	Root, bark		✓	✓	
Ambiliti plant	<u>Oxalis corniculata</u>	Stomach pain	Root, stem		✓	✓	
Bajramuli plant	<u>Sida cordata</u>	Bone fracture	Root		✓	✓	
Chireta	<u>Swertia angustifolia</u>	Malaria	Leaf, stem		✓	✓	

##### B. Animal in preparation of medicine:

**Table: 6.2.3.4 Animal in preparation of medicine**

Name of animal	Zoological name	Used for which disease	What Portion of animal used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Cobra-de-capello	<u>Naja naja</u>	Hypnotism	Head		✓	✓	
Bear	<u>Ursidae</u> <u>carnivora</u>	Stomach pain	Nail		✓	✓	

**C. Minerals in use of medicines:**

**Table: 6.2.3.5 Minerals in use of medicines**

Name of mineral	Used for which disease	What Portion of mineral used in preparation of medicines	Process		Consumable form	
			Burning	Soaking	Food	Wear
Copper	Ghost attack	All	✓			✓
Iron	Ghost attack	All	✓			✓

**6. Magical treatment:**

**Table: 6.2.3.6 List of diseases for which magical treatments are done**

Local name of disease	English name of disease	Magical treatments adopted
Bhuta lagiba	Ghost attack	Chanting

**7. Use of Ayurvedic medicines with local treatments (ITK):**

**Table: 6.2.3.7 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Jalantaka	Hydrophobia	Creeper of <u>Acaci nilotica</u> + turmeric+ oil of <u>Ricinus communis</u>
2.	Basanta	Smallpox	Leaf of <u>Azadirachta indica</u> + turmeric+ oil of <u>Ricinus communis</u>
3.	Raja jakhma	Tuberculosis	Fruit of <u>Cajanus cajan</u> + turmeric

**Healer No. 6.2.4**

**1. Name & Address: Aku Jakasika**

Village: Khajuri  
Panchayat: Kurli  
P.O: Kurli  
Pin Code: 765019  
Block: Bissam Cuttack  
District: Rayagada

**2. Healer at a glance:**

1. Age	35years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	4
6. Earning member	1
7. Practice	Since 2010
8. Average patient per year	60-70
9. Practice	Herbal medicine and magical treatment
10. Practice Learned from	Father, self effort
11. Specialization	Dysentery, headache, fever, cough, women disease, ulcer, breast disease,
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.2.4.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Munda bindha	Headache	Defective eye sight, high blood pressure, sleeplessness, constipation, indigestion, fever.	Examination of patient
2.	Jwara	Fever	Depression, acute, inflammation of the nose, muscular pain.	Examination of patient
3.	Kasa	Cough	Discharge of sputum from mouth.	Examination of sputum
4.	Stree roga	Women disease	Feeling weakness and body become black, continuous bleeding.	Urine test
5.	Ghaa	Ulcer	Elimination of blood from ulcer point and Occurrence of pain at that point.	Eye estimation
6.	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weakness, weight loss.	Examination of patient
7.	Stana roga	Breast disease	Discontinuous secretion of milk, problem arises to feed the child.	Examination of patient

**4. Rituals suggested and performed for curing of diseases:**

**Table: 6.2.4.2 Rituals suggested and performed for curing of diseases**

Name of Disease	Steps followed in performing the rituals
Ghost attack Put an ill eye	1. The healer chants various mantras and if the patient is not cure within seven days, then they will make arrangement of oblation. 2. After oblation, they offer hen as a victim in front of Goddess Kali. 3. After completion of puja they distribute Prasad to everybody.

## 5. Use of therapeutic agents in treatment of patients

### A. Plants in preparation of medicine:

**Table: 6.2.4.3 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Gangasiuli plant	<u>Nyctanthes arbortristis</u>	Fever	Root		✓	✓	
Palua plant	<u>Curcuma zedoaria</u>	Fever	Root , leaf		✓	✓	
Talamuli plant	<u>Curculigo orchioibes</u>	Breast disease	Root		✓	✓	
Arjuna plant	<u>Terminalia arjuna</u>	Ulcer	Bark		✓	✓	
Bahada plant	<u>Taerminalia bellerica</u>	Cough	Fruit		✓	✓	
Harida plant	<u>Terminalia chebula</u>	Cough	Fruit		✓	✓	
Bhuin limba plant	<u>Andrographis paniculatus</u>	Dysentery	Root, bark		✓	✓	
Jhanjika plant	<u>Breynia rhamnoides</u>	Headache	Root		✓	✓	
Masani plant	<u>Ehertia laevis</u>	Cough	Leaf		✓	✓	
Jhanjika plant	<u>Breynia rhamnoides</u>	Headache	Leaf		✓	✓	
Pita korwa plant	<u>Holarrhera antidysenterica</u>	Dysentery	Bark		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

## 6. Magical treatment:

**Table: 6.2.4.4 List of diseases for which magical treatments are done**

Local name of disease	English name of disease	Magical treatments adopted
Bhuta lagiba	Ghost attack	Chanting
Najar lagiba	Put an ill eye on others	Chanting

**7. Use of Ayurvedic medicines with local treatments (ITK):** None

**Healer No. 6.2.5**

**1. Name & Address: Sikaka Druku**

Village: Khajuri  
Panchayat: Kurli  
P.O: Kurli  
Pin Code: 765019  
Block: Bissam Cuttack  
District: Rayagada  
Ph. No.: 8895187195

**2. Healer at a glance:**

1. Age	50years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	4
6. Earning member	2
7. Practice	Since 1994
8. Average patient per year	30-40
9. Practice	Herbal treatment
10. Practice Learned from	God
11. Specialization	Epilepsy, dysentery, malaria, fever, paralysis, joint pain, headache
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.2.5.1 Diseases treated by the healer**

SI No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Malaria	Malaria	Headache, backache, high temperature, shivering & vomiting.	Examination of patient
2.	Anthu ganthi byatha	Joint pain	General symptoms include fatigue, severe pain in joints, difficult to move.	Examination of patient
3.	Bata	Epilepsy	Wind formation in stomach, indigestion.	Eye estimation
4.	Jwara	Fever	Depression, acute, inflammation of the nose, muscular pain.	Examination of patient
5.	Pakhya ghata	Paralysis	Nerve disorder, motionless part of body, tears comes from eyes, difficult to close eyes.	Examination of patient
6.	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weakness, weight loss.	Examination of patient
7.	Munda bindha	Headache	Defective eye sight, high blood pressure, sleeplessness, constipation, indigestion, fever.	Examination of patient

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicine:**

**Table: 6.2.5.2 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Gangasiuli plant	<u>Nyctanthes arbortristis</u>	Fever	Root, leaf		✓	✓	
Palua plant	<u>Curcuma zedoaria</u>	Fever	Root		✓	✓	
Bana khajuri plant	<u>Phoenix pusilla</u>	Epilepsy	Root		✓	✓	
Bichuati plant	<u>Laportea interrupta</u>	Paralysis	Leaf		✓	✓	
Bhuin kakharu plant	<u>Ipomoea digitata</u>	Headache	Root		✓	✓	
Bhuin limba plant	<u>Andrographis paniculatus</u>	Dysentery	Root, leaf		✓	✓	
Baruna plant	<u>Crateva adansonii</u>	Joint pain	Leaf		✓	✓	
Chireta plant	<u>Swertia angustifolia</u>	Malaria	Leaf, stem		✓	✓	



**B. Animal in preparation of medicine:**

**Table: 6.2.5.3 Animal in preparation of medicine**

Name of animal	Zoological name	Used for which disease	What Portion of animal used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Pangolin	<u>Manis gigantea</u>	Paralysis	Leather	✓		✓	

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK):**

**Table: 6.2.5.4 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Bata	Epilepsy	Root of <u>Ipomoea digitata</u> + ghee
2.	Jhada	Dysentery	Root and leaf of <u>Andrographis paniculatus</u> + lemon water

**Healer No. 6.2.6**

**1. Name & Address: Shyam Wadaka**

Village: Khajuri  
Panchayat: Kurli  
P.O: Kurli  
Pin Code: 765019  
Block: Bissam Cuttack  
District: Rayagada  
Ph. No.: 8763248772/9937398570

**2. Healer at a glance:**

1. Age	39years
2. Education	7 <sup>th</sup>
3. Religion	Hindu
4. Family type	Joint
5. Family size	7
6. Earning member	2
7. Practice	Since 1994
8. Average patient per year	200-250
9. Practice	Bone setter and herbal treatment
10. Practice Learned from	God
11. Specialization	Epilepsy, ear ache, skin disease, women disease, tooth ache, joint pain, headache, bone fracture.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.2.6.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Kana bindha	Ear ache	Pain occur inside ear.	Examination of patient
2.	Charma roga	Skin disease	Scabies, figures are affected, itching & pus formation.	Eye estimation
3.	Bata	Epilepsy	Wind formation in stomach, indigestion.	Eye estimation
4.	Stree roga	Women disease	Abdomen pain, weakness, headache, pain in different organs of body, loss of appetite & constipation.	Examination of patient
5.	Danta bindha	Tooth ache	Miled dull pain in or around a tooth.	Examination of patient
6.	Anthu ganthi byatha	Joint pain	General symptoms include fatigue, severe pain in joints, difficult to move.	Examination of patient
7.	Munda bindha	Headache	Defective eye sight, high blood pressure, sleeplessness, constipation, indigestion, fever.	Examination of patient
8.	Hada bhangha	Bone Fracture	Pain in the injured area that gets worse when the area is moved or pressure is applied. Loss of function in the injured area.	Examination of patient

**4. Rituals suggested and performed for curing of diseases:**

**Table: 6.2.6.2 Rituals suggested and performed for curing of diseases**

Name of Disease	Steps followed in performing the rituals
Put an ill eye on other	<ol style="list-style-type: none"> <li>1. At the beginning of puja, patients massage his own body with turmeric powder and finish his/her bath.</li> <li>2. At the time of puja healer offers black hen, seven types of flower, pigeon, lamp, jhuna to worship the God.</li> <li>3. The healer chants mantra with the help of bel leaf.</li> <li>4. Then the patient wear talisman after completion of puja.</li> </ol>

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicine:**

**Table: 6.2.6.3 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Hada jala plant	<u>Vitis tuandrangularis</u>	Bone Fracture	Root		✓	✓	
Muturi plant	<u>Smilax zeylanica</u>	Put an ill eye	Stem		✓	✓	
Bana kadali plant	<u>Cochorus aestuans</u>	Put an ill eye	Root		✓	✓	
Kusum plant	<u>Carthamus tinctorius</u>	Put an ill eye	Bark		✓	✓	
Bhuin kakharu plant	<u>Ipomoea digitata</u>	Bone Fracture	Leaf		✓	✓	
Bhuin limba plant	<u>Andrographis paniculatus</u>	Skin disease	Root, leaf		✓	✓	
Hada bhanga plant	<u>Cissus quadrangular</u>	Ear ache	Stem		✓	✓	
Sundhi plant	<u>Argemone Mexicana</u>	Skin disease	Root		✓	✓	
Kaincha plant	<u>Abrus precatorius</u>	Women disease	Seed		✓	✓	
Mohi plant	<u>Lannea coromandelica</u>	Tooth ache	Bark		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK):**

**Table: 6.2.6.4 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Charma roga	Skin disease	Root of <u>Smilax zeylanica</u> + sandal wood
2.	Kana bindha	Earache	Root of <u>Andrographis paniculatus</u> + turmeric
3.	Hada bhanga	Bone Fracture	Root of <u>Vitis tuandrangularis</u> + dough powder

**Healer No. 6.2.7**

**1. Name & Address: Chanu Hikaka**

Village: Khajuri  
Panchayat: Kurli  
P.O: Kurli  
Pin Code: 765019  
Block: Bissam Cuttack  
District: Rayagada

**2. Healer at a glance:**

1. Age	35years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	4
6. Earning member	1
7. Practice	Since 1995
8. Average patient per year	15-20
9. Practice	Herbal and magical treatment
10. Practice Learned from	Self effort
11. Specialization	Fever, women disease, ulcer, disorder of menstruation, filaria
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.2.7.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Stree roga	Disorder of menstruation	Abdomen pain, weakness, headache, pain in different organs of body, loss of appetite & constipation.	Examination of patient
2.	Jwara	Fever	Depression, acute, inflammation of the nose, muscular pain.	Examination of patient
3.	Bata jwara	Filaria	Inflammation of gland, fever, severing, swollen skin in leg and hand.	Eye estimation
4.	Stree roga	Women disease	Symptoms include feeling weakness and body become black, continuous bleeding.	Examination of patient
5.	Ghaa	Ulcer	Elimination of blood from ulcer point and Occurrence of pain at that point.	Eye estimation

**4. Rituals suggested and performed for curing of diseases:** None

### **5. Use of therapeutic agents in treatment of patients**

#### **A. Plants in preparation of medicine:**

**Table: 6.2.7.2 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Beta plant	<u>Calamus tenuis</u>	Disorder of menstruation	Root , bark		✓	✓	
Patala garuda plant	<u>Rauvolfia serpentine</u>	Headache	Root		✓	✓	
Mahakala plant	<u>Trichosanthes bracteata</u>	Headache	Root		✓	✓	
Gangasiuli plant	<u>Nyctanthes arbortristis</u>	Fever	Leaf		✓	✓	
Hada bhanga plant	<u>Cissus quadrangular</u>	Women disease	Stem		✓	✓	
Bara plant	<u>Ficus benjamina</u>	Ulcer	Root		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK):**

**Table: 6.2.7.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Jwara	Fever	Leaf of <u>Nyctanthes arbortristis</u> +black pepper + honey

**Healer No. 6.2.8**

**1. Name & Address: Sikakambu Kalu**

Village: Khajuri  
Panchayat: Kurli  
P.O: Kurli  
Pin Code: 765019  
Block: Bissam Cuttack  
District: Rayagada  
Ph. No.: 9437362483

**2. Healer at a glance:**

1. Age	42 years
2. Education	8 <sup>th</sup>
3. Religion	Hindu
4. Family type	Joint
5. Family size	6
6. Earning member	4
7. Practice	Since 2000
8. Average patient per year	50-60
9. Practice	Herbal treatment
10. Practice Learned from	Self effort
11. Specialization	Epilepsy, malaria, fainting disease, dysentery, jaundice, headache.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all



**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.2.8.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Munda byatha	Headache	Defective eye sight, high blood pressure, sleeplessness, constipation, indigestion, fever.	Examination of patient
2.	Malaria	Malaria	Headache, backache, high temperature, shivering & vomiting.	Examination of patient
3.	Murchha roga	Fainting disease	Symptoms such senseless, excess of sweat secretion from the body, dizziness.	Visible body symbols
4.	Bata	Epilepsy	Wind formation in stomach, indigestion.	Examination of patient
5.	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weakness, weight loss.	Examination of patient
6.	Kamala	Jaundice	Yellowness in eyes, excess of urination and look yellow in colour, weakness in body.	Visible body symbols

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicine:**

**Table: 6.2.8.2 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Tulsi plant	<u>Ocimum Sanctum</u>	Malaria	Leaf		✓	✓	
Duba plant	<u>Cynodom dactylon</u>	Fainting disease	Root		✓	✓	
Ada plant	<u>Zingiber officinalis</u>	Jaundice	Root		✓	✓	
Haladi plant	<u>Curcuma domestica</u>	Jaundice	Root		✓	✓	
Lanka plant	<u>Capsicum annum</u>	Jaundice	Root		✓	✓	
Bela plant	<u>Aegle marmelos</u>	Malaria	Leaf		✓	✓	
Harida plant	<u>Terminalia chebula</u>	Malaria	Fruit		✓	✓	
Kerenda koli plant	<u>Carissa carandas</u>	Dysentery	Fruit		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK):**

**Table: 6.2.8.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Malaria	Malaria	Leaf of <u>Aegle marmelos</u> + leaf of <u>Ocimum Sanctum</u> + turmeric
2.	Kamala	Jaundice	Root of <u>Capsicum annum</u> + ginger + turmeric

**Healer No. 6.2.9**

**1. Name & Address: Pidikaka Manu**

Village: Khambesi  
Panchayat: Kurli  
P.O: Kurli  
Pin Code: 765019  
Block: Bissam Cuttack  
District: Rayagada

**2. Healer at a glance:**

1. Age	55 years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	7
6. Earning member	3
7. Practice	Since 1995
8. Average patient per year	60-70
9. Practice	Herbal treatment and bone setter
10. Practice Learned from	Self effort
11. Specialization	Epilepsy, fever, dysentery, toothache, anemia, bone fracture, stomach pain, hydrophobia, piles, skin disease.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.2.9.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Arsha	Piles	Nasal congestion, indigestion, constipation, diarrhoea.	Stool test
2.	Jwara	Fever	Depression, acute, inflammation of the nose, muscular pain.	Examination of patient
3.	Danta bindha	Tooth ache	Symptom includes dull pain in or around a tooth.	Visible body symbols
4.	Bata	Epilepsy	Wind formation in stomach, indigestion.	Eye estimation
5.	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weakness and weight loss.	Examination of patient
6.	Rakta hinata	Anaemia	Symptom includes shortage of blood, vertigo and feel of weakness.	Examination of patient
7.	Hada bhanga	Bone fracture	Pain in the injured area that gets worse when the area is moved or pressure is applied. Loss of function in the injured area.	Examination of patient
8.	Jalantaka	Hydrophobia	Symptoms such as exaggerated sensation at the bite site excitability, loss of feeling in an area of the body, loss of muscle function, pain at the site of the bite, swelling .	Examination of patient
9.	Peta byatha	Stomach pain	Pain occur at night, spread to other parts of body gradually, vomiting.	Examination of patient
10.	Charma roga	Skin disease	Scabies, figures are affected, itching & pus formation.	Examination of patient

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicine:**

**Table: 6.2.9.2 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Niragundi plant	<u>Vitex nrgundo</u>	Epilepsy	Root , leaf , flower		✓	✓	
Basanga plant	<u>Adhatoda vasica</u>	Arsha	Root, leaf , flower		✓	✓	
Arjuna plant	<u>Terminalia arjuna</u>	Bone fracture	Leaf, bark		✓	✓	
Hadajala plant	<u>Vitis quandrangularis</u>	Bone fracture	Leaf, bark		✓	✓	
Amarpoi plant	<u>Kalanchoe pinnata</u>	Dysentery	Leaf		✓	✓	
Baula plant	<u>Mimusops elengi</u>	Tooth ache	Root ,bark		✓	✓	
Lajakuli plant	<u>Mimosa pudica</u>	Tooth ache	Root ,bark		✓	✓	
Aankul plant	<u>Alangium chinense</u>	Hydrophobia	Root		✓	✓	
Rakta chandan plant	<u>Santalum album</u>	Stomach pain	Root		✓	✓	
Anantamula plant	<u>Hemidesmus indicus</u>	Anaemia	Root		✓	✓	
Kandhaa Alu plant	<u>Dioscorea belophylla</u>	Piles	Fruit		✓	✓	
Agara plant	<u>Argemone Mexicana</u>	Fever	Root		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK):**

**Table: 6.2.9.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Bata	Epilepsy	Leaf of <u>Vitex nrgundo</u> + camphor + ghee
2.	Peta byatha	Stomach pain	Root of <u>Santalum album</u> + black pepper
3.	Jalantaka	Hydrophobia	Root of <u>Alangium chinense</u> + curd

**Healer No. 6.2.10**

**1. Name & Address: Kadraka Bama**

Village: Gandeli  
Panchayat: Kurli  
P.O: Kurli  
Pin Code: 765019  
Block: Bissam Cuttack  
District: Rayagada  
Ph. No.: 8658407195

**2. Healer at a glance:**

1. Age	49 years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	5
6. Earning member	1
7. Practice	Since 2009
8. Average patient per year	80-90
9. Practice	Herbal treatment
10. Practice Learned from	Father
11. Specialization	Epilepsy, fever, dysentery, paralysis, joint pain, stomach pain, disorder of menstruation, insanity.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.2.10.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Anthu ganthi byatha	Joint pain	General symptoms include fatigue, severe pain occurs in joints, difficult to move.	Examination of patient
2.	Jwara	Fever	Depression, acute, inflammation of the nose, muscular pain.	Examination of patient
3.	Stree roga	Disorder of menstruation	Abdomen pain, weakness, headache, pain in different organs of body, loss of appetite & constipation.	Examination of patient
4.	Bata	Epilepsy	Wind formation in stomach, indigestion.	Eye estimation
E	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weakness, weight loss.	Examination of patient
6.	Pakhya ghata	Paralysis	Nerve disorder, motionless part of body, tear comes from eyes, difficult to close eyes.	Examination of patient
8.	Pagalami	Insanity	Symptoms such as patient express abnormal behavior action.	Examination of patient
9.	Peta byatha	Stomach pain	Pain occurs at night, spread to other parts of body gradually, vomiting.	Examination of patient

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicine:**



**Table: 6.2.10.2 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Bana khajuri plant	<u>Phoenix pusilla</u>	Fever	Root		✓	✓	
Pitamari plant	<u>Naregamia alata</u>	Insanity, epilepsy	Leaf, bark		✓	✓	
Bichuati plant	<u>Laportea interrupta</u>	Paralysis	Leaf		✓	✓	
Gangasiuli plant	<u>Nyctanthes arbortristis</u>	Dysentery	Leaf, root		✓	✓	
Baruna plant	<u>Crateva adansonii</u>	Joint pain	Leaf		✓	✓	
Agara Plant	<u>Argemone Mexicana</u>	Fever	Root		✓	✓	
Kaincha plant	<u>Abrus precatorius</u>	Disorder of menstruation	Seed		✓	✓	
Kerendakoli plant	<u>Carissa carandas</u>	Dysentery	Fruit		✓	✓	
Ambiliti	<u>Oxalis corniculata</u>	Stomach pain	Root, stem		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK):**

**Table: 6.2.10.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Jhada	Dysentery	Root of <u>Nyctanthes arbortristis</u> + turmeric
2.	Bata	Epilepsy	Root of <u>Naregamia alata</u> + turmeric
3.	Pakhya ghata	Paralysis	Leaf of <u>Laportea interrupta</u> + ghee

**Healer No. 6.2.11**

**1. Name & Address: Janju Jakasika**

Village: Gandeli  
Panchayat: Kurli  
P.O: Kurli  
Pin Code: 765019  
Block: Bissam Cuttack  
District: Rayagada  
Ph. No.: 8018480154

**2. Healer at a glance:**

1. Age	54 years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	6
6. Earning member	3
7. Practice	Since 1998
8. Average patient per year	60-70
9. Practice	Herbal treatment
10. Practice Learned from	Father
11. Specialization	Fever, jaundice, malaria, headache, tuberculosis, piles, diarrhoea.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.2.11.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Kamala	Jaundice	Yellowness in eyes, excess of urination and look yellow in colour, weakness.	Visible body symbols
2.	Jwara	Fever	Depression, acute, inflammation of the nose, muscular pain.	Examination of patient
3.	Malaria	Malaria	Headache, backache, high temperature, shivering & vomiting.	Examination of patient
4.	Arsha	Piles	External & internal swelling in the anal region, loss of appetite, itching of anus, wind formation.	Stooling test
5.	Raja jakhma	Tuberculosis	Loss of weight, fever, cough, change of voice, pain in chest, spitting of mucus containing blood, weakness, burning sensation at feet & in palms.	Examination of patient
6.	Munda batha	Headache	Defective eye sight, high blood pressure, sleeplessness, constipation, indigestion, fever.	Examination of patient
7.	Tarala jhada	Diarrhoea	Symptom includes occurrence of frequent loose motion, watery stool, light harness or dizziness due to dehydration.	Examination of patient

**4. Rituals suggested and performed for curing of diseases:** None

## 5. Use of therapeutic agents in treatment of patients

### A. Plants in preparation of medicine:

**Table: 6.2.11.2 Plants in preparation of medicine**

Name of plants	Botanical name	Used for which disease	What Portion of plants used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Nimba plant	<u>Azadirachta indica</u>	Fever, malaria	Root		✓	✓	
Patala garuda plant	<u>Rauvolfia serpentina</u>	Tuberculosis	Root		✓	✓	
Baruna plant	<u>Crateva adansonii</u>	Joint pain	Leaf		✓	✓	
Kaincha plant	<u>Abrus precatorius</u>	Disorder of menstruation	Seed		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

## 7. Use of Ayurvedic medicines with local treatments (ITK):

**Table: 6.2.11.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Malaria	Malaria	Root of <u>Azadirachta indica</u> + ghee
3.	Jwara	Fever	Leaf of <u>Azadirachta indica</u> + ghee

**Healer No. 6.2.12**

**1. Name & Address: Pana Wadaka**

Village: Khambesi  
Panchayat: Kurli  
P.O: Kurli  
Pin Code: 765019  
Block: Bissam Cuttack  
District: Rayagada  
Ph. No.: 8658584642

**2. Healer at a glance:**

1. Age	55 years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	6
6. Earning member	3
7. Practice	Since 1999
8. Average patient per year	40-60
9. Practice	Herbal treatment
10. Practice Learned from	Self effort
11. Specialization	Jaundice, malaria, tuberculosis, fever, diabetes, blood pressure, rheumatism
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.2.12.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Malaria	Malaria	Headache, backache, high temperature, shivering & vomiting.	Examination of patient
2.	Jwara	Fever	Depression, acute, inflammation of the nose, muscular pain.	Examination of patient
3.	Madhumeha	Diabetes	Weakness, develop excessive hunger, burning sensation in urination.	Examination of patient
4.	Rakta chapa	Blood pressure	Anger and excitement, absence of sleep, feeling of unstability, weakness in body.	Examination of patient
5.	Anthu ganthi bata	Rheumatism	General symptoms include Inability to move or raise hand or foot, spots seen joint portion of body.	Examination of patient
6.	Kamala	Jaundice	Yellowness in eyes, excess of urination and look yellow in colour, weakness in body.	Visible body symbols
7.	<b>Raja jakhma</b>	<b>Tuberculosis</b>	Loss of weight, fever, cough, change of voice, pain in chest, spitting of mucus containing blood, weakness, burning sensation at feet & in palms.	Examination of patient

**4. Rituals suggested and performed for curing of diseases:**

**Table: 6.2.12.2 Rituals suggested and performed for curing of diseases**

Name of Disease	Steps followed in performing the rituals
Evil spirit Ghost attack	1. After taking bath, worshiping to Goddess Bhabani. 2. Then offer fruits like banana, coconut and other worship material like vermilion, ghee, incense, raw rice, sandal wood. 3. After puja complete distribute of prasad to everybody.

## 5. Use of therapeutic agents in treatment of patients

### A. Plants in preparation of medicine:

**Table: 6.2.12.3 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Limba plant	<u>Azadirachta indica</u>	Fever	Root		✓	✓	
Patalgaruda plant	<u>Rauvolfia serpentina</u>	Jaundice	Root, leaf		✓	✓	
Gangasiuli plant	<u>Nyctanthes arbortristis</u>	Malaria	Leaf		✓	✓	
Kantei koli plant	<u>Flacourtia indica</u>	Blood pressure	Root		✓	✓	
Asadua plant	<u>Capparis zeylanica</u>	Rheumatism	Root		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

### 7. Use of Ayurvedic medicines with local treatments (ITK):

**Table: 6.2.12.4 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Jwara	Fever	Root of <u>Nyctanthes arbortristis</u> + honey

**Healer No. 6.2.13**

**1. Name & Address: Salpu Sikaka**

Village: Khajuri  
Panchayat: Kurli  
P.O: Kurli  
Pin Code: 765019  
Block: Bissam Cuttack  
District: Rayagada  
Ph. No.: 8895164991

**2. Healer at a glance:**

1. Age	45 years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	4
6. Earning member	1
7. Practice	Since 1999
8. Average patient per year	90-100
9. Practice	Bone setter
10. Practice Learned from	Self effort and father
11. Specialization	Bone fracture
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.2.13.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Hada bhanga	Bone fracture	Pain in the injured area that gets worse when the area is moved or pressure is applied. Loss of function in the injured area.	Examination of patient

**4. Rituals suggested and performed for curing of diseases:** None



## 5. Use of therapeutic agents in treatment of patients

### A. Plants in preparation of medicine:

**Table: 6.2.13.2 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Mango plant	<u>Mangifera indica</u>	Bone fracture	Bark		✓	✓	
Ghee kuanri plant	<u>Aloe vera</u>	Bone fracture	Root , juice		✓	✓	
Bhuin nimba plant	<u>Andrographis paniculatus</u>	Bone fracture	Root		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

## 7. Use of Ayurvedic medicines with local treatments (ITK):

**Table: 6.2.13.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Hada bhanga	Bone fracture	Leaf of <u>Aloe vera</u> + oil of <u>Ricinus communis</u>

**Healer No. 6.2.14**

**1. Name & Address: Bari Jakasika**

Village: Khambesi  
Panchayat: Kurli  
P.O: Kurli  
Pin Code: 765019  
Block: Bissam Cuttack  
District: Rayagada

**2. Healer at a glance:**

1. Age	30years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	5
6. Earning member	1
7. Practice	Since 1990
8. Average patient per year	50-60
9. Practice	Herbal treatment
10. Practice Learned from	Father
11. Specialization	Headache, malaria, piles, stomach pain, metal fatigue, jaundice, tooth ache, tuberculosis .
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.2.14.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Malaria	Malaria	Headache, backache, high temperature, shivering & vomiting.	Examination of patient
2.	Danta bindha	Tooth ache	Mild dull pain in or around a tooth.	Examination of patient
3.	Kamala	Jaundice	Yellowness in eyes, excess of urination and look yellow in colour, weakness in body.	Visible body symbols
4.	Arsha	Piles	External & internal swelling in the anal region, loss of appetite, itching of anus, wind formation.	Stool test
5.	Raja jakhma	Tuberculosis	Loss of weight, fever, cough, change of voice, pain in chest, spitting of mucus containing blood, weakness, burning sensation at feet & in palms.	Examination of patient
6.	Dhatu khyaya	Metal fatigue	Discharge of white liquid substances through urine in concentrated form.	Urine test
7.	Munda bindha	Headache	Defective eye sight, high blood pressure, sleeplessness, constipation, indigestion, fever.	Examination of patient
8.	Peta byatha	Stomach pain	Pain occur at night, spread to other parts of body gradually, vomiting	Examination of patient

**4. Rituals suggested and performed for curing of diseases:** None

## 5. Use of therapeutic agents in treatment of patients

### A. Plants in preparation of medicine:

**Table: 6.2.14.2 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Mango plant	<u>Mangifera indica</u>	Tuberculosis	Root		✓	✓	
Paja plant	<u>Litsea glutionsa</u>	Tuberculosis	Root		✓	✓	
Kadali plant	<u>Musa sapientum</u>	Headache	Root		✓	✓	
Gangasiuli plant	<u>Nyctanthes arbortristis</u>	Malaria	Root		✓	✓	
Mandia plant	<u>Eleusine coracana</u>	Jaundice	Root		✓	✓	
Koilekha plant	<u>Hygrophila auriculata</u>	Metal fatigue	Leaf		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

### 7. Use of Ayurvedic medicines with local treatments (ITK):

**Table: 6.2.14.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Raja jakhama	Tuberculosis	Root of litsea glutionsa + ghee
2.	Munda bindha	Headache	Juice of <u>Musa sapientum</u> + black pepper
3.	Malaria	Malaria	Leaf of <u>Nyctanthes arbortristis</u> + honey

**Healer No. 6.2.15**

**1. Name & Address: Maguni Sikaka**

Village: Gandeli  
Panchayat: Kurli  
P.O: Kurli  
Pin Code: 765019  
Block: Bissam Cuttack  
District: Rayagada

**2. Healer at a glance:**

1. Age	30years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	4
6. Earning member	1
7. Practice	Since 1994
8. Average patient per year	10-15
9. Practice	Herbal treatment
10. Practice Learned from	Father
11. Specialization	Dysentery, fever, piles, stomach pain, metal fatigue, jaundice, paralysis, headache .
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.2.15.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Jwara	Fever	Depression, acute, inflammation of the nose, muscular pain.	Examination of patient
2.	Pakhya ghata	Paralysis	Nerve disorder, motionless part of body, tears from eyes, difficult to close eyes.	Examination of patient
3.	Kamala	Jaundice	Yellowness in eyes, excess of urination and look yellow in colour, weakness in body.	Visible body symbols
4.	Arsha	Piles	External & internal swelling in the anal region, loss of appetite, itching of anus, wind formation.	Stool test
5.	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weakness, weight loss.	Examination of patient
6.	Dhatu khyaya	Metal fatigue	Discharge of white liquid substances through urine in concentrated form.	Urine test
7.	Munda bindha	Headache	Defective eye sight, high blood pressure, sleeplessness, constipation, indigestion, fever.	Examination of patient
8.	Peta byatha	Stomach pain	Pain occurs at night, spread to other parts of body gradually, vomiting.	Examination of patient

**4. Rituals suggested and performed for curing of diseases:** None

## 5. Use of therapeutic agents in treatment of patients

### A. Plants in preparation of medicine:

**Table: 6.2.15.2 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Simuli plant	<u>Bombax ceiba</u>	Metal fatigue	Root, bark		✓	✓	
Badiaanla plant	<u>Phyllanthus fraternus</u>	Metal fatigue	Root, bark		✓	✓	
Sajana plant	<u>Moringa oleifera</u>	Stomach pain	Root		✓	✓	
Arakha plant	<u>Calotropis gigantean</u>	Piles	Root		✓	✓	
Jada plant	<u>Ricinus communis</u>	Piles	Root		✓	✓	
Indramarisa plant	<u>Acalypha indica</u>	Piles	Leaf		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

## 7. Use of Ayurvedic medicines with local treatments (ITK):

**Table: 6.2.15.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Peta byatha	Stomach pain	Root of <u>Moringa oleifera</u> + black pepper
2.	Dhatu khyaya	Metal fatigue	Root of <u>Bombax ceiba</u> + black pepper

### **6.3 Kutia Kandha (Kandhamal District)**

#### **Healer No. 6.3.1**

**1. Name & Address: Rishu Mallick**

Village: Kutikia  
Panchayat: Kutikia  
P.O: Kutikia  
Pin Code: 762110  
Block: Baliguda  
District: Kandhamal  
Ph. No.: 9439978998

**2. Healer at a glance:**

1. Age	40 years
2. Education	3class
3. Religion	Hindu
4. Family type	Joint
5. Family size	6
6. Earning member	3
7. Practice	Since 1990
8. Average patient per year	50-60
9. Practice	Herbal and magical treatment
10. Practice Learned from	Guru (Simanchala Das)
11. Specialization	Eye disease, headache, chicken pox, small pox, back bone pain, fever, dysentery, tooth ache
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.



**Table: 6.3.1.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Chakhyu roga	Eye disease	A person unable to recognize the object clearly.	Eye estimation
2.	Munda byatha	Headache	Defective eye sight, high blood pressure, sleeplessness, constipation, indigestion, fever.	Examination of patient
3.	Hada puti	Chicken pox	Small bulging red color pimple size mark spread on the body.	Eye estimation
4.	Basanta	Small pox	Small and big round shape bulging red color scar mark spread on the body	Examination of scar mark
5.	Anta bindha	Back bone pain	General symptoms include fatigue, severe pain in joints, difficult to move.	Examination of patient
6.	Jwara	Fever	Depression, acute, inflammation of the nose, muscular pain.	Examination of patient
7.	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weakness, weight loss.	Examination of patient

#### 4. Rituals suggested and performed for curing of diseases:

**Table: 6.3.1.2 Rituals suggested and performed for curing of diseases**

Name of Disease	Steps followed in performing the rituals
Eye disease Chicken pox Small pox	1. After bath, patient and healer worship to lord Shiva in Dhabaleswar temple and make oblation. 2. Then they offer fruits like banana, coconut and other worship material like vernillion, ghee, incense, raw rice, sandal wood. 3. After puja distribution of Prasad to everybody.

## 5. Use of therapeutic agents in treatment of patients

### A. Plants in preparation of medicine

**Table: 6.3.1.3 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Patal garuda plant	<u>Rauvolfia serpentina</u>	Back bone pain	Root		✓	✓	
Ghee kuanri plant	<u>Aloe vera</u>	Headache	Leaf		✓	✓	
Jamu plant	<u>Syzygium cumini</u>	Dysentery	Bark		✓	✓	
Mango plant	<u>Mangifera indica</u>	Dysentery	Bark		✓	✓	
Gangasiuli plant	<u>Nyctanthes arbortristis</u>	Malaria	Leaf		✓	✓	
Bana kolatha plant	<u>Atylosia scarabaeos</u>	Disorder of menstruation	Root		✓	✓	
Ada plant	<u>Zingiber officinale</u>	Disorder of menstruation	Root		✓	✓	

### B. Animal in preparation of medicine: Not used

**C. Minerals in use of medicines:**

**Table: 6.3.1.4 Minerals in use of medicines**

Name of mineral	Used for which disease	What Portion of mineral used in preparation of medicines	Process		Consumable form	
			Burning	Soaking	Food	Wear
Copper	Eye disease	All	✓			✓

**6. Magical treatment:**

**Table: 6.3.1.5 List of diseases for which magical treatments are done**

Local name of disease	English name of disease	Magical treatments adopted
Chakhyu roga	Eye disease	Chanting
Anta bindha	Back bone pain	Chanting

**7. Use of Ayurvedic medicines with local treatments (ITK):**

**Table: 6.3.1.6 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Jhada	Dysentery	Bark of <u>Syzygium cumini</u> + bark of <u>Mangifera indica</u> + cloves +cinnamon
2.	Malaria	Malaria	Root of <u>Atylosia scarabaeoides</u> + leaf of <u>Nyctanthes arbortristis</u> +ghee
3.	Anta bindha	Back bone pain	Root of <u>Rauvolfia serpentina</u> + black peeper

**Healer No. 6.3.2**

**1. Name & Address: Dambarudhara Bindhani**

Village: Kutikia  
Panchayat: Kutikia  
P.O: Kutikia  
Pin Code: 762110  
Block: Baliguda  
District: Kandhamal  
Ph. No.: 9439978998

**2. Healer at a glance:**

1. Age	53 years
2. Education	2 class
3. Religion	Hindu
4. Family type	Joint
5. Family size	5
6. Earning member	2
7. Practice	Since 2000
8. Average patient per year	10-12
9. Practice	Herbal treatment
10. Practice Learned from	Father
11. Specialization	Joint pain, eye disease, fever, dysentery
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.3.2.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Chakhyu roga	Eye disease	A person unable to recognize the object clearly.	Eye estimation
2.	Jwara	Fever	Depression, acute, inflammation of the nose, muscular pain.	Examination of patient
3.	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weakness, weight loss.	Examination of patient
4.	Anthu ganthi bytha	Joint pain	General symptoms include fatigue, severe pain in joints, difficult to move.	Examination of patient

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicine**

**Table: 6.3.2.2 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Bela plant	<u>Aegle marmelos</u>	Joint pain	Leaf		✓	✓	
Patal garuda plant	<u>Rauvolfia serpentina</u>	Joint pain	Root		✓	✓	
Ganga siuli plant	<u>Nyctanthes arbortristis</u>	Fever	Leaf		✓	✓	
Limba plant	<u>Azadirachta indica</u>	Fever	Leaf		✓	✓	
Jamu plant	<u>Syzygium cumini</u>	Dysentery	Bark		✓	✓	
Mango plant	<u>Mangifera indica</u>	Dysentery	Bark		✓	✓	
Banana plant	<u>Musa sapientum</u>	Dysentery	Root		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK):**

**Table: 6.3.2.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of Disease	Local (ITK) + Ayurvedic
1.	Anthu ganthi byatha	Joint pain	Leaf of <u>Aegle marmelos</u> + root of <u>Rauvolfia serpentina</u> +honey+ black peeper
2.	Jwara	Fever	Leaf of <u>Nyctanthes arbortristis</u> + of <u>azadirachta indica</u> + honey + black peeper

### Healer No. 6.3.3

#### 1. Name & Address: Ramesh Jani

Village: Rangaparu  
Panchayat: Belghar  
P.O: Belghar  
Pin Code: 762107  
Block: Tumudibandh  
District: Kandhamal

#### 2. Healer at a glance:

1. Age	50years
2. Education	3 <sup>rd</sup> class
3. Religion	Hindu
4. Family type	Joint
5. Family size	4
6. Earning member	3
7. Practice	Since 2001
8. Average patient per year	10-12
9. Practice	Herbal treatment
10. Practice Learned from	Self effort
11. Specialization	Dysentery, fever, cough, back bone pain
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.3.3.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weakness, weight loss.	Examination of patient
2.	Jwara	Fever	Depression, acute, inflammation of the nose, muscular pain.	Examination of patient
3.	Kasa	Cough	Discharge of sputum from mouth.	Examination of sputum
4.	Charma roga	Skin disease	Scabies, figures are affected, itching & pus formation.	Eye estimation
5.	Anta byatha	Back bone pain	General symptoms include fatigue, severe pain in joints, difficult to move.	Examination of patient

#### 4. Rituals suggested and performed for curing of diseases:

**Table: 6.3.3.2 Rituals suggested and performed for curing of diseases**

Name of Disease	Steps followed in performing the rituals
Guni	1. Entire body is washed by chanting mantra with the help of salt. 2. Advise to drink that whole salt. 3. Then patient allowed to wear talisman which is filled in tulasi, <u>Cyndoon dactylon</u> and black cumin.
Ghost attack	1. At the beginning of ritual, Priest starts oblation at the village temple. 2. Then all members of family and priest worship the God Sani (Saturn) by offering coconut, banana, incense, and lightening the lamp. 3. After the puja, sacrifice of hen to God. 4. Then prasad of God (Hen meat) is being distributed to the family member and to everyone residing in the village.

#### 5. Use of therapeutic agents in treatment of patients

##### A. Plants in preparation of medicine

**Table: 6.3.3.3 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Sala plant	<u>Shorea rebusta</u>	Back bone pain	Root		✓	✓	
Ganga siuli plant	<u>Nyctanthes arbortristis</u>	Fever	Leaf		✓	✓	
Mahula plant	<u>Madhuca longifolia</u>	Cough	Leaf		✓	✓	
Amba plant	<u>Mangifera indica</u>	Dysentery	Bark		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used



**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK):**

**Table: 6.3.3.4 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Jhada	Dysentery	Bark of <u>Mangifera indica</u> + honey
2.	Jwara	Fever	Leaf of <u>Nyctanthes arbortristis</u> + honey+ black peeper
3.	Anta byatha	Back bone pain	Root of <u>Shorea rebusta</u> + mustard oil

**Healer No. 6.3.4**

**1. Name & Address: Tuna Majhi**

Village: Rangaparu  
Panchayat: Belghar  
P.O: Belghar  
Pin Code: 762107  
Block: Tumudibandh  
District: Kandhamal

**2. Healer at a glance:**

1. Age	45years
2. Education	4 <sup>th</sup> class
3. Religion	Hindu
4. Family type	Joint
5. Family size	8
6. Earning member	1
7. Practice	Since 1997
8. Average patient per year	350-400
9. Practice	Bone setter, herbal and magical treatment
10. Practice Learned from	Father
11. Specialization	Stomach pain, snake bite, hydrophobia, bone fracture, head ache, malaria, dysentery, metal fatigue, epilepsy.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.3.4.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Peta byatha	Stomach pain	Pain occurs at night, spread to other parts of body gradually, vomiting.	Examination of patient
2.	Sarpa dansana	Snake bite	symptoms such as <u>nausea</u> and <u>vomiting</u> , <u>diarrhoea</u> , <u>vertigo</u> , <u>fainting</u> , <u>tachycardia</u> , and cold, clammy skin.	Eye estimation
3.	Jalantaka	Hydrophobia	Exaggerated sensation at the bite site excitability, loss of sensation in an area of the body, loss of muscle function, pain at the site of the bite, Swelling.	Eye estimation
4.	Hada bhanga	Bone fracture	Pain in the injured area that gets worse when the area is moved or pressure is applied. Loss of function in the injured area.	Examination of patient
5.	Munda bindha	Headache	Defective eye sight, high blood pressure, sleeplessness, constipation, indigestion, fever.	Examination of patient
6.	Bata	Epilepsy	Wind formation in stomach, indigestion.	Eye estimation
7.	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weakness, weight loss.	Examination of patient
8.	Malaria	Malaria	Headache, backache, high temperature, shivering & vomiting.	Examination of patient

#### 4. Rituals suggested and performed for curing of diseases:

**Table: 6.3.4.2 Rituals suggested and performed for curing of diseases**

Name of Disease	Steps followed in performing the rituals
Fever Small pox	1. After finish bath healer and patient start worship to Lord Shiva in Dhabaleswar temple. 2. They offer fruits like banana, coconut and other worship material like vermilion, ghee, incense, raw rice, sandal wood. 3. Then sacrifice hen and goat to God after the puja activity is over. 4. After puja distribution of Prasad to everybody.

#### 5. Use of therapeutic agents in treatment of patients

##### A. Plants in preparation of medicine

**Table: 6.3.4.3 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Kaladudura plant	<u>Datura metel</u>	Stomach pain	Root		✓	✓	
Ghikuanri plant	<u>Aloe vera</u>	Headache	Leaf		✓	✓	
Simuli plant	<u>Bombax ceiba</u>	Metal fatigue	All		✓	✓	
Amarpoi plant	<u>Kalanchoe pinnata</u>	Dysentery	Bark		✓	✓	
Gangasiuli plant	<u>Nyctanthes arbortristis</u>	Malaria	Root		✓	✓	
Hadajala plant	<u>Vitis quandrangularis</u>	Bone fracture	All		✓	✓	
Coconut plant	<u>Cocos nucifera</u>	Epilepsy	Bark		✓	✓	
Kadamba plant	<u>Anthocephalus chinensis</u>	Snake bite	Bark		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:**

**Table: 6.3.4.4 Minerals in use of medicines**

Name of Mineral	Used for which disease	What Portion of mineral used in preparation of medicines	Process		Consumable form	
			Burning	Soaking	Food	Wear
Copper	Small pox	All	✓			✓
Pitala	Fever	All	✓			✓
Steel	Small pox	All	✓			✓

## 6. Magical treatment:

**Table: 6.3.4.5 List of diseases for which magical treatments are done**

Local name of disease	English name of disease	Magical treatments adopted
Basanta	Small pox	Chanting
Jwara	Fever	Chanting

## 7. Use of Ayurvedic medicines with local treatments (ITK):

**Table: 6.3.4.6 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Hada bhanga	Bone fracture	Bark of <u>Vitis quadrangularis</u> + black gram+ turmeric
2.	Bata	Epilepsy	Bark of <u>Cocos nucifera</u> +oil of <u>Ricinus communis</u>

**Healer No. 6.3.5**

**1. Name & Address: Narendra Majhi**

Village: Batipada  
Panchayat: Belaghar  
P.O: Belaghar  
Pin Code: 762107  
Block: Tumudibandh  
District: Kandhamal

**2. Healer at a glance:**

1. Age	50years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	6
6. Earning member	2
7. Practice	Since 2005
8. Average patient per year	50-60
9. Practice	Herbal treatment
10. Practice Learned from	Guru
11. Specialization	Metal fatigue, eczema, bone fracture, skin disease, scorpion bite, headache, malaria, dysentery, women disease, epilepsy.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.3.5.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of Disease	Symptoms of diseases	Methods of Identification
1.	Dhatu khyaya	Metal fatigue	Discharge of white liKuid substances through urine inconcentrated form.	Urine test
2.	Stree roga	Women disease	Feeling weakness and body become black, continuous bleeding.	Examination of patient
3.	Hada bhanga	Bone fracture	Pain in the injured area that gets worse when the area is moved or pressure is applied. Loss of function in the injured area.	Examination of patient
4.	Munda bindha	Headache	Defective eye sight, high blood pressure, sleeplessness, constipation, indigestion, fever.	Examination of patient
5.	Bata	Epilepsy	Wind formation in stomach, indigestion.	Eye estimation
6.	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weakness, weight loss.	Examination of patient
7.	Malaria	Malaria	Headache, backache, high temperature, shivering & vomiting.	Examination of patient
8.	Beenchi	Eczema	Occurrence of wounds on toe.	Eye estimation
9.	Charma roga	Skin disease	Scabies, figures are affected, itching & pus formation.	Eye estimation
10.	Stana roga	Breast disease	Discontinuous secretion of milk. Severe pain in breast. Unable to feed the child.	Examination of patient

**4. Rituals suggested and performed for curing of diseases:** None

## 5. Use of therapeutic agents in treatment of patients

### A. Plants in preparation of medicine

**Table: 6.3.5.2 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Ghee kuanri plant	<u>Aloe vera</u>	Headache	Leaf		✓	✓	
Jamu plant	<u>Syzygium cumini</u>	Dysentery	Bark		✓	✓	
Mango plant	<u>Mangifera indica</u>	Dysentery	Bark		✓	✓	
Ganga siuli plant	<u>Nyctanthes arbortristis</u>	Malaria	Bark		✓	✓	
Gaba plant	<u>Ricinus communis</u>	Epilepsy	Leaf		✓	✓	
Dhou plant	<u>Anogeissus latifolia</u>	Scorpion bite	Leaf		✓	✓	
Dantari kanta plant	<u>Acacia pennata</u>	Breast disease	Leaf		✓	✓	
Baigaba plant	<u>Jatropha gossypifolia</u>	Eczema	Leaf		✓	✓	
Hinjala plant	<u>Barringtonia acutangula</u>	Headache	Seed		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

### 7. Use of Ayurvedic medicines with local treatments (ITK):

**Table: 6.3.5.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Jhada	Dysentery	Bark of <u>Syzygium cumini</u> + bark of <u>Mangifera indica</u> + cloves
2.	Malaria	Malaria	Leaf of <u>Nyctanthes arbortristis</u> + ghee



**Healer No. 6.3.6**

**1. Name & Address: Hareswar Majhi**

Village: Tuakela  
Panchayat: Belaghar  
P.O: Belaghar  
Pin Code: 762107  
Block: Tumudibandh  
District: Kandhamal  
Ph. No.: 8895566260

**2. Healer at a glance:**

1. Age	61years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	5
6. Earning member	2
7. Practice	Since 1994
8. Average patient per year	120-150
9. Practice	Herbal treatment
10. Practice Learned from	Self effort
11. Specialization	Stomach pain, snake bite, hydrophobia, joint pain fever, dysentery, jaundice, epilepsy .
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.3.6.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Peta byatha	Stomach pain	Pain occurs at night and spread to other parts of body gradually, vomiting.	Examination of patient
2.	Sarpa dansana	Snake bite	Symptoms such as <u>nausea</u> and <u>fainting</u> , <u>tachycardia</u> , and cold, clammy skin.	Eye estimation
3.	Jalantaka	Hydrophobia	Exaggerated sensation at the bite site Excitability, loss of sensation in an area of the body, loss of muscle function, Pain at the site of the bite, swelling.	Eye estimation
4.	Jwara	Fever	Depression, acute, inflammation of the nose, muscular pain.	Examination of patient
5.	Bata	Epilepsy	Wind formation in stomach, indigestion.	Eye estimation
6.	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weakness, weight loss.	Examination of patient
7.	Anthu ganthi byatha	Joint pain	General symptoms include fatigue, severe pain in joints, difficult to move.	Examination of patient
8.	Kamala	Jaundice	Yellowness in eyes, excess of urination and look yellow in colour, weakness in body.	Visible body symbols

**4. Rituals suggested and performed for curing of diseases:** None

## 5. Use of therapeutic agents in treatment of patients

### A. Plants in preparation of medicine

**Table: 6.3.6.2 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Champa plant	<u>Michelia champaca</u>	Epilepsy	Bark		✓	✓	
Jada plant	<u>Ricinus communis</u>	Joint pain	Root		✓	✓	
Bhuin kakharu plant	<u>Ipomoea digitata</u>	Jaundice	Fruit		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not use

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK):**

**Table: 6.3.6.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Anthu ganthi byatha	Joint pain	Root of <u>Ricinus communis</u> + turmeric
2.	Kamala	Jaundice	Fruit of <u>Ipomoea digitata</u> + banana + honey

**Healer No. 6.3.7**

**1. Name & Address: Pitula Jani**

Village: Burlubaru  
Panchayat: Belaghar  
P.O: Belaghar  
Pin Code: 762107  
Block: Tumudibandh  
District: Kandhamal

**2. Healer at a glance:**

1. Age	85years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	10
6. Earning member	6
7. Practice	Since 1960
8. Average patient per year	70-100
9. Practice	Bone setter, herbal and magical treatment
10. Practice Learned from	Father
11. Specialization	Malaria, small pox, measles, rheumatism, headache, fever, snake bite, hydrophobia .
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.3.7.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Malaria	Malaria	Headache, backache, high temperature, shivering & vomiting.	Examination of patient
2.	Sarpa dansana	Snake bite	Symptoms such as <u>nausea</u> and <u>vomiting</u> , <u>fainting</u> , <u>tachycardia</u> and cold, clammy skin.	Eye estimation
3.	Munda bindha	Headache	Defective eye sight, high blood pressure, sleeplessness, constipation, indigestion, fever.	Examination of patient
4.	Anthu ganthi bata	Rheumatism	General symptoms include Inability to move or raise hand or leg spot seen in joint portion of body.	Examination of patient
5.	Milimila	Measles	A red blotchy rash normally develops about 3-4 days after the first symptoms. It usually starts on the head and neck and spreads down the body. It takes 2-3 days to cover most of the body. The rash often turns a brownish color and gradually fades over a few days.	Eye estimation
6.	Basanta	Small pox	Small and big round shape bulging red color scar mark size spread over the body.	Examination of scar mark
7.	Jalantaka	Hydrophobia	Exaggerated sensation at the bite site excitability, loss of sensation in an area of the body, loss of muscle function, pain at the site of the bite, swelling.	Examination of patient

#### 4. Rituals suggested and performed for curing of diseases:

**Table: 6.3.7.2 Rituals suggested and performed for curing of diseases**

Name of Disease	Steps followed in performing the rituals
Small pox	<ol style="list-style-type: none"> <li>1. After taking bath, patient worship to Goddess Bhabani.</li> <li>2. Then offers fruits like banana, coconut and other worship material like vernillion, ghee, incense, raw rice, sandal infront of goddess and does some oblation.</li> <li>3. After completion of puja, distribute of prasad to everybody.</li> </ol>
Ghost attack	<ol style="list-style-type: none"> <li>1. At the beginning of ritual, Priest starts oblation at the village temple.</li> <li>2. Then all members of family and priest worship the God Saturn (Sani) by offering coconut, banana, incense, and lightening the lamp.</li> <li>3. After the puja, sacrifice of hen to Goddess. Then the Prasad of Goddess (Hen meat) is being distributed to the family member and to everyone residing in the village.</li> </ol>

#### 5. Use of therapeutic agents in treatment of patients

##### A. Plants in preparation of medicine

**Table: 6.3.7.3 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plants used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Gangasiuli plant	<u>Nyctanthes arbortristis</u>	Malaria	Root		✓	✓	
Kantei koli plant	<u>Flacourtia indica</u>	Small pox	Fruit		✓	✓	

**B. Animal in preparation of medicine:**

**Table: 6.3.7.4 Animal in preparation of medicine**

Name of animal	Zoological name	Used for which disease	What Portion of animal used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Bat	<u>Pipistrellus</u> <u>Pipistrellus</u>	Rheumatism	All part	✓		✓	

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:**

**Table: 6.3.7.5 List of diseases for which magical treatments are done**

Local name of disease	English name of disease	Magical treatments adopted
Najar lagiba	Put an ill eye on others	At first patient face towards east direction then various mantra chants in front of patient. Then patient carries talisman on his/her right side of hand.

**7. Use of Ayurvedic medicines with local treatments (ITK):** Not used

**Healer No. 6.3.8**

**1. Name & Address: Ramachandra Jani**

Village: Burlubaru  
Panchayat: Belaghar  
P.O: Belaghar  
Pin Code: 762107  
Block: Tumudibandh  
District: Kandhamal

**2. Healer at a glance:**

1. Age	50years
2. Education	7 <sup>th</sup> class
3. Religion	Hindu
4. Family type	joint
5. Family size	10
6. Earning member	5
7. Practice	Since 1994
8. Average patient per year	150-200
9. Practice	Bone setter, herbal and magical treatment
10. Practice Learned from	Self decision
11. Specialization	Bone fracture, measles, joint pain, headache, fever, snake bite, hydrophobia , cough, tooth ache, epilepsy, cancer.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all



**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.3.8.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of Disease	Symptoms of diseases	Methods of Identification
1.	Hada bhangha	Bone fracture	Pain in the injured area that becomes worse when the area is moved or pressure is applied. Loss of function in the injured area.	Examination of patient
2.	Sarpa dansana	Snake bite	Symptoms such as <u>nausea</u> and <u>vomiting</u> , <u>fainting</u> , <u>tachycardia</u> and cold, clammy skin.	Eye estimation
3.	Munda bindha	Headache	Defective eye sight, high blood pressure, sleeplessness, constipation, indigestion, fever.	Examination of patient
4.	Anthu byatha	Joint pain	General symptoms include fatigue, severe pain in joints, difficult to move.	Examination of patient
5.	Milimila	Measles	A red blotchy rash normally develops about 3-4 days after the first symptoms. It usually starts on the head and neck and spreads down the body. It takes 2-3 days to cover most of the body. The rash often turns a brownish color and gradually fades over a few days.	Eye estimation
6.	Danta bindha	Tooth ache	Milled pain in or around a tooth.	Examination of Patient
7.	Jalantaka	Hydrophobia	Exaggerated sensation at the bite site excitability, loss of sensation in an area of the body, loss of muscle function, pain at the site of the bite, swelling.	Examination of patient
8.	Karkata roga	Cancer	Symptoms like fever, extreme tiredness or weight loss, dizziness, unusual bleeding.	Examination of patient
9.	Apasma	Epilepsy	Wind formation in stomach, indigestion.	Examination of patient
10.	Kasa	Cough	Discharge of sputum of white colour from mouth.	Eye estimation of sputum

#### 4. Rituals suggested and performed for curing of diseases:

**Table: 6.3.8.2 Rituals suggested and performed for curing of diseases**

Name of Disease	Steps followed in performing the rituals
Put an ill eye	<ol style="list-style-type: none"> <li>1. After taking bath, patient worship to Goddess Kali.</li> <li>2. Then offers fruits like banana, coconut and other worship material like vermilion, ghee, incense, raw rice, sandal in front of Goddess and does some oblation.</li> <li>3. After completion of puja, distribute of prasad to everybody.</li> </ol>
Guni	<ol style="list-style-type: none"> <li>1. At the beginning of ritual, Priest starts oblation at the village temple.</li> <li>2. Then all members of family and priest worship the God Sauturn (Sani) by offering coconut, banana, incense, and lightening the lamp.</li> <li>3. After the puja, sacrifice of hen to Goddess. Then the Prasad of Goddess (Hen meat) is distributed to the family member and villagers.</li> </ol>

#### 5. Use of therapeutic agents in treatment of patients

##### A. Plants in preparation of medicine:

**Table: 6.3.8.3 Plants in preparation of medicine**

Name of plants	Botanical name	Used for which disease	What Portion of plants used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Hadajala plant	<u>Vitis quandrangularis</u>	Epilepsy	Root		✓	✓	
Ghikuanri plant	<u>Aloe vera</u>	Headache	All		✓	✓	
Apamaranga plant	<u>Achyranthes aspera</u>	Fever	Root		✓	✓	
Maranga plant	<u>Moringa oleifera</u>	Cough	Root		✓	✓	

##### B. Animal in preparation of medicine: Not used

**C. Minerals in use of medicines:**

**Table: 6.3.8.4 Minerals in use of medicines**

Name of Minerals	Used for which disease	What Portion of geological used in preparation of medicines	Process		Consumable form	
			Burning	Soaking	Food	Wear
Copper	Put an ill eye on other	All	✓			✓
Mica	Put an ill eye on others	Calx	✓			✓

**6. Magical treatment:**

**Table: 6.3.8.5 List of diseases for which magical treatments are done**

Local name of disease	English name of disease	Magical treatments adopted
Najar lagiba	Put an ill eye on others	At first, patient face towards east direction then various mantra chanted in front of patient. Then patient carries tied -talisman on his/her right side of hand.
Guni	Hypnotism	Chanting

**7. Use of Ayurvedic medicines with local treatments (ITK):** Not used

**Healer No. 6.3.9**

**1. Name & Address: Rabana Majhi**

Village: Sanatuakela  
Panchayat: Belaghar  
P.O: Belaghar  
Pin Code: 762107  
Block: Tumudibandh  
District: Kandhamal

**2. Healer at a glance:**

1. Age	70years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	4
6. Earning member	2
7. Practice	Since 2009
8. Average patient per year	50-60
9. Practice	Herbal and magical treatment
10. Practice Learned from	God
11. Specialization	Skin disease, jaundice, measles, joint Pain, headache, hair fall, smallpox, wart, black mole, stomach pain, fainting disease, tooth ache.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.3.9.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Basanta	Smallpox	Small and big round shape bulging red color scar mark size spread on the body.	Examination of scar mark
2.	Murchha roga	Fainting disease	Symptoms such senseless, excess of sweat secretion from the body, dizziness.	Eye estimation
3.	Munda bindha	Headache	Defective eye sight, high blood pressure, sleeplessness, constipation, indigestion, fever.	Examination of patient
4.	Anthu byatha	Joint pain	General symptoms include fatigue, severe pain in joints, difficult to move.	Examination of patient
5.	Milimila	Measles	A red blotchy rash normally develops about 3-4 days after the first symptoms. It usually starts on the head and neck and spreads down the body. It takes 2-3 days to cover most of the body. The rash often turns a brownish color and gradually fades over a few days.	Eye estimation
6.	Danta bindha	Tooth ache	Miled pain in or around a tooth.	Examination of patient
7.	Peta batha	Stomach pain	Pain occurs at night, spread to other parts of the body gradually, vomiting.	Examination of patient
8.	Charma roga	Skin disease	Scabies, figures are affected, itching & pus formation.	Examination of skin
9.	Kamala	Jaundice	Yellowness in eyes, excess of urination and look yellow in colour, weakness in body.	Visible body symbols
10.	Chanda roga	Balad disease	Excess of hair fall from head.	Eye estimation
11.	Kalajai	Black mole	Black colour round shape on different parts of body.	Eye estimation
12.	Bhatudi	Wart	A wart may appear as a bump with a rough surface on different parts of body.	Eye estimation

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicine:**

**Table: 6.3.9.2 Plants in preparation of medicine**

Name of plants	Botanical name	Used for which disease	What Portion of plants used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Bahada plant	<u>Terminalia bellirica</u>	Wart	Root		✓	✓	
Basanga plant	<u>Adhatoda Vasica</u>	Black mole	Leaf		✓	✓	
Kalyani plant	<u>Catharanthus roseus</u>	Fainting disease	Leaf		✓	✓	
Asoka plant	<u>Saraca asoca</u>	Stomach pain	Leaf		✓	✓	
Mehendi plant	<u>Lawsonia inermis</u>	Jaundice	Leaf		✓	✓	
Jada plant	<u>Ricinus communis</u>	Balad disease	Seed		✓	✓	
Bhuinkakharu plant	<u>Ipomoea digitata</u>	Small pox	Root		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:**

**Table: 6.3.9.3 List of diseases for which magical treatments are done**

Local name of disease	English name of disease	Magical treatments adopted
Sarpa dansana	Snake bite	Chanting
Jalantaka	Hydrophobia	Chanting

**7. Use of Ayurvedic medicines with local treatments (ITK):**

**Table: 6.3.9.4 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Bhatudi	Wart	Root of <u>Terminalia bellirica</u> + milk
2.	Basanta	Smallpox	Root and leaf of <u>Ipomoea digitata</u> + honey.

**Healer No. 6.3.10**

**1. Name & Address: Adala Majhi**

Village: Batipada  
Panchayat: Belaghar  
P.O: Belaghar  
Pin Code: 762107  
Block: Tumudibandh  
District: Kandhamal

**2. Healer at a glance:**

1. Age	80years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	2
6. Earning member	1
7. Practice	Since 2002
8. Average patient per year	40-50
9. Practice	Herbal and magical treatment
10. Practice Learned from	God
11. Specialization	Dysentery, stomach pain, joint pain, small pox, headache, tuberculosis, snake bite, hydrophobia.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.3.10.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of Disease	Symptoms of diseases	Methods of Identification
1.	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weakness, weight loss.	Examination of patient
2.	Sarpa dansana	Snake bite	Symptoms such as <u>nausea</u> and <u>fainting</u> , <u>tachycardia</u> and cold, clammy skin.	Eye estimation
3.	Munda bindha	Headache	Defective eye sight, high blood pressure, sleeplessness, constipation, indigestion, fever.	Examination of patient
4.	Anthu ganthi byatha	Joint pain	General symptoms include fatigue, severe pain occurs in joints, difficult to move.	Examination of patient
5.	Peta byatha	Stomach pain	Pain occurs at night, spread to other parts of body gradually, vomiting.	Examination of patient
6.	Basanta	Small pox	Small and big round shape bulging red colour scar mark spread on the body.	Examination of scar mark
7.	Jalantaka	Hydrophobia	Exaggerated sensation at the bite site spot excitability, loss of sensation in an area of the body, loss of muscle function, pain at the site of the bite, swelling.	Examination of patient
8.	Raja jakhma	Tuberculosis	Loss of weight, fever, cough, change of voice, pain in chest, spitting of mucus containing blood, weakness, burning sensation at feet & in palms.	Examination of patient



#### 4. Rituals suggested and performed for curing of diseases:

**Table: 6.3.10.2 Rituals suggested and performed for curing of diseases**

Name of Disease	Steps followed in performing the rituals
Small pox	<ol style="list-style-type: none"> <li>1. After taking bath, patient worship to Goddess Bhabani.</li> <li>2. Then offers fruits like banana, coconut and other worship material like vernillion, ghee, incense, raw rice, sandal in front of goddess and does some oblation.</li> <li>3. After completion of puja, distribute of prasad to everybody.</li> </ol>
Snake bite	<ol style="list-style-type: none"> <li>1. Healer prepare leaf-made of sala leaf with the help of jhuna and showing in front of patient face for 2-3 rounds by chanting mantras of Goddess Kali.</li> <li>2. Sucking of poison from the bite site and then application of herbal plant root and bark on the bite point.</li> </ol>

#### 5. Use of therapeutic agents in treatment of patients

##### A. Plants in preparation of medicine

**Table: 6.3.10.3 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Dudhika plant	<u>Euphorbia thymifolia</u>	Hydrophobia	Leaf		✓	✓	
Patala garuda plant	<u>Rauvolfia serpentina</u>	Snake bite	Root		✓	✓	
Kasmar plant	<u>Gmelina arborea</u>	Tuberculosis	Root		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK):** Not used

**Healer No. 6.3.11**

**1. Name & Address: Mandala Majhi**

Village: Tuakela  
Panchayat: Belaghar  
P.O: Belaghar  
Pin Code: 762107  
Block: Tumudibandh  
District: Kandhamal  
Ph. No.: 9439804638

**2. Healer at a glance:**

1. Age	60years
2. Education	3 <sup>rd</sup> class
3. Religion	Hindu
4. Family type	Joint
5. Family size	4
6. Earning member	3
7. Practice	Since 1992
8. Average patient per year	70-80
9. Practice	Herbal treatment
10. Practice Learned from	Father
11. Specialization	Stomach pain, snake bite, tuberculosis, back bone pain, headache, dysentery, diabetes
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.3.11.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Peta byatha	Stomach pain	Pain occurs at night, spread to other parts of body gradually, vomiting.	Examination of patient
2.	Sarpa dansana	Snake bite	Symptoms such as <u>nausea</u> and <u>fainting</u> , <u>tachycardia</u> , and cold, clammy skin.	Eye estimation
3.	Munda bindha	Headache	Defective eye sight, high blood pressure, sleeplessness, constipation, indigestion, fever.	Examination of patient
4.	Raja jakhma	Tuberculosis	Loss of weight, fever, cough, change of voice, pain in chest, spitting of mucus containing blood, weakness, burning sensation at feet & in palms.	Examination of patient
5.	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weakness & weight loss.	Examination of patient
6.	Anta byatha	Back bone pain	General symptoms include fatigue, severe pain in joints, difficult to move.	Examination of patient
7.	Madhumeha	Diabetes	Weakness, develop excessive hunger, burning sensation in urination	Ants surrounded in urination place

**4. Rituals suggested and performed for curing of diseases:** None

## 5. Use of therapeutic agents in treatment of patients

### A. Plants in preparation of medicine

**Table: 6.3.11.2 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Asoka plant	<u>Saraca asoca</u>	Dysentery, back bone pain	Root, leaf		✓	✓	
Jada plant	<u>Ricinus communis</u>	Headache	Fruit		✓	✓	
Apamara nga plant	<u>Achyranthes aspera</u>	Diabetes	Root		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

### 7. Use of Ayurvedic medicines with local treatments (ITK):

**Table: 6.3.11.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Jhada	Dysentery	Root of <u>Saraca asoca</u> + honey
2.	Madhumeha	Diabetes	Root of <u>Achyranthes aspera</u> + dry ginger
3.	Anta byatha	Back bone pain	Bark of <u>Saraca asoca</u> + black peeper

**Healer No. 6.3.12**

**1. Name & Address:** **Raghunath Majhi**  
Village: Rangaparu  
Panchayat: Belaghar  
P.O: Belaghar  
Pin Code: 762107  
Block: Tumudibandh  
District: Kandhamal

**2. Healer at a glance:**

1. Age	25years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	4
6. Earning member	2
7. Practice	Since 1999
8. Average patient per year	10-15
9. Practice	Herbal treatment
10. Practice Learned from	Father
11. Specialization	Dysentery, stomach pain, jaundice, chickenpox, Small pox, headache, metal fatigue, fever, tuberculosis, piles.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.3.12.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weakness, weight loss.	Examination of patient
2.	Arsha	Piles	External & internal swelling in the anal region, loss of appetite, itching effect of anus, wind formation.	Stool test
3.	Munda bindha	Headache	Defective eye sight, high blood pressure, sleeplessness, constipation, indigestion, fever.	Examination of patient
4.	Dhatu khyaya	Metal fatigue	Discharge of white liKuiud substances through urine in concentrated form.	Urine test
5.	Peta batha	Stomach pain	Pain occurs at night, spread to other part gradually, vomiting.	Examination of patient
6.	Basanta	Small pox	Small and big round shape bulging red color scar mark size spread on the body.	Examination of scar mark
7.	Hada phuti	Chicken pox	Exaggerated sensation at the bite spot excitability, loss of feeling in an area of the body, loss of muscle function, pain at the site of the bite, swelling.	Eye estimation
8.	Raja jakhma	Tuberculosis	Loss of weight, fever, cough, change of voice, pain in chest, spitting of mucus containing blood, weakness, burning sensation at feet & in palms.	Examination of patient
9.	Kamala	Jaundice	Yellowness in eyes, excess of urination & look yellow in colour, weakness.	Visible body symbols
10.	Jwara	Fever	Depression, acute, inflammation of the nose, muscular pain.	Examination of patient

#### 4. Rituals suggested and performed for curing of diseases:

**Table: 6.3.12.2 Rituals suggested and performed for curing of diseases**

Name of Disease	Steps followed in performing the rituals
Small pox and chicken pox	1. After taking bath, patient worship to Goddess Bhabani. 2. Then offers fruits like banana, coconut and other worship material like vernillion, ghee, incense, raw rice, sandal in front of Goddess and does some oblation. 3. After completion of puja, distributes prasad to everybody.

#### 5. Use of therapeutic agents in treatment of patients

##### A. Plants in preparation of medicine

**Table: 6.3.12.3 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Gangasiuli plant	<u>Nyctanthes arbortristis</u>	Fever	Root		✓	✓	
Kadali plant	<u>Musa sapientum</u>	Headache	Root		✓	✓	
Mandia plant	<u>Eleusine coracana</u>	Jaundice	Root		✓	✓	
Badiaanla plant	<u>Phyllanthus fraternus</u>	Metal fatigue	Root		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

#### 7. Use of Ayurvedic medicines with local treatments (ITK):

**Table: 6.3.12.4 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Dhatu khyaya	Metal fatigue	Root of <u>Phyllanthus fraternus</u> + black pepper
2.	Kamala	Jaundice	Root of <u>Eleusine coracana</u> + honey

**Healer No. 6.3.13**

**1. Name & Address: Kabichandra Majhi**

Village: Belaghar  
Panchayat: Belaghar  
P.O: Belaghar  
Pin Code: 762107  
Block: Tumudibandh  
District: Kandhamal  
Ph. No.: 8895222787

**2. Healer at a glance:**

1. Age	57years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	5
6. Earning member	1
7. Practice	Since 2001
8. Average patient per year	50-60
9. Practice	Herbal treatment and bone setter.
10. Practice Learned from	Father
11. Specialization	Diabetes, jaundice, metal fatigue, bone fracture.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.



**Table: 6.3.13.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Madhumeha	Diabetes	General seizures develop excessive hunger, frequent urination, weakness of body.	Ants surround ed urine.
2.	Hada bhangha	Bone fracture	Pain in the injured area that gets worse when the area is moved or pressure is applied. Loss of function in the injured area.	Examination of patient
3.	Dhatu khyaya	Metal fatigue	Discharge of white liKuid substances through urine in concentrated form.	Urine test
4.	Kamala	Jaundice	Yellowness in eyes, excess of urination & look yellow in colour, weakness in body.	Visible body symbols

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicine**

**Table: 6.3.13.2 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Sisua plant	<u>Dalbergia sissoo</u>	Diabetes	Leaf		✓	✓	
Paja plant	<u>Litsea sebifera</u>	Metal fatigue	Root		✓	✓	
Mandia plant	<u>Eleusine coracana</u>	Jaundice	Root		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK):**

**Table: 6.3.13.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Dhatu khyaya	Metal fatigue	Root of <u>Litsea sebifera</u> + black pepper

**Healer No. 6.3.14**

**1. Name & Address: Girdapath Majhi**

Village: Mandalkuna

Panchayat: Belaghar

P.O: Belaghar

Pin Code: 762107

Block: Tumudibandh

District: Kandhamal

**2. Healer at a glance:**

1. Age	90years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	7
6. Earning member	1
7. Practice	Since 2009
8. Average patient per year	15-20
9. Practice	Herbal treatment
10. Practice Learned from	Father
11. Specialization	Jaundice, metal fatigue, stomach pain, headache, fever, tuberculosis, pistula .
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.3.14.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Peta byatha	Stomach pain	Pain occurs at night, spread to other parts of body gradually, vomiting.	Ants surrounded in urine.
2.	Munda bindha	Headache	Defective eye sight, high blood pressure, sleeplessness, constipation, indigestion, fever.	Examination of patient
3.	Dhatu khyaya	Metal fatigue	Discharge of white liquid substances through urine in concentrated form.	Urine test
4.	Kamala	Jaundice	Yellowness in eyes, excess of urination & look yellow in colour, weakness in body.	Visible body symbols
5.	Jwara	Fever	Depression, acute, inflammation of the nose, muscular pain.	Examination of patient
6.	Raja jakhama	Tuberculosis	Loss of weight, fever, cough, change of voice, pain in chest, spitting of mucus containing blood, weakness, burning sensation at feet & palms.	Examination of patient
7.	Malakantaka	Pistula	A hard lump may be felt around the anus, itchiness in the anus area. Pain while defecating, the anus area may be red and sore.	Stool test

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicine**

**Table: 6.3.14.2 Plants in preparation of medicine**

Name of plants	Botanical name	Used for which disease	What Portion of plants used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Mehendi plant	<u>Lawsonia inermis</u>	Jaundice	Leaf		✓	✓	
Tentuli plant	<u>Tamarindus indicus</u>	Metal fatigue	Seed		✓	✓	
Bara plant	<u>Ficus bengalensis</u>	Pistula	Root		✓	✓	
Aswagandha plant	<u>Withania somnifera</u>	Headache	Root		✓	✓	
Arjuna plant	<u>Terminalia arjuna</u>	Tuberculosis	Root		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK):**

**Table: 6.3.14.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of Disease	Local (ITK) + Ayurvedic
1.	Dhatu khyaya	Metal fatigue	Seed of <u>Tamarindus indicus</u> + honey
2.	kamala	Jaundice	Leaf of <u>Lawsonia inermis</u> + honey
3.	Malakantaka	Pistula	Root of <u>Ficus bengalensis</u> + honey

**Healer No. 6.3.15**

**1. Name & Address: Subunath Majhi**

Village: Rangaparu  
Panchayat: Belaghar  
P.O: Belaghar  
Pin Code: 762107  
Block: Tumudibandh  
District: Kandhamal

**2. Healer at a glance:**

1. Age	60years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	3
6. Earning member	2
7. Practice	Since 2005
8. Average patient per year	50-60
9. Practice	Herbal treatment
10. Practice Learned from	Father
11. Specialization	Jaundice, metal fatigue, stomach pain, malaria, tuberculosis, pistula
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.3.15.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Peta byatha	Stomach pain	Pain occurs at night, spread to other part of body gradually, vomiting.	Examination of patient
2.	Malaria	Malaria	Headache, backache, high temperature, shivering & vomiting.	Examination of patient
3.	Dhatu khyaya	Metal fatigue	Discharge of white liquid substances through urine in concentrated form.	Urine test
4.	Kamala	Jaundice	Yellowness in eyes, excess of urination & look yellow in colour, weakness in body.	Visible body symbols
5.	Raja jakhama	Tuberculosis	Loss of weight, fever, cough, change of voice, pain in chest, spitting of mucus from mouth containing blood, weakness, burning sensation at feet & in palms.	Examination of patient
6.	Malakantaka	Pistula	A hard lump may be felt around the anus, itchiness in the anus area. Pain while defecating, the anus area may be red and become sore.	Stool test

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicine**

**Table: 6.3.15.2 Plants in preparation of medicine**

Name of plants	Botanical name	Used for which disease	What Portion of plants used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Kaladudura plant	<u>Datura metel</u>	Stomach pain	Root		✓	✓	
Dudura plant	<u>Datura stramonium</u>	Metal fatigue	Leaf		✓	✓	
Bhuin kakharu plant	<u>Ipomoea digitata</u>	Jaundice	Fruit		✓	✓	
Kasmar plant	<u>Gmelina arborea</u>	Tuberculosis	Root		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK):**

**Table: 6.3.15.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Dhatu khyaya	Metal fatigue	Fruit of <u>Datura stramonium</u> + ghee
2.	kamala	Jaundice	Fruit of <u>Ipomoea digitata</u> + black pepper
3.	Peta byatha	Stomach pain	Root of <u>Datura metel</u> + ghee

**6.A A Summery of diseases treated by individual Kandha healers**

**Table: 6.A List of Disease treated by Kandha healers (N=45)**

Sl. No.	Local name of the disease	English name of the disease	Frequency	Percentage
1.	Agarjiva	Dislocation of bone	01	2.22
2.	Akhi dhara	Conjunctivitis	03	6.66
3.	Anta daraja	Back bone pain	12	26.66
4.	Anthu ganthi bata	Rheumatism	04	8.88
5.	Arsha	Piles	07	15.55
6.	Basanta	Small pox	08	17.77
7.	Bata	Epilepsy	16	35.55
8.	Beenchi	Eczema	02	4.44
9.	Bhatudi	Wart	01	2.22
10.	Bhuta lagiba	Ghost attack	03	6.66
11.	Bichha kamudiba	Scorpion bite	04	8.88
12.	Stree roga	Disorder of menstruation	10	22.22
13.	Bisa khaiba	Poison intake	03	6.66
14.	Chanda roga	Balad ness	01	2.22
15.	Chuti jhadiba	Hair fall	01	2.22
16.	Danta bindha	Tooth ache	09	20.00
17.	Dhala chhau	Leucosis	03	6.66
18.	Dhatu khaya	Metal fatigue	13	26.66
19.	Ecsira	Scrotal hydrocele	01	2.22
20.	Garmi	Mania	01	2.22
21.	Ghaa	Ulcer	03	6.66
22.	Guni	Hypnotism	02	4.44
23.	Hada bhanga	Bone fracture	17	37.77
24.	Hada phuti	Chicken pox	08	17.77
25.	Haija	Cholera	01	2.22
26.	Jalantaka	Hydrophobia	16	35.55
27.	Jhada	Dysentery	22	48.88
28.	Jwara	Fever	22	48.88
29.	Kalajai	Black mole	01	2.22
30.	Kamala	Jaundice	24	53.33
31.	Karkata	Cancer	02	4.44
32.	Karna bindha	Ear ache	05	11.11
33.	Karna pachiba	Otorrhoea	03	6.66



Sl. No.	Local name of the disease	English name of the disease	Frequency	Percentage
34.	Kasa	Cough	05	11.11
35.	Kustha roga	Leprosy	02	4.44
36.	Madhumeha	Diabetes	04	8.88
37.	Malakantaka	Constipation	06	13.33
38.	Malaria	Malaria	22	48.88
39.	Milimila	Measles	01	2.22
40.	Munda byatha	Headache	19	42.22
41.	Murchha roga	Fainting disease	05	11.11
42.	Najar lagiba	Put an ill eye on others	04	8.88
43.	Pakastali pradaha	Gastritis	02	4.44
44.	Peta byatha	Stomach pain	19	42.22
45.	Raja jakhama	Tuberculosis	13	28.88
46.	Rakta hinata	Anaemia	03	6.66
47.	Sarpa dansana	Snake bite	11	24.44
48.	Stana roga	Breast disease	06	13.33
49.	Charma Roga	Skin disease	06	13.33
50.	Swasa roga	Asthma	02	4.44
51.	Tarala jhada	Diarrhoea	10	22.22
52.	Pagalami	Insanity	02	4.44
53.	Pakhyaghata	Paralysis	04	8.88

## **6.4 Santal Tribe (Mayurbhanj District)**

### **Healer No. 6.4.1**

#### **1. Name and address: Chaitanya Soren**

Village: Nuagaon  
Panchayat: Dukura  
P.O: Kamali  
Block: Khunta-1  
District: Mayurbhanj  
Pincode: 757075  
Ph. No.: 7894148755

#### **2. Healer at a glance:**

1. Age	60years
2. Education	7 <sup>th</sup> class
3. Religion	Hindu
4. Family type	Joint
5. Family size	6
6. Earning member	2
7. Practice	Since 1992
8. Average patient per year	100-155
9. Practice	Herbal medicine
10. Practice Learned from	Father
11. Specialization	Metal fatigue, jaundice, blood pressure, epilepsy, agarjiva, disorder of mensuration , malnutrition, malaria, skin disease.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.4.1.1 Diseases treated by the healer**

Sl No.	Local name of disease	English Name of disease	Symptoms of diseases	Methods of Identification
1.	Dhatu khyaya	Metal fatigue	Discharge of white liKuid substances through urine in concentrated form.	Urine test
2.	Kamala	Jaundice	Yellowness in eyes, excess of urinations, yellow in colour, weakness.	Visible body symbols
3.	Bata	Epilepsy	Wind formation in stomach, indigestion.	Eye estimation
4.	Malaria	Malaria	Headache, backache, high temperature, shivering & vomiting.	Eye estimation
5.	Agarjiva	Dislocation of bone	Pain in affected portion swelling and motionless in affected part of the body.	Examination of patient
6.	Stree roga	Disorder of menstruation	Abdomain pain, weakness, headache, pain in different organs of body, loss of appetite & constipation.	Urine test
7.	Khadya bhaba	Malnutrition	Inadequate food, unbalanced diet. Other causes include digestive problems, physical weakness.	Eye estimation
8.	Charma roga	Skin disease	Scabies, fingures are affected, itching & pus formation.	Eye estimation
9.	Rakta chapa	Blood pressure	Anger and excitement, absence of sleep, feeling of unstability, weakness in body.	Eye estimation

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicine**

**Table: 6.4.1.2 Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Dudhi plant	<u>Euphorbia thymifolia</u>	Metal fatigue	Creper		✓	✓	
Gudchi plant	<u>Tinospora cordifolia</u>	Epilepsy	Bark		✓	✓	
Patala garuda plant	<u>Rauvolfia serpentine</u>	Blood Pressure	Root		✓	✓	

**B. Animal in preparation of medicine**

**Table: 6.4.1.3 Animal in preparation of medicine**

Name of animal	Zoological name	Used for which disease	What Portion of animal used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Massage
Scorpion	<u>Archinida scorpionida</u>	Jaundice	All	✓			✓
Cobra	<u>Elapidae Naja</u>	Blood Pressure	Fat	✓			✓

**C. Minerals in use of medicines: Not used**

**6. Magical treatments:** None

**7. Use of Ayurvedic medicines with local treatments (ITK)**

**Table: 6.4.1.4 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of Disease	English Name of Disease	Local (ITK) + Ayurvedic
1.	Rakta chapa	Blood Pressure	Root of <u>Rauvolfia serpentina</u> + opium + durga ghee.
2.	Charma roga	Skin disease	Root of <u>Rauvolfia serpentina</u> + bark of <u>Tinospora cordifolia</u> + creeper of <u>Euphorbia hymifolia</u> .
3.	Dhatu khyaya	Metal fatigue	Oil of <u>carthamus Tinctorius</u> + Whole part of the <u>Archinida scorpionida</u>

**Healer No. 6.4.2**

**1. Name & address: Shree Muchiram Murmu**

Village: Nuagoan  
Panchayat: Dukura  
P.O: Kamali  
Block: Khuta-1  
District: Mayurbhanj  
Pincode: 757075  
Ph. No.: 9556816702



**2. Healer at a glance:**

1. Age	40 years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Nuclear
5. Family size	2
6. Earning member	1
7. Practice	Since 2008
8. Average patient per year	100
9. Practice	Herbal medicine
10. Practice Learned from	Father
11. Specialization	Epilepsy, metal fatigue, dysentery, piles, night pollution.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.4.2.1 Diseases treated by the healer**

Local name of disease	English name of disease	Symptoms	Identification by
Bata	Epilepsy	Wind formation in stomach, indigestion.	Examination of patient
Dhatu khyaya	Metal fatigue	Discharge of white liKuid substances through urine in concentrated form.	Urine test
Dadma	Dysentery	Passage of mucus with stool, loss of appetite, weakness, weightt loss.	Examination of patient
Arsha	Piles	External & internal swelling in the anal region, loss of appetite, itching effect of annus, wind formation in belly.	Stool test
Swopna dosa	Night pollution	Weakness, physically thin body.	Examination of patient

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicines**

**Table: 6.4.2.2 Plants in preparation of medicines**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Simili Plant	<u>Salmalia malabarica</u>	Metal fatigue	Flower		✓		✓
Ganjei plant	<u>cannabis sativa</u>	Epilepsy	Root		✓		✓
Dimiri plant	<u>Ficus glomerata</u>	Dysentery	Juice of fruit, flower		✓		✓

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK)**

**Table: 6.4.2.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English name of disease	Local (ITK) + Ayurvedic
1.	Bata	Epilepsy	Ghee + root of <u>cannabis sativa</u>
2.	Dhatu khyaya	Metal fatigue	Ghee +root of <u>Salmalia malabarica</u>

**Healer No. 6.4.3**

**1. Name & address: Chhatish Chandra Marandi**

Village: Nuagoan  
Panchayat: Dukura  
P.O: Kamali  
Block: Khunta-1  
District: Mayurbhanj  
Pincode: 757075  
Ph. No.: 9178383277



**2. Healer at a glance:**

1. Age	44years
2. Education	+2 arts
3. Religion	Hindu
4. Family type	Joint
5. Family size	6
6. Earning member	1
7. Practice	Since 2009
8. Average patient per year	100-150
9. Practice	Herbal medicine
10. Practice Learner	Father
11. Specialization	Stomach pain, jaundice, epilepsy, piles, dysentery, headache, skin disease, eczema, hair fall, metal fatigue.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all



**3. Diseases treated by healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table 6.4.3.1 Diseases treated by the healer**

Sl No.	Local name of disease	English Name of disease	Symptoms of diseases	Methods of Identification
1.	Peta byatha	Stomach pain	Pain occurs in at night, spread to other part of body gradually, vomiting.	Examination of patient
2.	Kamala	Jaundice	Yellowness in eyes, excess of urination, yellow in colour, weakness.	Visible body symptoms
3.	Munda byatha	Headache	Defective eye sight, high blood pressure, sleeplessness, constipation, indigestion, fever.	Examination of patient
4.	Bata	Epilepsy	Wind formation in stomach, indigestion.	Visible body symptoms
5.	Arsha	Piles	External & internal swelling in the anal region, loss of appetite, itching effect of anus, wind formation in belly.	Stool test
6.	Beenchi	Eczema	Skin boiling, eruption of water.	Examination of patient
7.	Chuti upudiba	Baladness	Fall of hair, excessive mental worry, anxiety, anger.	Examination of patient
8.	Jhada	Dysentery	Passage of mucus with stool, loss of apitite, weakness, weight loss.	Examination of patient
9.	Charma roga	Skin disease	Scabies, figures are affected, itching & pus formation.	Examination of patient
10.	Dhatu khyaya	Metal fatigue	Discharge of white liKuid substances through urine in concentrated form.	Urine test

**4. Rituals suggested and performed for curing of diseases:** None

## 5. Use of therapeutic agents in treatment of patients

### A. Plants in preparation of medicines

**Table: 6.4.3.2 Plants in preparation of medicines**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Simili Plant	<u>Salmalia malabarica</u>	Metal fatigue	Fruit		✓	✓	
Arjun Plant	<u>Terminalia arjuna</u>	Epilepsy	Bark		✓	✓	
Kusuma plant	<u>Schleichera oleosa</u>	Jaundice	Flower		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

## 7. Use of Ayurvedic medicines with local treatments (ITK)

**Table: 6.4.3.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Dhatu khyaya	Metal fatigue	Turmeric+ ghee + (flower juice of <u>Salmalia malabarica</u> )
2.	Kamala	Jaundice	Ghee + (leave of <u>Cannabis sativa</u> + flower juice of <u>Carthamus tinctorius</u> )

**Healer No. 6.4.4**

**1. Name & address:** **Laxmana Tudu**  
Village: Nuagaon  
Panchayat: Dukura  
P.O.: kamali  
Block: Khunta-1  
District: Mayurbhanj  
Pincode: 757075  
Ph. No.: 9178687343



**2. Healer at a glance:**

1. Age	75years
2. Education	10 <sup>th</sup> class
3. Religion	Hindu
4. Family type	Joint
5. Family size	4
6. Earning member	2
7. Practice	Since 2010
8. Average patient per year	96
9. Practice	Herbal medicine
10. Practice Learner	Guru
11. Specialization	Metal fatigue, jaundice, epilepsy, malaria, malnutrition.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.4.4.1 Diseases treated by the healer**

Sl No.	Local name of disease	English Name of disease	Symptoms of diseases	Methods of Identification
1.	Dhatu khyaya	Metal fatigue	Discharge of white liKuid substances through urine in concentrated form.	Urine test
2.	Kamala	Jaundice	Yellowness in eyes, excess of urination, yellow in colour, weakness.	Visible body symptoms
3.	Khadya bhaba	Malnutrition	Inadequate food, unbalanced diet. Other causes include digestive problems, physical weaknesses.	Examination of patient
4.	Bata	Epilepsy	Wind in stomach, indigestion.	Visible body symptoms
5.	Malaria	Malaria	Headache, backache, high temperature, shivering & vomiting.	Examination of patient

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicines**

**Table: 6.4.4.2 Plants in preparation of medicines**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Dhatuli plant	<u>Woodfordia fruticosa</u>	Malaria	Flower		✓	✓	
Jastimadhu plant	<u>Glycyrrhiza glabra</u>	Metal fatigue	Root		✓	✓	
Patala garuda plant	<u>Rauvolfia serpentina</u>	Malnutrition	Root		✓	✓	
Ostaa plant	<u>Ficus religiosa</u>	Metal fatigue	Bark		✓	✓	
Manjuati plant	<u>Lawsonia inermis</u>	Epilepsy	Bark		✓	✓	
Bhuin nimbi plant	<u>Andrographis paniculatus</u>	Jaundice	Leaf		✓	✓	
Kusuma plant	<u>Schleichera oleosa</u>	Jaundice	Bark		✓	✓	

**B. Animal in preparation of medicine**

**Table: 6.4.4.3 Animal in preparation of medicine**

Name of animal	Zoological name	Used for which disease	What Portion of animal used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Cow	<u>Bos indicus</u>	Epilepsy	Urine	✓			✓
Chicken	<u>Gallus gallus</u>	Metal fatigue	Yolk	✓			✓

**C. Minerals in use of medicines: Not used**

**6. Magical treatment:** None

## 7. Use of Ayurvedic medicines with local treatments (ITK)

**Table: 6.4.4.4 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Dhatu khyaya	Metal fatigue	Turmeric + root of <u>Glycyrrhiza glabra</u>
2.	Kamala	Jaundice	Ghee + (leave of <u>Andrographis paniculatus</u> + bark of <u>Carthamus tinctorius</u>
3.	Khadya bhaba	Malnutrition	Honey + root of <u>Rauvolfia serpentina</u>
4.	Bata	Epilepsy	Ghee + leave of <u>Lawsonia inermis</u>
5.	Malaria	Malaria	Ghee + flower of <u>Woodfordia fruticosa</u>

**Healer No. 6.4.5**

**1. Name & Address: Laxmidhar Hembram**

Village: Bidyadharpur  
Panchayat: Baripada Municipality  
P.O.: Kainfulia  
Block: Palabani  
District: Mayurbhanj  
Pincode: 757107  
Ph. No.: 7381255475

**2. Healer at a glance:**

1. Age	70 years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	4
6. Earning member	1
7. Practice	Since 1985
8. Average patient per year	2000-2520
9. Practice	Herbal medicine and bone setter.
10. Practice Learner	Uncle
11. Specialization	Metal fatigue, ear ache, epilepsy, snake bite, hydrophobia, Scorpio bite, women disease, head ache.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.4.5.1 Diseases treated by the healer**

Sl No.	Local name of disease	English Name of disease	Symptoms of diseases	Methods of Identification
1.	Dhatu khyaya	Metal fatigue	Discharge of white liquid substances through urine concentrated form.	Urine test
2.	Karna bindha	Ear ache	Cold, cough, sinusitis, foul smell comes from ear, pain.	Visible symbols
3.	Sarpa dansana	Snake bite	Severe pain occurs at the location of bite, spot swelling, redness and bruising at the location of the bite, nausea, vomiting, diarrhoea, itchy lumps on the skin, swelling of the lips, tongue and gums, breathing difficulties with wheezing.	Eye estimation
4.	Bata	Epilepsy	Wind formation in stomach, indigestion.	Eye estimation
5.	Jalantaka	Hydrophobia	Exaggerated sensation at the bite site excitability, loss of sensation in an area of the body, loss of muscle function, pain at the site of the bite.	Examination of patient
6.	Bichha dansana	Scorpion bite	Exaggerated sensation at the bite site Excitability. Pain occurrence at bite point.	Examination of patient
7.	Munda byatha	Headache	Defective eye sight, high blood pressure, sleeplessness, constipation, indigestion, fever.	Eye estimation
8.	Stree roga	Disorder of mensuration	Abdomen pain, weakness, headache, pain in different organs of body, loss of appetite & constipation.	Urine test

#### 4. Rituals suggested and performed for curing of diseases

**Table: 6.4.5.2 Rituals suggested and performed for curing of diseases**

Name of disease	Steps followed in performing the rituals
Hydrophobia	Fasting followed after bathing then worship to God and Goddess. Then lighting of ghee in the house of the patient followed after worshipping to God Shiva offering coconut, banana and other fruits etc. The ring made out of grass wearing Kusa Batu in the finger at the time of puja .



## 5. Use of therapeutic agents in treatment of patients

### A. Plants in preparation of medicines

**Table: 6.4.5.3 Plants in preparation of medicines**

Name of plant	Botanical name	Used for which disease	What portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Simili plant	<u>Salmalia Malabarica</u>	Metal fatigue	Flower		✓	✓	
Amla plant	<u>Emblica officinlis</u>	Metal fatigue	Fruit		✓	✓	
Mutha ganda plant	<u>Cyprous rotundus</u>	Metal fatigue	Root		✓	✓	
Jada plant	<u>Ricinus communis</u>	Ear ache	Seed		✓	✓	
Patala garuda plant	<u>Rauvolfia Serpentina</u>	Stomach pain	Bark		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Mineral in preparation of medicine:** Not used

**6. Magical treatment:** None

## 7. Use of Ayurvedic medicines with local treatments (ITK)

**Table: 6.4.5.4 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Sarpa dansana	Snake bite	Root of <u>Rauvolfia Serpentina</u> + ghee
2.	Karna bindha	Ear ache	Milk juice of <u>Ricinus communis</u>

**Healer No. 6.4.6**

**1. Name & address:** **Kuanr Soren**  
 Village: Kandalia  
 Panchayat: Dukura  
 P.O: Kamali  
 Block: Khunta-1  
 District: Mayurbhanj  
 Pincode: 757075  
 Ph. No.: 8457910710



**2. Healer at a glance:**

1. Age	65years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	9
6. Earning member	2
7. Practice	Since 2005
8. Average patient per year	600-650
9. Practice	Herbal medicine and bone setter
10. Practice Learner	Self decision
11. Specialization	Joint pain, paralysis and epilepsy.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table 6.4.6.1 Diseases treated by the healer**

Sl. No.	Local name of disease	English Name of Disease	Symptoms of diseases	Methods of Identification
1.	Anthu ganthi byatha	Joint pain	General symptoms include fatigue, severe pain in joints, difficult to move.	Examination of patient
2.	Bata	Epilepsy	Wind formation in stomach, indigestion.	Eye estimation
3.	Pakhya ghat	Paralysis	Nerve disorder, motionless part of body, tears from eyes, difficult to close eyes.	Examination of patient

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicines**

**Table: 6.4.6.2 Plants in preparation of medicines**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Rohani Plant	<u>Fagus sylvatica</u>	Paralysis	Bark		✓	✓	
Sunari Plant	<u>Cassia fistula</u>	Epilepsy	Bark		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK)**

**Table: 6.4.6.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Name of Ayurvedic + ITK medicine
1.	Anthu ganthi byatha	Joint pain	Black pepper + bark of <u>Fagus sylvatica</u>
2.	Pakhya ghat	Parlysis	Ghee + bark of <u>Cassia fistula</u>

**Healer No. 6.4.7**

**1. Name & address: Shree Samarai Soren**

Village: Satakhania  
Panchayat: Basipitha  
P.O: Bangra  
Block: Khunta-1  
District: Mayurbhanj  
Pincode: 757074  
Ph. No.: 9668837346



**2. Healer at a glance:**

1. Age	40 years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	6
6. Earning member	1
7. Practice	Since 1999
8. Average patient per year	100 patient
9. Practice	Magical
10. Practice Learner	Relatives
11. Specialization	Magical treatment
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.4.7.1 Diseases treated by the healer**

Local name of disease	English name of disease	Symptoms	Identification by
Guni	Hypnotism	Body become turn into pale colour	Loss of self ignorance
Najar	Put an ill eye on others	Fever in body	Loss of self ignorance

#### 4. Rituals suggested and performed for curing of diseases

**Table: 6.4.7.2 Rituals suggested and performed for curing of diseases**

Name of disease	Steps followed in performing the rituals
Put an ill eye on others	1. Morning goes for bathing without talking anybody. 2. Bathing with empty stomach. 3. After bath goes to village temple to worship god. 4. Prayer & chanting mantras before god. 5. Offer fruits as Prasad to God. 6. After worship distribute Prasad to people present in temple.

#### 5. Use of therapeutic gents in treatment of patients

##### A. Plants in preparation of medicines

**Table: 6.4.7.3 Plants in preparation of medicines**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicine	What are other ingredients	Process		Consumable form	
					Burning	Soaking	Food	Drink
Tulsi plant	<u>Ocimum sanctum</u>	Hypnotism	Leaf	Honey, water		✓		✓
Duba Plant	<u>Cydoon dactylon</u>	Put an ill eye	Leaf	water		✓		✓

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

#### 6. Magical treatment:

**Table: 6.4.7.4 Magical treatment**

Local name of disease	English name of disease	Magical treatments adopted
Guni	Hypnotism	Mantra path
Najar	Put an ill eye on others	Mantra path

**7. Use of Ayurvedic medicines with local treatments (ITK):** None

**Healer No. 6.4.8**

**1. Name & Address: Shreemati Sana Soren**

Village: Satakhania  
Panchayat: Bangra  
P.O.: Bangra  
Block: Khunta-1  
District: Mayurbhanj  
Pincode: 757074  
Ph. No.: 9668837346

**2. Healer at a glance :**

1. Age	35 years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	6
6. Earning member	1
7. Practice	Since 1999
8. Average patient per year	70-80
9. Practice	Magical
10. Practice Learner	Relatives (Matabati Soren)
11. Specialization	put an ill eye, hypnotism
12. Profession	Healing and wage earning
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.4.8.1 Diseases treated by the healer**

Local name of disease	English name of disease	Symptoms	Identification by
Guni	Hypnotism	Body turn to pale in colour	Pale colour of face
Najar lagiba	Put an ill eye on others	Body turn to pale in colour	Pale colour of face

**4. Rituals suggested and performed for curing of diseases**

**Table: 6.4.8.2 Rituals suggested and performed for curing of diseases**

Name of disease	Steps followed in performing the rituals
Put an ill eye on others	After bath visit to temple for worship the God and distribute prasad to people present in that temple.

## 5. Use of therapeutic agents in treatment of patients

### A. Plants in preparation of medicines

**Table: 6.4.8.3 Plants in preparation of medicines**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Tulasi plant	<u>Ocimum sanctum</u>	Hypnotism	Leaf			✓	
Dub plant	<u>Cyndoon dactylon</u>	Put an ill eye on others	All			✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:**

**Table: 6.4.8.4 Minerals in use of medicines**

Name of mineral	Used for which disease	What Portion of mineral used in preparation of medicines	Process		Consumable form	
			Burning	Soaking	Food	Wear
Copper	Hypnotism	All	✓			✓
Iron	Put an ill eye on others	All	✓			✓

## 6. Magical treatment:

**Table: 6.4.8.5 Magical treatment**

Local name of disease	English name of disease	Magical treatments adopted
Guni	Hypnotism	Secrete chanting
Najar lagiba	Put an ill eye	Secrete chanting

**7. Use of Ayurvedic medicines with local treatments (ITK):** None

**Healer No. 6.4.9**

**1. Name & Address: Padmalochan Majhi**

Village: Sanatanpur  
Panchayat: Basipitha  
P.O.: Talkunda  
Block: Khunta-1  
District: Mayurbhanj  
Pincode: 757074  
Ph. No.: 8457812238



**2. Healer at a glance :**

1. Age	65years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	7
6. Earning member	3
7. Practice	Since 1956
8. Average patient per year	100-350
9. Practice	Herbal medicine and magical
10. Practice Learner	Father
11. Specialization	Metal fatigue, diabetes, blood pressure, hydrocele, snake bite.
12. Profession	Healing and farming
14. Restriction in treatment	Opened for all



**3. Diseases treated by healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.4.9.1 Diseases treated by the healer**

Sl. No.	Local name of disease	English Name of disease	Symptoms of diseases	Methods of Identification
1.	Dhatu khyaya	Metal fatigue	Discharge of white liquid substances through urine in concentrated form.	Urine test
2.	Madhumeha	Diabetes	Weakness, develop excessive hunger, burning sensation during urination & frequent urination.	Urine test , Examination of patient
3.	Rakta chapa	Blood pressure	Anger and excitement, absence of sleep, feeling of unstability, weakness.	Examination of patient
4.	Kosta brudhi (Male)	Hydrocele	Size of testis increases and unable to walk. Water deposition in testis.	Eye estimation
5.	Sarpa dansana	Snake bite	Symptoms such as nausea and vomiting, diarrhoea, vertigo, fainting , tachycardia, and cold, clammy skin.	Examination of patient, Visible body symbols

#### 4. Rituals suggested and performed for curing of diseases

**Table: 6.4.9.2 Rituals suggested and performed for curing of diseases**

Name of disease	Steps followed in performing the rituals
Sarpa dansana	1. The healer applies mantra and tantra, then blow air from mouth again and agains in the affected spot by snake bite.

## 5. Use of therapeutic agents in treatment of patients

### A. Plants in preparation of medicines

**Table: 6.4.9.3 Plants in preparation of medicines**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Simili Plant	<u>Salmalia malabarica</u>	Metal fatigue	Flower		✓	✓	
Gudumari Plant	<u>Gymnema sylvestre</u>	Diabetics	Leaf		✓	✓	
Patala garuda plant	<u>Rauvolfia serpentine</u>	Blood pressure	Root		✓	✓	

### B. Animal in preparation of medicine

**Table: 6.4.9.4 Animal in preparation of medicine**

Name of animal	Zoological name	Used for which disease	What Portion of animal used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Bat	<u>Pipistrellus</u> <u>Pipistrellus</u>	Hydrocele	Flesh	✓		✓	

### C. Minerals in use of medicines: Not used

**6. Magical treatment:** None

## 7. Use of Ayurvedic medicines with local treatments (ITK)

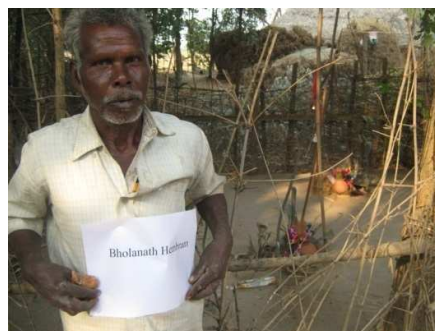
**Table: 6.4.9.5 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Dhatu	Metal fatigue	Turmeric + flower juice of <u>Salmalia malabarica</u>
2.	Madhumeha	Diabetics	Leaf of <u>Gymnema sylvestre</u>
3.	Rakta chapa	Blood pressure	(Root of <u>Rauvolfia serpentine</u> + seed of hatia kankada) + ghee

**Healer No. 6.4.10**

**1. Name & Address: Bhulanath Hembram**

Village: Bhupad  
Panchayat: Bangra  
P.O: Bangra  
Block: Khunta-1  
District: Mayurbhanj  
Pincode: 757074  
Ph. No.: 9777513207



**2. Healer at a glance:**

1. Age	63years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	7
6. Earning member	3
7. Practice	Since 1990
8. Average patient per year	100
9. Practice	Herbal medicine and bone setter
10. Practice Learner	Guru, father and self decision
11. Specialization	Metal fatigue, joint pain, jaundice, cancer, tumour, tuberculosis, bone fracture, fever.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.4.10.1 Diseases treated by the healer**

Sl. No.	Local name of disease	English Name of disease	Symptoms of diseases	Methods of Identification
1.	Dhatu khyaya	Metal fatigue	Discharge of white liKuid substances in urine through concentrated form.	Urine test
2.	Anthu ganthi byatha	Joint pain	Severe pain in joints, unable to move & sleeplessness.	By patient Examination
3.	Kamala	Jaundice	Yellowness in eyes, excess of urination & yellow in colour, weakness.	Visible body symbols
4.	Karkata	Cancer	Symptom includes severe headache & fever. Body weakness.	By patient Examination
5.	Raja jakhama	Tuberculosis	Loss of weight, fever, cough, change of voice, pain in chest, spitting of mucus containing blood, weakness, burning sensation at feet & palms.	By patient Examination
6.	Abu	Tumour	Big or small size flesh like structure found in intestine, stomach, frequent pain, vomiting, sleeplessness, difference in behavior.	By patient Examination
7.	Hada bhangha	Bone fracture	Pain in the injured area that gets worse when the area is moved or pressure is applied. Loss of function in the injured area.	By patient Examination
8	Jwara	Fever	Depression, acute, inflammation of the nose, muscular pain.	By patient Examination

#### 4. Rituals suggested and performed for curing of diseases

**Table: 6.4.10.2 Rituals suggested and performed for curing of diseases**

Name of disease	Steps followed in performing the rituals
Guni	Bathing with empty stomach, proceed to temple & sit for a while and worshiping the God followed by offering banana, coconut and other worship material like vermilion, sandal wood insence.

## 5. Use of therapeutic agents in treatment of patients

### A. Plants in preparation of medicines

**Table: 6.4.10.3 Plants in preparation of medicines**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Kasmar Plant	<u>Gmelina arborea</u>	Joint pain	Root, stem		✓	✓	
Asana plant	<u>Terminallia tomentosa</u>	Metal fatigue	Leaf		✓	✓	
Bel plant	<u>Aegle marmelos</u>	Jaundice	Leaf		✓	✓	
Manjuati plant	<u>Lawsonia inermis</u>	Tumour	Root		✓	✓	
Arjun plant	<u>Terminalia arjuna</u>	Metal fatigue	Bark		✓	✓	
Gangasiuli plant	<u>Nyctanthes arbortristis</u>	Joint pain	Leaf		✓		✓
Begunia Plant	<u>Vitex negundo</u>	Cancer	Leaf, fruit		✓		✓
Kala Tulasi plant	<u>Ocimum sanctum</u>	Metal fatigue	Leaf		✓		✓
Harad dali Plant	<u>Cajanus cajan</u>	Joint pain	Leaf		✓		✓
Ghikuanri plant	<u>Aloe vera</u>	Metal fatigue	Leaf		✓		✓

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

## 6. Magical treatment:

**Table: 6.4.10.4 List of diseases for which magical treatments are done**

Local name of disease	English name of disease	Magical treatments adopted
Dahani lagiba	Evil spirit	Chanting
Bhuta and preta	Ghost attack	Chanting
Guni	Hypnotism	Chanting

## 7. Use of Ayurvedic medicines with local treatments (ITK)

**Table: 6.4.10.5 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Dhatu khyaya	Metal fatigue	Root of <u>Terminallia tomentosa</u> + ghee
2.	Anthu ganthi byatha	Joint pain	Seed of <u>Carthamus tinctorius</u> + ghee

**Healer No. 6.4.11**

**1. Name & Address: Raghunath Hansda**

Village: Girishchandrapur  
Panchayat: Badapathar  
P.O: Bahalda  
Block: Khunta-1  
District: Mayurbhanj  
Pincode: 757074  
Ph. No.: 7853923993

**2. Healer at a glance:**

1. Age	50 years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	4
6. Earning member	1
7. Practice	Since 2004
8. Average patient per year	96
9. Practice	Herbal medicine
10. Practice Learner	Guru
11. Specialization	Metal fatigue, epilepsy, piles, skin disease, tuberculosis, leprosy, snake bite, hydrophobia.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.4.11.1 Diseases treated by the healer**

Sl No.	Local name of disease	English Name of disease	Symptoms of diseases	Methods of Identification
1.	Dhatu	Metal fatigue	Discharge of white liKuid substances through urine in concentrated form.	Urine test
2.	Arsha	Piles	External & internal swelling in the anal region, loss of appetite, itching effect of anus, wind formation in belly.	Stool test
3.	Charma roga	Skin disease	Scabies, figures are affected, itching & pus formation.	Examination of patient
4.	Bata	Epilepsy	Wind formation in stomach, indigestion.	Examination of patient
5.	Raja jakhama	Tuberculosis	Loss of weight, fever, cough, change of voice, pain in chest, spitting of mucus containing blood, weakness, burning sensation at feet & in palms.	Examination of patient
6.	Kustha	Leprosy	The main symptom of leprosy is disfiguring skin sores, lumps, or bumps that do not cure after several weeks or months. The skin sores become look pale in coloured.	Eye estimation
7.	Sarpa dansana	Snake bite	Severe pain occur at the location of the bite, swelling, redness and bruising colour at the location of the bite spot, nausea, vomiting, diarrhoea, itch lumps on the skin.	Visible symbols on bite point at body
8.	Jalantaka	Hydrophobia	Exaggerated sensation at the bite site excitability, loss of sensation in an area of the body, loss of muscles function, pain at the site of the bite spot.	Visible symbols



**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicines**

**Table: 6.4.11.2 Plants in preparation of medicines**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
						Food	Drink
				Burning	Soaking		
Kasmar plant	<u>Gmelina arborea</u>	Piles	Root, stem		✓	✓	
Asana plant	<u>Terminalia tomentosa</u>	Metal fatigue	Leaf		✓	✓	
Bel plant	<u>Aegle marmelos</u>	Skin disease	Leaf		✓	✓	
Singari plant	<u>Caesalpinia crista</u>	Tuberculosis	Leaf		✓	✓	
Manjuati plant	<u>Lawsonia inermis</u>	Epilepsy	Bark		✓	✓	
Arjun plant	<u>Terminalia arjuna</u>	Metal fatigue	Bark		✓	✓	
Basanga plant	<u>Adhatoda vasica</u>	Leprosy	Leaf		✓	✓	
Pineapple plant	<u>Ananus comosus</u>	Leprosy	Fruit		✓		✓

**B. Animal in preparation of medicine**

**Table: 6.4.11.3 Animal in preparation of medicine**

Name of animal	Zoological name	Used for which disease	What Portion of animal used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Turtle	<u>Herbivora testudinidae</u>	Metal fatigue	Flesh	✓		✓	
Crab	<u>Liocarcinus vernalis</u>	Metal fatigue	Fat	✓		✓	

### C. Minerals in use of medicines

**Table: 6.4.11.4 Minerals in use of medicines**

Name of mineral	Used for which disease	What Portion of mineral used in preparation of medicines	Process		Consumable form	
			Burning	Soaking	Food	Drink
Copper	Snake bite	All	✓			

### 6. Magical treatments:

**Table: 6.4.11.5 Magical treatments**

Local name of disease	English name of disease	Magical treatments adopted
Sarpa dansana	Snake Bite	Chanting Mantra
Dahani lagiba	Evil spirit	Chanting Mantra
Bhuta & preta	Ancestor Ghost attack	Chanting Mantra
Guni	Hypnotism	Chanting Mantra

### 7. Use of Ayurvedic medicines with local treatments (ITK)

**Table: 6.4.11.6 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Dhatu khyaya	Metal fatigue	Root of <u>Terminallia tomentosa</u> + ghee
2.	Bata	Epilepsy	Leaf of <u>Flacourtia cataphracta</u> + ghee

**Healer No. 6.4.12**

**1. Name & Address:** **Narayan Tudu**  
 Village: Sanatanpur  
 Panchayat: Basipitha  
 P.O: Talkunda  
 Block: Khunta-1  
 District: Mayurbhanj  
 Pincode: 757074  
 Ph. No.: 9777007894



**2. Healer at a glance:**

1. Age	76 years
2. Education	3 Class
3. Religion	Hindu
4. Family type	Joint
5. Family size	3
6. Earning member	2
7. Practice	Since 2008
8. Average patient per year	2
9. Practice	Herbal medicine
10. Practice Learner	Self decision
11. Specialization	Piles
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.4.12.1 Diseases treated by the healer**

Sl. No.	Local name of disease	English Name of disease	Symptoms of diseases	Methods of Identification
1.	Arsha	Piles	External & internal swelling in the anal region, loss of appetite, itching effect of anus, wind formation in belly.	Stool test

**4. Rituals suggested and performed for curing of diseases:** None

## 5. Use of therapeutic agents in treatment of patients

### A. Plants in preparation of medicines

**Table: 6.4.12.2 Plants in preparation of medicines**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Guduchi Plant	<u>Tinospora cordifolia</u>	Piles	Root		✓	✓	
Mahula Plant	<u>Mdhuca indica</u>	Piles	Root		✓	✓	
Ame plant	<u>Apocynun cannodinun</u>	Piles	Root		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

## 7. Use of Ayurvedic medicines with local treatments (ITK)

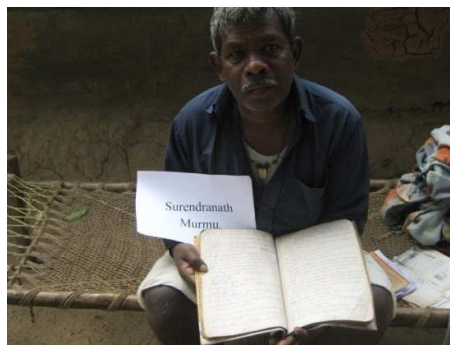
**Table: 6.4.12.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Name of Ayurvedic + ITK medicine
1.	Arsha	Piles	Root of ( <u>Tinospora cordifolia</u> + <u>Mdhuca indica</u> ) + ghee

**Healer No. 6.4.13**

**1. Name & Address: Surendra Nath Murmu**

Village: Bangra  
Panchayat: Bangra  
P.O.: Bangra  
Block: Khunta-1  
District: Mayurbhanj  
Pincode: 757074  
Ph. No.: 7894902835



**2. Healer at a glance:**

1. Age	70 years
2. Education	Master in arts
3. Religion	Hindu
4. Family type	Joint
5. Family size	2
6. Earning member	1
7. Practice	Since 2004
8. Average patient per year	50
9. Practice	Herbal medicine and magic
10. Practice Learner	Father and grand father
11. Specialization	Metal fatigue, jaundice, epilepsy, mouth sores, women disease, joint pain, gastritis.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.4.13.1 Diseases treated by the healer**

Sl. No.	Local name of disease	English Name of disease	Symptoms of diseases	Methods of Identification
1.	Dhatu khyaya	Metal fatigue	Discharge of white liKuid substances through urine in concentrated form.	Urine test
2.	Kamala	Jaundice	Yellowness in eyes, excess of urinations, yellow in colour, weakness.	Visible body symptoms
3.	Anthu ganthi byatha	Joint pain	General symptoms include fatigue, severe pain in joints, difficult to move.	Examination of patient
4.	Bata	Epilepsy	Wind formation in stomach, indigestion.	Visible body symptoms
5.	Mukha gwahar roga	Mouth sore (Stomatitis)	Mouth look redness, weakness, unable to eat & drink.	Examination of patient
6.	Rutu shraba	Disorder of menstruation	Abdomen pain, weakness, headache, pain in different organs of body, loss of appetite & constipation.	Examination of patient
7.	Pakasthali pradaha	Gastritis	Indigestion, constipation, burning sensation occurs in chest, weakness, irritable.	Examination of patient

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicines**

**Table: 6.4.13.2 Plants in preparation of medicines**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Bel tree	<u>Aegle marmelos</u>	Gastritis	Fruit		✓	✓	
Barakoli tree	<u>Zizyphus mauritiana</u>	Metal fatigue	Root, fruit & stem		✓	✓	
Kasmaar tree	<u>Gmelina arborea</u>	Metal fatigue	Root		✓	✓	
Gadaa plant	<u>Ricinus comumis</u>	Epilepsy	All		✓	✓	
Manjuati Plant	<u>Lawsonia inermis</u>	Epilepsy	Leaf, root & stem		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:**

**Table: 6.4.13.3 Minerals in use of medicines**

Name of mineral	Used for which disease	What Portion of mineral used in preparation of medicines	Process		Consumable form	
			Burning	Soaking	Food	Wear
Quartz ashes	Joint pain	All	✓			✓
Coun shell ashes	Metal fatigue	All	✓			✓

**6. Magical treatment: List of diseases for which magical treatments are done:** None

**7. Use of Ayurvedic medicines with local treatments (ITK)**

**Table: 6.4.13.4 Use of Ayurvedic medicines with local treatments (ITK)**

SI No.	Local name of disease	English Name of Disease	Name of Ayurvedic + ITK medicine
1.	Dhatu khyaya	Metal fatigue	Ghee + flower of <u>Gmelina arborea</u>
2.	Bata	Epilepsy	Juice of ginger + root of <u>Aegle marmelos</u>

**Healer No. 6.4.14**

**1. Name & Address: Durgachandra Hembram**

Village: Bhupad  
Panchayat: Bangra  
P.O.: Bangra  
Block: Khunta-1  
District: Mayurbhanj  
Pincode: 757074  
Ph. No.: 7894237227



**2. Healer at a glance:**

1. Age	60years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	6
6. Earning member	3
7. Practice	Since 1995(herbal), 1992(magical)
8. Average patient per year	200-2500
9. Practice	Herbal medicine and magic
10. Practice Learner	Guru
11. Specialization	Metal fatigue, malaria and skin disease
12. Profession	Healing and Farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.



**Table: 6.4.14.1 Diseases treated by the healer**

Sl. No.	Local name of disease	English Name of disease	Symptoms of diseases	Methods of Identification
1.	Dhatu khyaya	Metal fatigue	Discharge of white liKuid substances in urine in concentrated form.	Urine test
2.	Malaria	Malaria	Headache, backache, high temperature, shivering & vomiting.	Examination of patient
3.	Charma roga	Skin disease	Scabies, figures are affected, itching & pus formation.	External observation on body parts.

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicines**

**Table: 6.4.14.2 Plants in preparation of medicines**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Rohini Plant	<u>Fagus sylvatica</u>	Metal fatigue	Root, bark		✓	✓	
Paja plant	<u>Litsea glutionsa</u>	Malaria	Bark		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK)**

**Table: 6.4.14.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Dhatu khyaya	Metal fatigue	Ghee + root & bark of <u>Fagus sylvatica</u>

**Healer No. 6.4.15**

**1. Name & Address: Salku Kisku**

Village: Bangra  
Panchayat: Bangra  
P.O.: Bangra  
Block: Khunta-1  
District: Mayurbhanj  
Pincode: 757074  
Ph. No.: 7894072255



**2. Healer at a glance:**

1. Age	65years
2. Education	9 <sup>th</sup> class
3. Religion	Hindu
4. Family type	Joint
5. Family size	4
6. Earning member	1
7. Practice	Since 2003
8. Average patient per year	50-60
9. Practice	Bone setter, herbal, magic and guni
10. Practice Learner	Father
11. Specialization	Metal fatigue, piles, epilepsy, diabetes, blood pressure, disorder of menstruation, joint Pain, gastritis, tuberculosis, fever, breast cancer.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.4.15.1 Diseases treated by the healer**

Sl. No.	Local name of disease	English Name of disease	Symptoms of diseases	Methods of Identification
1.	Dhatu khyaya	Metal fatigue	Discharge of white liquid substances through urine in concentrated form.	Urine test
2.	Arsha	Piles	External & internal swelling in the anal region, loss of appetite, itching effect of anus, wind formation in belly.	Stool test
3.	Madhumeha	Diabetes	Weakness, develop excessive hunger, burning sensation in urination & frequent urination.	Urine test
4.	Bata	Epilepsy	Wind formation in stomach, indigestion.	Visible body symptoms
5.	Rakta chap	Blood pressure	Anger and excitement, sleeplessness, feeling of unstability, weakness.	Examination of patient
6.	Stree roga	Disorder of menstruation	Abdomen pain, weakness, headache, pain in different organs of body, loss of appetite & constipation.	Urine test
7.	Raja jakhama	Tuberculosis	Loss of weight, fever, cough, change of voice, pain in chest, spitting of mucus containing blood, weakness, burning sensation at feet & in palms.	Examination of patient
8.	Jwara	Fever	Depression, acute, inflammation of the nose, muscular pain.	Examination of patient
9.	Stana karkata	Breast cancer	Pain or tenderness in the breast, Swelling in the armpit, nipple retraction, dimpling, itching, a burning sensation, or ulceration.	Examination of patient

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicines**

**Table: 6.4.15.2 Plants in preparation of medicines**

Name of plants	Botanical name	Used for which disease	What Portion of plants used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Gaisiria plant	<u>Valeriana officinalis</u>	Metal fatigue	Root		✓	✓	
Kasmaar plant	<u>Gmelina arborea</u>	Metal fatigue, Disorder of menstruation	Root		✓	✓	
Gangasiuli plant	<u>Nyctanthes arbortristis</u>	Epilepsy	Leaf		✓	✓	
Basanga plant	<u>Adhatoda vasica</u>	Tuberculosis	Leaf		✓	✓	
Bhuin nimbi plant	<u>Andrograp his paniculatus</u>	Disorder of menstruation	Leaf		✓	✓	
Patala garuda plant	<u>Rauvolfia serpentina</u>	Snake bite	Root		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

#### 6. List of diseases for which magical treatments are done.

**Table: 6.4.15.3 List of diseases for which magical treatments are done**

Local name of disease	English name of disease	Magical treatments adopted
Jalantaka	Hydrophobia	Only chanting Mantra
Sarpa dansana	Snake bite	Only chanting Mantra
Birudi dansana	Wasp bite	Only chanting Mantra

#### 7. Use of Ayurvedic medicines with local treatments (ITK)

**Table: 6.5.1.15.4 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of Disease	Name of Ayurvedic + ITK medicine
1.	Dhatu khyaya	Metal fatigue	Turmeric + root of <u>Gmelina arborea</u>
2.	Arsha	Piles	Honey+ root of <u>Valeriana officinalis</u>

**Healer No. 6.4.16**

**1. Name & Address:** Shyamsundar Murmu  
Village: Goudagan (Mahuli Sahi)  
Panchayat: Basipitha  
P.O.: Basipitha  
Block: Khunta-1  
District: Mayurbhanj  
Pincode: 757074  
Ph. No.: 8763495318



**2. Healer at a glance:**

1. Age	65years
2. Education	9 <sup>th</sup> class
3. Religion	Hindu
4. Family type	Joint
5. Family size	2
6. Earning member	1
7. Practice	Since 2008
8. Average patient per year	30-50
9. Practice	Herbal medicine and magic
10. Practice Learner	Guru (Chandra Murmu)
11. Specialization	Metal fatigue, piles, epilepsy, paralysis, joint pain and jaundice.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.4.16.1 Diseases treated by the healer**

Sl No.	Local name of disease	English Name of disease	Symptoms of diseases	Methods of Identification
1.	Dhatu khyaya	Metal fatigue	Discharge of white liKuid substances through urine in concentrated form.	Urine test
2.	Arsha	Piles	External & internal swelling in the anal region, loss of appetite, itching effect of anus, wind formation in belly.	Stool test
3.	Anthu ganthi byatha	Joint pain	General symptoms include fatigue, severe pain occurs in joints, difficult to move.	Examination of patient
4.	Bata	Epilepsy	Wind formation in stomach, indigestion.	Visible body symptoms
5.	Pakhya ghat	Paralysis	Nerve disorder, motionless in different part of body, tears comes from eyes, difficult to close eyes.	Examination of patient
6.	Swasa roga	Asthma	Nasal congestion, indigestion, constipation, diarrhoea.	Examination of patient
7.	Tarala jhada	Diarrhoea	Severe loose motion.	Examination of patient
8.	Kamala	Jaundice	Yellowness in eyes, excess of urination, yellow in colour & weakness in body.	Visible body symptoms

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicines**

**Table: 6.4.16.2 Plants in preparation of medicines**

Name of plant	Botanical name	Used for which disease	What portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Baincha plant	<u>Flacourtia cataphracts</u>	Metal fatigue	Fruit, leaf		✓	✓	
Mehendi plant	<u>Lawsonia inermis</u>	Metal fatigue	Leaf		✓	✓	
Sunthi plant	<u>Curcuma aromatica</u>	Epilepsy	Fruit		✓	✓	
Gangasiuli plant	<u>Nyctanthes arbortristis</u>	Asthma	Leaf , fruit		✓	✓	
Juani plant	<u>Anethum gravealens</u>	Joint pain	Fruit		✓	✓	
Pipali plant	<u>Piper longum</u>	Epilepsy	Leaf		✓	✓	

**B. Animal in preparation of medicine**

**Table: 6.4.16.3 Animal in preparation of medicine**

Name of animal	Zoological name	Used for which disease	What Portion of animal used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Turtle	<u>Herbivora testudinidae</u>	Asthma	Flesh	✓		✓	
crab	<u>Liocaveinus vernalis</u>	Metal fatigue	Fat	✓		✓	

### C. Minerals in use of medicines

**Table: 6.4.16.4 Minerals in use of medicines**

Name of mineral	Used for which disease	What Portion of mineral used in preparation of medicines	Process		Consumable form	
			Burning	Soaking	Food	Wear
Copper	Put an ill eye on others	All	✓			✓

### 6. List of diseases for which magical treatments are done.

**Table: 6.4.16.5 List of diseases for which magical treatments are done**

Local name of disease	English name of disease	Magical treatments adopted
Jalantaka	Hydrophobia	Only chanting Mantra
Sarpa dansana	Snake bite	Only chanting Mantra
Swapna dosa	Night pollution	Only chanting Mantra

### 7. Use of Ayurvedic medicines with local treatments (ITK)

**Table: 6.4.16.6 Use of Ayurvedic medicines with local treatments (ITK)**

Sl No.	Local name of disease	English Name of Disease	Name of Ayurvedic + ITK medicine
1.	Dhatu khyaya	Metal fatigue	Honey + root of ( <u>Curcuma aromatic</u> + <u>Piper longum</u> )
2.	Bata	Epilepsy	Ghee + leaf & root of <u>Flacourtia cataphracts</u>
3.	Arsha	Piles	Turmeric + fruit of <u>Anethum gravealens</u>



**Healer No. 6.4.17**

**1. Name & Address: Kuanr Tudu**

Village: Gaudagan  
Panchayat: Basipitha  
P.O.: Basipitha  
Block: Khunta-1  
District: Mayurbhanj  
Pincode: 757074  
Ph. No.: 9776650315



**2. Healer at a glance:**

1. Age	46years
2. Education	10 <sup>th</sup>
3. Religion	Hindu
4. Family type	Joint
5. Family size	6
6. Earning member	2
7. Practice	Since 1999
8. Average patient per year	80-100
9. Practice	Herbal medicine
10. Practice Learner	Guru (Mochiram Singh)
11. Specialization	Metal fatigue, jaundice, skin disease, epilepsy, filaria, piles, stomach pain.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.4.17.1 Diseases treated by the healer**

Sl. No.	Local name of disease	English Name of disease	Symptoms of diseases	Methods of Identification
1.	Dhatu khyaya	Metal fatigue	Discharge of white liKuid substances through urine in concentrated form.	Urine test
2.	Kamala	Jaundice	Yellowness in eyes, excess of urination & yellow in colour, weakness develop in body.	Visible symbols
3.	Charma roga	Skin disease	Scabies, figures are affected, itching & pus formation.	Examination of patient
4.	Bata	Epilepsy	Wind formation in stomach, indigestion.	Eye estimation
5.	Arsha	Piles	External & internal swelling in the anal region, loss of appetite, itching effect of anus, wind formation in belly.	Stool test
6.	Bata jwara	Filaria	Inflammation of gland, fever, swollen skin in leg & hand.	Examination of patient
7.	Peta byatha	Stomach pain	Pain at night, spread to other part of body, gradually, vomiting.	Examination of patient

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicines**

**Table: 6.4.17.2 Plants in preparation of medicines**

Name of plant	Botanical name	Used for which disease	What portion of plants used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Baidanka plant	<u>Mucuna Pruriens</u>	Metal fatigue	Root, fruit		✓	✓	
Dhatuki plant	<u>Woodfordia fruticosa</u>	Metal fatigue	Flower		✓	✓	
Simili plant	<u>Salmaalial malabarica</u>	Metal fatigue	Flower		✓	✓	
Pedipedika plant	<u>Abutilon indicum</u>	Jaundice	Leaf		✓	✓	
Hemsagar plant	<u>Kalanchoe laciniata</u>	Stomach pain	Leaf		✓	✓	
Jastimadhu plant	<u>Glycyrrhiza glabra</u>	Jaundice	Root		✓	✓	
Patala garuda plant	<u>Rauwolfia serpentina</u>	Epilepsy	Root		✓	✓	
Kaincha plant	<u>Abrus precatorius</u>	Filaria	Root		✓	✓	
Manjuati plant	<u>Lawsonia inermis</u>	Jaundice	Leaf		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK)**

**Table: 6.4.17.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Dhatu khyaya	Metal fatigue	Ghee + (root, fruit <u>Mucuna Pruriens</u> + <u>Woodfordia fruticosa</u> )

**Healer No. 6.4.18**

**1. Name & Address:** Surendra Hansda  
Village: Badajamuna  
Panchayat: Basipitha  
P.O.: Tangana  
Block: Khunta-1  
District: Mayurbhanj  
Pincode: 757074  
Ph. No.: 8763441265



**2. Healer at a glance:**

1. Age	42years
2. Education	10 <sup>th</sup> class
3. Religion	Hindu
4. Family type	Joint
5. Family size	4
6. Earning member	1
7. Practice	Since 1999
8. Average patient per year	40-75
9. Practice	Herbal medicine
10. Practice Learner	Father and relatives
11. Specialization	Metal fatigue, jaundice, epilepsy, piles, diabetes, fever.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.4.18.1 Diseases treated by the healer**

Sl. No.	Local name of disease	English Name of disease	Symptoms of diseases	Methods of Identification
1.	Dhatu khyaya	Metal fatigue	Discharge of white liKuid substances through urine in concentrated form.	Urine test
2.	Kamala	Jaundice	Yellowness in eyes, excess urination & yellow in colour, weakness.	Visible symbols
3.	Madhumeha	Diabetes	Weakness, develop excessive hunger, frequent urination & burning sensation in urination.	Urine test
4.	Bata	Epilepsy	Wind in stomach, indigestion.	Eye estimation
5.	Arsha	Piles	External & internal swelling in the anal region, loss of appetite, itching effect of anus, wind formation in belly.	Stool test
6.	Jwara	Fever	Depression, acute, inflammation of the nose, muscular pain.	Examination of patient

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicines**

**Table: 6.4.18.2 Plants in preparation of medicines**

Name of plant	Botanical name	Used for which disease	What portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Kasmar plant	<u>Asparagus racemosus</u>	Metal fatigue	Root, fruit		✓	✓	
Gaisiria plant	<u>Valeriana officinalis</u>	Epilepsy	Flower		✓	✓	
Basanga plant	<u>Adhatoda vasica</u>	Jaundice	Leaf		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK)**

**Table: 6.4.18.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Kamala	Jaundice	Root of <u>Lawsonia inermis</u> + sugar
2.	Madhumeha	Diabetes	Bark of ( <u>ficus bengalensis</u> + <u>ficus reiigiosa</u> )
3.	Malaria	Malaria	Leaf of <u>Nyctanthes arbortristis</u> +black pepper

**Healer No. 6.4.19**

**1. Name & Address: Srimad Marandi**

Village: Basipitha  
Panchayat: Basipitha  
P.O.: Basipitha  
Block: Khunta-1  
District: Mayurbhanj  
Pincode: 757074  
Ph. No.: 8594872686

**2. Healer at a glance:**

1. Age	50 years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	5
6. Earning member	1
7. Practice	Since 1998
8. Average patient per year	50-100
9. Practice	Herbal medicine and bone setter
10. Practice Learner	Sister in law
11. Specialization	Metal fatigue, dysentery, epilepsy, piles, eczema, stomach pain, disorder of menstruation, headache.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.4.19.1 Diseases treated by the healer**

Sl. No.	Local name of disease	English Name of disease	Symptoms of diseases	Methods of Identification
1.	Dhatu khyaya	Metal fatigue	Discharge of white liKuid substances urine in concentrated form.	Urine test
2.	Kamala	Jaundice	Yellowness in eyes, excess of urination & yellow in colour, weakness.	Visible symbols
3.	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weakness, weight loss,	Eye estimation
4.	Fits	Epilepsy	Wind formation in stomach, indigestion.	Eye estimation
5.	Arsha	Piles	External & internal swelling in the anal region, loss of appetite, itching effect of anus, wind formation in belly.	Stool test
6.	Jwara	Fever	Depression, acute, inflammation of the nose, muscular pain.	Examination of patient
7.	Beenchi	Eczema	Occurrence of wounds in toe.	Eye estimation
8.	Peta byatha	Stomach pain	Pain at night, spread to other part of body gradually, vomiting.	Examination of patient
9.	Stree roga	Disorder of mensuration	Abdomen pain, weakness, headache, pain in different organs of body, loss of appetite & constipation.	Urine test

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicines**



**Table: 6.4.19.2 Plants in preparation of medicines**

Name of plants	Botanical name	Used for which disease	What Portion of plants used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Mehendi plant	<u>Lawsonia inermis</u>	Women disease	Root		✓	✓	
Kusum plant	<u>Carthamus tinctorius</u>	Bone fracture	Bark, creeper		✓	✓	
Hadajala plant	<u>Vitis quandrangulris</u>	Bone fracture	Bark, creeper		✓	✓	
Kain kanda plant	<u>Nymphaea lotus</u>	Women disease	Bark		✓	✓	
Ghee kuanri plant	<u>Aloe vera</u>	Head ache	Leaf		✓	✓	
Nali Apamarga plant	<u>Achvranthes aspera</u>	Stomach pain	Root		✓	✓	
Gangasiuli plant	<u>Nyctanthes arbortristis</u>	Malaria	Leaf		✓	✓	
Nimba plant	<u>Azadirachta indica</u>	Malaria	Leaf		✓	✓	
Sunamukhi plant	<u>Casia aunsustiafolia</u>	Metal fatigue	Leaf		✓	✓	
Motri lata	<u>Smilax maycophylla</u>	Disorder of mensuration	Root		✓	✓	
Patala garuda	<u>Rauvolfia Serpentina</u>	Dysentery	Bark		✓	✓	
Pijuli plant	<u>Psidium guajava</u>	Dysentery	Fruit		✓	✓	
Mandar plant	<u>Hibiscus rosasinensis</u>	Dysentery	Leaf		✓	✓	

**B. Animal in preparation of medicine**

**Table: 6.4.19.3 Animal in preparation of medicine**

Name of animal	Zoological name	Used for which disease	What portion of animal used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Bug	<u>Abar coleoptera</u>	Piles	All part			✓	
Bear	<u>Ursidae carnivore</u>	Women disease	Flesh	✓		✓	
Crab	<u>Liocarcinus vernalis</u>	Women disease	Flesh	✓		✓	

**C. Minerals in use of medicines: Not used**

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK)**

**Table: 6.4.19.4 Use of Ayurvedic medicines with local treatments (ITK)**

Sl No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Stree roga	Disorder of menstruation	Root of <u>Lawsonia inermis</u> + ghee
2.	Dhatu khyaya	Metal fatigue	leaf of <u>Casia aunsustiafolia</u> +ghee
3.	Jhada	Dysentery	Bark of <u>Rauvolfia Serpentina</u> + <u>Hibiscus rosasinenis</u> + <u>Psidium guajava</u>
4.	Beenchi	Eczema	Root of <u>Achvranthes aspera</u> + salt
5.	Malaria	Malaria	Leaf of <u>Nyctanthes arbortristis</u> + raw banana + leaf of <u>Azadirachta indica</u> + black pepper + honey

**Healer No. 6.4.20**

**1. Name & Address: Dhananjaya Kisku**

Village: Sudiam  
Panchayat: Sirishbani  
P.O.: Sirishbani  
Block: Samakhunta  
District: Mayurbhanj  
Pincode: 757049  
Ph. No.: 7873826428



**2. Healer at a glance:**

1. Age	55years
2. Education	8 <sup>th</sup> class
3. Religion	Hindu
4. Family type	Joint
5. Family size	4
6. Earning member	2
7. Practice	Since 2003
8. Average patient per year	100-150
9. Practice	Herbal medicine
10. Practice Learner	Guru
11. Specialization	Metal fatigue, jaundice, epilepsy, cancer, snake bite, haris, dysentery, paralysis
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.4.20.1 Diseases treated by the healer**

Sl. No.	Local name of disease	English Name of disease	Symptoms of diseases	Methods of Identification
1.	Dhatu khyaya	Metal fatigue	Discharge of white liKuid substances through urine in concentrated form.	Urine test
2.	Kamala	Jaundice	Yellowness in eyes, excess urination & yellow in colour, weakness.	Visible body symbols
3.	Bata	Epilepsy	Wind formation in stomach, indigestion.	Eye estimation
4.	Karkata	Cancer	Symptoms like fever, weight loss, dizziness and unusual bleeding.	Examination of patient
5.	Sarpa dansana	Snakebite	Symptoms such as nausea and vomiting, diarrhoea, vertigo, fainting, tachycardia, and cold, clammy skin.	Examination of patient
6.	Arsha	Piles	External & internal swelling in the anal region, loss of appetite, itching effect of anus, wind formation in belly.	Stool test
7.	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weak, weight loss.	Examination of patient
8.	Pakhya ghat	Paralysis	Nerve disorder, motionless part of body, tears from eyes, difficult to close eyes.	Eye estimation

**4. Rituals suggested and performed for curing of diseases:** None

## 5. Use of therapeutic agents in treatment of patients

### A. Plants in preparation of medicines

**Table: 6.4.20.2 Plants in preparation of medicines**

Name of plant	Botanical name	Used for which disease	What portion of plant used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Sunamukhi plant	<u>Casia aungustiatolia</u>	Metal fatigue	Leaf		✓	✓	
Dimiri plant	<u>Ficus glomerata</u>	Jaundice	Leaf		✓	✓	
Gudchi plant	<u>Tinospora cordifolia</u>	Epilepsy	Bark		✓	✓	
Patala garuda plant	<u>Rauvolfia serpentina</u>	Snake bite	Root, stem		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

## 7. Use of Ayurvedic medicines with local treatments (ITK)

**Table: 6.4.20.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Sarpa dansana	Snake bite	Root of <u>Rauvolfia serpentina</u> + Sunthi+ black pepper
2.	Kamala	Jaundice	Root of <u>Ficus glomerata</u> + ghee
3.	Dhatu khyaya	Metal fatigue	Root of <u>Casia aungustiatolia</u> + ghee

## 6.5 Santal Tribe (Keonjhar District)

### Healer No. 6.5.1

**1. Name & Address:** Rabindranath Hansda  
Village: Danardanpur  
Panchayat: Danardanpur  
P.O.: Dhrupada  
Block: Sadar Keonjhar  
District: Keonjhar  
Pincode: 758013  
Ph. No.: 9938388828



### 2. Healer at a glance:

1. Age	55years
2. Education	10 <sup>th</sup> class
3. Religion	Hindu
4. Family type	Nuclear
5. Family size	7
6. Earning member	3
7. Practice	Since 2007
8. Average patient per year	30 - 50
9. Practice	Herbal medicine and magical
10. Practice Learned from	Guru (Mano lahar), Father
11. Specialization	Dhatu, jaundice, fits, stomach pain, period problem, snake bite, hydrophobia, dysentery and joint pain
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table 6.5.1.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Dhatu khayaya	Metal fatigue	Discharge of white liKuid substances through urine in concentrated form.	Urine test
2.	Kamala	Jaundice	Yellowness in eyes, excess of urination and yellow in colour, weakness.	Visible body symbols
3.	Bata	Epilepsy	Wind in stomach, indigestion.	Eye estimation
4.	Stree roga	Disorder of menstruation	Abdomen pain, weakness, headache, pain in different organs of body, loss of appetite & constipation.	Urine test
5.	Peta byatha	Stomach pain	Pain at night, spread to other part gradually, vomiting.	Continuous pain
6.	Sarpa Dansan	Snake Bite	Symptoms such as nausea and vomiting, diarrhoea, vertigo, fainting, tachycardia, and cold, clammy skin.	Visible body symbols
7.	Jalantaka	Hydrophobia	Sensation at the bite site excitability, Loss of sensation in an area of the body, Loss of muscles function, Pain at the site of the bite, swelling.	Visible symptoms
8.	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weak, weight loss.	Weak body, feeling tiredness
9.	Anthu Ganthi bindha	Joint pain	General symptoms include fatigue, severe pain in joints, difficult to move.	Visible symptoms

#### 4. Rituals suggested and performed for curing of diseases:

**Table: 6.5.1.2 Rituals suggested and performed for curing of diseases**

Name of disease	Steps followed in performing the rituals
Hydrophobia Snake bite	<ol style="list-style-type: none"> <li>1. The healer gives some herbal medicine.</li> <li>2. Then some mantra is chanted for sometime to worship the God.</li> <li>3. Then healer and patient both go together to the village temple for offering coconut, banana and other worship materials.</li> <li>4. At temple periphery, the healer starts oblation by ghee burning.</li> <li>5. Then Prasad is distributed to all those who are participating in oblation.</li> <li>6. After completion puja, the patient offer money to temple.</li> </ol>

## 5. Use of therapeutic agents in treatment of patients

### A. Plants in preparation of medicine

**Table: 6.5.1.3 Plants in preparation of medicine**

Name of plants	Botanical name	Used for which disease	What Portion of plants used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Pipali plant	<u>Piper Longum</u>	Dhatu, disorder of menstruation	Fruit		✓	✓	
Nageswar plant	<u>Mesua ferrea</u>	Dhatu, stomach pain	Flower		✓	✓	
Jaitri plant	<u>Myristica fragrans</u>	Dhatu	Fruit		✓	✓	
Jaitri plant	<u>Myristica fragrans</u>	Dhatu	Fruit		✓	✓	
Patala garuda plant	<u>Rauvolfia Serpentina</u>	Stomach pain, epilepsy, jaundice	Root		✓	✓	
Mandar plant	<u>Hibiscus rosasinensis</u>	Disorder of menstruation	Flower		✓	✓	
Dhala palasa plant	<u>Butea monosperma</u>	Disorder of menstruation	Flower		✓	✓	
Dhala tarata plant	<u>Ervatamia divaricata</u>	Disorder of menstruation	Flower		✓	✓	
Dhala tarata plant	<u>Ervatamia divaricata</u>	Disorder of menstruation	Flower		✓	✓	
Mehendi plant	<u>Lawsonia Inermis</u>	Jaundice	Root		✓	✓	
Apamaranga plant	<u>Achvranthes aspera</u>	Snake bite	Root		✓	✓	
Kalara plant	<u>Momordica Charantia</u>	Dysentery	Leaf		✓	✓	
Jamu plant	<u>Syzygium cumini</u>	Dysentery	Leaf		✓	✓	

### B. Animal in preparation of medicine



**Table: 6.5.1.4 Animal in preparation of medicine**

Name of Animal	Zoological name	Used for which disease	What Portion of animal used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Massage
Panda	<u>Alurpoda melanoleuca</u>	Snake bite	Leather	✓			✓
Panda	<u>Alurpoda melanoleuca</u>	Hydrophobia	Leather	✓			✓

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK):** None

**Healer No. 6.5.2**

**1. Name & Address: Mansha Hemram**

Village: Danardanpur  
Panchayat: Danardanpur  
P.O: Dhrupada  
Block: Sadar Keonjhar  
District: Keonjhar  
Pincode: 758013  
Ph. No.: 9777779625

**2. Healer at a glance:**

1. Age	70years
2. Education	3 <sup>th</sup> Class
3. Religion	Hindu
4. Family type	Joint
5. Family size	5
6. Earning member	3
7. Practice	Since 2004
8. Average patient per year	12
9. Practice	Herbal medicine
10. Practice Learned from	Father and other relatives
11. Specialization	Dhatu, disorder of menstruation, malaria, dysentery
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.5.2.1 Diseases treated by the healer**

Sl No.	Local name of disease	English Name of disease	Symptoms of diseases	Methods of Identification
1.	Dhatu khyaya	Metal fatigue	Discharge of white liKuid substances through urine in concentrated form.	Urine test
2.	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weak, weight loss.	Eye estimation
3.	Stree roga	Disorder of menstruation	Abdomen pain, weakness, headache, pain in different organs of body, loss of appetite & constipation.	Urine test
4.	Malaria	Malaria	Headache, backache, high temperature, shivering & vomiting.	Eye estimation

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicine**

**Table: 6.5.2.2 Plants in preparation of medicine**

Name of plants	Botanical name	Used for which disease	What Portion of plants used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Muturikathi plant	<u>Smilax zeylanica</u>	Dysentery	Root, stem		✓	✓	
Gangasiuli plant	<u>Nyctanthes arbortristis</u>	Malaria	Leaf		✓	✓	
Sunthi plant	<u>Curcuma aromatica</u>	Malaria	Root		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatments:** None

**7. Use of Ayurvedic medicines with local treatments (ITK)**

**Table: 6.5.2.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Malaria	Malaria	Leaf of <u>Nyctanthes arbortristis</u> + root of <u>Curcuma aromatic</u> + black pepper

**Healer No. 6.5.3**

**1. Name & Address:** **Gobinda Hansda**  
Village: Rajbandh  
Panchayat: Raisuan  
P.O.: Raisuan  
Block: Sadar Keonjhar  
District: Keonjhar  
Pincode: 758013  
Ph. No.: 8908784329



**2. Healer at a glance:**

1. Age	45years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	5
6. Earning member	2
7. Practice	Since 2007
8. Average patient per year	100-150
9. Practice	Herbal medicine
10. Practice Learned from	Father and Guru (Jitu ram Mardi)
11. Specialization	Piles, jaundice, hydrophobia, women diseases, fever, dysentery
12. Profession	Healing and farming all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.5.3.1 Diseases treated by healer**

Sl No.	Local name of disease	English Name of Disease	Symptoms of diseases	Methods of Identification
1.	Kamala	Jaundice	Yellowness in eyes, excess of urination and yellow in colour, weakness.	Visible body symbols
2	Arsha	Piles	External & internal swelling in the anal region, loss of appetite, itching of anus, wind formation in belly.	Stool test
3	Jalantaka	Hydrophobia	Patient becomes hydrophobic in nature.	Eye estimation
4	Stree roga	Disorder of menstruation	Abdomen pain, weakness, headache, pain in different organs of body, loss of appetite & constipation.	Urine test
5	Jwara	Fever	Depression, acute, inflammation of the nose, muscular pain.	Eye estimation
6	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weakness, weight loss.	Eye estimation

#### **4. Rituals suggested and performed for curing of diseases**

**Table: 6.5.3.2 Rituals suggested and performed for curing of diseases**

Name of rituals	Steps followed in performing the rituals
Chanting mantra	<ol style="list-style-type: none"><li>1. After bathing, patient worships before Goddess in temple.</li><li>2. Offer fruits as Prasad to the Goddess.</li><li>3. Then distribute Prasad to everyone.</li></ol>

#### **5. Use of therapeutic agents in treatment of patients**

##### **A. Plants in preparation of medicine**

**Table: 6.5.3.3 Plants in preparation of medicine**

Name of plants	Botanical name	Used for which disease	What Portion of plants used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Sala plant	<u>Shorea robusta</u>	Piles	Bark		✓		✓
Gilli plant	<u>Indigofera cassioides</u>	Jaundice	Root		✓		✓
Bara koli plant	<u>Ziziphus mauritiana</u>	Women diseases	Fruit		✓		✓
Kendu plant	<u>Diospyros melanoxylon</u>	Jaundice	Bark		✓		✓
Pijuli plant	<u>Psidium guajava</u>	Dysentery	Leaf		✓		✓
Gangasiuli plant	<u>Nyctanthes arbortristis</u>	Fever	All parts of plant		✓		✓
Amba Plant	<u>Mangifera indica</u>	Dysentery	Bark		✓		✓
Dalimba plant	<u>Punica granatum</u>	Dysentery	Fruit		✓		✓

**B. Animal in preparation of medicine:**

**Table: 6.5.3.4 Animal in preparation of medicine**

Name of animals	Zoological name	Used for which disease	What Portion of animals used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Civet cat	<u>Paradoxurus hermaphroditus</u>	Small pox, piles	Leather	✓			✓

**C. Minerals in use of medicines: Not used**

**6. Magical treatments:** None

**7. Use of Ayurvedic medicines with local treatments (ITK)**

**Table: 6.5.3.5 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of Disease	Local (ITK) + Ayurvedic
1.	Dhatu khyaya	Metal fatigue	Flower of <u>Schleichera oleosa</u> +gagery + fruit of <u>Emblica officinalis</u>
2.	Malaria	Malaria	<u>Nyctanthes arbortristis</u> leaf+ gagery
3.	Jhada	Dysentery	Bark of <u>Psidium guajava</u> + fruit of <u>Punica granatum</u>

**Healer No. 6.5.4**

**1. Name & Address:** **Sunaram Kisku**  
Village: Totasahi  
Panchayat: Raisuan  
P.O.: Raisuan  
Block: Sadar Keonjhar  
District: Keonjhar  
Pincode: 758013  
Ph. No.: 9178681233



**2. Healer at a glance:**

1. Age	62years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	9
6. Earning member	4
7. Practice	Since 2002
8. Average patient per year	60
9. Practice	Herbal medicine, magical and Guni
10. Practice Learned from	Guru (Cho tray Mardi)
11. Specialization	Gastric, cough, asthma, piles, disorder of mensuration, jaundice, fits, worm disease, nerve stretch.
12. Profession	Healing and farming
14. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.



**Table: 6.5.4.1 Diseases treated by the healer**

Sl No.	Local name of disease	English Name of disease	Symptoms of diseases	Methods of Identification
1.	Pakasthali pradaha	Gastritis	Indigestion, constipation, burning sensation in chest, weakness, irritable.	When a drop of kerosene oil is put in urine it make zigzag way
2.	Kasa	Cough	Discharge of sputum	Eye estimation of sputum
3.	Stree roga	Disorder of menstruation	Abdomen pain, weakness, headache, pain in different organs of body, loss of appetite & constipation.	Examination of patient
4.	Arsha	Piles	External & internal swelling in the anal region, loss of appetite, itching of anus, wind formation in belly.	Stool test
5.	Kamala	Jaundice	Yellowness in eyes, excess of urination and yellow in colour, weakness.	Visible body symbol
6.	Swasa roga	Asthma	Nasal congestion, indigestion, constipation, diarrhoea.	Eye estimation
7.	Kurmi roga	Worm disease	Discharge of white colour worms at the time of release excreta.	Stool test
8.	Snayubika	Nervous debility	An involuntary and painful contraction of a voluntary muscles or a group of muscles.	Germs visible when drop of kerosene oil is putting in anus.
9.	Fits	Epilepsy	Wind formation in stomach, indigestion.	Eye estimation

#### 4. Rituals suggested and performed for curing of diseases:

**Table: 6.5.4.2 Rituals suggested and performed for curing of diseases**

Name of rituals	Steps followed in performing the rituals
Najar lagiba	Entire body is washed by chanting mantra with the help of salt Advise to drink that whole salt. Then allowed to wear talisman which is filled in tulasi, dub grass and black cumin.
Planet effect	At the beginning of ritual, priest starts oblation at the village temple. Then all members of family and priest worship the God sani (saturen) by offering coconut, banana, shwoing incense and lightening the lamp. After the puja, hen is sacrificed. Then the prsad of Goddess (hen meat) is distributed to the family members and villagers.

#### 5. Use of therapeutic agents in treatment of patients

##### A. Plants in preparation of medicine

**Table: 6.5.4.3 Plants in preparation of medicine**

Name of plants	Botanical name	Used for which disease	What Portion of plants used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Bahada plant	<u>Taerminalia bellerica</u>	Piles	Bark		✓	✓	
Bhuin nimba plant	<u>Andrographis paniculatus</u>	Piles	Leaf		✓	✓	
Pita nau plant	<u>Lagenaria siceraria</u>	Period problem	Fruit		✓	✓	
AAnkal plant	<u>Alangium chinense</u>	Cough	Bark		✓	✓	
Pipali plant	<u>Piper longum</u>	Cough	Root, leaf		✓	✓	
Basanga plant	<u>Adhatoda vasica</u>	Cough	Leaf		✓	✓	
Amarpoi plant	<u>Kalanchoe pinnata</u>	Nerve stretch	Leaf		✓	✓	
Patala garuda plant	<u>Rauvolfia serpentina</u>	Snake bite	Root, leaf		✓	✓	

##### B. Animal in preparation of medicine:

**Table: 6.5.4.4 Animal in preparation of medicine**

Name of Animals	Zoological name	Used for which disease	What Portion of animals used in preparation of medicines	Process		Consumable form	
				Burning	Drying	Food	Drink
Oyster	<u>Pinctada margaritifera</u>	Eye disease	Shell		✓	✓	
Pigeon	<u>Columbidae colomiformes</u>	Gastritis	Flesh	✓		✓	
Turtle	<u>Herbivora testudinidae</u>	Asthma	Flesh	✓		✓	
Bat	<u>Pipistrellus pipistrellus</u>	Asthma	Flesh	✓		✓	

**C. Minerals in use of medicines:** Not used

## 6. Magical treatments:

**Table: 6.5.4.5 Magical treatments**

Local name of disease	English name of disease	Magical treatments adopted
Sarpa Dansan	Snake bite	After snake bite, the healer first applies herbal medicines all over body of the patient. Then he gives special herbal medicine namely <u>Rauvolfia serpentina</u> to consume which protects the patient from the poison of snake. After all of this, mantra is also chanted to cure the disease
Jalantaka	Hydrophobia	The healer gives herbal medicine. Then mantra is chanted for sometimes to worship the God. Then healer and patient, both together visit to the village temple for offering coconut, banana and other worship materials. At temple periphery, the healer starts oblation by ghee burning. Then Prasad is distributed to all members participating in oblation. After puja, the patient offers money to temple
Bhuta lagiba	Removal of ghost, spirit	When the ghost appears in the body of the patient, he behaves abnormally followed by fever. Then they offer all kinds of fruits like banana, coconut to the God along with lightening lamp with ghee. Slaughtering of hen takes place near the Goddess after the puja activity is over. Then the Prasad of Goddess (Hen meat) is being distributed to everybody residing in the village. After all of this, the patient is advised to wear talisman which is made up of Neem, Bhalia, Saala, Pingu and root of Chaar plant.

## 7. Use of Ayurvedic medicines with local treatments (ITK)

**Table: 6.5.4.6 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of Disease	Local (ITK) + Ayurvedic
1.	Kasa	Cough	Juice of <u>Adhatoda vasica leaf</u> + honey
2.	Snyubika	Nervous debility	Leaf of <u>Kalanchoe pinnata</u> + sugar

**Healer No. 6.5.5**

**1. Name and Address: Dillip Hansda**

Village: Danardanpur  
Panchayat: Danardanpur  
P.O.: Dhrupada  
Block: Sadar Keonjhar  
District: Keonjhar  
Pincode: 758013  
Ph. No.: 9777980503



**2. Healer at a glance:**

1. Age	43years
2. Education	10 <sup>th</sup> class
3. Religion	Hindu
4. Family type	Joint
5. Family size	6
6. Earning member	2
7. Practice	Since 1999
8. Average patient per year	35-65
9. Practice	Herbal medicine, mal nutrition
10. Practice Learned from	Father
11. Specialization	Jaundice, gastritis, nasal bleeding, boils, joint Pain, metal fatigue, piles.
12. Profession	Healing and farming
13. Practice learned from	Father
14. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.5.5.1 Diseases treated by the healer**

Sl No.	Local name of disease	English Name of disease	Symptoms of diseases	Methods of Identification
1.	Kamala roga	Jaundice	Yellowness in eyes, excess of urination and yellow in colour, weakness.	Visible body symbols
2.	Dhatu khyaya	Metal Fatigue	Discharge of white liKuid substances through urine in concentrated form.	Eye estimation
3.	Pakasthali pradha	Gastritis	Indigestion, constipation, burning sensation in chest, weakness, irritable.	Eye estimation
4.	Nasa rakta sphalan	Nasal bleeding	Profuse heavy bleeding from nose.	Eye estimation
5.	Batha	Boil	It turns red, painful, warm, and swollen. A fever may develop later.	Eye estimation
6.	Ganthi Bata	Joint Pain	General symptoms include fatigue, severe pain in joints, difficult to move.	Observation of patient
7.	Arsha	Piles	External & internal swelling in the anal region, loss of appetite, itching effect of anus, wind formation in belly.	By stool test

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicine**

**Table: 6.5.5.2 Plants in preparation of medicine**

Name of plants	Botanical name	Used for which disease	What Portion of plants used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Bhui kakharu plant	<u>Cucurbita maxima</u>	Jaundice	Fruit		✓		✓
Pedi pedika plant	<u>Abutilon indicum</u>	Nasal bleeding	Leaf		✓	✓	
Apa marang plant	<u>Achyranthes aspera</u>	Hydrophobia	Leaf, root, fruit		✓		✓
Lajakuli plant	<u>Mimosa pudica</u>	Metal fatigue	Root		✓		✓

**B. Animal in preparation of medicine:**

**Table: 6.5.5.3 Animal in preparation of medicine**

Name of animals	Zoological name	Used for which disease	What Portion of animals used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Turtle	<u>Herbivora testudinidae</u>	Piles	Head	✓			✓
Dog	<u>Cannis familiaris</u>	Metal fatigue	Bone	✓			✓

**C. Minerals in use of medicines: Not used**

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK)**

**Table: 6.5.5.4 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of Disease	Local (ITK) + Ayurvedic
1.	Pliha	Spleen	Root of <u>Cucurbita maxima</u> and <u>Abutilon indicum</u> + turmeric

**Healer No. 6.5.6**

**1. Name and Address: Budhram Majhi**

Village: Dhatika  
Panchayat: Raisuan  
P.O.: Kadagarh  
Block: Sadar Keonjhar  
District: Keonjhar  
Pincode: 758013  
Ph. No.: 7064209522



**2. Healer at a glance:**

1. Age	58years
2. Education	10th
3. Religion	Hindu
4. Family type	Joint
5. Family size	6
6. Earning member	3
7. Practice	Since 1990
8. Average patient per year	60-70
9. Practice	Herbal medicine
10. Practice Learned from	Father
11. Specialization	Dog bite
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.5.6.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Jalantaka	Hydrophobia	Patient becomes hydrophobic in nature	Patient observation

**4. Rituals suggested and performed for curing of diseases:**

**Table: 6.5.6.2 Rituals suggested and performed for curing of diseases**

Name of disease	Steps followed in performing the rituals
Hydrophobia	After dog bite, the healer gives herbal medicine which is made up by the mixture of black pepper and root of <u>cyprous rotundus</u> and mantra is chanted for sometime while worshipping the God. Then healer and patient both go to the village temple for offering coconut, banana and other worship materials and do for oblation.

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicine**

**Table: 6.5.6.3 Plants in preparation of medicine**

Name of plants	Botanical name	Used for which disease	What Portion of plants used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Mehendi plant	<u>Lawsonia inermis</u>	Hydrophobia	Root	✓			✓

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK):** None



**Healer No. 6.5.7**

**1. Name and Address:** **Jatia Majhi**  
Village: Dhatika  
Panchayat: Raisuan  
P.O.: Kadagarh  
Block: Sadar Keonjhar  
District: Keonjhar  
Pincode: 758013  
Ph. No.: 8658962301

**2. Healer at a glance:**

1. Age	60years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	5
6. Earning member	3
7. Practice	Since 1990
8. Average patient per year	30-50
9. Practice	Herbal medicine and bone setter
10. Practice Learned from	Guru
11. Specialization	Metal fatigue, jaundice, stomach pain, disorder of menstruation, snake bite, hydrophobia, bone fracture, skin disease, ear ache, tuberculosis
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.5.7.1 Diseases treated by the healer**

Sl No.	Local name of disease	English Name of Disease	Symptoms of diseases	Methods of Identification
1.	Dhatu khyaya	Metal fatigue	Discharge of white liquid substances through urine in concentrated form.	Urine test
2.	Kamala	Jaundice	Yellowness in eyes, excess of urination and yellow in colour, weakness.	Visible body symbol
3.	Charma roga	Skin disease	Scabies, figures are affected, itching & pus formation.	Eye estimation
4.	Stree roga	Disorder of menstruation	Irregular of period time, severe bleeding, weakness in body, headache.	Urine test
5.	Peta byatha	Stomach pain	Pain at night, spread to other part of gradually, vomiting.	Examination of patient
6.	Sarpa Dansan	Snake Bite	Symptoms such as nausea and vomiting, diarrhoea, vertigo, fainting, tachycardia, and cold, clammy skin.	Eye estimation
7.	Jalantaka	Hydrophobia	Exaggerated sensation at the bite site excitability, loss of sensation in an area of the body, loss of muscle function, Pain at the site of the bite, swallowing.	Eye estimation
8.	Hada Bhanga	Bone fracture	Pain in the injured area that gets worse when the area is moved or pressure is applied. Loss of function in the injured area.	Examination of patient
9.	Kana bindha	Ear ache	Pain in ear	Examination of patient
10.	Raja Jakhma	Tuberculosis	Loss of weight, fever, cough, change of voice, pain in chest, spitting of mucus containing blood, weakness, burning sensation at feet & in palms.	Eye estimation

#### 4. Rituals suggested and performed for curing of diseases:

**Table: 6.5.7.2 Rituals suggested and performed for curing of diseases**

Name of rituals	Steps followed in performing the rituals
Mental worship	<ol style="list-style-type: none"> <li>1. First of all sitting in front of Marang Teacher (God) after morning bath is over.</li> <li>2. Then offer fine raw rice to hen and with sindur and agarbati.</li> <li>3. Sacrifices of hen to Goddess after the puja activity complete.</li> <li>4. Then the Prasad of Goddess (Hen meat) is being distributed to everybody residing in the village.</li> </ol>

#### 5. Use of therapeutic agents in treatment of patients

##### A. Plants in preparation of medicine

**Table: 6.5.7.3 Plants in preparation of medicine**

Name of plants	Botanical Name	Used for which disease	What Portion of plants used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Patala garuda plant	<u>Rauvolfia Serpentina</u>	Stomach pain	Root		✓	✓	
Mandar plant	<u>Hibiscus rosasinenis</u>	Disorder of menstruation	Root		✓	✓	
Hadajala plant	<u>Vitis quandrangulris</u>	Bone fracture	Root		✓	✓	
Apa marang plant	<u>Achyranthes aspera</u>	Hydrophobia	Root		✓	✓	
Patala garuda plant	<u>Rauvolfia serpentina</u>	Snake bite	Root		✓	✓	
Lajakuli plant	<u>Mimosa pudica</u>	Metal fatigue	Root		✓	✓	
Pedipedika plant	<u>Abutilon indicum</u>	Jaundice	Leaf		✓	✓	
Kusuma plant	<u>Carthamus tinctorius</u>	Skin disease	Bark		✓	✓	
Kain plant	<u>Nymphaea alba</u>	Tuberculosis	Flower		✓	✓	
Champa plant	<u>Michellia champaca</u>	Tuberculosis	Flower		✓	✓	

**B. Animal in preparation of medicine**

**Table: 6.5.7.4 Animal in preparation of medicine**

Name of Animal	Zoological name	Used for which disease	What Portion of animal used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Peacock	<u>Pava cristatus</u>	Disorder of menstruation	Hair	✓		✓	
Snail	<u>Calcareous epiphragm</u>	Ear ache	Flesh	✓		✓	

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK)**

**Table: 6.5.7.5 : Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of Disease	Local (ITK) + Ayurvedic
1.	Raja Jakhma	Tuberculosis	Oil of <u>Martynia annua</u> + ghee

**Healer No. 6.5.8**

**1. Name of Address: Bangali Hansda**

Village: Dhatika  
Panchayat: Raisuan  
P.O.: Kadagarh  
Block: Sadar Keonjhar  
District: Keonjhar  
Pincode: 758013  
Ph. No.: 9668144737

**2. Healer at a glance:**

1. Age	50years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	4
6. Earning member	2
7. Practice	Since 1999
8. Average patient per year	50-60
9. Practice	Herbal medicine and bone setter
10. Practice Learned from	Father (Jagan Hansdah)
11. Specialization	Disorder of menstruation, skin diseases, bone fracture, dysentery, esunphulia, epilepsy, stomach pain, mania, jaundice, gastritis.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.5.8.1 Diseases treated by the healer**

Sl No.	Local name of disease	English Name of disease	Symptoms of diseases	Methods of Identification
1.	Stree roga	Disorder of menstruation	Abdomen pain, weakness, headache, pain in different organs of body, loss of appetite & constipation.	Urine test
2.	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weakness, weight loss.	Eye estimation
3.	Charma raga	Skin diseases	Scabies, figures are affected, itching effect & pus formation.	Visible body symbols
4.	Hada Bhanga	Bone fracture	Swelling on fracture point of bone & pain occur.	Visible body symbols
5.	Thanda	Esunphulia	Severe headache and slight fever occur.	Eye estimation
6.	Bata	Epilepsy	Wind formation in stomach, indigestion.	Eye estimation
7.	Peta byatha	Stomach pain	Pain at night, spread to other part gradually, vomiting.	Examination of patient
8.	Kamala	Jaundice	Yellowness in eyes, excess of urination and yellow in colour, weakness.	Visible body symbol
9.	Pakasthali pradaha	Gastritis	Indigestion, constipation, burning sensation in chest, weakness, irritable.	Examination of patient

**4. Rituals suggested and performed for curing of diseases:** None

## 5. Use of therapeutic agents in treatment of patients

### A. Plants in preparation of medicine

**Table: 6.5.8.2 : Plants in preparation of medicine**

Name of plant	Botanical name	Used for which disease	What Portion of plants used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Duba plant	<u>Cyndoon dactylon</u>	Disorder of menstruation	All		✓		✓
Arakha plant	<u>Calotropis gigantea</u>	Skin diseases	Leaf		✓		✓
Amba plant	<u>Mangifera indica</u>	Dysentery	Stem		✓		✓
Nimba plant	<u>Azadirachta indica</u>	Stomach pain	Stem		✓		✓
Buta plant	<u>Cicer arietinum</u>	Mania	Fruit		✓		✓
Podina plant	<u>Mentha viridis</u>	Disorder of menstruation	Leaf		✓		✓
Nimba	<u>Azadirachta indica</u>	Gastritis	Stem		✓		✓

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

## 7. Use of Ayurvedic medicines with local treatments (ITK)

**Table: 6.5.8.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of Disease	Local (ITK) + Ayurvedic
1.	Udar batha	Stomach pain	Bark of <u>Azadirachta indica</u> + black pepper
2.	Charma roga	Skin diseases	Mustard oil + juice of <u>Azadirachta indica</u>
3.	Pakasthali pradha	Gastritis	Bark of <u>Mentha viridis</u> + black pepper

**Healer No. 6.5.9**

**1. Name and Address: Rohin Soren**

Village: Tikar pada  
Panchayat: Mahodei Joda  
P.O.: Tikarpada  
Block: Sadar Keonjhar  
District: Keonjhar  
Pincode: 758013  
Ph. No.: 9658147915



**2. Healer at a glance:**

1. Age	75years
2. Education	6 <sup>th</sup> Class
3. Religion	Hindu
4. Family type	Joint
5. Family size	6
6. Earning member	1
7. Practice	Since 1996
8. Average patient per year	30-50
9. Practice	Herbal medicine
10. Practice Learned from	Father
11. Specialization	Malaria, epilepsy, metal fatigue, swelling of chicks, diarrhoea, spleen jaundice, boil, piles.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.



**Table: 6.5.9.1 Diseases treated by the healer**

Sl. No.	Local name of disease	English Name of Disease	Symptoms of diseases	Methods of Identification
1.	Tarala jhada	Diarrhoea	Frequent loose motion, watery stools, light headedness or dizziness from dehydration.	Examination of patient
2.	Dhatu khyaya	Metal fatigue	Discharge of white liKuid substances through urine in concentrated form.	Urine test
3.	Kamala	Jaundice	Yellowness in eyes, excess of urination and look yellow in colour, weakness in the body.	Visible body symbols
4.	Malaria	Malaria	Headache, backache, high temperature, shivering & vomiting.	Eye estimation
5.	Jwara	Fever	Depression, acute, inflammation of the nose, muscular pain.	Eye estimation
6.	Bata	Epilepsy	Wind formation in stomach, indigestion.	Visible body symbols
7.	Arsha	Piles	External & internal swelling in the anal region, loss of appetite, itching effect of anus, wind formation in belly.	Stool test
8.	Batha	Boil	It turns red, painful, warm, and swollen. A fever may develop later on.	Eye estimation
9.	Pliha	Spleen	Fatigue, weight loss, frequent infections	Eye estimation
10.	Galua	Swelling in chicks	Severe Pain in throat, patient unable to consume food.	Visible symbol

**4. Rituals suggested and performed for curing of diseases:** None

## 5. Use of therapeutic agents in treatment of patients

### A. Plants in preparation of medicine

**Table: 6.5.9.2 Plants in preparation of medicine**

Name of plants	Botanical name	Used for which disease	What Portion of plants used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Ambada plant	<u>Spondias pinnata</u>	Jaundice	Bark		✓	✓	
Tulasi plant	<u>Ocimum sanctum</u>	Malaria	Leaf		✓	✓	
Patalagaruda plant	<u>Rauvolfia serpentina</u>	Epilepsy, metal fatigue	Bark		✓	✓	
Mahula plant	<u>Mdhuca indica</u>	Boil	Root		✓	✓	
Panna plant	<u>Piper betle</u>	Piles	Leaf		✓	✓	

### B. Animal in preparation of medicine:

**Table: 6.5.9.3 Animal in preparation of medicine**

Name of animals	Zoological name	Used for which disease	What Portion of animals used in preparation of medicines	Process		Consumable form	
				Burning	Drying	Food	Drink
Kochila	<u>Ocyceros griseus</u>	Spleen	Head		✓	✓	
Turtle	<u>Herbivora Testudinidae</u>	Epilepsy	Head		✓	✓	

### C. Minerals in use of medicines: Not used

## 6. Magical treatments: None

**7. Use of Ayurvedic medicines with local treatments (ITK):**

**Table: 6.5.9.4 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Batha	Boil	Root of <u>Mdhuca indica</u> + oil of <u>Ricinus communis</u>
2.	Bata	Epilepsy	Leaf of <u>Piper betle</u> + ghee
3.	Malaria	Malaria	Leaf of <u>Nyctanthes arbortristis</u> + root of <u>Curcuma aromatica</u> +black pepper

**Healer No. 6.5.10**

**1. Name and Address: Shibasankar Mardi**

Village: Rajbandh  
Panchayat: Raisuan  
P.O.: Raisuan  
Block: Jhumpra  
District: Keonjhar  
Pincode: 758013  
Ph. No.: 9437214323



**2. Healer at a glance:**

1. Age	47years
2. Education	M.A
3. Religion	Hindu
4. Family type	Joint
5. Family size	7
6. Earning member	2
7. Practice	Since 2004
8. Average patient per year	50-60
9. Practice	Herbal medicine
10. Practice Learned from	Father
11. Specialization	Jaundice, asthma, vibration on central portion of head.
12. Profession	Healing and service
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.5.10.1 Diseases treated by the healer**

Sl No.	Local name of disease	English name of disease	Symptoms of diseases	Methods of Identification
1.	Kamala	Jaundice	Yellowness in eyes, excess of urination and look yellow in colour, weakness in body.	Visible body symbols
2.	Talu dhukduk	Child disease	Vibration on central position of upper flat surface head.	Visible body symbols
3.	Swasha roga	Asthma	Nasal congestion, indigestion, constipation, diarrhoea.	Eye estimation

**4. Rituals suggested and performed for curing of diseases: None**

**5. Use of therapeutic agents in treatment of patient**

**A. Plants in preparation of medicine**

**Table: 6.5.10.2 Plants in preparation of medicine**

Name of plants	Botanical name	Used for which disease	What Portion of plants used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Tulasi plant	<u>Ocimum sanctum</u>	Jaundice	Leaf		✓	✓	
Mehendi plant	<u>Lawsonia inermis</u>	Jaundice	Root		✓	✓	
Coconut plant	<u>Cocos nucifera</u>	Child disease	Raw coconut water		✓		✓
Akhu plant	<u>Saccharum officinarum</u>	Asthma	Juice		✓		✓

**B. Animal in preparation of medicine**

**Table: 6.5.10.3 Animal in preparation of medicine**

Name of Animal	Zoological name	Used for which disease	What Portion of animal used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Bat	<u>Pipistrellus</u> <u>Pipistrellus</u>	Asthma	Flesh	✓		✓	
Turtle	<u>Herbivora</u> <u>Testudinidae</u>	Vibration of upper portion of head in body	Upper part	✓		✓	

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK)**

**Table: 6.5.10.4 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of Disease	Local (ITK) + Ayurvedic
1.	Swasa	Asthma	Leaf of <u>Ocimum sanctum</u> +Root of <u>Zingiber officinal</u> + leaf of <u>Curcuma aromatica</u> + <u>Piper longum</u> +honey+ghee
2.	Kamala	Jaundice	Juice of <u>Saccharum officinarum</u> + root of <u>lawsonia inermis</u> + Raw coconut water +chaula dhua pani+ country liquor.
3.	Talu dukduk	Child disease	The soil is used where the red ant live.

**Healer No. 6.5.11**

**1. Name and Address: Saharai Tudu**

Village: Totasahi  
Panchayat: Raisuan  
P.O.: Raisuan  
Block: Sadar Keonjhar  
District: Keonjhar  
Pincode: 758013  
Ph. No.: 9178681233



**2. Healer at a glance:**

1. Age	50years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	4
6. Earning member	1
7. Practice	Since 1997
8. Average patient per year	10-20
9. Practice	Herbal medicine
10. Practice Learned from	Guru
11. Specialization	Disorder of menstruation, gastritis, metal fatigue
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.5.11.1 Diseases treated by the healer**

Sl. No.	Local name of disease	English Name of disease	Symptoms of diseases	Methods of Identification
1.	Stree roga	Disorder of menstruation	Abdomen pain, weakness, headache, pain in different organs of body, loss of appetite & constipation.	Urine test
2.	Dhatu khyaya	Metal fatigue	Discharge of white liquid substances through urine in concentrated form.	Urine test
3	Pakasthali pradaha	Gastritis	Indigestion, constipation, burning sensation in chest, weakness, irritable.	Examination of patient

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicine**

**Table: 6.5.11.2 Plants in preparation of medicine**

Name of plants	Botanical name	Used for which disease	What Portion of plants used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Apamarang plant	<u>Achvranthes aspera</u>	Disorder of menstruation	Leaf, root		✓		✓
Amarpoi plant	<u>Kalanchoe pinnata</u>	Metal fatigue	Root		✓		✓
Pipali plant	<u>Piper longum</u>	Gastritis	Root		✓		✓



**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK)**

**Table: 6.5.11.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Peta byatha	Stomach pain	Bark of <u>Azadirachta indica</u> + black pepper
2.	Charma roga	Skin diseases	Mustard oil + leaf of <u>Kalanchoe pinnata</u>
3.	Pakasthali pradaha	Gastritis	Bark of <u>Azadirachta indica</u> + black pepper

**Healer No. 6.5.12**

**1. Name and Address: Mahendra Majhi**

Village: Dabank  
Panchayat: Padmapur  
P.O.: Padmapur  
Block: Sadar Keonjhar  
District: Keonjhar  
Pincode: 758013  
Ph. No.: 9090632119



**2. Healer at a glance:**

1. Age	35years
2. Education	7 <sup>th</sup> Class
3. Religion	Hindu
4. Family type	Joint
5. Family size	6
6. Earning member	1
7. Practice	Since 2001
8. Average patient per year	200
9. Practice	Herbal medicine
10. Practice Learned from	Self decision
11. Specialization	Cough, piles, gastritis, metal fatigue, diabetes
12. Profession	Healing and farming
13. Practice learned from	Self decision
14. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.5.12.1 Diseases treated by the healer**

Sl. No.	Local name of disease	English Name of disease	Symptoms of diseases	Methods of Identification
1.	Kasa	Cough	Discharge of sputum from mouth.	Eye estimation of sputum
2.	Dhatu khyaya	Metal fatigue	Discharge of white liKuid substances through urine in concentrated form.	Urine test
3.	Arsha	Piles	External & internal swelling in the anal region, loss of appetite, itching of anus, wind formation in belly.	By stool test
4.	Pakasthali pradaha	Gastritis	Indigestion, constipation, burning sensation in chest, weakness, irritable.	Eye estimation
5.	Madhumeha	Diabetes	Weakness, develop excessive hunger, burning sensation in urination.	Ants surrounded in urination place

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients:**

**A. Plants in preparation of medicine**

**Table: 6.5.12.2 Plants in preparation of medicine**

Name of plants	Botanical name	Used for which disease	What Portion of plants used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Pipali plant	<u>Piper longum</u>	Metal fatigue	Root, leaf		✓	✓	
Patalagaruda plant	<u>Rauvolfia serpentina</u>	Gastritis	Root		✓	✓	
Chita plant	<u>Andrographis paniculatus</u>	Diabetes	Root		✓	✓	
Debdaru plant	<u>Polyathia longifolia</u>	Cough	Root, stem		✓	✓	
Gudumari plant	<u>Gymnema sylvestre</u>	Diabetes	Leaf		✓	✓	
Kusum plant	<u>Carthamus tinctorius</u>	Cough	Flower, root		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatments:** None

**7. Use of Ayurvedic medicines with local treatments (ITK)**

**Table: 6.5.12.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Dhatu khyaya	Metal fatigue	Root of <u>Polyathia longifolia</u> + turmeric + root of <u>Piper longum</u>
2.	Kasa	Cough	Root of <u>Carthamus tinctorius</u> + mustard oil + garlic
3.	Pakasthali pradaha	Gastritis	Root of <u>Schleichera oleosa</u> + root of <u>Andrographis paniculatus</u> + ghee
4.	Madhumeha	Diabetes	Root of ( <u>Gymnema sylvestre</u> + <u>Rauvolfia serpentina</u> ) +_honey

**Healer No. 6.5.13**

**1. Name and Address: Jarman Majhi**

Village: Amrutpada  
Panchayat: Parajanpur  
P.O.: Parajanpur  
Block: Sadar Keonjhar  
District: Keonjhar  
Pincode: 758031  
Ph. No.: 8895819266

**2. Healer at a glance:**

1. Age	60years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	7
6. Earning member	3
7. Practice	Since 2005
8. Average patient per year	35-40
9. Practice	Herbal medicine
10. Practice Learned from	Guru (Bulei Tudu)
11. Specialization	Joint pain, stomach pain, tuberculosis, asthma, piles, snake bite, hydrophobia, metal fatigue.
12. Profession	Healing and Farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.5.13.1 Diseases treated by the healer**

Sl. No.	Local name of disease	English Name of disease	Symptoms of diseases	Methods of Identification
1.	Anthu Ganthi batha	Joint pain	General symptoms include fatigue, severe pain in joints, difficult to move.	By examination of patient
2.	Dhatu khyaya	Metal fatigue	Discharge of white liKuid substances in urine in concentrated form.	Urine test
3.	Arsha	Piles	External & internal swelling in the anal region, loss of appetite, itching of anus, wind formation in belly.	Stool test
4.	Swasha roga	Asthma	Nasal congestion, indigestion, constipation, diarrhoea.	Eye estimation
5.	Madhumeha	Diabetes	Weakness, develop excessive hunger, burning sensation in urination.	Ants surrounded in urination place.
6.	Raja Jakhama	Tuberculosis	Loss of weight, fever, cough, change of voice, pain in chest, spitting of mucus containing blood, weakness, burning sensation at feet & in palms.	Eye estimation
7.	Peta byatha	Stomach pain	Pain at night, spread to other part of body gradually, vomiting.	By examination of patient
8.	Sarpa dansan	Snake bite	Look bluish eye of the patient.	Marking wounds at the bite site of patient
9.	Jalantaka	Hydrophobia	Patient becomes hydrophobic in nature.	Eye estimation

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients:**

**A. Plants in preparation of medicine**

**Table: 6.5.13.2 Plants in preparation of medicine**

Name of plants	Botanical name	Used for which disease	What Portion of plants used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Patalagaruda plant	<u>Rauvolfia serpentina</u>	Snake bite	Root		✓	✓	
Debdaru plant	<u>Polyathia Longifolia</u>	Metal fatigue	Root, Stem		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

## 6. Magical treatments:

**Table: 6.5.13.3 List of diseases for which magical treatments are done**

Local name of disease	English name of disease	Magical treatments adopted
Sarpa dansan	Snake bite	After snake bite, the healer performs the rituals for snake bite, applies herbal medicines all over the patient's body and gives special herbal medicine to consume namely Patala garuda that protects the patient from the poison of snakes. Some mantra is also chanted.
Jalantaka	Hydrophobia	After dog bite, the healer gives some herbal medicine which is made up by mixture of black pepper and root of <u>cyprous rotundus</u> and mantra is chanted. Then healer and patient, both are go to the village temple for offering coconut, banana other worship material and perform some oblation.

## 7. Use of Ayurvedic medicines with local treatments (ITK)

**Table: 6.5.2.13.4 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of Disease	Local (ITK) + Ayurvedic
1.	Joint pain	Joint pain	Root of <u>Rauvolfia serpentina</u> + turmeric
2.	Swasa roga	Asthma	Juice of <u>Azadirachta indica</u> + mustard oil
3.	Jakhma	Tuberculosis	Root of <u>Polyathia Longifolia</u> + ghee

**Healer No. 6.5.14**

**1. Name and Address: Suklal Majhi**

Village: Amrutpada  
Panchayat: Parajanpur  
P.O.: Parajanpur  
Block: Sadar Keonjhar  
District: Keonjhar  
Pincode: 758031  
Ph. No.: 7377216292

**2. Healer at a glance:**

1. Age	50years
2. Education	7 <sup>th</sup> class
3. Religion	Hindu
4. Family type	Joint
5. Family size	7
6. Earning member	2
7. Practice	Since 2011
8. Average patient per year	35-40
9. Practice	Herbal medicine
10. Practice Learned from	Self decision
11. Specialization	Diabetes, joint pain, piles, fits, pistulla
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.



**Table: 6.5.14.1 Diseases treated by the healer**

Sl. No.	Local name of disease	English Name of disease	Symptoms of diseases	Methods of Identification
1.	Ganthi pida	Joint pain	General symptoms include fatigue, severe pain occur in joints, difficult to move.	By examination of patient
2.	Bata	Epilepsy	Wind formation in stomach, indigestion.	Eye estimation
3.	Arsha	Piles	External & internal swelling in the anal region, loss of appetite, itching effect of anus, wind formation in belly.	By stool test
4.	Mala kantaka	Constipation	A root like structure develop inside the anus general seizures, often leading to loss of consciousness, occurrence of jerks in the body, muscle spasms which ejects or comes out at the time of stooling and give pain to patient.	Eye estimation
5.	Madhumeha	Diabetes	Weakness, develop excessive hunger, burning sensation in urination.	Ants surrounded in urination place.

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients:**

**A. Plants in preparation of medicine**

**Table: 6.5.14.2 Plants in preparation of medicine**

Name of plants	Botanical name	Used for which disease	What Portion of plants used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Apamaranga plant	<u>Achyranthes aspera</u>	Metal fatigue	Root		✓	✓	
Bara plant	<u>Ficus bengalensis</u>	Jointpain	Root		✓	✓	
Ghikuanri plant	<u>Aloe vera</u>	Diabetes	Leaf		✓	✓	

**B. Animal in preparation of medicine:** Not used

**C. Minerals in use of medicines:** Not used

**6. Magical treatments:** None

**7. Use of Ayurvedic medicines with local treatments (ITK)**

**Table: 6.5.14.3 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Anthu ganthi byatha	Joint pain	Root of <u>Ficus bengalensis</u> + <u>Eugenia caryophyllus</u>
2.	Bata	Epilepsy	Leaf of <u>Aloe vera</u> + ghee
3.	Madhumeha	Diabetes	Root of <u>Achyranthes aspera</u> + fruit of <u>cocos nucifera</u> + alum

**Healer No. 6.5.15**

**1. Name and Address: Pradhan Majhi**

Village: Kashira  
Panchayat: Parajanpur  
P.O.: Parajanpur  
Block: Sadar Keonjhar  
District: Keonjhar  
Pincode: 758031  
Ph. No.: 9090008302



**2. Healer at a glance:**

1. Age	70years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	5
6. Earning member	3
7. Practice	Since 1980
8. Average patient per year	30
9. Practice	Herbal medicine, magical and guni
10. Practice Learned from	Father
11. Specialization	Diarrhoea, chickenpox, malaria, epilepsy, women disease, small pox, hypnotism, evil spirit
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.5.15.1 Diseases treated by the healer**

Sl. No.	Local name of disease	English Name of Disease	Symptoms of diseases	Methods of Identification
1.	Tarala jhada	Diarrhoea	Occurance of frequent loose motion watery stools, light headedness or dizziness from dehydration.	Examination of patient
2.	Hada puti	Chickenpox	Small bulging red colour pimple size mark spread all over the body.	Visible body symbols
3.	Stree roga	Disorder of menstruation	Abdomen pain, weakness, headache, pain in different organs of body, loss of appetite & constipation.	Eye estimation
4.	Malaria	Malaria	Headache, backache, high temperature, shivering & vomiting.	Eye estimation
5.	Basanta	Small pox	Small and big round shape bulging red colour scar mark spread on the body.	Visible body symbols
6.	Bata	Epilepsy	Wind formation in stomach, indigestion.	Eye estimation
7.	Guni	Hypnotism	Body turn in to black	Body turn in to black
8.	Dahani lagiba	Evil spirit	Body turn in to black	Body turn in to black

**4. Rituals suggested and performed for curing of diseases:**

**Table: 6.5.15.2 Rituals suggested and performed for curing of diseases**

Name of disease	Steps followed in performing the rituals
Diarrhoea Small pox Malaria Chickenpox	1. Bathing with empty stomach, proceed to temple & sit for a while worshipping the God by offering banana, coconut, sindur, sandal. 2. Offering to God 3-hen, 2-guana, 1-pigeon and 1-goat 3. Then distribute Prasad to everyone

## 5. Use of therapeutic agents in treatment of patients

### A. Plants in preparation of medicine

**Table: 6.5.15.3 Plants in preparation of medicine**

Name of plants	Botanical name	Used for which disease	What Portion of plants used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Patala garuda plant	<u>Rauvolfia Serpentina</u>	Diarrhoea	Root		✓	✓	
Babul plant	<u>Acacia nilotica</u>	Chickenpox	Root		✓	✓	
Tulasi plant	<u>Ocimum sanctum</u>	Malaria	Leaf		✓	✓	
Kalara plant	<u>Momordica charantia</u>	Malaria	Root		✓	✓	
Janhi plant	<u>Luffa acutangula</u>	Malaria	Root		✓	✓	
Bhuin champa plant	<u>Michellia champaca</u>	Epilepsy	Root		✓	✓	
Ada plant	<u>Zingiber officinalis</u>	Epilepsy	Leaf		✓	✓	
Dudhi plant	<u>Wrightia tinctoria</u>	Epilepsy	Root		✓	✓	
Harida plant	<u>Terminalia chebula</u>	Disorder of menstruation	Fruit		✓	✓	

**B. Animal in preparation of medicine**

**Table: 6.5.15.4 Animal in preparation of medicine**

Name of Animal	Zoological name	Used for which disease	What Portion of animal used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Bat	<u>Pipistrellus pipistrellus</u>	Malaria	Wings	✓		✓	

**C. Minerals in use of medicines: Not used**

**6. Magical treatment:**

**Table: 6.5.15.5 Magical treatment**

Local name of disease	English name of disease	Magical treatments adopted
Bhuta lagiba	Ghost	<u>Mantra</u>
Dahani lagiba	Evil spirit	Najar pajar bagbir de e najar kie kate Teacher kate , Teachera gian hi muin katai, kat sere kahar angya iswhor parbati nka angyate ami Ami katiachi katia jan.

**7. Use of Ayurvedic medicines with local treatments (ITK): Not used**

**Healer No. 6.5.16**

**1. Name and Address: Singu Majhi**

Village: Amrutpada  
Panchayat: Parajanpur  
P.O.: Parajanpur  
Block: Sadar Keonjhar  
District: Keonjhar  
Pincode: 758031  
Ph. No.: 9438336243



**2. Healer at a glance:**

1. Age	65years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	6
6. Earning member	2
7. Practice	Since 1999
8. Average patient per year	10-20
9. Practice	Herbal medicine and magical
10. Practice Learned from	Father (Kalu Majhi)
11. Specialization	Piles, jaundice, hydrophobia, stomach pain, fever, cough, epilepsy, mouth cavity, skin diseases, gastritis, disorder of menstruation
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.5.16.1 Diseases treated by the healer**

Sl. No.	Local name of disease	English Name of disease	Symptoms of diseases	Methods of Identification
1.	Kamala	Jaundice	Yellowness in eyes, excess of urination and yellow in colour, weakness in body.	Visible body symbols
2	Arsha	Piles	External & internal swelling in the anal region, loss of appetite, itching of anus, wind formation in belly.	Stool test
3	Jalantaka	Hydrophobia	Patient becomes hydrophobic in nature	Patient examination
4	Stree roga	Disorder of menstruation	Abdomen pain, weakness, headache, pain in different organs of body, loss of appetite & constipation.	Patient examination
5	Jwara	Fever	Depression, acute, inflammation of the nose, muscular pain.	Patient examination
6	Peta byatha	Stomach pain	Pain at night, spread to other part of body gradually, vomiting.	Patient examination
7	Mukha gahwara	Mouth sore	Look mouth redness, weakness, unable to eat & drink.	Patient examination
8	Pakasthali pradaha	Gastritis	Indigestion, constipation, burning sensation in chest, weakness, irritable.	Patient examination
9	Charma roga	Skin diseases	Scabies, figures are affected, itching & pus formation.	Patient examination
10	Bata	Epilepsy	Wind formation in stomach, indigestion.	Patient examination
11	kasa	Cough	Discharge of sputum from mouth.	Eye estimation of sputum



#### 4. Rituals suggested and performed for curing of diseases

**Table: 6.5.16.2 Rituals suggested and performed for curing of diseases**

Name of rituals	Steps followed in performing the rituals
Mantra patha	1. In empty stomach After bathing worship the God in empty stomach. 2. Offering fruits to God. 3. Then distribute the Prasad to everyone.

#### 5. Use of therapeutic agents in treatment of patients

##### A. Plants in preparation of medicine

**Table: 6.5.16.3 Plants in preparation of medicine**

Name of plants	Botanical name	Used for which disease	What Portion of plants used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Harida plant	<u>Terminalia chebula</u>	Disorder of menstruation	Root		✓	✓	
Apamarang plant	<u>Achvranthes aspera</u>	Disorder of menstruation	All		✓	✓	
Apa marang plant	<u>Achyranthes aspera</u>	Hydrophobia	Root		✓	✓	
Dhatuli plant	<u>Woodfordia fruticosa</u>	Fever	Root		✓	✓	
Amba plant	<u>Mangifera indica</u>	Dysentery	Bark		✓	✓	
Kalara plant	<u>Momordica Charantia</u>	Dysentery	Bark		✓	✓	
Jamu plant	<u>Syzygium cumini</u>	Dysentery	Bark		✓	✓	
Gadaa plant	<u>Ricinus comumis</u>	Epilepsy	Thorn		✓	✓	

**B. Animal in preparation of medicine:**

**Table: 6.5.16.4 Animal in preparation of medicine**

Name of animals	Zoological name	Used for which disease	What Portion of animals used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Bear	<u>Ursidae</u> carnivora	Fever	Hair	✓			✓
Bat	<u>Pipistrellus</u> <u>pipistrellus</u>	Fever	Flesh	✓			✓
Crab	<u>Liocarcinus</u> <u>vernalis</u>	Whooping cough	Thorn	✓			✓
Cricket	<u>Gryllus</u> <u>assimilis</u>	Jaundice	Bile	✓			✓

**C. Minerals in use of medicines:** Not used

**6. Magical treatments:** Not used

**7. Use of Ayurvedic medicines with local treatments (ITK)**

**Table: 6.5.16.5 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Stree roga	Disorder of menstruation	<u>Mdhuca indica</u> oil + birguluchi+ tendiupul +sagudana
2.	Kasa	Whooping cough	Black pepper + ghee + sarjun plant
3.	Charma roga	Skin diseases	<u>Pongamia glabra</u> oil + black cumin seed.

**Healer No. 6.5.17**

**1. Name and Address: Sundarmani Majhi**

Village: Amrutpada  
Panchayat: Parajanpur  
P.O.: Parajanpur  
Block: Sadar Keonjhar  
District: Keonjhar  
Pincode: 758031  
Ph. No.: 07787844220

**2. Healer at a glance:**

1. Age	45years
2. Education	7 <sup>th</sup> Class
3. Religion	Hindu
4. Family type	Joint
5. Family size	4
6. Earning member	1
7. Practice	Since 2004
8. Average patient per year	60
9. Practice	Herbal medicine
10. Practice Learned from	Guru (Naba Pradhan)
11. Specialization	Skin disease, stomach pain, piles, disorder of menstruation, jaundice, hydrocele, eye disease, joint pain, tuberculosis, pihidi fever, mirigi fever.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.5.17.1 Diseases treated by the healer**

Sl. No.	Local name of disease	English Name of Disease	Symptoms of diseases	Methods of Identification
1.	Charma roga	Skin disease	Scabies, figures are affected, itching & pus formation.	By Examination of patient
2.	Peta byatha	Stomach pain	Pain at night, spread to other part of body gradually, vomiting.	By examination of patient
3.	Stree roga	Disorder of menstruation	Abdomen pain, weakness, headache, pain in different organs of body, loss of appetite & constipation.	By examination of patient
4.	Arsha	Piles	External & internal swelling in the anal region, loss of appetite, itching of anus, wind formation in belly.	Stool test
5.	Kamala	Jaundice	Yellowness in eyes, excess of urination and yellow in colour, weakness in the body.	Visible body symbol
6.	Raja Jakhma	Tuberculosis	Loss of weight, fever, cough, change of voice, pain in chest, spitting of mucus containing blood, weakness, burning sensation at feet & in palms.	Eye estimation
7.	Pihuda jwara	Pihuda fever	Symptoms include fever, <u>headache</u> , sweats, fatigue, <u>nausea</u> and vomiting.	Eye estimation
8.	Anthu ganthi byatha	Joint pain	general symptoms include fatigue, severe pain in joints, difficult to move	Ants surrounded in urine.
9.	Mirigi jwara	Mirigi fever.	<u>Headache</u> and vomiting	Eye estimation
10.	Chakhyu roga	Eye disease	Problem to see the objects clearly.	By examination of patient
11.	Ecsira	Hydrocele	Symptoms include size of testis increases and unable to walk. Deposition of water in testis.	By examination of patient

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicine**

**Table: 6.5.17.2 Plants in preparation of medicine**

Name of plants	Botanical name	Used for which disease	What Portion of plants used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Bhuin champa plant	<u>Kaempferia rotunda</u>	Stomach pain	Root		✓	✓	
Bhuin kain plant	<u>Nymphaea lotus</u>	Disorder of menstruation	Root		✓	✓	
Hatikana plant	<u>Leea crispa</u>	Joint pain	Bark		✓	✓	
Methi plant	<u>Trigonella foenum</u>	Eye disease	Leaf		✓	✓	
Chandan plant	<u>Santalum album</u>	Disorder of menstruation	Bark		✓	✓	

**B. Animal in preparation of medicine:**

**Table: 6.5.17.3 Animal in preparation of medicine**

Name of Animals	Zoological name	Used for which disease	What Portion of Animals used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Minnow fish	<u>Pimephales promelas</u>	Eye disease	Bile	✓		✓	

**C. Minerals in use of medicines:**

**Table: 6.5.17.4 Minerals in use of medicines**

Name of minerals	Used for which disease	What Portion of minerals used in preparation of medicines	Process		Consumable form	
			Burning	Soaking	Food	Wearing on the body
Copper	Someone eye influence	All parts of plant	✓			✓
Mahulagira	Someone eye influence	All parts of plant	✓			✓
Hudtad	Someone eye influence	All parts of plant	✓			✓
Ambarikasi	Periods problem	All parts of plant	✓			✓
Sulphur	Someone eye influence	All parts of plant	✓			✓
Rasa sindur	Period problem	All parts of plant	✓			✓

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK)**

**Table: 6.5.17.5 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of Disease	Local (ITK) + Ayurvedic
1.	Peta byatha	Stomach disease	Leaf, Root of Mundapitari plant + juice of <u>Zingiber officinale</u>
2.	Anthu ganthi byatha	Joint pain	Root of Bhuin asana plant + ghee
3.	Kamala	Jaundice	Root of <u>Kaempferi rotunda</u> + leaf of <u>Lawsonia inermis</u>
4.	Stree roga	Disorder of menstruation	Root of <u>Nymphaea lotus</u> + bark of <u>Santalum album</u> + ghee
5.	Chakhyu roga	Eye disease	Leaf of <u>Trigonella foenum</u> + bile of <u>Pimephales promelas</u> + mustard oil

**Healer No. 6.5.18**

**1. Name and Address: Bhatta Majhi**

Village: Silisuan  
Panchayat: Kandarapasi  
P.O.: Silisuan  
Block: Sadar Keonjhar  
District: Keonjhar  
Pincode: 758031  
Ph. No.: 9668145879



**2. Healer at a glance:**

1. Age	73years
2. Education	9 <sup>th</sup> Class
3. Religion	Hindu
4. Family type	Joint
5. Family size	3
6. Earning member	2
7. Practice	Since 1994
8. Average patient per year	200-240
9. Practice	Herbal medicine
10. Practice Learned from	Father
11. Specialization	Asthma, epilepsy, Piles, tuberculosis, heart disease, hydrophobia, gastritis, diabetes, scrotal hydrocele, hair fall.
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.5.18.1 Diseases treated by the healer**

Sl. No.	Local name of disease	English Name of disease	Symptoms of diseases	Methods of Identification
1.	Swasa roga	Asthma	Nasal congestion, indigestion, constipation, diarrhoea, breathing problem.	By Examination of patient
2.	Chuti upudiba	Hair fall	More no of hair falls after combing on head.	Eye estimation
3.	Ecsira	Scrotal hydrocele	Symptoms include size of testis increases and unable to walk. Deposition of water in testis.	By examination of patient
4.	Arsha	Piles	External & internal swelling in the anal region, loss of appetite, itching of anus, wind formation in belly.	Stool test
5.	Pakasthali pradaha	Gastritis	Indigestion, constipation, burning sensation in chest, weakness, irritable.	Eye estimation
6.	Raja Jakhma	Tuberculosis	Loss of weight, fever, cough, change of voice, pain in chest, spitting of mucus containing blood, weakness, burning sensation at feet & in palms.	Eye estimation
7.	Bata	Epilepsy	Wind in stomach, indigestion.	Eye estimation
8.	Madhumeha	Diabetes	Weakness, develop excessive hunger, burning sensation in urination.	Ants surrounded in urination place.
9.	Jalantaka	Hydrophobia	Patient becomes hydrophobic in nature	Eye estimation
10.	Hrud roga	Heart disease	Severe pain in heart, sweating often develop headache.	By examination of patient
11.	Kana bindha	Ear ache	Pain occur in ear, headache.	By examination of patient



#### 4. Rituals suggested and performed for curing of diseases:

**Table: 6.5.18.2 Rituals suggested and performed for curing of diseases**

Name of disease	Steps followed in performing the rituals
Jalantaka	The healer gives some herbal medicine to patient . Then some mantra is chanted to worship the god. Then healer and patient, both go together to the village temple for offering coconut, banana and other worship material. At temple periphery, the healer starts oblation by ghee burning. Then Prasad is distributed to all members those who are participating in oblation. After puja, the patient offers money to temple

#### 5. Use of therapeutic agents in treatment of patients

##### A. Plants in preparation of medicine

**Table: 6.5.18.3 Plants in Preparation of Medicine**

Name of plants	Botanical name	Used for which disease	What Portion of plants used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Bhuin champa plant	<u>Kaempferia rotunda</u>	Epilepsy	Root		✓	✓	
Agnijhal plant	<u>Clausena excavata</u>	Epilepsy	Root		✓	✓	
Satabari plant	<u>Asparagus gracilis</u>	Tuberculosis	Leaf, root		✓	✓	
Aankal plant	<u>Alangium chinense</u>	Scrotal hydrocele	Root		✓	✓	
Arjun plant	<u>Terminalia arjuna</u>	Heart disease	Bark		✓	✓	

**B. Animal in preparation of medicine:**

**Table: 6.5.18.4 Animal in preparation of medicine**

Name of animals	Zoological name	Used for which disease	What Portion of animals used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Scorpion	<u>Archinida scorpionida</u>	Ear ache, Hair fall	Head	✓			✓
Snail	<u>Calcareous epiphragm</u>	Epilepsy	Middle part	✓			✓
Minnow fish	<u>Pimephales promelas</u>	Tuberculosis	Bile	✓			✓

**C. Minerals in use of medicines:**

**Table: 6.5.18.5 Minerals in use of medicines**

Name of minerals	Used for which disease	What Portion of minerals used in preparation of medicines	Process		Consumable form	
			Burning	Soaking	Food	Wearing on the body
Copper	Someone eye influence	All	✓			✓

**6. List of diseases for which magical treatments are done:** None

**7. Use of Ayurvedic medicines with local treatments (ITK)**

**Table: 6.5.18.6 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Pakasthali pradaha	Gastritis	Root of <u>Euphorbia hirta</u> plant+ root of <u>Cinnamomum verum</u>
2.	Arsha	Piles	Root of <u>Polyalthia longifolia</u> + turmeric
3.	Madhumeha	Diabetes	Leaf of <u>Gymnema sylvestre</u> + honey

**Healer No. 6.5.19**

**1. Name and Address: Pitambar Majhi**

Village: Teliarshla  
Panchayat: Arshla  
P.O.: Arshala  
Block: Jhumpra  
District: Keonjhar  
Pincode: 758031  
Ph. No.: 9439170084



**2. Healer at a glance:**

1. Age	87 years
2. Education	6 <sup>th</sup> Class
3. Religion	Hindu
4. Family type	Joint
5. Family size	3
6. Earning member	2
7. Practice	Since 1980
8. Average patient per year	70-100
9. Practice	Herbal medicine and magical
10. Practice Learned from	Father and guru (Sankar Murmu and Balaram Tanti)
11. Specialization	Malaria, fever, diarrhoea, stomach pain, chicken pox, small pox, jaundice, snake bite, hydrophobia
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.5.19.1 Diseases treated by the healer**

Sl. No.	Local name of disease	English Name of Disease	Symptoms of diseases	Methods of Identification
1.	Tarala Jhada	Diarrhoea	Develop frequent loose motion, watery stools, light headedness or dizziness from dehydration.	By Examination of patient
2.	Peta byatha	Stomach pain	Pain at night, spread to other part of body gradually, vomiting.	Eye estimation
3.	Kamala	Jaundice	Yellowness in eyes, excess of urination and look yellow in colour, weakness develop in body.	Visible body symbols
4.	Malaria	Malaria	Headache, backache, high temperature, shivering & vomiting.	Eye estimation
5.	Jwara	Fever	Depression, acute, inflammation of the nose, muscular pain.	Eye estimation
6.	Hada puti	Chicken pox	Small bulging red colour pimple size mark spread on the body.	Visible body symbols
7.	Basanta	Small pox	Small and big round shape bulging red colour scar mark spread on the body	Visible body symbols
8.	Sarpa dansan	Snake bite	Severe pain at the location of the bite spot swelling, redness and blushing at the location of the bite, nausea, vomiting,	Eye estimation
9.	Jalantaka	Hydrophobia	Patient becomes hydrophobic in nature.	Eye estimation

#### 4. Rituals suggested and performed for curing of diseases:

**Table: 6.5.19.2 Rituals suggested and performed for curing of diseases**

Name of disease	Steps followed in performing the rituals
Snake bite	After snake bite, the healer performs the rituals for snake bite, applies herbal medicines all over the patient's body and give special herbal medicine to eat namely <u>Rauvolfia serpentina</u> that protects the patient from the poison of snakes. Some mantra is also chanted.
Hydrophobia	After dog bite, the healer gives some herbal medicine and mantra is chanted for worshipping the God. Then healer and patient go together to the village temple & offers coconut, banana and other worship material to the Goddess and perform oblation.

#### 5. Use of therapeutic agents in treatment of patients

##### A. Plants in preparation of medicine

**Table: 6.5.19.3 Plants in Preparation of medicine**

Name of plants		Used for which disease	What Portion of plants used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Nali Apamarga plant	<u>Achvranthes aspera</u>	Stomach pain	Root		✓	✓	
Gangasiuli plant	<u>Nyctanthes arbortristis</u>	Fever, diarrhoea	Leaf		✓	✓	
Kanteikoli plant	<u>Flacourtia indica</u>	Chicken pox, small pox	Root		✓	✓	
Bel plant	<u>Aegle marmelos</u>	Jaundice	Root		✓	✓	
Patalagaruda plant	<u>Rauvolfia serpentina</u>	Snake bite	Root, leaf		✓	✓	

**B. Animal in preparation of medicine:**

**Table: 6.5.19.4 Animal in preparation of medicine**

Name of animals	Zoological name	Used for which disease	What Portion of animals used in preparation of medicines	Process		Consumable form	
				Burning	Drying	Food	Drink
Cow	<u>Bos indicus</u>	Malaria	Horn		✓	✓	
Mad dog	<u>Cannis familiaris</u>	Diarrhoea	Bone		✓	✓	
Monkey	<u>Macaque monkey</u>	Stomach pain	Bone		✓	✓	
Bear	<u>Ursidae carnivora</u>	Jaundice	Bone		✓	✓	

**C. Minerals in use of medicines: Not used**

**6. Magical treatments:**

**Table: 6.5.19.5 List of diseases for which magical treatments are done**

Local name of disease	English name of disease	Magical treatments adopted
Najar lagiba	Put an ill eye on others.	At first, patient take bath in empty stomach and then proceeds to temple & sits for a while worship the God. The healer sprinkle chanted water over the body of patient. Then advise to wear talisman on the right hand side of patient.
Bhuta jhadiba	Removal of ghost	When the ghost appears in the body of the patient, he behaves abnormally followed by fever. Then they offer all kinds of fruits like banana, coconut to the God along with lightening lamp with ghee, incense. Slaughter of hen takes place near the Goddess after the puja activity is over. Then the prasad of Goddess (Hen met) is being distributed to everybody residing in the village mainly to the patient. After all of this, the patient is advised to wear talisman which is made up metal consist of Neem, Bhalia, Saala, Pingu and root of chaar plant.

**7. Use of Ayurvedic medicines with local treatments (ITK): None**

**Healer No. 6.5.20**

**1. Name and Address: Damburdhar Majhi**

Village: Teli Arshala  
Panchayat: Arshala  
P.O.: Arshala  
Block: Jhumpra  
District: Keonjhar  
Pincode: 758031  
Ph. No.: 7077425271



**2. Healer at a glance:**

1. Age	59years
2. Education	Illiterate
3. Religion	Hindu
4. Family type	Joint
5. Family size	7
6. Earning member	1
7. Practice	Since 1990
8. Average patient per year	50-60
9. Practice	Herbal medicine
10. Practice Learned from	Self decision
11. Specialization	Hydrophobia, scorpion bite, cancer, dysentery, small pox, chicken pox, ear ache, nasal bleeding
12. Profession	Healing and farming
13. Restriction in treatment	Opened for all

**3. Diseases treated by the healer:** The survey studied critically the diseases treated by the healers along with symptoms and methods of identification.

**Table: 6.5.20.1 Diseases treated by the healer**

Sl. No.	Local name of disease	English name of Disease	Symptoms of diseases	Methods of Identification
1.	Karkata	Cancer	Symptoms like fever, extreme tiredness, or weight loss, dizziness and unusual bleeding discharge.	Examination of patient
2.	Jhada	Dysentery	Passage of mucus with stool, loss of appetite, weakness, weight loss.	Eye estimation
3.	Basanta	Small pox	Small and big round shape bulging with red colour scar mark spread on the body.	Visible body symbols
4.	Hada puti	Chicken pox	Small bulging red colour pimple size mark spread on the body.	Visible body symbols
5.	Bichha kamuda	Scorpion bite	Exaggerated sensation at the bite site excitability. Pain at that bites point.	Eye estimation
6.	Jalantaka	Hydrophobia	Exaggerated sensations at the bite site excitability, loss of sensation in an area of the body, loss of muscle function, pain occur at the bite site, swelling developed.	Eye estimation
7.	Nasa rakta sraba	Nasal bleeding	Bleeding from nose.	Examination of patient
8.	Kana Bindha	Ear ache	Pain occur in ear, headache.	Eye estimation

**4. Rituals suggested and performed for curing of diseases:** None

**5. Use of therapeutic agents in treatment of patients**

**A. Plants in preparation of medicine**



**Table: 6.5.20.2 Plants in preparation of medicine**

Name of plants	Botanical name	Used for which disease	What Portion of plants used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Baunsa plant	<u>Bambusa arundinacea</u>	Cancer	Internal tender portion of bamboo		✓	✓	
Kusum plant	<u>Carthamus tinctorius</u>	Cancer	Seed		✓	✓	
Nimba plant	<u>Azadirachta indica</u>	Cancer	Oil		✓	✓	
Dokta plant	<u>Nicotiana tabacum</u>	Chicken pox, small pox	Seed		✓	✓	
Ankal plant	<u>Alangium chinense</u>	Hydrophobia	Root		✓	✓	
Jari plant	<u>Ficus microcarpa</u>	Ear ache	Leaf		✓	✓	
Oluo plant	<u>Amorphophallus sylvaticus</u>	Ear ache	Juice of plant		✓	✓	

**B. Animal in preparation of medicine**

**Table: 6.5.20.3 Animal in preparation of medicine**

Name of Animal	Zoological name	Used for which disease	What Portion of animal used in preparation of medicines	Process		Consumable form	
				Burning	Soaking	Food	Drink
Monkey	<u>Macaque monkey</u>	Cancer	Bone	✓		✓	
Dog	<u>Cannis familiaris</u>	Cancer	Bone	✓		✓	
Bear	<u>Ursidae carnivora</u>	Cancer	Bone	✓		✓	
Turtle	<u>Herbivora testudinidae</u>	Nasal bleeding	Upper part	✓		✓	

**C. Minerals in use of medicines: Not used**

**6. Magical treatment:** None

**7. Use of Ayurvedic medicines with local treatments (ITK)**

**Table: 6.5.20.4 Use of Ayurvedic medicines with local treatments (ITK)**

Sl. No.	Local name of disease	English Name of disease	Local (ITK) + Ayurvedic
1.	Karkata	Cancer	Internal tender portion of <u>Bambusa arundinacea</u> + seed of <u>Carthamus tinctorius</u> + oil of <u>Azadirachta indica</u>
2.	Jalantaka	Hydrophobia	Root of <u>Alangium chinense</u> + turmeric
3.	Kana bindha	Ear ache	Leaf of <u>Ficus microcarpa</u> + juice of <u>Amorphophallus sylvaticus</u>

**6.B A Summery of diseases treated by individual Santal healers**

**Table: 6.B List of Disease treated by Santal healers (N=40)**

Sl. No.	Local Name	English Name	Frequency	Percentage
1.	Abu	Tumour	01	2.50
2.	Agrarjiva (hada khasi jiba)	Dislocation of bone	01	2.50
3.	Amla	Acidity	01	2.50
4.	Anthuganthi byatha	Joint pain	08	20.00
5.	Arsha	Piles	13	32.50
6.	Basanta	Small pox	02	5.00
7.	Bata	Epilepsy	22	55.00
8.	Bata jwara	Filaria	01	2.50
9.	Beenchi	Eczema	03	7.50
10.	Bichha kamuda	Scorpion bite	02	5.00
11.	Birudi kamudiba	Wasp bite	01	2.50
12.	Charma roga	Skin disease	09	22.50
13.	Chuti jhadiba	Hair fall	02	5.00
14.	Dadma	Dysentery	01	2.50
15.	Dahani lagiba	Evil spirit	01	2.50
16.	Danta bindha	Tooth ache	03	7.50
17.	Dhatu khyaya	Metal fatigue	21	52.50
18.	Ecsira	Scrotal hydrocele	02	5.00
19.	Galua	Swelling in chick	01	2.50
20.	Garmi	Mania	04	10.00
21.	Guni	Hypnotism	03	7.50
22.	Hada bhanga	Bone fracture	05	12.50
23.	Hadaputi	Chicken pox	02	5.00
24.	Jalantaka	Hydrophobia	10	25.00
25.	Jhada	Dysentery	10	25.00
26.	Jwara	Fever	06	15.00
27.	Kamala	Jaundice	19	47.50
28.	Kana bindha	Ear ache	03	7.50
29.	Karkata roga	Cancer	03	7.50
30.	Khadyabhaha	Malnutrition	02	5.00
31.	Kurmi	Worm disease	03	7.50
32.	Kustha	Leprosy	01	2.50
33.	Madhumeha	Diabetes	05	12.50
34.	Malakanthaka	Costipation	02	5.00

Sl. No.	Local Name	English Name	Frequency	Percentage
35.	Malaria	Malaria	08	20.00
36.	Mirigi jwara	Mirigi Fever	01	2.50
37.	Munda bindha	Headache	05	12.50
38.	Najar lagiba	Put an ill eye on others	02	5.00
39.	Nasa rakta sraba	Nasal bleeding	01	2.50
40.	Pakasthali Pradaha	Gastritis	08	20.00
41.	Pakhya ghata	Paralysis	03	7.50
42.	Peta byatha	Stomach pain	09	22.50
43.	Pihuda jwara	Pihuda fever	02	5.00
44.	Pita banti	Secretion of bile in vomiting	02	5.00
45.	Raja jakhma	Tuberculosis	07	17.50
46.	Rutu sraba	Disorder of menstruation	15	37.50
47.	Sarpa dansana	Snake bite	09	22.50
48.	Stana roga	Breast disease	01	2.50
49.	Swapna dosa	Night pollution	01	2.50
50.	Swasa	Asthma	04	10.00
51.	Tarala jhada	Diarrhoea	04	10.00
52.	Thanda	Esunphulia	02	5.00
53.	Thariba	Trembling	01	2.50
54.	Ucha rakta chapa	High blood pressure	04	10.00

## 6.C: Therapeutical agents

### 6.C.1 Plants and their use

**Table: 6.C.1 Plants and their use**

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines
Aankal plant	<u>Alangium chinense</u>	Scrotal hydrocele Cough	Root, Bark
Ada	<u>Zingiber officinalis</u>	Epilepsy	Leaf
Agnijhal plant	<u>Clausena excavata</u>	Epilepsy	Root
Akhu plant	<u>Saccharum officinarum</u>	Asthma	Juice
Amarpoi plant	<u>Kalanchoe pinnata</u>	Nerve stretch Metal fatigue	Leaf, Root
Amba plant	<u>Mangifera indica</u>	Dysentery	Bark, Stem
Ambada plant	<u>Spondias pinnata</u>	Jaundice	Bark
Ame plant	<u>Apocynum cannodinum</u>	Piles	Root
Amla plant	<u>Emblica officinalis</u>	Metal fatigue	Fruit
Ankal plant	<u>Alangium chinense</u>	Hydrophobia	Root
Apamarang plant	<u>Achvranthes aspera</u>	Disorder of menstruation Dog bite Snake bite Metal fatigue	Leaf, root, fruit
Arakha plant	<u>Calotropis gigantea</u>	Skin diseases	Leaf
Arjun Plant	<u>Terminalia arjuna</u>	Epilepsy Metal fatigue Heart disease	Bark
Asana plant	<u>Terminalia tomentosa</u>	Metal fatigue	Leaf
Babul plant	<u>Acacia nilotica</u>	Chickenpox	Root
Bahada plant	<u>Terminalia bellerica</u>	Piles	Bark
Baidanka plant	<u>Mucuna Pruriens</u>	Metal fatigue	Root, fruit
Baincha plant	<u>Flacourtia cataphracts</u>	Metal fatigue	Fruit, leaf
Bara koli plant	<u>Ziziphus mauritiana</u>	Women diseases Metal fatigue Diarrhoea	Root, fruit & stem
Bara plant	<u>Ficus bengalensis</u>	Jointpain	Root

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Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines
Basanga plant	<u>Adhatoda vasica</u>	Leprosy Tuberculosis Cough Jaundice	Leaf
Baunsa plant	<u>Bambusa arundinacea</u>	Cancer	Internal tender portion of bamboo
Begunia Plant	<u>Vitex negundo</u>	Cancer	Leaf, fruit
Bel plant	<u>Aegle marmelos</u>	Jaundice Skin disease Gastritis	Leaf, Fruit
Bhui kakharu	<u>Cucurbita maxima</u>	Jaundice	Fruit
Bhuin champa plant	<u>Kaempferia rotunda</u>	Stomach pain Epilepsy	Root
Bhuin kain plant	<u>Nymphaea lotus</u>	Disorder of menstruation	Root
Bhuin nimba plant	<u>Andrographis paniculatus</u>	Piles Jaundice Disorder of menstruation	Leaf
Buta plant	<u>Cicer arietinum</u>	Mania	Fruit
Champa plant	<u>Michelia champaca</u>	Tuberculosis	Flower
Chandan plant	<u>Santalum album</u>	Disorder of menstruation	Bark
Chita plant	<u>Andrographis paniculatus</u>	Diabetes	Root
Coconut plant	<u>Cocos nucifera</u>	Talu dukduk	Raw coconut water
Dalimba plant	<u>Punica granatum</u>	Dysentery	fruit
Debdaru plant	<u>Polyathia longifolia</u>	Cough Metal fatigue	Root, stem
Dhala palasa	<u>Butea monosperma</u>	Disorder of menstruation	Flower
Dhala tarata plant	<u>Ervatamia divaricata</u>	Disorder of menstruation	Flower
Dhatuki plant	<u>Woodfordia fruticosa</u>	Metal fatigue	Flower
Dhatuli plant	<u>Woodfordia fruticosa</u>	Malaria	Flower
Dimiri plant	<u>Ficus glomerata</u>	Dysentery Jaundice	Juice of fruit, flower, Leaf
Dokta plant	<u>Nicotiana tabacum</u>	Chicken pox, small pox	Seed
Duba Plant	<u>Cyndoon dactylon</u>	Put an ill eye Disorder of menstruation	All
Dudhi plant	<u>Euphorbia thymifolia</u>	Metal fatigue Epilepsy	Creeper, Root

***Indigenous Ethno-Medicinal Practices among the Kandha and Santal of Odisha***

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines
Gadaa plant	<u>Ricinus comumis</u>	Epilepsy	All
Gaisiria plant	<u>Valeriana officinalis</u>	Metal fatigue Epilepsy	Root, Flower
Gangasiuli grass	<u>Nyctanthes arbortristis</u>	Fever Joint pain Asthma Malaria Fever, diarrhoea Epilepsy	All parts of plant
Ganjei plant	<u>cannabis sativa</u>	Epilepsy	Root
Ghikuanri plant	<u>Aloe vera</u>	Diabetes Head ache Metal fatigue	Leaf
Gilli plant	<u>Indigofera cassioides</u>	Jaundice	Root
Gudchi plant	<u>Tinospora cordifolia</u>	Epilepsy Piles	Bark, Root
Gudumari Plant	<u>Gymnema sylvestre</u>	Diabetics	Leaf
Hadajala plant	<u>Vitis quandrangulris</u>	Bone fracture	Bark, creeper
Harad dali Plant	<u>Cajanus cajan</u>	Joint pain	Leaf
Harida plant	<u>Terminalia chebula</u>	Disorder of menstruation	Fruit
Hatikana plant	<u>Leea crispa</u>	Joint pain	Bark
Hemsagar plant	<u>Kalanchoe laciniata</u>	Stomach pain	Leaf
Jada plant	<u>Ricinus communis</u>	Ear ache	Seed
Jaitri plant	<u>Myristica fragrans</u>	Dhatu	Fruit
Jamu plant	<u>Syzygium cumini</u>	Dysentery	leaf
Janhi plant	<u>Luffa acutangula</u>	Malaria	Root
Jari plant	<u>Ficus microcarpa</u>	Ear ache	leaf
Jastimadhu plant	<u>Glycyrrhiza glabra</u>	Metal fatigue Jaundice	Root
Juani plant	<u>Anethum gravealens</u>	Joint pain	Fruit
Kain kanda plant	<u>Nymphaea lotus</u>	Women disease	Bark
Kain plant	<u>Nymphaea alba</u>	Tuberculosis	Flower
Kaincha plant	<u>Abrus precatorius</u>	Filaria	Root
Kala Tulasi plant	<u>Ocimum sanctum</u>	Metal fatigue	Leaf
Kalara plant	<u>Momordica Charantia</u>	Dysentery Malaria	Leaf, Root
Kanteikoli plant	<u>Flacourtia indica</u>	Chicken pox, small pox	Root

***Indigenous Ethno-Medicinal Practices among the Kandha and Santal of Odisha***

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines
Kasmaar plant	<u>Gmelina arborea</u>	Metal fatigue Disorder of menstruation Joint pain Piles	Root, stem
Kendu plant	<u>Diospyros melanoxylon</u>	Jaundice	Bark
Kusum plant	<u>Carthamus tinctorius</u>	Bone fracture Skin disease Cough Cancer Jaundice	Bark, creeper, flower, root, seed
Lajakuli lata	<u>Mimosa pudica</u>	Metal fatigue	Root
Mahula plant	<u>Mdhuca indica</u>	Boil Piles	Root
Mandar plant	<u>Hibiscus rosasinensis</u>	Disorder of menstruation Dysentery	Flower, Leaf
Manjuati plant	<u>Lawsonia inermis</u>	Epilepsy Tumour Jaundice Metal fatigue Women disease Jaundice Hydrophobia	Bark, Root, Leaf, stem
Methi plant	<u>Trigonella foenum</u>	Eye disease	Leaf
Motri lata	<u>Smilax maycophylla</u>	Disorder of mensuration	Root
Mutha ganda plant	<u>Cyprous rotundus</u>	Metal fatigue	Root
Muturikathi plant	<u>Smilax zeylanica</u>	Dysentery	Root, stem
Nageswar plant	<u>Mesua ferrea</u>	Dhatu, stomach pain	Flower
Nali Apamarga plant	<u>Achvranthes aspera</u>	Stomach pain	Root
Nimba plant	<u>Azadirachta indica</u>	Malaria Gastritis Stomach pain Cancer	Leaf, Stem, Oil
Oluo plant	<u>Amorphophallus sylvaticus</u>	Ear ache	Juice of plant
Ostaa plant	<u>Ficus reiigiosa</u>	Metal fatigue	Bark
Paja plant	<u>Litsea glutionsa</u>	Malaria	Bark
Panna plant	<u>Piper betle</u>	Piles	Leaf



***Indigenous Ethno-Medicinal Practices among the Kandha and Santal of Odisha***

Name of plant	Botanical name	Used for which disease	What Portion of plant used in preparation of medicines
Patala garuda Plant	<u>Rauvolfia</u> <u>Serpentina</u>	Stomach pain, fits, jaundice Dysentery Snake bite Blood Pressure Malnutrition Snake bite Snake bite Metal fatigue Gastritis	Root, Bark, Leaf, Stem
Pedipedika plant	<u>Abutilon indicum</u>	Jaundice Nasal bleeding	Leaf
Pijuli plant	<u>Psidium guajava</u>	Dysentery	Fruit, Leaf
Pineapple plant	<u>Ananus comosus</u>	Leprosy	Fruit
Pipali plant	<u>Piper Longum</u>	Dhatu, disorder of menstruation Epilepsy Cough Metal fatigue Gastritis	Fruit, Leaf, Root
Pita nau plant	<u>Lagenaria siceraria</u>	Period problem	Fruit
Podina plant	<u>Mentha viridis</u>	Disorder of menstruation	Leaf
Rohini Plant	<u>Fagus sylvatica</u>	Metal fatigue Paralysis	Root, bark
Sala plant	<u>Shorea robusta</u>	Piles	Bark
Satabari plant	<u>Asparagus gracilis</u>	Tuberculosis	Leaf, root
Simili plant	<u>Salmaia Malabarica</u>	Metal fatigue	Flower, Fruit
Singari plant	<u>Caesalpinia crista</u>	Tuberculosis	Leaf
Sunamukhi plant	<u>Casia</u> <u>aunsustiafolia</u>	Metal fatigue	Leaf
Sunari Plant	<u>Cassia fistula</u>	Epilepsy	Bark
Sunthi plant	<u>Curcuma aromatica</u>	Epilepsy Malaria	Fruit, Root
Tulasi plant	<u>Ocimum sanctum</u>	Hypnotism Malaria Jaundice	Leaf

## 6.C.2 Animal and their use

**Table: 6.C.2 Animal and their use**

Name of animal	Zoological name	Used for which disease	What Portion of animal used in preparation of medicines
Badudi	<u>Bat</u>	Malaria	Wings
Bat	<u>Pipistrellus</u> <u>Pipistrellus</u>	Hydrocele Asthma Fever	Flesh, Meat
Bear	<u>Ursidae</u> <u>carnivore</u>	Women disease Jaundice Cancer Fever	Flesh, Bone, Hair
Bug	<u>Abar</u> <u>coleoptera</u>	Piles	All part
Chicken	<u>Gallus</u> <u>gallus</u>	Metal fatigue	Yolk
Cobra	<u>Elapidae</u> <u>Naja</u>	Blood Pressure	Fat
Cow	<u>Bos</u> <u>indicus</u>	Epilepsy Malaria	Urine, Horn
Crab	<u>Liocarcinus</u> <u>vernalis</u>	Women disease Metal fatigue Whooping cough	Flesh, Fat, Thorn
Cricket	<u>Gryllus</u> <u>assimilis</u>	Jaundice	Bile
Dog	<u>Cannis</u> <u>familiaris</u>	Metal fatigue Cancer	Bone
Kochila	<u>Ocyeros</u> <u>griseus</u>	Spleen	Head
Mad dog	<u>Cannis</u> <u>familiaris</u>	Diarrhoea	Bone
Minnow fish	<u>Pimephales</u> <u>promelas</u>	Eye disease Tuberculosis	Bile
Monkey	<u>Macaque</u> <u>monkey</u>	Stomach pain Cancer	Bone
Oyster	<u>Pinctada</u> <u>margaritifera</u>	Eye disease	Shell
Panda	<u>Alurpoda</u> <u>melanoleuca</u>	Snake bite Hydrophobia	Leather
Peacock	<u>Pava</u> <u>cristatus</u>	Disorder of menstruation	Hair
Pigeon	<u>Columbidae</u> <u>colombiformes</u>	Gastritis	Meat
Saria patni	<u>Paradoxurus</u> <u>Hermaphroditus</u>	Small pox, piles	Leather

Name of animal	Zoological name	Used for which disease	What Portion of animal used in preparation of medicines
Scorpion	<u>Archinida scorpionida</u>	Ear ache, Hair fall Jaundice	All
Snail	<u>Calcareous epiphragm</u>	Ear ache Epilepsy	Flesh , Middle part
Turtle	<u>Herbivora testudinidae</u>	Metal fatigue Asthma Piles Epilepsy Vibration of upper surface flat portion of head in body Nasal bleeding	Flesh, Meat, Head, Upper part (khola)

#### 6. C.3 Mineral and their use

**Table: 6.C.3 Mineral and their use**

Name of mineral	Used for which disease	What Portion of mineral used in preparation of medicines
Ambarikasi	Periods problem	All parts of plant
Copper	Hypnotism Put an ill eye on others Snake bite	All parts of plant
Coun shell ashes	Metal fatigue	All parts of plant
Hudtad	Someone eye influence	All parts of plant
Mahulagira	Someone eye influence	All parts of plant
Quartz ashes	Joint pain	All parts of plant
Rasa sindur	Period problem	All parts of plant
Sulphur (gandhak)	Someone eye influence	All parts of plant

## **CHAPTER VII**

# **ADOPTABILITY AND APPLICABILITY**

## CHAPTER VII

### **ADOPTABILITY AND APPLICABILITY**

The present study has been conducted to ascertain the reaction of healers as well as patients about traditional healing practices which are classified as bone setting, herbal treatment and magical treatment. The study found out valuable information about herbal and magical treatment adopted by Kandha and Santal. The acceptability and adoption of traditional healing practices needs in depth study and analysis. The summarized interferences on adoption and acceptability are as follows.

1. The Tribes have the treasures of forest based indigenous knowledge. Being store house of traditional wisdom, there is a need to plan programs to preserve such knowledge.
2. The study 'Indigenous Ethno-Medicinal Practices among the Santal and Kandha of Odisha' is an attempt to explore (i) traditional healing practices (ii) methods and techniques followed in healing (iii) plants, herbs, animal, mineral etc used as therapeutic agents and (iv) methods employed to cure the patients.
3. There are three emerging issues of the study. These are herbal treatment, magico-religious treatment and use of therapeutic agents of plant, animal and mineral origin.
4. The ITK used by the Tribes for treatment of diseases is of prime importance. The ITKs are also used by the local ayurvedic practitioner. Because of the healing quality, the ITKs are in use over the generations.
5. The study enlisted the plants, herbs, animals and minerals which are used by the Tribes, the Kandha and Santal to cure the patients.
6. The outcomes of the study emphasize the need for rationalization of practices followed by Kandhas and Santals to cure the patients.
7. The diseases, their symptoms, identification of causes are the valuable information that can be scientifically examined. The elements of composition of herbal medicines with respect to their quality of preservation, availability,

processing and proportion of use can be ascertained for benefit of common man. The dose of medicines, interval of administration and condition of use are important aspects that need intensive study and analysis.

8. Bone setting and use of herbal medicines for healing is another important dimension of the study. How the local healers treat bone fracture cases that too at different parts of body needs through examination. Bandaging practice with bamboo sticks, applying of paste prepared out of herbs, frequency of use etc. are the important aspects that need special studies. The patients not cured by allopathic treatments, are cured by traditional methods needs through investigation as claimed by the healers. To learn these skills and their adoption in treating patients would be cost-saving to which poor people can afford.
9. Magico-religious belief and treatment is another important dimension of the study. The treating of ghost attack or evil effect of spirit, what Tribedo and what healers do need special study. Mantras they recite to cure patients can be examined and procedure can be recorded by direct observation methods to bring fact to light (snake bite and dog bite).
10. The tests/ methods adopted by the tribal healers to identify the diseases and causes of the diseases appear to be very simple and cost-effective. For example, putting mustard oil in urine of patients and determining diseases by colour and direction of flow of urine although is very simple test, the scientific reasons behind need to be ascertained.
11. Women and Children are more frequently subjected to suffering. The women hood, menstruations, development of sex organs, milk secretion, mastoids are common diseases in the forest based areas. Abortion, pregnancy, easy delivery etc. are treated by the healers. The method of treatment is cost effective. The child disease like skin diseases, diarrhoea, eye problem etc. are effectively treated by the healers. The family planning, abortion, and early pregnancy are treated by the traditional healers. The methods of treatment, use of herbal

medicine, their composition, dose etc. can be rationalized to provide treatment at much cheaper rate.

12. The cases like snake bite, dog bite, scorpion bite are easily treated by the tribal healers. They apply herbal medicine followed by magico-treatment (Mantra). The process of treatment and curability can be studied in depth to prepare a package of treatment for such rural poor.
13. The medicinal plants and shrubs of tribal areas are vanishing at a faster rate due to multiple factors. There is need to preserve and propagates these valuable plants. The study has identified such plants in relation to multiple diseases which can be taken care of. As per suggestions of the healers, in each and every Panchayat medicinal garden can be established in tribal dominated districts on public- private participatory mode. Moreover, the forest produce which form major component of herbal medicines can be preserved and rationally utilized.
14. Health, hygiene and treatment have complex approach. In case of Tribe, these are backed by culture and religious sanction. This suggests of bone setter healers that in every Panchayat a shade for bone fracture treatment may be opened in coordination with local healers which can provide bone fracture treatment to the people of locality at minimum Herbal medicinal processing units have been suggested by some healers involving local ayurvedicpractioners. The proposal needs examination in terms of forest and government approval. But the proposal can provide qualitative herbal medicine along with employment opportunity to tribal youths.
15. The traditional healing practice is an individual concern. Each and every healer has specific approach to treatment of patients. To collect and use wisdom of healers of the locality there is need to have a training center where healers can be trained with scientific basis. This would help to obtain a good number of healers who would be tribal friendly at rural areas and then the value of sanitation and environment can be propagated.

16. The healers, their specialization, treatment practices, mode of payment for treatment can be listed for the knowledge of the patients, so that patients can easily reach to desired healers.
17. The study examined the acceptability and adoption aspects of treatment practices both herbal and magico- religious approach. There is need to document the healing experience of all healers in an elaborative form to lay foundation for further research.
18. Health care is very much related to cultural pattern of individuals. Treatment, sanitation and natural environment of tribal areas should be the basis for developing health packages for them.
19. The study believes that traditional healing practices of snake bite, dog bite, scorpion bite, bone fracture are treated well by the tribal healers at a very low cost. The scientific examination of such treatments can lead to find out low cost treatment packages for above diseases/ items for benefits of common man.



## **CHAPTER VIII**

### **CASE STUDY**

## CHAPTER VIII

### CASE STUDIES

#### A. Case Studies of Santal Healers

##### Case 1

Name: Shree Shyamsundar Murmu  
Village: Goudagan (Mahuli Sahi)  
P.O.: Basipitha  
Panchayat: Basipitha  
Block: Khunta-1  
District: Mayurbhanj  
Pincode: 757074  
Ph. No.: 8763495318



Shree Shyamsundar Murmu, a middle aged (55 years) healer (ojha) of village Goudagaon of Khunta block in Mayurbhanj district has earned reputation for his healing practices. Being educated up to 7<sup>th</sup> standard, Mr. Murmu leads the family of two persons, himself and wife Jamuna. Although wife Jamuna is illiterate in the formal schooling, she supports her husband in treating a number of patients throughout the year. He earns his livelihood primarily from farming but works as sweeper in an organization of the locality to add to his family income.

**Economic activities:** In the year 2008, Shyamsundar started healing practices of his own being trained by his local teacher Shree Chandra Murmu who is no more alive. But the skill of practices, his teacher taught him, brought him name and fame along with earning of good income. According to Mr. Shyamasundar, his annual income varies from Rs-50,000 to Rs-60,000/- from farming and healing practices. According to his version, “the local healing practices are more cost effective if the diseases are correctly dignosed and his medicines are taken as per his direction”.

**Healing practices:** In the beginning years, he had faced problems and the patients were not much interested to avail treatment from him. In the year 2011, i.e. after three years of his practice, he successfully cured a local patient Shree Hateswar Murmu from pile who had failed to get cured even after approaching modern physician in Govt. hospital from time to

time for about a year. Success of his treatment spread in locality and now he is able for treating the diseases effectively like mental fatigue, piles, diabetes, tuberculosis, fever, gynaecological diseases of women, snake bite, dog bite, scorpion bite and many others. To avoid rush, he has fixed two days in a week, i.e. on Sunday and Tuesday for treatment. The villagers say that on these two days he performs puja for about three hours in the morning and starts treatment with full confidence. According to informants he worships deities before treating patients and thus cures patient with success. Whatever the reasons may be, he is fully committed to treat people to the best of his capacity. He treats 30-40 patients per month and asks the waiters to come in next turn.

One of the success stories of Mr. Murmu is narrated below to have a glance about his happiness, treatment and overall satisfaction.

In 2010, in month of February, a patient named Sukru (female) came from a neighboring village of Bhupada for treatment of brain malaria. Before that she had taken lots of medicines and approached doctors of Govt. hospitals. Her illness was due to brain malaria with multiple problems like, headache, body pain, burning during micturation, nose bleeding and weakness. Observing all these conditions, the doctors in Govt. hospital refused her for any treatment in locality. Being harassed by the doctor with body full of pains and depressed mind without hope of life she approached Mr. Murmu for treatment. After hearing the plight of the patient, Mr. Murmu took it as a challenge. He started treating the patient by giving three herbal tablets per day with certain ritual to appease Marang Buru. The practice continued for two days to arrest body pain immediately. The patient Sukru got cured after continued treatment and at present she is in normal condition without any ailment. Mr. Murmu says all his efforts are supported by Almighty and his treatment is controlled and monitored by God directed. If one is sincere, committed and knows treatment well, in majority cases success can be assured.

He follows specific steps to diagnose the diseases. Past suffering, past medicine and faith on God are the common questions that he puts to the patients and never talks about treatment cost although he takes it. He prescribes and gives medicine for a week free of cost and then charges. Mr. Murmu says that so far none has expressed displeasure till this time about his treatment charge.

**Magical treatment:** He also cures the patients in magical way. He does magical treatment for the following diseases.

- (a) Put an ill eye on others: In the beginning, the healer memorizes the name of Goddesses Maa Manisha and Tarini and chants the mantras blowing the same on the body of patient by raising hands up and down 3 to 5 times. Keeping Goddess Manisha in mind, inside the temple he offers fruits, like banana, coconut, lights lamp and worships for a while and then distributes Prasad to patient and others whoever present during worship inside the temple.
- (b) Snake bite: First of all, he allows the patient to sleep in straight position then tied with thick cloth in bite point of snake. The juice of Rauvolfia serpentina and root of Calotropis gigantea are mixed together applied on the spot. After that 2 to 3 numbers of hairs are uprooted from the head of patient and kept on the tongue of the patient. The same hair is being rubbed on the bite point along with chanting the mantra for 2 to 3 times. The patient is claimed to have cured within one day.
- (c) Dog bite: In first step, the wound is washed with normal water perfectly. The bark of Moringa oleifera and Allium sativum are grinded properly and pasted on the wound and then he chants mantra for 2 to 3 times. The patient is claimed to have cured within 2 to 3 days.
- (d) Scorpion bite: The tobacco leaf mixed with molasses (0.5gm) properly to make paste and then applied on wound point. Patient gets cure within 2 to 3 days.



He uses simple forest based products as an ingredient of medicine composition. The most frequently used herbal products of Mr. Murmu are, 1. Curcuma aromatica (Sunthi) 2. Rauvolfia serpentina (Patala garuda) 3. Lawsonia inermis (Mehendi) 4. Terminalia chebula (Harida), 5. Terminalia bellerica (Bahada), 6. Piper longum (Pipali). He also uses animal based therapeutic agents like Rajhansa (male swan) for Asthma, Herbivora testidinae for

cough, and Liocarcinus vernalis for diarrhoea and copper for affected eye. The juice of Piperlongum (Pipali), Curcuma aromatica (Sunthi),

Gymnemasylvestre (Gudmari), Zingiber officinale (Ada) are mixed together and given to the patient for drink. The disease gets cured within 2 to 3 days. For long term treatments he accepts up to Rs 300. To get these ingredients for preparing composition of his medicines, he has contacts with local traders, forester and forest dwellers and even goes too far off places for collection. Because of the investment in collection of materials he charges little more depending up on curability of chronic diseases.

For his small family the income from farm, service and healing practices are enough. His style of living is little different from others. He has two rooms exclusively for preserving herbal products with labeling. He has established himself in his community and is known as a good healer beside as Goodman. Mr. Murmu and wife Jamuna are worried for a child that so far denied to them. His aspiration is to expand healing practices but he lacks manpower to handle it. However, he has not yet decided about the future of his practices in case of unforeseen situations which might arise in future.

Mr. Murmu wants to expand his treatment for which financial support is required to equip his small laboratory.

## Case 2

Name: Shree Mahata Majhi  
Village: Nuagan  
P.O.: Kamali  
Panchayat: Dukura  
Block: Khunta-1  
District: Mayurbhanj  
Pincode: 757075  
Ph. No.: 9556133829



Shree Mahata Majhi, an old man aged about seventy years is the known healer (ojha) of village Nuagan of Khunta block in Mayurbhanja district. He is famous for bone setting. He is well known in that locality for good treatment, good behavior and accessibility in the community. His family consists of four members including himself, his wife Aladi and two daughters named Kapura and Kanheilal who are already married. Although he and his wife are illiterates, they realise the importance of education. They couldn't educate their daughters due to financial problem. Shree Majhi maintains a good life with social esteem because of his treatment. The patients come to him from different places with no restriction of age, sex and caste. He belongs to BPL category and earns his livelihood primarily not only from farming but from healing practices. The annual income touches about Rs-70,000/- per year.

Healing practice is a family occupation of Shree Mahata Majhi. He has learned the methods of treatment from his late father in the year of 1970. He started healing practices independently from year 1974 in the month of March by posing himself as a disciple of Shree Srinath Murmu. Now he treats about 4-5 patients per month particularly on Sundays. Most of the patients are from different tribes like the Kandha and Bhuyan of the locality. He charges patient depending on their paying capacity. For the first time in the year 1974, he started treatment in setting the fractured bones applying herbal medicines. Since then, he has not looked back and progressed in his profession. Shree Mahata Majhi is known as specialist in bone setting. Generally he collects herbal plants from forest for composition of his medicine. The plants like 1. Juice of Grewiatiliifolia 2. Bark of Ficusbengalansis 3. Root of Kalanchoepinnata 4. Leaves of Gmelina arborea are in demand for him. He remembers that one day a patient came from Bhupad village in February 2000 with fractured leg. After

examination of patient, Mr. Majhi gave herbal medicine and advised to perform rituals by sacrificing a hen in front of the shrine of the village deities. Then he treated the patient and successfully set the bone inside.

**Economic activities:** - Healing is a good source of income for him. Approachability, hospitality and good behavior are the three major ethics that he adopts to earn his living. His major engagements are treating of patients, collection of herbal plants, processing and preserving them for future use. He spends major time in treating the patients and collection of the herbal ingredients to process them to prepare medicine.

To get herbal materials he has established good rapport with traders, local people and outsiders. With increase in the business, he has expanded his linkage with different agencies. He is very much calculative in his investment, expenditure and income. The practice has enabled him to provide good education to his children. In short, his economic activities consist of healing practice, salary of son and income from farming. As business, he has paid much attention in healing practices and still has in mind for expansion.

Mr. Mahata Majhi at this age of 72 years is also conscious of his role for Santal community with regard to their development, income generation and other aspects. He remembers the struggle he had during 1980's to 1990's for recognition of Santali language. He had approached officials, political leaders and others for development of Santali language. Mr. Majhi says that the lack of initiative from Santal is the reason for which Santali language could not be developed as expected. The political consciousness of Mahata Majhi is relatively more. According to him, the people belonging to community should have single point approach to avail Govt. help and assistance.

Mr. Majhi is known for treatment of bone fracture, he has cured a good number of patients over the years. He claims that he has successfully treated multiple bone fractures, head injury, accident cases and the patients are now in normal condition. In describing a successful story of his life, Mr. Majhi says, "It was month of October 2009, when Mr. Majhi was sitting in his





house some people of his village Nuagaon came running to him. Stating that a person named Joda Hembram was seriously injured by the local criminals and was in very bad condition. The people immediately took him to the house of the patient. He saw Joda is sleeping with multiple fractures in hand, leg and back bone. On contact the Govt. hospital refused to treat him saying that it was beyond their limit and refused as a lost case. Mr. Majhi took a challenge and started immediate treatment. According to his method, he first applied the oil of Carthamustinctorius, in fractured bone. After that a paste made out of Moringaoleifera and Carthamustinctorius oil was applied to fractured bone and was plasted with the help of bamboo splits. The bandage was to change on every third day, by the end of three month, the patient was cured. The news spread so strongly that today the patients who are refused by Govt. hospital come to him for treatment and even the local doctors are surprised of his treatment. This was one of the memorable events in his life.

Mahata Majhi emphasizes to grow a number of medicinal plants in their locality for treatment of patient. Some of them are Grewiatiliifolia, Ficus bengalensis, Lawsonia Inermis, Litseaglutionsa, Kalanchoepinnata, Piperlongum, Aloevera, Ocimum Sanctum, Mallotusrepandus and Mimosapudica.

Besides, he also uses therapeutical component of animal origin like Pipistrellus Pipistrellus and Liocarcinus vernalis He also uses ITK made out of oil of Carthamustinctorius with the combination of Moringaoleifera juice and ghee for treatment of bone fracture. According to him, the bone fracture is a complicated treatment. The patient can be better cured in the traditional method than the methods followed in Govt. hospital.

Not only as a healer but also as a good man of the village, Shree Majhi is well known. His residence, interior decoration, household articles exhibit his choice, liking and position in the community. The people seek his advice in community function, conflict resolution, social function and community development work. Thus Shree Majhi enjoys social reputation as a healer and good person.

To improve the treatment methods in case of bone fracture, he strongly emphasizes the traditional methods. To have better treatment facilities, he suggests the following.

1. Expansion/cultivation of medicinal plants in the area.
2. Construction of small shades to treat the patients in each panchayat.
3. To set up training programmes for the local healers to impart the skill on preparation of herbal medicines to deal with such cases.
4. The Govt. should encourage and provide financial assistance to the poor healers for expansion of traditional treatment.



### Case 3

Name: Shree Kuanr Soren  
Village: Kandalia  
P.O.: Kamali  
Panchayat: Dukura  
Block: Khunta-1  
District: Mayurbhanj  
Pincode: 757075  
Ph. No.: 8457910710



Mr. Kuanr Soren at the age of (60 years) is a known healer (Ojha) of the Santal community of village Kandalia in Khunta block of Mayurbhanj district. In spite of being a tribalmatriculate he refused to the job opportunity he decided to live as healer and serve his community. He leads a family of nine members. He values education and intends to educate all his children. Even though his wife Gango Soren is (50 years) illiterate, she has also realized the importance of education and pleads strongly for education of Santal girls. Mr. Soren has earned social recognition because of his education and healing practices in the locality. He treats patients irrespective of age, sex, caste and religion. To him all patients are equal irrespective of their social status.

**Economic background:** Mr. Soren is economically sound. The major source of his income is healing. He charges Rs 50 per patient per disease which is well within affordable range of the patients. Mr. Soren says that he follows three important ethics, like affordability of patient, good hospitality at the place of treatment and affectionate behavior with patients. His elder son is in defence service and regularly supports him. Thus his annual family income touches around two lakhs. Mr. Soren spends major time in treatment, collection of herbal materials and preparation of medicines. In view of his profession he has established good rapport with traders, forest officials and forest dwellers. He keeps a sharp vision in preparation of medicine, family investment, income and expenditures. In addition to his own income, the support from his son and from farm also makes his economic status stronger. His son (Khetramohan Soren) is in defence earning a good amount and supports him regularly. The entire family supports him as and when it is required in healing practices. Good income is one of the reasons for his position in the community.

**Healing Practices:** Healing practice primarily is a family occupation of Mr. Soren. He learned professional skill through self efforts and took a firm decision to be known as good healer. He treats about 600 patients per year and most of them belong to different tribe. In 2005, he started treatment of setting fractured bones applying herbal medicines.

For dealing with the bone setting, Shree Soren select herbs, dries them in sun, makes powder and prepares bamboo sticks and use them when required to make plaster. The selection of bamboo sticks follows seasoning. He keeps these sticks in house and makes use when required. From 2005 he has been progressing in his healing profession.

Mr. Soren generally treats the diseases, like paralysis, joint pain and epilepsy. He neither believes in magico-religious treatment nor performs such rituals or magic. Herbal treatment is his major activity. One of the success story, he narrated as follows:

A gentleman, named Makara Pradhan aged about 60 years who belongs to village of Chitagada in Dukura Panchayat came to Mr. Soren seriously suffering from the disease paralysis for treatment.

After seeing the patient, Mr. Soren thought for a while, and looked at the patient. Being harassed at Govt. hospitals, Makara Pradhan anxiously looked at Soren for positive response. Mr. Soren took it as a challenge and started treatment. The medicine for paralysis was prepared by Mr. Soren in his home. The preparation of his medicine was boiling of cow ghee (100ml), castor oil (150ml) and roots of Dudura plant (2 to 3 pieces) together for about 30 minutes. The paste made out of this process was massaged on different parts of body of patient like shoulder and leg for about 20 to 25 minutes. The patient was advised to practise it for three times a day continuously for three months. The medicine worked well



and the patient was cured within stipulated time. Now the patient Makara Pradhan is alright and performs his daily activities in normal ways.

**Preparation of medicine:** Mr. Kuanr Soren is very meticulous in his profession. He has mind to develop a herbal garden close to his residence. His plan not yet materialised. To upkeep the professional activities, he has planned to have his own herbal garden and wish to plant the following plants like Syzygiumcumini (Jamukoli) to cure the disease like diabetes, Aeglemarmelos (Bel) and Emblicaofficinalis (Anla) used to cure dysentery disease, Ricinuscommunis (Jada) plant used for disease like headache, Buteamonosperma (Palasa) used to cure the insanity disease, Azadirachta indica (Neem) is used for preparing medicine for skin diseases, root of Ocimum sanctum (Tulsi) is mainly used by the healer to cure stomach pain. He also treats joint pain, epilepsy and paralysis.

The major components of his treatment are bulbs, leaves, stem and stem bark. The uses of these ingredients are made in forms of juice, pest, dried powder and decoction. These ingredients are sun dried for making powder where as for pest and juice these used as fresh.

He is in mind to hand over responsibility of the healing practices to his son. His son is now taking training from him. He needs financial support to have required materials to treat diseases, like cancer, tuberculosis and diabetes.

Not only as a healer but also as a good man of the village, Mr. Soren is well known in the locality. The interior of his residence is well decorated. The household articles exhibit his choice, status and position in the community. The people of his own tribe seek his advice in community function, community conflict, social function and Community development work. Thus Mr. Soren enjoys good social reputation.

#### Case 4

Name: Shree Pradhan Majhi  
Village: Kashira  
P.O.: Parajanpur  
Panchayat: Parajanpur  
Block: Sadar Keonjhar  
District: Keonjhar  
Pincode: 758031  
Ph. No.: 9090008302



At the time of wide spread chicken pox and diarrhoea in Parjanpur Panchayat, people desperately ran to Shree Pradhan Majhi of Kasira village for immediate treatment. When young girls are affected by ancestor ghost /evil spirit (Lapranko bonga) no other than Pradhan Majhi is searched for to cure the patients.

**Economic background:** Since from the year 1980, Pradhan Majhi is actively involved in healing profession and now he has completed seventy years of age. Mr. Majhi lives in joint family system consisting of his wife Duli Majhi of age sixty five years and three sons with their wives and childrens. He leads a complete family life in the Santal community and commands respect. Simple living, popularity and good hand in treatment have added to his personality of Mr. Majhi over two decades. Mr. Majhi does farming in three acres of land and earns a good amount. He belongs to APL category.

**Healing profession:** Healing profession is of his own interest. He came to profession during the year 1980. Being influenced by his father, he decided to serve the Santal community. His late father was a healer (Ojha) and he learned healing techniques and use of herbal medicine from him. It is his characteristic that he never goes near to the patient and patients have to come to him for treatment. During thirty four years of healing practices, he never deviated from his principle and now has a large number of patients mostly from the tribe of Santal, Kolha, Bhuyianand Mahanta. He has never confined treatment to any specific sex, age and caste category.

He has got expertise in treating the diseases, like chicken pox, diarrhoea, small pox, malaria, disorder of menstruation and epilepsy. Besides other minor diseases of seasonal occurrence are also treated by him.

Mr. Majhi feels and believes that the suffering of the Santal is due to wrath of deities, evil spirits, etc. He says, “Once people forget God, Goddess are bound to suffer even though they prayed afterwards”.

The common disease of the locality are diarrhoea which occurs in the month of May and June, small pox in April and May where as chicken pox, malaria and epilepsy are season neutral. The diarrhoea continues for 1-2 days, small pox 3-4 days where as chicken pox, malaria and epilepsy continue for 5-7 days.

Some diseases are confined to the patients where as the contagious diseases spread to other villages. He makes urine test, eye test and tongue test to determine the diseases. To detect the presence of ghost in the body of the patients he uses the specific techniques. Presence of ghost is tested by holding rice and lemon together and then the healer turns his head round three times. If the colour of rice changes to red, he confirms the presence of ghost in the body of the patients. Then he recites mantras and keep right hand on the head of the patient. If this method fails, then he takes few leaves of banyan tree and put rice and vermilion together on the leaves. By this method, rice is mixed with vermilion and healer throws these on the head of the patient and thus the process is completed.

As far as charge for treatment is concerned, he prefers to take gift of hen, goat, sheep and pigeon in addition to money. The charges are decided on nature of disease and treatment. He is not grooming own children in the prevailing profession and left it for the future decision to be taken at appropriate time.

He is satisfied in his profession and says due to wrath of God and lack of confidence on God and Goddess, people suffer from diseases. In describing the illness, he emphasizes length and nature of suffering and visible symbols to prescribe medicines. He has unique experience to know the disease by putting rice and vermilion on banyan leaf and then on head of the patient. The test has proved to be correct on several occasions which he narrated with full confidence.

**Magical treatment:** Diarrhoea, chicken pox, malaria, snake bite and ghost attack are the common diseases that comes under domain of magical treatment. Ritual is called as “Nimechha bada o kialo”. The following are the steps of rituals.

- To get up early in the morning, after brushing and bath in empty stomach, the patient has to pray God.
- Then he arranges puja. This is done by cleaning the place with cow dung, putting vermilion, rice, coconut and banana before village diety. In case of contagious diseases the offering becomes a community affair and in other cases it is individual affairs.
- Three poultry birds, two swans, one pigeon and one goat are sacrificed for immediate cure of diarrhoea, small pox and chicken pox. Then after doing this, meat of the animals are distributed as a Prasad to all family members and village people.
- After ritual is over the patient offers two new cloths to healer.

This arrangement is done in the middle place of the village in the presence of many people and Prasad are given to all families.

**Guni and Mantras:** The healer recites mantras and pronounces in the ear of the patient so that others can't know the secret of it.

To make the treatment more efficient, he combines local ITK and herbal medicines with that of magical treatment. Not only plants but also animals are good contributors to the composition of his medicine. Minerals are not used in this case. The logic of Mr. Majhi for success is due to blessings of God and Goddess, magic works where others fail, easy to apply, with less cost, and it is better than any other method of treatment. In case of diarrhoea, small pox, malaria and ghost attack magical treatment is argued to be best. In the opinion of Mr. Majhi ITK and magical treatment are better approaches than single one. ITK that he uses for treatment is root of *Momordica charantia* and root of *Luffa acutangula* in combination with ghee for malaria.

However, he is not a leader of community but is consulted on many matters connected with welfare of the village people.



### Case 5

Name: Shree Sunaram Kisku  
Village: Totasahi  
P.O.: Raisuan  
Panchayat: Raisuan  
Block: Sadar Keonjhar  
District: Keonjhar  
Pincode: 758013  
Ph. No.: 9178681233



Shree Sunaram Kisku is (62 years) a healer (Ojha) and belongs to village Dhatikaof Sadar Keonjhar block in Keonjhar district. Hestands on good reputationfor healing practice in the locality.His family consists of eight members i.e he himself, wife Basanti (58 years), three sons namely Bagi Kisku (32 years), Durga prasad (30 years) and Laba Kisku (27 years), one daughter- in- law Muskan Kisku (30 years) and two grandsons and granddaughter of age 5 years and 2 years respectively. Shree Sunaram Kisku and wife Basanti are illiterates but realizing importance of education, they have educated their children up to high school standard. His elder son works as a driver and second one is engaged as a daily laborer. Mr. Kisku's wife Basanti gives full supports to her husband in treatment of patients through the year as it is assured good source of income.

**Economic background:** In the year 2002, Mr. Kisku began his healing practices on herbal, magical after learning from his Guru, Shree Chottray Maradi who is no more there. His teacher taught him the skill of treatment. Shree Sunaram Kisku earns his livelihood from the sources like farming, business and daily wages in addition to healing practices. His annual income is around Rs- 75,000/-. The economic condition of Mr. Kisku is relatively better than other households of the village. His family income comes from farm, business and daily wages in addition to healing practices. His style of living is little different than others. He lives in semipakka house having one big bedroom and kitchen room with a centrally wide spaced room for preserving of herbal products.

**Healing practices:** According to his version, the local healing practices are more cost effective provided the diseases are correctly diagonized and proper medicines are prescribed.

Sometimes, patients of Bhubaneswar and even other distance places visit him for treatment of chronic disease. He says patients come to him only because of truthful and worthy treatment.

In the year 2008, a patient named Bharati Sahoo came to him in the month of January for exorcism of ghost. Before coming to him, Bharati's father had approached many allopathic Govt. Hospital for recovery but failed. The patient was vomiting with fever and talking abnormally. Mr. Kisku first examined the patient, observed and concluded that when ghost Hapranko Bonga (ancestral spirits) appears inside the body of the patient, abnormal behavior is exhibited followed by high fever. In starting treatment Mr. Sunaram offers fruits, like banana, coconut to the village deities along with lightening lamp with ghee, vermilion, incense and sacrifices hen. After completion of puja, the Prasad of village deities is distributed to all residing in the village. The patient then was advised to wear talisman made up of copper metal containing Neem, Bhalia, Saala, Pingu, and root of Chaar plant. After the ritual treatment within two days the patient got cure. According to people, Shree Kisku appears before deities and then starts treating patients and because of this he is able to cure the patients successfully. He correctly diagnoses the diseases. He usually treats 10 to 15 patients per month. To avoid crowd of patients, he has fixed for two days a week i.e., on Saturday and Sunday.

Past suffering, past medicine and faith on diety are the common questions he asks to the patients at the time of treatment but never spells out the cost, required for the treatment. The technique works well to receive more patients for treatment.

Mr. Kisku also advises for few ritual activities to disease affected persons. These are an evil eye on others, family disturbance in house, bad impact of evil planet of star Saturn etc. According to him to bring peace in the house one has to worship the star of Saturn in the village temple by sacrificing black swan to God. In addition he also advocates offering fruits, like banana, coconut, orange, sundried rice, ghee, incense, vermilion along with lightening the lamp. After chanting mantra for 3 to 4 times Mr. Kisku then sprinkle water on the body of the patient. Patients get cured within 1 to 2 days.





**Magical treatment:** He also practises magic for exorcism of the ghost from the body of the patient.

Release of ghost: Generally when ghosts attack to any person, fever and abnormal behaviour of the person are observed. The ritual activity begins with by praying Goddess and offering fruits, like banana, coconut, vermilion, ghee and lightening the lamp. Then a hen is sacrificed and patients are advised to wear talisman in the right hand. The talisman made up copper metal contains mixture of roots of neem, bhalia, saal, pingu and char.

He uses forest based products as ingredients for preparing medicines. The most frequently used herbal products are, 1. Myristica fragrans ( jai phala), 2. Terminalia bellerica (Bahada plant), 3. Andrographis paniculatus (Bhuin Nimba), 4. Lagenaria siceraria (Pitanau plant), 5. Alangium chinense (Ankul plant), and 6. Achyranthes aspera (Apamaranga). He also uses therapeutic animal based products like 1. Calcarius epiphrym (Snail), 2. Columbidae colombiformes (Pigeon), 3. Herbivora testudinidae (Turtle) and 4. Pipistrellus Pipistrellus (Bat) to prepare medicines.

Durgaprasad Kisku, his son is also being inspired in traditional healing practice is learning the skills and methods to improve his family business. Mr. Kisku has the aspiration to expand healing practices but due scarcity of forest herbal medicinal plants, he fails to do within affordable means. For him healing is also a business and has paid adequate attention for expansion. Not only as a healer but also as a good man of the village, Shree Sunaram Kisku is well known in the locality. His healing practice and good behavior brought him name and fame in the community.

### **Interpretive Conclusion:**

The Santal are one of the advanced tribe in Odisha. With change of time, their life style, occupation, income pattern and cultural behavior have been changed. In case of traditional healing methods the Santal follow foot prints of their ancestors and perform rituals to escape from clutches of ill spirits. The present investigation has made detail study of five cases of Santal healers from Mayurbhanj and Keonjhar district. The Santal healers, Shree Syamasundar Murmu, Mahata Majhi, Kuanr Soren, Pradhan Majhi and Sunaram Kisku were personality interviewed by the investigators to record their cases. The synthesized outcomes of five case studies reveal the followings.

1. The healers enjoy better social and economic status in their community. They hold leadership position and influence the villagers on many matters.
2. Besides social recognition, the healers also earn good income from healing profession.
3. The healers practice both herbal and magical treatments. Some of them are specialized in bone setting. The herbal medicines are administered in treatment of the diseases but for controlling of evil spirit, snake bite, dog bite and chicken pox the Santal healers prescribe rituals.
4. The herbal medicines are prepared by the healers themselves. They collect herbal plants, their leaves, root, and stem from forest.
5. While performing rituals they make offering to village deity, differently called at different locations in the center being Marang buru.
6. The healers charge for treatment depending upon nature of disease and affordability of the patients and curability. The Santal healers do not impose restriction on treatments of male, female, religion and caste. The healers feel proud of their profession; groom their children to take up healing profession after them as it carries more of social and economic values.
7. The Santal healers have desire to establish herbal garden and improvement in their profession for which they need financial assistance.
8. In Santal community the healers used to enjoy special status depending on their name and fame.
9. Some Santal healers strongly support magical treatment as it is easier, less costly and effective particularly in case of ghost attack.

## **B. Case Studies of Kandha Healers**

### **Case 1**

Name: Shree Shyam Wadaka  
Village: Khajuri  
P.O.: Khajuria  
Panchayat: Kurli  
Block: Bissam Cuttack  
District: Rayagada



Mr. Shyam Wadaka is a healer (Disiri) of Dongria Kandhas and resides in Kurli Panchayat. He is of 39 years and carries basket full of dreams. He belongs to Jani clan. The Dongria Kandha live in hilly areas with the less accessibility to the outside world and are very much backward in socio-economic parameters.

Mr. Wadaka has family of a son and three daughters and father. His wife Pulme Wadaka is of thirty five years old. She quite active, cooperative and helps her husband in healing practices. The source of earning for family is agriculture that too of one acre of non-irrigated land. To supplement family income he oftenly opts for wage earning and belongs to BPL category. His income from healing practices is comfortable.

**Professional carrier:** Mr. Wadaka started his carrier as a professional healer (disiri) in the year 1994 at the age of nineteen. At that time he was married and was inspired by his wife Pulme Wadaka to opt for the line of healing. He first started herbal and magical treatment in the locality. As per his version, the another inspiration behind the profession was the Dongar Debata (hilly God) who came in his dream and advised him to serve his community through herbal as well as magical treatment. The dream worked well, Mr. Wadaka prepared his life for the treating of Tribe and gradually acquired the skills of identifying disease and started collection and preparation of herbal medicine to treat the patients. He treats all the patients irrespective of sex, caste, age, tribe and sub tribe. Mr. Wadaka says that he has good number of patients belonging to tribe of Budda, Sitha & Koya besides Kandha. His popularity gradually crossed the village boundary and at present he treats about 100-150 patients of different diseases per year. To enrich his treatment, he combines magical with herbal treatment which works wonderfully.

**Treatment activities:** Mr. Shyam Wadaka has a long record of success in treating the patients. The patients come from far of places because of his name and thus here receives a good number of patients throughout the year, specifically for treatment of the following diseases.

- (1) Fever (2) Paralysis (3) Epilepsy (4) Joint pain  
(5) Headache (6) Malaria (7) Dysentery

In special cases, he undertakes treatment of bone fracture, spirit attack and dog bite. Many women and children are being treated for different diseases, sometimes he feels tied to treat the patients affected by ancestor ghost and evil spirit. About evil spirit and ancestor ghost (Lapranko bonga) he says “We, Kandha tribe are the children of Dongar Debata, we live by His mercy & blessing. The success and failure of treatment also belongs to Him and the healers have little to do”.

In healing profession, Mr. Wadaka has come across many problems at different times. When the patients are not cured, he faces the problem and says to them delay treatment, irregularity in taking of medicine and Wrath of God are the main causes. When his argument in support of failure is not accepted he advises to perform for rituals. In three occasions his magical treatment is found to be effective where herbal medicines fail. They are (1) Dysentery (2) Blood vomiting (3) Malaria

As per Mr. Wadaka, If God is satisfied then the patients get cured. The steps of ritual as he suggests are,

1. After bath in morning the patient has to worship village diety and distribute *Prasad* to people around.
2. To offer fruits, flowers, rice and sacrificing of hen.
3. After worshipping, the patient has to use vermilion on fore head for a week.
4. Sacrificing of hen is to be done on new moon day (*Amabasya*) only.



In some cases, country liquor made out of rice is also distributed in the village, which helps to get blessings of the elders for early recovery of patients. He knows *mantras* to heal the disease like snake bite, dog bite, scorpion bite and harmful effect of evil spirits which he does not share with anybody else. For him mantra is his trade secret.

Mr. Wadaka takes fees for his treatment depending on type of diseases and affordability of patient. Although he is not rigid about payment of fees but never accepts it unless the amount is within his expectation. However, there has not been any problem in accepting fees for treatment.

#### **Preparation of medicines:**

Mr. Wadaka is very particular about selection and collection of medicinal plants from local forest areas and processes them with the help of his wife. The preparation of medicines consists of steps like (I) drying (II) grinding and (III) making powder. The powders are kept in different containers for future use. The following plants are collected by Mr. Wadaka for preparation of herbal medicine from nearby forest. These plants are, curcumazedoaria, Nyctanthesarbortristis, Laporteainterrupta, Phoenixpusilla , Azadirachtaindica.

Although he planned many times, yet has not been able to develop medicinal garden of his own. Besides, he has to spend money to collect herbal plants by engaging labor and many times his wife, son and daughter-in-law.

Management system: To deal with good number of patients throughout the year, there is need to keep systematic record for subsequent follow up action. His son Manoj Wadaka, (12 years) read up to 5<sup>th</sup> standard is being entrusted to keep such records on the following items.

1. Frequency of visit of patients with name with date.
2. Stocking of herbal medicine quantity and retaining quality and their expiry date.
3. Collection of fees from patients.
4. Expenditure on herbal medicine on account of collection, processing and preservation. Manoj his son keeps all these records as advised by his father.



According to Mr. Wadaka, the major items of annual expenditure are (i) Collection of herbal plants (Rs-4000 to Rs-5000) and (ii) Labor engagement (Rs-2000 to Rs-4000/)

The profit he receives out of healing is about Rs.6000 to Rs-7000 per year. In the month of January to October, the patients are more than in other seasons of the year. According to him, poor nutrition, mental agony, hard work without rest, lack of commitment to offer to God, dieting pattern are the major causes for disease of the people in the locality.

He also takes leadership role in many of the social functions, marriage settlement, sale and purchase of animal in the village. People consult him in many matters seeking his advice for solutions.

In short, Mr. Wadaka expresses his satisfaction as being a healer in serving people of his community. He is devotee of God Dongar Debata. Every year he scarifies poultry bird before God for well being. Mr. Wadaka hopes the practice would continue in future and young people would be interested to render these services to tribal communities.

The case study concludes that Kandha tribe has very strong belief in magical and herbal treatment and rituals. Once Dongar Debata is happy and satisfied, the Dongria Kandhas will lead prosperous life. Dongria Kandhas are few in population, live in forest and environment friendly situation, work on agriculture and lead simple life. They are strong believers of indigenous healing practices and magical treatments. The residents of the locality hardly visit Govt. Hospitals and dispensaries.

## Case 2

Name: Shree Dilip Mallick  
Village: Parampanga  
P.O.: Parampanga  
Panchayat: Parampanga  
Block: Baliguda  
District: Kandhamal

On entering into the village, Parampanga, people show the house of Mr. Dilip Mallick. The villagers feel that patients have come to the healer Dilip Mallick. On 26<sup>th</sup> May of year 2014 when our research team arrived in the village, without asking any question, they showed the house of Dilip Mallick situated at the end of settlement.

Mr. Dilip belongs to the Kandhatribes that too Desia Kandha. At this age of thirty five years he has established his name and fame as good healer (Disiri) of the locality. His house is always full of people coming from far and near. He has been blessed with a son and three daughters. At the age of eighteen years he stepped into the profession of healing being influenced by his late father. Now he is well known healer of the locality and treats almost all types of diseases including that of magical ones.

Mr. Mallick cures diseases like, bone fracture, gives herbal medicines and sometimes attempts magical treatment. His patients are mostly from the Tribes of Desia, Kutia, Buddo, Malua and Sitha Kandha.

In the year 1998, during rainy season Mr. Dillip had continuously treated ten snake bite patients using locally available juice of bark of Kundoru (*Acacia pennata*) and that became the point of name and fame in the locality. He also admits that his failure in some cases brought him bad name. Now he treats a number of diseases like, malaria, dysentery, snake bite, jaundice and asthma and in some case smooth delivery. According to him he has not yet mastered to treat fits of small children. Now snake and dog bite are common diseases for which patients come from far off.

Mr. Dillip states that diseases occur due to poor health, malnutrition, poor sanitation and carelessness at the beginning of the disease. In addition, hard work during summer and

irregular food habit are the causes of illness of tribes in most cases. His treatment starts with ascertaining body temperature, visible symbol, dieting pattern and abnormality of the patients if any. He never admits that country liquor as one of the reasons of ill health.

As far as his magical treatment is concerned, he says, “If the spirit is very violent it becomes difficult to control, else any liquor of affected patient came to him has been successfully treated”.

He gives special attention to treat senseless patients. According to him, the patient becomes senseless because of ghost attack or heart problem. In this case he advises for rituals near temple of the village where he worships “Dongar Debata”.

To satisfy God, he prescribes rituals and the cost is being born by the patients. The suggested rituals are,

1. Patients have to take bath before sun rise and wear new cloths.
2. The patients has to be brought before the God and lay down straight keeping head down not less than half an hour.
3. Mr. Dillip would start chanting mantras lighting lamp with ghee and others.
4. After puja is over, Prasad is distributed among the villagers.
5. The patient is advised not to take non-veg food items till the clearance received from the healers (disiri).
6. The process to continue for three days or till the patients becomes normal.
7. The patient and healers both have to paste vermilion on forehead that are used for worshipping.
8. Offering of locally made liquor or sacrificing of hen is optional and advised as per condition of the patients.

The income of Mr. Dilip is enough to manage of six memberfamily. Out of two acres of rain fed land, whatever he earns seem to be adequate for him. His son, daughter and wife also undertake wage earning in village plantation work. His wife Lukant and childrens all co-operate him in collection, drying and preserving herbal medicines. At pre monsoon time he goes to forest to collect herbal plant and sometimes engage people to collect forest produce for him.



Mr. Dillip Mallick has full faith in magical and indigenous method of treatment. He has not yet decided whether he will advise his son to bein this line. According to him, if some financial help is provided, he can easily expand business in future.

He feels that since the diseases are increasing day by day, there would be more demand for healers and one can comfortably earn a good amount of money as well as maintain his livelihood smoothly.

Shree Dilip Mallick in magical treatment has earned name and fame. Following are the common diseases that Dilip treats and symptoms he identifies on physical observation.

Sl. No.	Name of disease	Symptom of disease
1	Jaundice	Yellowness in eyes, excess of urination, looks yellow in colour, weakness.
2	Malaria	Headache, backache, high temperature, shivering & vomiting.
3	Asthma	Occurrence of pain at the time of breathing.
4	Tuberculosis	Loss of weight, fever, cough, change of voice, pain in chest, spitting of mucus containing blood, weakness, burning sensation at feet & palms.
5	Epilepsy	Wind formation in stomach, indigestion.
6	Bone fracture	Pain in the injured area that gets worse when the pressure is applied. Loss of function in the injured area.
7	Metal fatigue	Discharge of white liKuid substances through urine in concentrated form.
8	Disorder of menstruation	Abdomen pain, weakness, headache, pain in different organs of body, loss of appetite & constipation.
9	Snake bite	Severe pain occurs at the location of bite, spot swelling, redness and bruising at the location of the bite, nausea, vomiting, diarrhoea, itchy lumps on the skin, swelling of the lips, tongue and gums, breathing difficulties with wheezing.
10.	Hydrophobia	Exaggerated sensation at the bite site excitability, loss of sensation in an area of the body, loss of muscle function, pain at the site of the bite.

Looking at the situation, he takes decision to treat the patient and according to him illness of Tribe is due to hard work without adequate nutritious food. They are physically weak and are frequently subjected to different types of diseases. Mr. Mallik is in opinion that Kandha tribe are victims seasonal diseases like diarrhoea in the month of June, July and August ever year.

In management of livelihood system, the KandhaTribe are not very particular for saving. He says KandhaTribe earn and spend and hardly plan for future. During course of treatment Mr.

Mallick tries to infuse the ideas of (1) more saving (2) to grow more of remunerative crop (3) consciousness about health and (4) regular worship to God.

In support of his achievements, Mr. Mallick has expressed about the illness and curability of diarrhoea in the locality. In the year 2010-2011 his success in curing diarrhoea is reported to be 92.30% (120/130) and in 2011-2012 it was 83.33% (100/120). In the year 2011-2013 Mr. Mallick cured 70 patients out of 95 suffered in diarrhoea achieving 73.68% curability while in the year 2013-14 the curability was 93.75% (75/80).

Mr. Mallick says in case of snake bite, dog bite, chicken pox and continued fever, the allopathic medicines are not much helpful as in case of magical treatment. According to him, if information about snake bite reaches him the patient is assured of curability.

Mr. Mallick is a young man of 35 years and engaged in healing practices. He also holds leadership position. Although he has not formally contested for ward member or Sarpanch still people consult him in various issues like marriage settlement, community conflict and religious functions. He has three daughters. For all of them he is little worried and save money for their marriage and other welfare activities. According to Mr. Mallick, the approximate income from healing practices in last four years varied from 950 up to Rs 2500/- per year.

According to Mr. Mallick at community level, recognition comes through serving people, good behavior and commitment. The Kandha Tribe are strong believers of trustworthiness of healers.

### Case 3

Name: Shree Ramchandra Mallick  
Village: Dadakangia  
P.O.: Tumudi bandh  
Panchyat: Parampanga  
Block: Baliguda  
District: Kandhamal

Mr. Ramchandra Mallick is a young person of 38 years of age. He entered in to the profession of healing and is called local disiri at an early age. He belongs to Desia Kandha of village Dadakangia of Panchayat Parampanga of Baliguda block in Kandhamal district. His family consists of six members including himself, his mother Saniri Mallick who is 80 years old but very active in day to day activities. He has only three daughters. The children are within 4 to 10 years in age and presently at school going stage. His wife Risanti Mallick looks after household activities in the family.

**Economic background:** Mr. Mallick possess five acres of land and produce enough from farm to meet his own consumption with little marketable surplus. He grows paddy, maize, ragi and seasonable vegetables. His annual income is up to Rs- 70,000/- which includes contribution of business, agriculture and healing. He is also a progressive farmer in the village and possesses a bicycle and power tiller. He comes under BPL category.

**Healing profession:** From the year 2000 onwards, he increased the volume of his professional activities and now he practices all kinds of treatment like bone setting, herbal medicine and magical treatment. His teacher Laxmanananda Saraswati was a famous monk of that area and was assassinated by miscreants. Mr. Mallick before coming to healing practice had to spend more time with his teacher Laxmanananda Saraswati. His teacher taught him morality, honesty and rendering services for the poor tribe. Laxmanananda Saraswati was a famous person in the state and had vision to serve poor people by different skills. Mr. Mallick happens to be one of his disciplines, who went to teacher at the age of 24 years with an ambition to be a good healer for the Kandha tribe. Now he treats 250-300 patients of different kinds per year because of his popularity and good hand in treatment, and he even covers 30 to 35 kms to treat the patients. He has no restriction in treatment of sex, age and caste. He has

good number of patients among Kutia, Dongria, Jani and Kandha in addition to his own sub tribe Desia.

Being popular in the locality, not only he treats patient but also act as a good leader. According to Mr. Mallick, the causes of diseases are due to nonperformance of religious activities, ancestral ghost, outside contacts, malnutrition and poor sanitation. However, while giving the medicine he advices patient for sanitation and better environment of living. The diseases, that Mr. Mallick treats in his locality are, malaria, metal fatigue, jaundice, fainting, diarrhoea, pistula, breast disease, ear ache and black mole etc. He has expertise in identifying disease by method of visible body symbol, urine test, eye lid, tongue and dieting pattern. According to Mr. Mallick, the 10 important major diseases of his locality are malaria, mental fatigue, jaundice, fainting disease, diarrhoea, pistula, breast disease, ear ache and black mole.

He says, curability of disease in case of fainting, jaundice, diarrhoea and breast disease of women can be ensured 100% and other diseases like malaria, pistula and ear ache can also be cured with variation. The non curability of disease according to him is, due to delay in treatment, irregularity in taking medicine and wrong administration of herbal doses. He treats women and children without any hesitation. Payment of fees by patient is very nominal. During course of interaction, he didn't disclose it but the payment depends upon nature and length of diseases. His other professional engagement is the preparation of medicine throughout the year. He is satisfied with this job.

When a patient comes for the treatment, he enquires about important aspects like nature of suffering, length of suffering, visible symbols, dieting pattern, past medicine and abnormal behaviour if any.

Normally he doesn't suggest ritual but suggest only in case of leprosy, snake bite, ghost attack, hydrophobia and scorpion bite. He worships Lord Shiva and says he has got blessing from God to treat the patients. To conduct rituals, he prefers to visit residence of patient rather than a common place. He maintains secret of the treatment procedure and hardly speak to others. The plants, animals and minerals which he uses for preparation of medicine are- Nyctanthes arbortristis, Lawsonia Inermis, Momordica charantia, Mimosa pudica, Buteamonosperna, Rauvolfia serpentina.

**Magical treatment:** Mr. Mallick practices the rituals against the diseases mentioned below.

(a) Snake bite: Snake bite is a common in that area and many people become victim of snake bite. The poisonous snake is very dangerous and Mr. Mallick takes special care in treatment. The steps followed in case of snake bite are,

1. Once he knows about snake bite, he immediately comes near to the patient otherwise patient is brought to him.
2. He has ability to know the name of snake by looking at the victim.
3. He chants mantras in the ear of the patient for seven times and he uses root and leaf of Rauvolfia serpentine and grinds them perfectly and pastes them on the spot of snake bite. He has stored these materials in his house. He keeps on massaging on the wound site of patient for about 40 minutes.
4. Then he applies urine of male child below 12 years old with cow ghee and asks the patient to drink. On completion of 3 days, the patients get cured and then he asks the patient to perform puja in the temple of Lord Shiva.

(b) Dog bite (Hydrophobia): Although dog bite is not very frequent in his locality but during summer many patients came with problem of dog bite. The steps followed by Ramchandra Mallick to treat patients of dog bite are,

1. He doesn't chant mantra's in this case. He grinds arakha leaf, cow ghee and milk together and asks the patient to drink.
2. After one day, if the patient is not cured then he asks to arrange Trinath Mela. After mela is complete they offer coconut, banana, flattened rice before God and the patients distribute Prasad to the people.

(c) Scorpion bite: Scorpion bite almost follows the same procedure as in case of the snake bite. But in case of scorpion bite chanting mantra is followed by massaging at bite spot with milk of buffalo for about 40 minutes, till the sensation of patient is restored.

(d) Bone fracture: Mr. Mallick claims that he can cure the patient with bone fracture and so far he has already treated 22 such cases. In case of bone fracture the following steps are followed.

- He applies paste made out of Sandhi plant locally available and applies warm treatment by putting with water in the spot or lit fire to wound and show the affected part of the body to fire. The paste is plastered with the help of bamboo pieces. After 2 to 3 days, it is opened and replastered in the same procedure. The cure of bone fracture takes longtime (3 to 14 days).

(e) Leprosy: The leprosy patients are few in number in the locality. To treat leprosy patient, on the day of new moon he collects 108 numbers bel leaves without any damage and must have three leaves each and offers to Lord Shiva (linga). The water is poured in the name of patient and the water is collected and given to patients to drink. The patient is advised to recite the following mantras.

Aai jaar, kaala jaar, bae jaar, chamki jaar

Dusti jaar, arjina jaar, pita bata, kafa jaar

Jhad jhad pilar angaru jaar chhad

Iswar parvatinkara koti koti daya anka heu.

Mr. Mallick is very popular in his community. He is a leader. Mr. Mallick is consulted and his opinion is accepted on many issues. His wife is very happy with the performance of her husband as a healer, farmer and a leader.

#### Case 4

Name: Shree Rabana Majhi  
Village: Sana tuakela  
P.O.: Belaghar  
Panchayat: Belaghar  
Block: Tumudi bandh  
District: Kandhamal



Mr. Rabana Majhi is an experienced healer (Disiri) and belongs to sub tribe Kutia Kandha. Even at this age of seventy he never refuses any patients for treatment. He has taken up healing as means of livelihood in addition to farming. He has a family consisting of four members, his wife Randangadu Majhi (65 years), son Rusi Majhi (35 years) and daughter Swapna Majhi (25 years). He cultivates about five acres of land and earns enough for the year. His income from healing practice is quite good. On interaction, he did not disclose real income but appeared to be comfortable in money matters.

**Economic Background:** At the age of twenty five years, he was attracted for healing profession on his own decision and started treatment at the age of twenty eight. He remembers the day of his first treatment (1<sup>st</sup> January 1986) as an excellent day in his life. He promised to serve Kandha tribe in general and Kutia Kandha to which he belongs in particular. He belongs to BPL category and owns five acres of rainfed land. His son, daughter and wife all work in farming as well as in healing practices. His son, Rusi Majhi occasionally goes for wage earning. Healing profession is the main source of earning of the family in addition to age old farming.

**Healing Profession:** Rusi Majhi practices herbal as well as magical treatment. He opted for profession on his own with a dream to help his Tribe as well as to earn money. Dongar Debata is his inspiration and he claims to have received His blessing to take up healing practices. His claim is supported by his children that God (Penu) has directed him to be in healing profession. He normally treats 70 to 80 patients per month on an average and his patients are mostly confined to Kutia, Desia and Sitha Kandha. Irrespective of caste, creed, sex, age and religion he treats all patients.

He ascribes poverty, malnutrition, poor sanitation, evil spirit, ancestral ghost, climatic change are the major reasons of illness of the people. As per Mr. Majhi, the common diseases of the locality are stomach pain, joint pain, jaundice, black mole, wart, small pox, hair fall, scabies (skin disease) and fainting disease. For diagnosis the diseases, he applies his own technique like visible symbols, eye estimation, facial expression etc. The important diseases he treats are skin disease, headache, jaundice, dysentery and stomach pain. He has developed a catalog of his own to identify the



disease against the symptom. He claims that 100% curability he has achieved in treating of jaundice, headache, chicken pox, joint pain, mouth problem, hair fall and dysentery etc. Against the complain of non curability, he cites, reasons like late treatment, irregularity of taking medicine, not performing of rituals and carelessness about health problem. After treating for a period of ten years, he acquired expertise to diagnose diseases easily and their causes. He prefers to accept gift like hen, pig and goat rather than cash in hand. Besides healing, he also prepares herbal medicines with help of family members. However, sometimes he purchases ingredients for medicine from the market.

Being satisfied and happy with profession, he has now groomed his son Rusi and plans to hand over treating practices to him in future.

**Magical Treatment:** - His concentration is that illness is due to hard work and wrath of God. Before treating the patients he inquires about length and reason of suffering. After being satisfied by the responses of patients, he decides the course of treatment.

Mr. Majhi expressed that due to presence of bone, metal and other materials beneath the land, the owners suffer. For such cases, he advises to perform rituals against ghost attack, evil spirits and ill effect of planet. The steps in rituals for different diseases are,

1. Land worship: In this case bone, materials etc. are found beneath the land of the patient, for which he prescribes for land worship. To start with a line is drawn on the land. On the leaf of Bhalia plant (*Semecarpus anacardium*), turmeric powder, rice powder, castor oil are kept. These elements together called as *Raga Bhog* and after digging in the soil, the *Raga Bhog* is kept under soil and also is spread across the land and then a hen is sacrificed. Blood of hen is



spread on the land. Mr. Majhi believes by this process land is purified and owner escapes from the clutches of the spirit.

2. Worshipping of planet: Rabana Majhi also advises for worshipping planets to get rid of evil effects of ancestral ghosts (*lapranko bonga*) and misfortunes. The procedure is that head of the family in the morning will go to the near by river and take bath and will collect twelve kinds of flower in which red flower like china rose are given prime importance. After that oblation is held, the owner has to take bath again in river and worship. Then he visits the temple and offer coconut to Goddess. According to Mr. Majhi all the evil spirits and bad effect of planet are taken care by this process.

3. Snake Bite: In case of snake bite, he adopts another method. He sucks poison from the biting point till the patient feels comfortable. After that he applies the paste made out of Saranga seed for 2-3 days, the patient thus gets cured. This process is effective as per his version and Mr. Majhi uses it whenever snake bite patients approach for treatment.

4. Removal of Ghost: Ghosts are malavpolent spirits. They are potential danger for the Kandha tribe. They believe that the ancestral ghosts and the spirits always try to damage the families of Kandhas. To get rid of this problem, they perform rituals. On a leaf of Sala, they put rice and chant mantra for well being of patients. In some cases, they offer country liquor to Goddess along with Jhuna, rice followed by scarifying a hen. After sacrificing of hen, ashes from cremation ground is collected and then put on the forehead of the patient. Thus, the spirit is bound to leave the patient and can't stay in close vicinity. After the spirit is out, the patient is advised to use talisman in right hand for long time.

In case of herbal treatment, Mr. Majhi collects therapeutic agents of plant origin from forest. These plants are Taerminaliabellerica, Adhatodavasica, Lawsoniainermis, Ricinuscommunis, Cucurbitamaxima, Saracaasoca.

He uses ITK for wart disease and small pox with 100% of success curability. For wart disease he uses root of Taerminaliabellerica in combination with milk and for small pox, he prescribes root and leaf of Cucurbitamaxima and leaf of cyndoondactylon in combination with honey.

Mr. Rabana Majhi is very calculative in his profession. He does not treat the patient who is half treated or refused by other healers. He describes to develop a herbal garden close to his residence. He has a plan in mind to establish a herbal garden in the village. The well known

plants of his choice are, Hasasanga (Kandhaa Alu), Pihalkanda (Pani Alu), Tungamsanga (Pita Alu), Duri (Kendu), Sembed (Paadhua), Siju (Dokanasiju), Dudhi (Chitakuteai), Pichubar, Kujibara (Bara), Baidimiri (Dimiri), Baincha (Baincha), Meral (Kontaikoli), Gumna (Gambhari), Chiramar (Anantamula), Kaunria saga (Khata palanga), Kenua (Pitakorwa), Kanikanta (Koilekha), Lankanal (Baigaba), Basango (Basanga), Kaith (Kaitha), Kubabul (Nagarjuna), Mahua (Mahula), Badaklimba (Mahanimbo), Lajuli (Lajakoli), Pitagohun (Pitasaga), Nilkain (Nilkain).

In short, Mr. Majhi at this old age has feeling for an expansion of his business and support magico-religious treatment on the logic that snake bite, dog bite, ancestral ghost can't be controlled by herbal treatment. Magical treatment is backed by advantages of low cost, easy availability and without any residual effect.

Because of experience, Mr. Majhi is consulted by the villagers on issues related to community function, performance of religious activity, marriage settlement and overall development work, as a whole. In the world of herbal and magical treatment, Raban Majhi is deeply impressed and shall go on treating patients till he breaths last.

### Case 5

Name: Shree Rishu Mallick  
Village: Kutikia  
P.O.: Belaghar  
Panchayat: Kutikia  
Block: Baliguda  
District: Kandhamal



Rishu Mallick belongs to Kutia section of the Kandha tribe.

In the village of Kutikia, Mr. Mallick is known as healer locally called as Disiri. He has six members in family, the youngest being eight years old. To help in earning livelihood, his two sons, Ushap and Bisap work in field and wife, Satari Mallick does household works and helps her husband in healing as well as farming.

**Economic Background:** The family possesses four acres of land and the harvest is sufficient to meet food requirements of the year. He grows mostly paddy, pulses and seasonal vegetables. He sells vegetable in nearby market occasionally to add to the family income. He has a bicycle for mobility and hasn't purchased radio, T.V nor subscribes to any Newspaper. Rishu has education up to class III and knows how to read and write and does his signature when required. The annual income of the family excluding healing is approximately up to Rs-50,000/- and from healing he earns about Rs-20,000/- per yearbut comes under BPL catagory. For treatment fees, he goes by negotiation considering the affordability of patient, nature of diseases and duration of treatment.

**Healing Profession:** Shri Mallick practices both herbal and magical treatmentssince from the year 1990 when he was at the age of sixteen. He had tried to treat bone fracture but could not be successful. Coming to healing profession, he was guided by his teacher (Simanchal Das) a native of his locality who infused the idea of earning money through this profession. Simanchal Das died about eight years back but the knowledge and skill he imparted to Mr. Mallick brought him name and fame in locality. He covers about 10 km distance to treat the patients, and annually he treats about 60-70 patients by herbal and magical treatment. He believes in *Guni* and exercises skill in dealing with supernatural beings. He receives patients

with hospitality and favorable attitude. His patients are from Sitha, Desia, Dongria, Buddo and Kutia or Kandha sub Tribe. He has no restriction to treat the patients of different age, sex, caste and creeds. He is a devotee of Lord *Kutebati* and *Kali sundari Penu*. He practises *Mantra's and Tantra's* at midnight when others are in sleep. The prominent vermilion is seen at his forehead which gives him identity and wherever he goes either to local market or distance places. According to him the vermilion on fore head saves him from danger.

Mr. Mallick says malnutrition, wrath of God and Goddess, displeasure of spirits are the major causes of illness of the people in the locality. The frequently occurred diseases in the locality are dysentery, malaria, stomach pain, fever, eye conjunctivitis, back bone pain and chicken pox. Eye conjunctivitis occurs every year and he receives a good number of patients for treatment. Many of the older people of his tribe suffer from back pain and women from joint pain. These are the common diseases in the locality for which he gets maximum calls to attend.

For diagnosis of disease, he is very careful. Mr. Mallick examines eye, body, tongue and different parts to arrive at the conclusion about the causes of disease. According to him, delays in treatment, not taking of medicine in time, wrath of God are the reasons of suffering. In the rainy season dysentery is the major disease in the area which he attends with much care and sincerely. In the year of 2000, he had cured about 120 patients of such kind. However, treatment of cancer, T.B, fits, diabetes and bone fracture are out of his domain. He treats men, women and children regularly in the locality.

**Magical Treatment:** The local people say that Mr. Mallick is an expert in dealing with magical treatment. He is applying magical treatment for curing patients of snake bite, dog bite, scorpion bite, ghost attack, illness and fever of continuous nature. From body temperature, visible symbol and dieting pattern, he identifies the cause of disease and suggests remedial measures. The rituals as advised by him are most simple and quite affordable. Goddess *Dharani Penu* remains at the centre of the rituals. For an eye disease and chicken pox, his patients are advised to worship *Dharani Penu* adopting the following steps.

- a. Patients are advised to take bath before sunrise and proceed to temple without looking back.
- b. He has to offer fruits, like coconut, banana, incense and flowers of seven kinds like datura, marigold, champak, arakha, lotus, moon beam, and amaranth followed by offering lighting lamp.

c. The practice is particularly observed on Monday, Tuesday, Thursday and Saturday.

As regards, worshipping Goddess *Kali Sundari Penu*, Rishu Mallick prescribes the following steps. Goddess is worshipped for diseases like, abdominal pain, bone fracture, malaria and dysentery, etc. respectively. While offering puja, the patient has to wear new cloth and then offer vermilion, flower and incense to Goddess *Kali Sundari Penu* along with fruits and flowers of different kinds. It is also said that offering of blue/red clothes to Goddess *Kali Sundari Penu* and sacrifice of hen is the option but most effective.

**Guni and Mantra:** This magical practice is applied in case of snake bite, dog bite, scorpion bite, ancestor ghost and evil spirit. In case of magical treatment, when patient becomes victim of ancestor ghost and spirits the magical treatments are adopted, as per advice of healer. The story of Duli Mallick (18 years) of village Rangaparu of the locality is of quite interesting and it relates to November 2012. Duli Mallick was attacked by ancestral ghost (*lapranko bonga*) and remained speechless, exhibiting abnormal behaviour with body turned into black in colour and eyes in socket. She remained almost confined and did not talk to any body nor took foods and drink. After recognizing these symptoms, the healer, confirmed the attack of ghost and advised to perform puja called *Budi Bhoga*. This ritual was to be performed only in front of Goddess *Kali Sundari Penu* in cremation ground at night. After deciding the rituals to perform the patient was brought near the temple of Goddess *Kali Sundari Penu* in close proximity of cremation ground of the village and healer indicated a circular place demarcated by white colour sprayed with holy water of river Ganga. The patients i.e. victim of the spirit was asked to sit in the middle of the circle. The healer made some oblation using sundried rice (*Arua chaula*) and lighting lamp with ghee inside the demarcated place. The members of his own and neighboring families participated in rituals with age restriction of being above eight years old only. The participant was from both sexes. It is mandatory for all those who were present to drink country liquor including victim to pray for speedy recovery of patient. After oblation, the evil spirit was driven out by keeping the rice to the head of the patient for two times. The healer then chanted Mantra continuously before Goddess *Kali Sundari Penu* and sacrificed a black hen. The blood of hen was collected and



hair of the patient from head was taken and mixed together and then keeping inside in earthen pot was put under the soil after digging about a depth of 2ft. Then the hole was covered with soil and thus ritual came to an end. Then the healer advised the patient to wear talisman in right hand. After three days the patient got cured and evil spirit was exorcised bringing victim to the normal condition.

In case, the patient is not cured, the healer repeats the same rituals with a black goat not hen to ensure success.

**Preparation of herbal medicine:** Rishu Mallick and Satari Mallick both collect plants, stem, leaves of different plants and prepare medicine for various diseases. The following plants are used by Mr. Mallick to prepare herbal medicine. These plants are, Aloevera, Rauvolfia serpentina, Nyctathes arbotristis, Mangifera indica, Zingiber officinalis, Eugeniaj ambolana, Dolichos biflorus, Annonasquamosa.

He also uses minerals to make talisman for the patient made of copper. Mr. Mallick has earned his name for magical treatment. He puts the logics like, easy to apply, less cost and ensured curability are the characteristics of magical treatment. Sometimes, he combines magical treatment with that of herbal medicine for treatment of chicken pox, stomach pain and dysentery to achieve success. He also practises ITK medicines for following diseases.

- (I) Dysentery: He uses bark of Eugeniajambolana and Mangifera indica mixed up with black pepper and cloves to cure the disease.
- (II) Abdominal pain: He uses root of Rauvolfia serpentina combine with black pepper.

He is liked by people for treatment of various diseases at the door step of the patients. According to Rishu, "Healing is a noble profession and healers should up keep the traditional healings practices with sincerity and commitment".

**Interpretive conclusion:**

Five case studies were conducted taking Kandha healers as respondents belonging to sub tribe of Dongria, Desia and Kutia in the districts of Rayagada and Kandhamal. All five healers taken as the case studies are experienced healers and are in the profession in their community for a long period. The healers are found in wide range of age category beginning from 38 years up to 70 years. They are popular healers in their community. The following are the synthesized outcomes of the case studies.

1. The healers' prefer to confine their treatment in own tribe and sub tribes since the language and the culture do play a major role in treatment.
2. The healers covered under the case studies are practitioners of herbal as well as magico-religious treatments. A few healers have specialization in treating bone fracture cases.
3. The Kandha healers are strong believers of super natural power. They believe on traditional treatments which have been continuing from generation to generation. Their argument is that traditional healing practices are based on herbal and magico-religious ingredients which are eco-friendly, less cost, easily available as well as free from ill residual effect.
4. The common method of preparing herbal medicines is collection from forest. They process the ingredients by sun drying, grinding, juice extraction and soaking of stem/ barks. The magico-religious treatment is different from herbal treatment. Majority of Kandha healers are in favour of herbal treatments. The magical treatment is adopted in special cases like ghost attack, snake bite, dog bite and epidemical disease like diarrhoea and chicken pox.
5. The Kandha healers charge fees for treatment within affordable range of the patient. The gifts for healers are hen, goat, sheep and country liquor. They do not have restriction in treatment either sex.
6. The ingredients of herbal medicines are collected from near by forest. Since they reside by the forest the herbal ingredients are easily collected.

7. The Kandha healers irrespective of Dongria, Desia and Kutia sub-tribe follow common procedure in magico-religious treatment. The reciting of *mantra* is a must in case of all the healers following prescribed treatment.
8. The Kandha healers believe and are of opinion that the traditional healing practices will continue and the future generation will take care of it for the retention of ethnomedicine.
9. The Kandha healers are also interested in developing herbal gardens in locality as the deforestation is going on at a faster rate and also wish to under go training program for capacity building in healing.



**CHAPTER IX**

**KNOWLEDGEABLE PERSONS**

**(Field Findings)**

## CHAPTER IX

### RESPONSE FROM KNOWLEDGEABLE PERSONS ON TRIBAL TRADITIONAL HEALING PRACTICES

In tribal areas, the practitioners of folk medicine are a blend of witch-doctors and herbalists. In the context of present study, we have chosen knowledgeable persons to focus more on the traditional methods of healing practices particularly magico-religious treatment adopted by them. These persons are also known as Key Informants (KI). The term, 'Key Informant' is operationally defined as the persons who have knowledge about people, their activities, social system, cultural complex and normal behaviour and abnormal behaviour of the local people. Because of their knowledge, popularity and willingness to provide information, the study interviewed as many as 16 knowledgeable persons selected from the study villages. The major criterion was to select those KIs who had undergone an experience of administering treatment to the patients of the area.

**Table: 9.1 List of KIs included in the survey**

Sl. No.	Name	Village	Block	District
1	AnantaMajhi	Nuagaon	Khunta	Mayurbhanj
2	JaisingMajhi	Basipitha	Khunta	Mayurbhanj
3	SurendranathMajhi	Srirampur	Jhumpura	Keonjhar
4	SanatanaMurmu	Teliarshla	Jhumpura	Keonjhar
5	DhaneswarMajhi	Silisuan	Keonjhar	Keonjhar
6	JaramanMajhi	Amritpada	SadarKeonjhar	Keonjhar
7	TeachercharanNaik	Dabank	SadarKeonjhar	Keonjhar
8	TimikaMurmu	Dhatika	SadarKeonjhar	Keonjhar
9	BiswanathKisku	Totasahi	Raisuan	Keonjhar
10	Rajkishor Mardi	Rajbandh	Sadarkeonjhar	Keonjhar
11	PitulaJani	Bulabaro	Tumudibandh	kandhmal
12	LakuWadaka	Khajuri	Bissamcuttack	Rayagada
13	RamchandraMallick	Dadkangia	Baliguda	Kandhamal
14	BenarsinghBehera	Kutikia	Baliguda	Kandhamal
15	SindheWadaka	Khajuri	Bissamcuttack	Rayagada
16	Purna Chandra Baliarsingh	Muniguda	Muniguda	Rayagada

**9.1 Objectives:** The inclusion of KIs in the study was based on the following objectives.

1. To know the brief background about the KIs who keep all information at village level and also transmit new information to the people.
2. To know the leadership role of KIs in the village community and the matter in which they are consulted by the people
3. To find out the acquaintance of KIs with social activities particularly in health care practices.
4. To ascertain the reactions of KIs about curability of patients treated through traditional methods.
5. To collect information from the KIs about magico-religious practices in form of rituals performed by the healers to cure the patients.
6. To know the types of medicinal plants that are available around the villages and near by forest areas where healers treat the patients with herbal therapeutic agents.

**9.2 Data Collection:** The information regarding personal profile and healing practices along with their reactions were collected by the experienced qualified investigators by means of an interview scheduled developed for the purpose based on the stated objectives.

Sample	
District	No. of KIs.
1. Mayurbhanj	2
2. Keonjhar	8
3. Kandhamal	3
4. Raygada	3
<b>Total</b>	<b>16</b>

### **9.3 Results of the Study:**

**9.3.1 Personal Profile:** Most of the KIs are in age group of 30-50 years, have enough experience in dealing with Tribe, well acquainted with people of the locality. All the KIs are literates and have read up to middle and or high school standard. Majority of them belong to ST and very few to OBC and general caste. They are in farming profession and few of them have small business. They possess leadership traits and are consulted in the matter of treatment, social function, and cultural activities, development programs, family conflict, political matter and business etc. These backgrounds of KIs are indicators of their proficiency in knowing the people and their activities well.

**9.3.2 Reaction about the healers:** Further the reaction of the KIs was sought in the matter of healing practices and the healers.

There was little variation in their response to indicate extent of curability of the patients by the traditional methods of treatment.

**Table: 9.2 Patients' Reaction about the healers**

Reactions	Frequency	Percentage
1. All patients are cured	8	50.00
2. Most of the patients are cured	4	25.00
3. Some of the patients are cured	3	18.75
4. Very few patients are cured	1	6.25
<b>Total</b>	<b>16</b>	<b>100.00</b>

The reactions contained in the table reveal that majority of the patients in the locality get cured by the healers. It is also facts that healers cannot cure all the patients suffering from various diseases. The significant observation is that KIs have full confidence on the healers and traditional methods of treatment.

**9.3.3 Reaction about the magical treatment:** The important part of the investigation is the secret of magical treatments. According to the KIs the following diseases and accidental cases are fully cured by the local healers.

**Table: 9.3 Reaction about the magico-religious treatment (N=16)**

Sl. No.	Name of diseases and accidental cases	Frequency	Percentage
1.	Cough and cold	10	62.50
2.	Snake bite	4	25.00
3.	Dog bite	5	31.25
4.	Bone fracture		25.00
5.	Scorpion bite	7	43.75
6.	Scarcity of milk secretion of lactating mothers	3	18.75
7.	Birth control	2	12.50
8.	Spirit affected patients	4	25.00
9.	Blood vomiting after being frightened	7	43.75
10.	Smooth delivery of child	5	31.25
11.	Period disorder of women	6	37.50
12.	Prevention of miscarriage	2	12.50
13.	Abortion	3	18.75
14.	Night blindness	2	12.50
15.	High fever of children	7	43.75
16.	Chicken pox	6	37.50
17.	Hydrophobia	5	31.25
18.	Planet effect (Saturn, graha dosh)	10	62.50

To cure these diseases the healers adopt both herbal and magical treatment as supplement to each other.

**9.4 How do healers learn healing practices?** While interacting with the KIs the learning process of the healers was ascertained as given below.

**9.4.1 Magical healing:** Magical healing is individual choice. Those who have imbibed the desire they search about the ways and means to be magical healers. They are influenced by the social situations, personal interest and magical healers of the locally. The synthesis of procedures to be magical healers based on interactions with KIs is as follows.

1. They offer themselves to God and Goddess to be in line with full sincerity.
2. They regularly worship and offer fruits and flowers without deviation and then take food.
3. Some healers spend 7 or 14 or 21 days in temple with one vegetarian meal per day and devote full time in prayer and worshipping.

4. Many of them claim that they receive instructions in dream and then start magical treatment with all the rules as instructed.
5. Sometimes, they go to local cremation ground at night, sit for a while in meditation and chant the mantras. Some even claim that they interact with spirit and acquire skill to exercise control over the spirits. All Tribe believe the existence of spirits and their evil deeds.
6. After reciting mantras for 108 times, they return from cremation ground and declared to be masters in spirit control. Every month in Amabasya (New-moon) they visit to worship place in cremation ground.
7. After being perfect in controlling spirit, they start healing treatment. According to them the curability is faster with animal sacrifice, like poultry, or goat or sheep whatever available within their reach.

**9.4.2 Herbal healing Practice:** The sample KIs reveals that to be herbal healers there is altogether different process. Those who opt for this line are influenced by elderly healers, instructed by father, or by self urge and decision.

1. After deciding to be in the line, they approach elderly healers who would be not only their tutor but also a master trainer. During training they get associated with healing practices.
2. In case of bone setting, they remain with Teacher, see the operation and help in the process. They are also told about the effects of herbals, processing, and quantity of application with interval by the Teachers.
3. They are required to go to forest many a times, identify plants, their location, and season of growth. They collect root, leaves, stems, tubers, shoots, buds, flowers and even whole plants for preparation of medicines.
4. They put plant parts under sun dry, keep in cool place, churn them to powder and preserve for use.
5. In case of animal or insect bite, they apply herbal medicines and recite mantras. These mantras are very secret and they never tell to anybody except those who become their disciple.
6. In most cases, healers maintain strict disciplines in terms of Morning Prayer, offering to God, adhering to vegetarian, putting vermilion on forehead and taking at least a draught

of liquor offered to the deity. According to their beliefs, intake of liquor as a part of ritual is a must before treat a patient.

7. To become perfect healer, they have to practise the treatment at least for three years on free of cost.
8. One has to be perfect in identification of medicinal plants and processing of medicinal materials. Thus, the family members also learn and the process continues generation after generation.
9. At pre and post healing periods, they pray God and offer fruits or flowers.
10. In the beginning they treat patients free of cost and after three years they charge for it.

The respondents – knowledgeable persons were asked to share their wisdom on the tribal traditional healing system. The stock taking of such wisdom is presented in the statement indicated as under showing the local names of the herbal plants and their ingredients and their use for preparation of medicines and their application in curing different diseases.

**9.4.3 Rituals in Treatment:** The tribe and their healers strongly believe in rituals. They perform it with sincerity as far as possible.

In magico-religious treatment rituals are must while in herbal treatment it is optional. But in case of combination of herbal and magical rituals are must.

The diseases for which rituals are performed are, eye disease, chicken pox, cut wound, ghost attack, planet effect, evil eye, animal bite ( snake, dog, scorpion etc.) and hydrophobia.

**Table: 9.4 Description of rituals**

Name of Disease	Steps followed in performing the rituals
Put an ill eye on others	1. Morning bath without talking to anybody. 2. Bathing with empty stomach. 3. After bath goes to village temple to worship god. 4. During prayer & chanting mantras before God. 5. Offering fruits as Prasad to God. 6. After worship, distribution of Prasad to people present in temple.
Snake bite	1. The healer gives some herbal medicine. 2. Then some mantra is chanted for sometime to worship the God. 3. Then healer and patient both go together to the village temple for offering coconut, banana and other worship materials. 4. At temple periphery, the healer starts oblation by ghee burning. 5. Then Prasad is distributed to all those who are participating in oblation. 6. After completion puja, the patient offer money to temple.
Najarlagiba	Entire body of the patient is washed by chanting mantra with the help of salt. Advise to drink that whole salt. Then allowed to wear talisman which is filled in tulasi, dub grass and black cumin.
Mental worship	1. First of all sitting in front of Marang Buru (God) as soon as after morning bath is over. 2. Then offer fine raw rice to hen and with sindur and agarbati. 3. Sacrifices of hen to Goddess after the puja activity is completed. 4. Then the Prasad of Goddess (Hen meat) is being distributed to everybody residing in the village.
Small pox Chickenpox	1. Bathing with empty stomach, proceed to temple & sit for a while worshipping the God by offering banana, coconut, sindur, sandal. 2. Offering to God 3-hen, 2-guana, 1-pigeon and 1-goat 3. Then distribute Prasad to everyone
Planet effect	At the beginning of ritual, priest starts oblation at the village temple. Then all members of family and priest worship the God Sani (Saturn) by offering coconut, banana, showing incense and lightening the lamp. After the puja, hen is sacrificed. Then the prasad of Goddess (hen meat) is distributed to the family members and villagers.

The Kandha and Santal consider health imbalance manifested through indirect and intangible factors; i.e. supernatural and magical causes. Since the causes are attributed to metaphysical entities of mysterious forces. The healers whose knowledge on the causes of illness and disease are part of their community culture, they hardly think that the hygiene and dietary



habits may produce the ailment. For most of the disease they first consult the local traditional healer. The allopathic doctors are consulted only when the disease lingers long and shifting from one healer to another does not yield result. However, the healers try their best to bring the patients to regain normal health through appeasement of spirits and deities. In case of failure the healers have many ways of rationalising the failure of their curative strategies adopted during treatment. Unless local specific, community specific and need-based health care delivery system is evolved which is appropriate, acceptable, accessible, and affordable, the goal of health for all would remain a dream.

From field data one can safely conclude that the tribal healers are bound to coexist with the modern health care services during the transitional phase of any society. The adherents of traditional customs and usages, especially elders, have unquestionable trust on the healer's knowledge of medico-religious practices. The traditional tribal healer has been an inseparable entity of cultural moorings of the small communities. It has also been observed that with the constant and continuous intervention of allopathic medicine and treatment practices the change at the level of awareness have grown to certain extent as a result for quick relief and cure a few tribal elites often who in their locality are the referent individuals have shown their inclination to modern health management practices. However, the power of traditional medicinal practitioners has their stronger hold in community. Therefore, it would be wise to incorporate them into the modern health care system at the grassroots to make medicine more accessible to people. Of course, their incorporation into the modern health care practices likely to be useful only after they are being properly sensitized through periodic training as a result minor ailments can be effectively managed and monitored. For promoting preventive care of the health seekers their incorporation would be a great help to the welfare agencies as well as the community.

## **CHAPTER X**

# **CONCLUSION AND WAY FORWARD**

## CHAPTER X

# CONCLUSIONS AND WAY FORWARD

Odisha is one of the largest tribal-dominated states of the Indian Union. The state is the home to 62 distinct tribal groups that constitute around 22 percent of the state's population. They are mainly concentrated in the areas notified as Schedules Areas. These are generally rural and are often inaccessible. Due to this remoteness, these tribal groups are susceptible to multifarious deprivations. They face health problems; suffer from low educational attainments and declining livelihood opportunities. They suffer from high incidence of diseases, disabilities, poverty and hunger. Due to rigid cultural base and traditional attitude they hardly avail modern health care and depend on their local traditional healers for health treatment. The present explorative study, "Indigenous Ethno-Medicinal Practices among the Kandha and Santal Tribe of Odisha" was conducted in four districts namely, Kandhamal and Raygada for the Kandha Tribe and Mayurbhanj and Keonjhar for Santal Tribe with a set of objectives.

This chapter gives highlights of the discussions made in the preceeding chapters. The key points of the highlights are the Kandha and Santal healers and their traditional method of treatment, responses from the patients, who received the treatments, of both the said tribal communities and knowledgeable persons of the localities, the scope of adoptability and acceptability and way forward indicating the usefulness of the research finding.

### **10.1 Kandha healers and their healing practices:**

For exploration of the healing practices of the Kandha tribe the study draws opinions of as many as 45 healers from Kandha tribe, 15 from each of its sub-tribes of Desia, Dongria and Kutia, and a total of 225 patients @ of 5 per each healer belonging to these three subsections for data collection as per requirements of the investigation. Accordingly, the results of the study are presented in two major headings (I) traditional healers and their practices and (ii) patients and their opinions about healing practices. Further, the investigation was supported with the views of local knowledgeable persons on the matter to corroborate the findings sourced at each level.

### Healers and their practices

The findings of the study give a sketch of socio-economic and personal profile of the healers, healing as their profession, individual healers and their herbal treatment practices and magico-religious treatments and rituals.

The Kandha healer-respondents belonged to 13 important clans. Majority of them were from the clans of Saraka (15.56%), Mankada (13.34%), Jani (11.11%) and Mandal (11.11%). The Kandha healers lived in nuclear family system composed of 4 to 5 members with one or two earning members. The data represent cross sectional view of Kandha community. The tribe Kandha mainly depends on agriculture as major source of income followed by wage earning. Majority of the sample healers were marginal and small -peasants as per the classification of Govt. of Odisha on the possession of land. Majority of the sample belonged to BPL category followed by APL and their income was up to Rs-50,000 per year.

The study reveals that majority of the sample within the age group of 31-50 years and a few are above 50 years of age. The respondent healers were males and 93.33% of them were married. As regards to educational attainment, 60% are non-literates, 24.44% studied up to primary standard, 4.45% middle school, and 11.11% up to high school and none had gone beyond level of high school. In short, the sample represented all age groups above the age of 30 distributed in three educational groups upto high school level in the area under study. This seems education has least impact on ethno-medicinal practices and traditions hold good. It can also be attributed to the fact that the mainstream social system is subversive to the interest of the tribal mass and the retention of traditional ethno-medicinal practice remains compassionate to local socio-economic system.

The entire sample is healers. Apart from healing practices, majority of them were also involved in preparation of herbal medicine, in cultivation of medicinal plant (8.89%) and marketing of medicines (11.11%) in addition to healing practices. Majority of sample healers practiced herbal treatment (91.11%) followed by bone setting and magical treatment. However, about 17.77% reported practicing of Tantra and Mantra (Guni).

Self decision was the important factor to attract Kandha individuals to the line of healing profession followed by father and to some extent teacher (13.33%), the master in the healing practices of the area. Father and Teacher taught them the skill of treatment and in few cases (15.56%), they learnt by self effort.

Average number of patients per year per individual healer was found up to 100 and in 28.89% case of it was more. However, the figure varied from year to year. The study estimated that as much as 51 diseases frequently occurred in the locality and were treated by the healers. The important diseases were backbone pain, piles, epilepsy, ghost attack, snake bite, dog bite, scorpion bite, ulcer, cough, cold, jaundice, fever, dysentery, malaria, stomach pain, gastritis, asthma and diarrhea.

The causes of diseases were attributed to the reasons like physical weakness, climatic change, poor health, malnutrition and poor sanitation. The healers claimed that non curability of some disease was due to delay in treatment, irregularity in taking medicines and God's wish. While interviewing the respondents, some mentioned about curability of diseases as the desire of destiny and not only in hands of the healers. Kandha healers irrespective of sub tribes did not have any restriction in treating patients in the context to sex, caste and religion etc.

In most cases the patients paid fees for treatment to the healers on negotiable term. Also paying capacity of patient, nature of disease and duration of treatment were taken into consideration while charging the fees. Rituals used to be suggested by the healers and were duly performed by patients. The cost of rituals was born by the patients. Rituals were conducted in the house of patients or in near by worshiping place and arrangements were made by both healers and patients and sometimes with community support.

Majority of the healers groomed their children or relatives as future healers because to serve their community, as family occupation and to retain their name and fame in future. Majority of the healers were satisfied in their healing practices and because of profession they could hold leadership position in the community. The satisfaction was due to income, curing of diseases and recognition of the society.

The local healers were consulted by the community people in various matters like community function, religious activity, marriage settlement and development work etc. On receiving the patient, the healers used to enquire about causes of illness. The causes were found to be hard work without rest, displeasure of God, contact with already suffering persons and mental worriness. The common methods of identifying disease followed were external visible symbols on the body of the patients, dieting pattern, body temperature, pulse rate and facial expression. After being sure of the reasons used to the healers prescribe medicine and advice to perform rituals, if required.

Analysis of data gathered from 45 Kandha traditional healers and their practices estimates that mostly they treat the diseases like dysentery, hydrophobia, snake bite, stomach pain, joint pain, malaria, chicken pox, epilepsy, pistulla, asthma etc. They suggested rituals for snake bite, scorpion bite, ghost attack, small pox, chicken pox, dog bite, evil spirit, land worship, leprosy and other diseases.

The frequently used medicinal plants of healers was found to be Nyctathens arbortristis, Azardirachta indica, Mangifera indica, Aloe vera, Ocimum sanctum , Rauvolfia serpentina and others as indicated in appendix. Most of the theurapeutical agents of animal origin were Hornbill (Ocyeros griseus), Snail (Calcareous epiphragm), Bat (Pipistrellus Pipistrellus), Monkey (Macaque monkey), Crab (Liocarcinus vernalis), Turtle (Herbivora testudinidae) etc. In case of minerals, silver, sulphur and copper were frequently used followed by gold and iron to a limited extent.

It is observed that many healers combined the magic & herbal treatment to obtain quick better results. The magical treatments were found to be widely adopted for ghost attack, snake bite, dog bite and scorpion bite, Jaundice and continued fever for long time. Variation was observed in procedure followed for magical treatments according to sub tribe and location. The logics to support magical treatment were, wonders with God and Goddess, magic works where other methods fail, easy to apply, no cost or low cost involved & environmental friendly.

### **Patients and their reaction:**

The information on tribal traditional healing practice has two actors, the healer and the patient. The information gathered from the Kandha healers were cross checked with that of the information pooled from their patients so as to corroborate the findings. With this the study intended to ask the opinion of as many as 225 Kandha patients, who had received traditional treatments for cure of diseases.

The socio-economic profiles of the respondent patients reveals that all the patients belonged to as much as 21 clans. Highest percentages of them were from the clans of Gunji, Nagasya followed by Jani, Santa and Mayur etc. all most all patients 94% were original residents of the survey villages and only 6.22% were migrants. Majority of the patients were within age group of 32 to 50 years comprising of 65.33% male and 34.67% female. About 60% from them were married. As per their educational level, 64% were non-literates, 18.22% studied up to primary level, 8.44% middle school, 7.56% high school and remaining rest 1.33% had college education. However, only one of them was technically qualified.

Nuclear family system was common among the sample with average of 5 family members among whom, one or two earning members. Majority of them depended on agriculture as primary occupation supplemented by wage earning and collection of forest produce. In majority cases of the sample annual income less than Rs 50,000/- per year and very few had more than 50,000/-. In case of land possession 28% were landless, 33.78% marginal farmers and rest 28% of small farmers. About 95.11% of the respondents were under BPL category.

For treatment of diseases, maximum had availed traditional treatment followed by allopathic, Ayurvedic and homeopathic. They were unable to identify disease themselves and depended on healers for identification as well as cure. For traditional treatment of diseases by the healers, family members and self decision were found to be deciding factors. On arrival of the patients at the place of healer, the healers usually checked their body temperature, pulse rate, different parts of body and enquired about food habit, sleep condition and past period of suffering to identify the disease for treatment. The other important queries made were about attack of ghost and frequency of urination.

The patients cited about 20 diseases for which they had undergone treatment by the healers. Out of these diseases maximum were fever, stomach pain, dysentery, cough, hair fall, diarrhea, chicken pox, ear ache and back bone pain. The patients expressed that they got cure from these diseases by the traditional healers. But the healers did not disclose them about cause of their illness and composition of herbal medicine. Many of the patients had expressed to have performed rituals as per the advice of healers and got cured. The rate of payment for treatment was mostly negotiable followed by fixed rate. About 54.67% of patients knew the local Kaviraj and 47.56% had visited Govt. hospitals for treatment.

The reasons of preference for traditional healers over Govt. health care centers were based on considerations like well proven result in treatment, less cost, confidence of cure, close proximity, absence of ill effect, easy availability of medicine, easy approachability and able to express their feeling before the healers freely in their own language.

## **10.2 Santal Healers and their healing practices**

For the purpose of the study, 40 healers and 200 patients of Santal tribe were chosen from two districts, Mayurbhanj and Keonjhar on the basis of experience of minimum five years in healing practices and that of patients of being under treatment of the traditional healers at least for two diseases. The data for study were collected through an interview schedule developed on the basis of objectives and pretested for validity. The qualitative information collected from the healers and patients were analyzed and summarized below.

The personal profile of the healers reveals that they belonged to seven clans and maximum of them were from the clans of Murmu, Heambram, Hansda, Soren and Marandi. Most of them were in age group of 31 to 50 years, males, married and non-literates. The minimum and maximum age of the healers was 19 & 72 years respectively. About 25% of them were educated up to High School standard and 10% have studied up to college level. They mostly lived in nuclear family system, with average of 5 members per family and with one to two earning members. On the economic status, all of them belonged to BPL category, classified under small and marginal farmer category, depended on farming with annual income up to one lakhs. In addition to healing, they also undertake activities like preparation of medicines, cultivation of medicinal plants and marketing of medicines to limited extent.



In most cases, father, community leaders, family members and Teacher or master influenced them to be in healing profession while 25% of them had opted on their own. The sample healers had acquired the skill of treatment from their fathers who are/were healers in the past/present and from the Teacher or master of healers of the locality. None of them had gone through any literature to learn the art of healing.

Out of the total sample of 40, as much as 35% were bone setters, 57.50% herbal treatment practioners and 35% magical treatment healers. The healers were not confined to single treatment method rather adopted multiple treatments. The sample healers treated on an average 50 to 100 patients per year of different diseases. In few cases the number of patients went beyond 100 per year per healer.

The numbers of common diseases of the locality were mentioned up to 69 and many of them were seasonal in nature. In the rainy and prior to winter season the tribes in the districts of Mayurbhanj and Keonjhar used to suffer maximum. (See Table No. 10).

The healers start treatment after being sure of the causes of diseases. The healers cited many reasons for illness of the tribes. Poor health, malnutrition, poor sanitation, displeasure of ancestral ghosts, evil spirit, climatic change and biting of animals were prominent among them. The ascertained common causes of diseases were found to be mental worry, hard work, contact with sufferings and displeasure of God and Goddess. However, the reasons assigned by the healers varied from place to place and healers to healers. The common methods adopted by the healers in identification of diseases were, visible symptoms, urine test, facial look, body temperature, pulse rate and dieting pattern. After receiving the patient and knowing the causes of illness, healers used to enquire about intake of past medicine to start treatment.

Many healers used herbal medicines with magical treatment to treat the patients. In all cases the patients had to pay for the rituals and ritual process were being conducted in the house of the patients or temple or common place of the villages as suggested by the healers. The Santal healers conducted magical treatment in case of diseases like hydrophobia, snake bite,

scorpion bite, ghost attack and evil spirit, sudden frightened and lingering or continuous fever. On an average each healer treated 15-25 such cases per year. The procedure for magical treatment consisted of number of steps and central theme being chanting of mantras, time of treatment i.e. before and after sunset and offerings to God and Goddess with sacrifices of hen or goat. The logic in support of magical treatment as expressed were, quick recovery of patient, less cost, no need of taking medicine, no residual effect, non requirement of rest and pleasing of God and Goddess who are the creators of mankind. Further, the evil spirits and ancestral ghost could only be controlled by magical treatment which does not involve risk of misfortune.

Majority of the healers held leadership position in their community and were consulted in number of issues occurring in village to end with solution. Out of 54 diseases mentioned by Santal healers, the most frequently occurring diseases were metal fatigue, epilepsy, stomach pain, disorder of menstruation in women, dysentery, fever & child diseases. The healers use a variety of medicinal plants to prepare herbal medicines. (See list at annexure no-VII). The most frequently used plants were Rauvolfia seperitina, Nyctanthes arbortristis, Lawsonia inermis, Aloe vera, Ocimum sanctum. Besides, materials of animal origine constitute an important part of therapeutic agents in healing practices. The most used animal ingredients were from hen, goat, pigeon and bat. Also the mineral like copper, steel, iron, sulphur were the active ingredients in composition of medicine used by the healers to treat the patients. At times, tribal healers failed to cure the patients. The assigned reasons for non-curability of diseases were late treatment, non-curability nature of diseases, irregular in taking medicine and non performance of religious functions.

The investigation reveals that the Santal healers were free to treat patients irrespective of sex, caste, class and other considerations. They take optimum care of patients while treating them as per requirements of the diseases. All healers were found to be charging for treatment. Some had fixed rate while as many had to go with negotiation. The charges of treatment are very nominal and many times it is in form gift like poultry, bird or goats makes healers satisfied. The payment was mostly in form of cash and kind or even both.

The Santal traditional healers strongly opioned in favour of the continuance their healing practices. Many expressed it as a good profession for earning. Maximum healers were satisfied with their profession and wished next generation to continue it for long period. As such they used to groom their children in traditional healing practices for cause of serving the community people.

#### **Patients and their reaction:**

Like the findings from the healers, the opinions of the patients also go in favour of the traditional healing practices in curing of the diseases. As many as 200 patients from the districts of Mayurbhanj and Keonjhar, who received treatment from 40 traditional healers, responded about the practice.

The socio economic and personal profile of patients reveals that all of them belonged to eleven clans out of which, Hansda, Marandi, Murmu and Soren were maximum. Most of them were within fifty years of age, married including male and female. Among the respondents, 42% were non-literates, 33% studied up to high school standard and only 5% had opportunity to avail college education. They lived in nuclear family system with average family size of 5 members and one or two earning members. Agriculture was their mainstay and their annual income ranged up to maximum of Rs 50,000/-. Among them 18% were landless while rests belonged to marginal or small farmer category. Economically majority of them belonged to BPL category.

The patients expressed high confidence on traditional treatment followed by ayurvedic, allopathic and homeopathic type of treatment respectively in order. All the patients had availed traditional treatments by local healers, and doctors of ayurvedic, allopathic and homeopathic treatment. They had approached the healers for treatment either by self decision or being influenced by their family members. In most cases after seeing the patient, healers used to assure them full recovery and complete curability. The patients told that the diagnosis of disease was done by the healers enquiring body temperature, pulse rate, food and sleeping habit. In some cases hereditary reasons were also taken in to consideration in determination of the diseases.

The patient mentioned as much as 34 diseases for which they were treated by the traditional healers. In most cases the patients were cured and healers claimed credibility for treatment. The important diseases treated by the healers were bone fracture, burning of different parts of body, epilepsy, headache, pregnancy, nasal bleeding, gastritis, malaria, diarrhea, bite by animal like dog and snake, ghost attack and ill feeling etc. The mode of payment was found to be as per rate fixed by the healers and in some cases through negotiation.

The preference for traditional healers over Govt. health care centers was based on the considerations like low cost, easy approachability, compatible to life style, and better result. The patients were in view that local healers have created confidence in their mind for a variety of reasons. The important reasons are less cost, easy accessibility and availability of medicine at door step within affordable price. About 62% of the patients knew the local Kaviraj and 44.50% had approached Govt. hospital for one disease or other.

The sample patients under survey opined that traditional healing practices need a scientific touch for standardization of dose, quantity and interval of administration for which govt. funding should be extended.

### **10.3 Knowledgeable persons and traditional treatments:**

To assess the reactions of the knowledgeable persons or key informant of the survey localities about the traditional healers and their healing practices as many as 16 persons were selected following the purposive sampling methods. The investigation was designed on the objectives like, knowing of their socio-cultural background, leadership traits, acquaintance with traditional healing practices, magico-religious treatments and above all the healers and their healing practice. The data were collected on a pretested interview schedules based on the objectives by the investigators. The findings about knowledgeable persons and their reaction about traditional healing Practices have been summarized as under.

Personal Profile: Majority of the Knowledgeable Persons (KP) were in age group of 30-50 years, with enough experience in dealing with tribes, well acquaintance with people of the locality. All the KPs were literates and studied up to middle and high school level. Almost all

of them were from ST communities and very few from OBC and general caste. They were peasantry and few of them had small business.

The reaction of knowledgeable persons was that majority of the patients in the locality used to be cured by the local healers. It was also stated by them that in exceptional cases the healers were unable to cure all the patients suffering from various diseases.

The very important part of the investigation was to know the secret of magical treatments. According to the KPs the diseases and biological problems like (i) Cough and cold (ii) Snake bite (iii) Dog bite (iv) Bone fracture (v) Scorpion bites (vi) Non-milk secretion of lactating mother (vii) Birth control (viii) Spirit affected patients (ix) Blood vomiting after being frightened (x) problems in delivery (xi) menstruation period disorder (xii) miscarriage (xiii) Abortion (xiv) Night blindness (xv) High fever of children (xvi) Chicken pox (xviii) Hydrophobia (xviii) Planet effect (Saturn, *graha dosh*) were fully cured in the area of survey. Further accident casers and bone fracture were cured to full satisfaction of the patients.

The sample under study stated that magical and herbal treatments of the healers used to cure thousands of tribal patients every year and hence quite dependable. To cure these diseases the healers adopted both herbal and magico-religious treatment as complement to each other. In practicing these treatments the healers offered themselves to God and Goddess. The healers regularly worship God and Goddess and offer fruits and flowers without deviation before taking food till their patients were out of danger. Some healers spent 7 or 14 or 21 days in temple with vegetarian meal once per day and devoted full time in prayer and worshipping. Some expressed to have received instructions in dream to undertake treatment appeasing spirits. Sometimes, they used to go to local cremation ground at night, sit in meditation and chant the mantras. Some claimed to have interaction with the spirit. All tribes believed about existence of spirits and their evil deeds. After reciting mantras for 108 times, they used to return from cremation ground and declared to have controlled the spirit.

The tribes and their healers strongly believed in rituals. They perform it with sincerity as far as possible. In magico-religious treatment rituals are mandatory while in herbal it is optional. But in case of combination of herbal and magico-religious treatment the rituals were bound to

be followed. The diseases for which rituals were performed are, eye disease, chicken pox, cut wound, ghost attack, planet effect, evil eye, animal bite ( snake, dog, scorpion etc.) and hydrophobia. Knowledgeable persons under study support the traditional healing practices to a great extent.

#### **10.4 Adoptability and Applicability:**

The tribes are the treasurers of forest based indigenous knowledge. The study, "Indigenous Ethno-Medicinal Practices among Santal and Kandha of Odisha" leads to bring out three major issues like, herbal treatment, magico-religious treatment and therapeutically agents of plant animal and mineral origin have important role in traditional health care practices. These issues need examination to come out with specific recommendation for further research to look for adaptation and applicability of ethnomedicinal practices.

Due to close association with the forest they are dependent on natural resources for their subsistence. Also due to relative isolation from the modern civilisation and less efficient technology, the tribal communities through trial and error method have discovered the use value of local bioproducts for their health care. During the last few centuries they have developed their own to nurture the medicinal practices and have adoptive strategy within the framework of their traditions and customs. Of many survival strategies, traditional medicinal practices are one that hitherto safeguard their community members against health hazards.

The ITKs used by the tribes over generations proves their merit in treating the patients. The study stands with idea of rationalizing of practices so that their adoptability and applicability will gather momentum among the tribe and non-tribe people. The practices adopted by the traditional healers in identification of diseases, their symptoms, curing practices are good inputs for the researchers to draw valid conclusions for greater applicability of traditional healing practices.

The magico-religious belief and treatment is another important dimension which requires close observation to come out with recommendation for greater applicability of the practices. Magico-religious practices followed to cure the diseases reciting mantras is quite interesting.

The effects of such practices on the patients are to be examined for better understanding of the practices. The nearest and easily accessible bio diversity in form of medicine are endangered due to infrastructure development for industries, rehabilitation of displaced families, construction of roads under prime ministerial rural road development scheme, surface mines excavation, roads for ores transportation, construction of check dams, plantation of trees by forest department etc. In addition, it was also observed that subsequent generation is systemically not interested in traditions and local primary health care.

### **10.5 Way Forward:**

As one of the most excluded communities of India, tribal face many challenges in their day to day life. Extreme poverty, relative social exclusion, poor access to modern health care facilities, poor education and extremely limited employment opportunities are the tenets of tribes in the state.

The tribes of Odisha are largely marginalized and suffer from educational attainment and poor health status. Their excessive dependence on agriculture and forest for livelihood resources and gradual shifting to wage earning occupation and the presence of health centres at nearer homes could provide equality to traditional health care delivery system. The poverty of the tribes has direct bearing on their health and poor health status. The STs of Odisha are undernourished, anaemic, and prone to suffer from malaria, cholera, diarrhoea. Very few tribal women avail institutional support at the time of delivery. The mortality of children is very high. The modern health facilities in the tribal region are quite inadequate. Keeping these considerations in view, the local wisdom in health care practices needs to be explored and strengthened. In this context the present study has much relevance.

The outcomes of the study suggest the future investigation on the following aspect.

1. Efforts should be made development of herbarium through participation of tribal healers' to preserve roots, stems, leaves, flowers, fruits, seeds etc. of herbal-medicinal plants with proper labeling for use in herbal treatment as well as for facilitating further research.
2. Steps should be taken to find out rationally of herbal treatment through laboratory analysis methods to know the chemical composition of plants, shrubs, herbs used

by tribal healers. The ingredients derieved from animals and mineral origin used in the herbal treatment also need to be chemically analyzed.

3. Impact assessment study on dose, time of applications, interval and methods of intake, improvement in health status of the patients etc. in herbal treatment needs standardization for benefits of patients and common man and patented in favour of the natives.
4. Magico-religious treatment of curing in bite of snake, scorpion, dog etc. needs detail assessment in terms of effectiveness of ethno-medicine and their utilitarian value. The *mantras* recited at the time of curing the patients need to be translated into commonly used language that bear the testimony of the culture of identification, process of diagnosis, phases and duration of treatment and process of reintegration of patient into community life as a productive person.
5. The study advises for collection more of case studies of diverse nature on healing practices through observation, informal interview method and FGD method of data collection. This would provide deeper understanding of the culture of healing practices and the culture of balancing strategies adopted by the healers on behalf of the community. This would provide platform for the development intervention for health and sanitary management in local areas. Thus, the community and local specific health measures can be thought of. The most interesting part of the study is diagnosis of diseases. The methods used by the healers like urine test, facial expression, counting pulse rate, observing the change of voice, recoding the recent movement history of the patient etc. need thorough investigation and documentation. The associated healing information and belief system with facts would provide scope to understand the barriers to and stimulans of development intervention. Further, to impart the effective health management and sanitation training to the patients and helers in particular and elders of the community in general becomes essential to understand the role of the healers' in community health care peactices. The trained healers can be taken into confidence for minor ailments and can also be considered as a preventive human resource agent. The elite healer can act as a facilitator for community well-being.
6. To adopt holistic approach in order to understand the ethno-medicinal knowledge and technique of the tribal communities in community specific terms of a micro



ecology, it is high time to document traditional healers' knowledge system before it is too late.

7. For improving the health status of the tribal population an effective research team should be formed to study their health hazards and socio-cultural problems which are directly or indirectly linked with their health problems. The need for well established on health related ITKs a library at district and state level is well understood.
8. The impact of climate change needs long time observation in respect of occurrence of disease, nutrition intake and availability of medicinal plants specifically of seasonal nature.
9. Development of herbarium to preserve root, tubers, stem, leaf, bud, flower, fruits, cells etc. of herbal- medicinal plants with proper labeling for benefits of researcher as well as patients.
10. There is a need to find out rationally of herbal treatment through laboratory analysis methods to know the chemical composition of plants, shrubs, herbs used by tribal healers. The ingredient used of animals and minerals also need to be chemically analyzed. This might open new vista of untapped knowledge on medicinal treasure.
11. Impact assessment study on dose, time of applications, interval and methods of intake etc. in herbal treatments needs standardization for benefits of patients and common man
12. Magico-religious treatment of curing bite of snake, scorpion, dog etc. need detail assessment in terms of use and utility. The *mantras* recited at the time of curing the patients need to be translated into commonly used language and be put to test as a form of sound therapy.

There is significant difference between tribes in state with regard to health and living style. For improvement of tribe in respect of life style, health, education, sanitation, empowerment etc. specifically reproduction and child health care, scientific inputs have to be infused into tribal community if it does not have scope of subversion of modern medicinal syste.

As well established, the resistance rate to change is much higher among the tribes. There is a need for a full fledged study on resistance to change by the tribe

through a complete x-ray of tribal culture for infusion of innovative technologies into the tribal communities for their all rounds development as envisaged in planning for Tribes of Odisha.

13. The study team felt a need for more of case studies on healing practices through informal interview, FGD and observation method of data collection because of fast erosion of tribal traditional knowledge system.
14. Micro-ecological adaptation has been a part of cultural history of the tribal people. With the inroads of industrial capital to the tribal area the ecological imbalance has been reported from various sources. Keeping this in view, the impact of climate change needs long time observation in respect of occurrence of disease, nutrition intake and availability of medicinal plants specifically of seasonal nature.
15. The ingredients used from animal and plant origin require further investigation to ensure proper dose and interval in administration.
16. The most interesting part of the study is diagnosis of diseases. The methods used by the healers like urine test, facial expression etc. needs thorough investigation to equip healing information with facts.
17. For improving the health status of the tribal population an effective multi-disciplined research team should be formed to study the interaction and inter relation between the health hazards and socio-cultural system. The problems which are directly or indirectly linked with their health problems and culture need to be examined *in situ* before any prescriptions are made.
18. Low attainment of education and chronic poverty are the root causes of suffering of the tribes. These two social variables have impact on health, hygiene, treatment and dependency on traditional healing practices.
19. It is imperative that a modern physician working in any tribal area should have widest possible interaction with the local to understand the local problem in its realistic perspective.
20. The anthropological challenge does not lie in problems of highlighting the establishment of elitist nature of modern medical institutions to provide healthcare facilities to the tribal communities. It lies in understanding and exposing the mechanisms of integration of ethnomedicinal system of the tribal communities

with the mainstreaming treatment system of health care which is often subversive.

21. Many of the existing health development programs are not progressing properly. There is a need for a systematic evaluation of all health related programs working in tribal areas keeping in view the role of the traditional healers and changing perception of the beneficiaries
22. The utilization of ethnomedicines and the modern medical facilities need to be more vigorously studied through holistic approach so that data on how socio-economic status or lack of access to adequate modern health facilities influence the use of adversely affecting ethnomedicines can be collected and appropriate action can be taken at the right time. Inclusion of health economists and cultural anthropologists / medical anthropologists and indigenous medicine practitioners are essential components for grassroots planning and execution.
23. For formulating health development strategies for the tribal communities it would be helpful to review the existing forms of functional technologies and to identify the stimulants for and barriers to the health related development. Undermining the role of the traditional healers might lead to adverse impact on communities concerned. It would be useful to promote participation of the healers in health development interventions for preventive, promotive, curative and rehabilitative aspects of communities concerned. Community participation at all levels is a must to transform the unhealthy tribal society into a healthy tribal society.
24. One need not under value the traditional forms of education as this has always been used to solve community problems and that the community does not exist in isolation.
25. To run any successful health related problems meant for tribal communities forcible imposition is not advised unless it is against the human rights and as well as humanitarian rights. It is likely to yield positive result if we go to people, live among them, learn from them love them start with what they know built on what they have, establish rapport and finally try to integrate development interventional objectives within acceptable contents at appropriate contexts.
26. Study suggests to organise state level seminar involving healers for exchange of ideas and validating composition of ethno medicines for wider use.

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## ANNEXURES

*Annexure I*

**INTERVIEW SCHEDULE**  
**ON**  
**INDIGENOUS ETHNO-MEDICINAL PRACTICES AMONG THE KANDHA AND**  
**SANTAL TRIBES OF ODISHA**

**(ONLY FOR HEALERS)**

Sponsored by  
**SC and ST Research and Training Institute**  
**Bhubaneswar**

**Amity Humanity Foundation**  
Plot No. 32, VIP Area, IRC Village, Nayapalli  
Bhubaneswar 751015

**INTERVIEW SCHEDULE**

**(Only for Traditional Healers, Santal & Kandha)**

Sl. No.....

Date of Interview.....

**(Part I. Personal information)**

1. Name:-

2. Village:-

3. Gram Panchayat:-

4. Ward number:-

5. House number:-

6. Block:-

7. District:-

8. Caste:-

9. Tribe:-

Sub tribe:-

Clan:-

Sl. No.	Name of the family members	Relation with respondent	Age	Sex	Marital status	Educational attainment	Religion	Present engagement

10. Type of family

(i) Joint.....

(ii) Nuclear.....

11. Family size

(i) No. of Male.....

(ii) No. of Female.....

12. Number of earning member in the family? .....

13. What are your occupations and income per year other than healings?

Occupation	Primary	Secondary	Annual income
1. Agriculture			
2. Service			
3. Business			
4. Wage earning			
5. Any other			

14. How much land do you possess under irrigation / rainfed? (Ha/Acer)

(i) Total land.....

(A) Irrigated.....

(B) Rainfed.....

15. What do you possess of the followings?

Sl. No.	Possess	Do not possess
1. Radio		
2. TV		
3. Bicycle		
4. Automobile		
5. Power tiller		
6. Any other worth mention		

16. To which economic category do you belong?    APL / BPL

**(Part II. Profession as Healers)**

1. Since how many years, you are performing healing profession and what type of healing?

Sl. No.	Type of treatment	Since from which year	Remarks
1.	Bone setter		
2.	Herbal		
3.	Magical		
4.	Mal nutrition		
5.	Guni		

2. Who influenced you to take up this profession?

- (i) Father / Mother
- (ii) Other family members
- (iii) Relatives / Community elders
- (iv) Self decision
- (v) Teacher
- (vi) Any other specific

3. Who taught you the methods of treatment?

- (i) Father/Mother
- (ii) Community elders
- (iii) Any other person (Mention)

4. Normally how many persons do you treat per year?

5. What is the distance you normally cover to treat the patients?

6. Who are other Tribe come to you for treatment and how often?

Sl. No.	Tribe	Very often	Often	Sometimes	Never
1					
2					
3					
4					

7. What is the cause of diseases of the locality?

Sl. No.	Cause	Please tick the appropriate one
1	Poor health	
2	Malnutrition	
3	Poor sanitation	
4	Wrath of God	
5	Destiny to suffer	
6	Bad deeds of person	
7	Social contact	
8	Poor environment	
9	Due to non performance of religious function (worshiping God and Goddess)	
10	Due to non performance of cultural function	
11	Due to angriness of elder people	
12	Due to magical reason	
13	Guni	
14.	Ancestor ghost	
15.	Evil spirit	
16.	Physical Reason	
17.	Climatic Reason	
18.	Any other ( mention)	

8. Which are the months for occurrence of different diseases in your locality? (Mention minimum 10 frequently occurring diseases)

Sl. No	Name of the disease	Month of occurrence	How long continues
1			
2			
3			
4			
5			
6			
7			
8			
9			
10.			

9. What is the spreading area of different disease cover in your locality? (Mention 10 important frequently occurring diseases)

Sl. No.	Name of the disease	Normally Spread to how many villages?	Approximate distance	Season of occurrence	Period of continuity	Confined to village only
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

10. How do you diagnose the disease?

Sl. No.	Name of the disease (Min 10 diseases)	Important symptoms of diseases	Method of identification
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

11. What is your opinion about the curability of diseases?

Sl. No.	Name of the disease	% of curability	Not curable
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

12. When Patient is not cured in spite of treatment what reasons you assign?

- (i) Delay in Treatment
- (ii) Disease not curable
- (iii) Patient did not take medicine as per your advise
- (iv) Wrong administration of doses of medicine
- (v) Gods wish
- (vi) Born with sign of object
- (vii) Any other reason (specify)

13. What are the common diseases found in your locality and what the diseases you treat or reject to treat?

Sl. No.	Local name of the disease	Time of occurrence (month)	Diseases you treat	Diseases you do not treat
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

14. Do you treat men / women patients? (In case you are male / female) Yes\_\_\_ No\_\_\_

If 'No', what are the reasons?

- 1. Religion does not permit to treat women / men patients
- 2. You do not know the treatment of women / men
- 3. Personally you do not like
- 4. Any other reason (specify)



15. Do you charge for treatment? Yes \_\_\_\_\_ No \_\_\_\_\_

If yes, how much?

- (i) Fixed price
- (ii) Negotiation
- (iii) As per the paying capacity of patient
- (iv) Depending on nature of diseases
- (v) Duration of treatment
- (vi) Gift (Mention the name of gift)
- (vii) Any other (Mention)

16. What is your professional engagement?

- (i) Only treating the patients
- (ii) Preparation of medicine
- (iii) Cultivating medicinal plants
- (iv) Marketing of medicine
- (v) Any other profession as you practice (mention)

17. Are you grooming any other persons in your line of treatment? Yes \_\_\_ No \_\_\_

If 'Yes' why so

- (i) Family occupation
- (ii) More profitable at village level
- (iii) To serve Tribe
- (iv) To keep your name in future
- (v) Any other reason (Specify)

18. How much you are satisfied for treatment of patient?

- (i) Very much satisfied
- (ii) Satisfied
- (iii) Not satisfied
- (iv) If not satisfied, what are the reasons?
  - 1.
  - 2.
  - 3.

**(Part- III. Meaning of illness and curing rituals)**

1. When you come across patient, what reasons you assign for illness?
  - (i) Due to come in contact with other suffering patients
  - (ii) Due to hard work without rest
  - (iii) Due to mental worry
  - (iv) Due to displeasure of God
  - (v) Due to in born or in heritance reasons
  - (vi) Any other reasons
2. When patient approach before you, what normal reasons you want to know?
  - (i) Length of suffering
  - (ii) Nature of suffering
  - (iii) Reason of suffering
  - (iv) Any other cause of disease (specify)
3. What are the methods used to identify symptoms of diseases?
  - (i) Body temperature
  - (ii) Visible symbols
  - (iii) Dieting pattern
  - (iv) Any other symptoms
4. After knowing the symptoms, how do you proceed to start treatment process?
  - (i) Give medicine to take
  - (ii) EnKuire about past medicine
  - (iii) Ask to make exercise
  - (iv) Ask to perform rituals
  - (v) Any other symptom, you try to know (mention)

5. What are the common rituals practice for different diseases you advice to perform? (10 important diseases)

Sl. No.	Disease	Symptom	Rituals suggested
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

6. To perform rituals, who pays the money?

- (i) Patient
- (ii) Yourself as healer
- (iii) Community contribution
- (iv) Any other source

7. Mention the steps followed in performance of rituals.

Sl. No.	Disease	Name of the rituals	Steps followed	Objects of offering
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

8. Where rituals are performed?

- (i) In the house of patient
- (ii) Near to the worshipping place
- (iii) Common place available in the village
- (iv) No specific place
- (v) As decided by the healer

9. What arrangement do you make to start rituals?

- (i) Village meeting for gathering
- (ii) Arrangement of materials
- (iii) Worshipping of God/ Goddess
- (iv) Distribution of Prasad after puja
- (v) As decided by the healer
- (vi) Animal scarifies
- (vii) Any other

**(Part- IV. Therapeutically agents)**

1. Please enlist the name the plants that are used for preparation of medicine. (minimum 10 plants)

Sl. No.	Local name of the plants	Portion/ part of plants used for preparation of medicine	Method of harvesting
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

2. Please enlist name the animals/ birds that are used for preparation of medicine.

Sl. No.	Local name of the Animals/ Birds	Portion/ part of animals used for preparation of medicine	Method of collection
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

3. Please name the minerals & stones that are used for preparation of medicine

Sl. No.	Local name of the minerals & stones	Portion/ part of minerals used for preparation of medicine	Method of collection
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

4. What are the methods of procurement, harvest and preservations of plants, animals and minerals?

Sl. No.	Disease	Plants/ Animals/ Minerals	Procurement/ Harvest/Preservations
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

5. Use of therapeutically agents in preparation of medicines

Sl. No.	Plants/ Animals/ Minerals	Quantity for patient	Process- Soaking/ Burning/ Others etc.	Dose per patient	Food and drink	Availability throughout year/ Seasonal
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

6. What are general features of therapeutically agents?

(i) Plants

1. Seasonal / annual/ perennial
2. Flowering / non flowering
3. Bush/ Branches
4. Rainfed/ irrigated / both
5. Height of the plant
6. Shape of the plant (Tall/ Dwarf)

7. Time of flowering

8. Time of harvesting

7. What are the features of animals and birds as agents for preparation of medicines?

(i) Name

(ii) Domestic\_\_\_ Not domestic\_\_\_\_\_

(iii) Place of availability

(iv) Specific portion used for medicine

**(Part V. Assessment of overlap between magic and nature that is present in indigenous culture of the Tribe)**

1. Do you believe in magic to cure patient? Yes \_\_\_ No \_\_\_

If yes, what may be the reasons?

- (i) Wonders with God/Goddess
- (ii) Magic works where as other methods fail
- (iii) Magic in curing is fact based
- (iv) Easy to apply
- (v) No cost/less cost
- (vi) Environment friendly
- (v) Any other reason (mention)

2. Do you practice magic in curing patients? Yes \_\_\_ No \_\_\_

If yes, then for what type of disease, do you use magic and what are the methods of magic?

Sl. No.	Name of disease	Kind of magic used	Short description of magic treatment
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

3. In your culture, why do you believe nature as cause of illness? Mention the reasons.

- 1.
- 2.
- 3.
- 4.
- 5.



4. In what way nature helps in curing of diseases?

- 1.
- 2.
- 3.
- 4.
- 5.

5. What logic you state in support of your view for magical treatment?

Sl. No.	Diseases treated in magical way	Reasons/Logic behind magical treatment	Since when you are using this method	How many patients have been cured by the date
1				
2				
3				
4				
5				

6. How can you state boldly that magical treatments cures and not other treatments

- 1.
- 2.
- 3.
- 4.
- 5.

7. In which treatment do you combine magical ways with that of indigenous medicine with what effect?

Sl. No.	Disease	Treatment with medicine alone	Treatment with magical way	Medicine & Magic	Cured	Not cured
1.						
2.						
3.						
4.						
5.						

8. Do you believe magic and nature go together? Yes\_\_\_ No\_\_\_

If yes, give reasons:-

**(Part VI. Usefulness of ITK for incorporation in Ayurvedic Treatment)**

1. What are the common treatments for diseases in ITK method and Ayurvedic?

Sl. No	Diseases	ITK+ Ayurvedic medicines	% of success
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

2. ITK medicine ingredients

Sl. No	Name of ingredients	Seasonal/ annual availability	Approx. cost of procurement/free	Cultivated/ Forest produce	Commercial needs Very much/Much/Less
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

**(Part VII Leadership and Social Distance)**

1. Do people of your community treat you as their leaders? Yes \_\_\_\_ No \_\_\_\_

If yes, on what matters do they seek your advice beside treatment?

- (i) Community function
- (ii) Performance of religious activities
- (iii) Community conflict
- (iv) Social functions
- (v) Marriage settlement
- (vi) Sale/ purchase of land
- (vii) Sale/purchase of animals
- (vii) Community Development work
- (viii) Contacting officials
- (ix) Formation of group like SHG
- (x) Political matter
- (xi) Natural disaster/ calamity

2. What relation do you have with other Tribe of your locality (social distance)?

Relation with	T1	T2	T3	T4	T5
1.Can live with them					
2. Can dine with them					
3. Simple relation as friends					
4. Can lend money and materials					
5.Can have marriage relation					
6.Can support in conflict					
7. Can participate in religious function					
8.Can support in political matters					

(T= Tribe)

(Investigators are required to edit correctly before making final recording)

THANK YOU FOR COOPERATION

***Annexure II***

**INTERVIEW SCHEDULE**  
**ON**

**INDIGENOUS ETHNO-MEDICINAL PRACTICES AMONG KANDHA AND  
SANTAL TRIBE OF ODISHA**

**(ONLY FOR PATIENTS)**

**Sponsored by**

**SC and ST Research and Training Institute  
Bhubaneswar**

**Amity Humanity Foundation**

**Plot No. 32, VIP Area, IRC Village, Nayapalli  
Bhubaneswar 751015**

**INTERVIEW SCHEDULE FOR PATIENTS**

**(Indigenous Healing Practices among the Kandha/Santal Tribe of Odisha)**

Sl. No.....

Date of Interview.....

**(Part: I. Identification of Respondent)**

1. Name of the respondent:-
2. Village:-
3. Block:-
4. Ward:-
5. Name of G.P.:-
6. House No.:-
7. Name of the family head:-

**(Part II: Personal information)**

1. Name of your tribe:-
2. Name of sub-tribe:-
3. Name of clan:-
4. Since when you are residing in this village?
  - (i) From birth.....
  - (ii) Came to reside in year.....
5. Do you originally belong to this village?  
Yes \_\_\_\_\_ No \_\_\_\_\_  
If no, from where you have come to this village? \_\_\_\_\_
6. Personal status

Name (starting from head of the family)	Relation with respondent	Sex M/F	Age at present	Marital status M/UM/D*	Educational level	Present engagement

\*M=Married, UM=Un-married, D=Divorced

7. Type of family

(i) Joint

(ii) Nuclear

8. Family size

(i) No. of Male.....

(ii) No. of Female.....

9. Number of earning member in the family.....

10. What are your occupations and sources of income per year?

Occupation	Primary	Secondary	Annual income
1. Farming			
2. Service			
3. Business			
4. Wage earning			
5. Forest produce collection			
6. Any other			

11 How much land do you possess under irrigation /rainfed? (Ha / Acer)

(i). Total land.....

(A) Irrigated.....

(B) Rainfed.....

(C) Shifting cultivation.....

(D) Plantation.....

(E) Herbal plantation.....

12. What do you possess of the followings?

Sl. No.	Possess	Do not possess
1. Radio		
2. TV		
3. Automobile		
4. Power tiller		
5. Bullock cart		
6. Plough		
7. Any other worth mention		

13. Under which category your family belongs?

(i) APL\_\_\_\_\_

(ii) BPL\_\_\_\_\_

(iii) AAY\_\_\_\_\_

**(Part III Illness, Disease, curative measures)**

1. What is your level of confidence about different types of curative measures available in the locality?

Sl. No.	Types of curative methods	Level of Confidence on curative measures			
		Very much	Much	Little	Not at all
1.	Allopathic Govt. Hospitals				
2	Ayurvedic				
3.	Homeopathy				
4.	Traditional healers				
5.	Any other means (mention)				

2. You must have suffered till date. Please tell, what types of suffering you personally had and treatment received? (Within last 5 yrs)

Sl No	Types of suffering disease	Year	Duration	Types of treatment you underwent					
				Allopathy 1	Ayurvedic 2	Homeopathy 3	Traditional healers 4	In combination (Number)	Any other
1									
2									
3									
4									
5									

3. When you suffer, do you diagnose disease yourself? Yes \_\_\_\_\_ No \_\_\_\_\_ Can't not say \_\_\_\_\_

4. Who advised you to contact local healers?

- (i) Family members \_\_\_\_\_
- (ii) Relatives \_\_\_\_\_
- (iii) Friend \_\_\_\_\_
- (iv) Village leaders \_\_\_\_\_
- (v) Similar cured patient of the village \_\_\_\_\_
- (vi) Self decision \_\_\_\_\_
- (vii) Any other (mention) \_\_\_\_\_



5. When the healer saw you, what he spoke about the disease?

- (i) Curable
- (ii) Not curable
- (iii) Long time treatment required
- (iv) Any other remarks (mention)

6. How did he/she diagnose the disease?

- (i) Checked your temperature of body/pulse
- (ii) Checked other parts of body
- (iii) EnKuired about your food & sleep habit etc.
- (iv) EnKuired about past suffering history
- (v) EnKuired about hereditary reason
- (vi) EnKuired about ghost fear
- (v) EnKuired about ghost attack
- (vii) Any other question he asked (mention)

7. Did healer inform you about the cause of illness?

- (i) Yes \_\_\_\_\_
- (ii) No \_\_\_\_\_

If 'yes' please elaborate the cause/s of disease

8. What treatment was done for curing the disease?

Sl. No.	Name of the disease told by the healer	Symptoms of diseases identified	Period of treatment	% of cure as you feel
1				
2				
3				
4				
5				

9. Please elaborate treatment methods you adopted.

- (i) Rituals followed
- (ii) Medicines were given
- (iii) Both

(i) In case of rituals, what steps were followed?

Sl. No.	Disease	Steps followed in rituals				
		1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
1.						
2.						
3.						
4.						
5.						

(If more steps, please write separately with reference of disease)

(ii) Are rituals same for all diseases? Yes \_\_\_\_ NO \_\_\_\_

If 'no' please tell use of different rituals performed for different diseases.

Sl. No.	Name of diseases	Names of Different rituals for different diseases
1.		
2.		
3.		
4.		
5.		

(If rituals in local name, please use separate sheet and express rituals in common language)

(iii) If medicines were given please say about their composition.

Sl. No.	Disease	Medicine composition					Animal origin			
		Root	Stem	leave	Fruits/ Flower	Any other part	Skin	Bone	Urine	Any other part of animal
1.										
2.										
3.										
4.										
5.										

(Investigators to record, please use separate sheet)

(a) Local name of plant and botanical name:-

(b) Name of the animals & birds used, location of availability:-

10. Do healers use stone/mineral in composition of medicine? Yes \_\_\_\_ No \_\_\_\_

If 'yes' please name them

1.

2.

3.

11. Do healers inform you the composition of medicines? Yes \_\_\_\_ NO \_\_\_\_

12. In case of rituals, who arranges the materials?

- (i) Patients \_\_\_\_\_
- (ii) Healers on payment \_\_\_\_\_ without payment \_\_\_\_\_
- (iii) Community/tribe \_\_\_\_\_
- (iv) Any other arrangement mention \_\_\_\_\_

(Investigators to be extremely alert to fill up correctly)

13. What magical treatments the healers prescribe /do to cure the disease? Please brief them.

Brief description:-

14. What is the rate of payment to healers for treatment?

- (i) Fixed rate \_\_\_\_\_ (How much per diseases per person)
- (ii) Negotiable \_\_\_\_\_
- (iii) As fixed by the healers \_\_\_\_\_
- (iv) Any other method (mention) \_\_\_\_\_

15. If payment, is it done by

- (i) Cash \_\_\_\_\_
- (ii) Kind \_\_\_\_\_
- (iii) Both \_\_\_\_\_

16. If kind, what are those?

- (1)
- (2)
- (3)

17. Do you know any Kavirajs of this area? Yes \_\_\_\_\_ No \_\_\_\_\_

If 'yes' do you go to them for treatment? yes \_\_\_\_\_ NO \_\_\_\_\_

18. Have you ever visited Govt. hospital for treatment? Yes \_\_\_\_\_ No \_\_\_\_\_

19. If 'yes' how do you compare with your traditional healers?

Sl. No.	Reasons for preference	Traditional healers	Govt. Hospitals
1	Easily approachable		
2	Close proximity		
3	Less cost		
4	Better result		
5	No ill effect		
6	Compatible to life style		
7	Easily available		
8	Able to express the problem properly		
9	Well proved result in treatment		
10	Confidence of cure		

20. Can you please express your level of satisfaction with treatment of traditional healers?

(i) Very much satisfied\_\_\_\_\_

(ii) Satisfied\_\_\_\_\_

(iii) Not satisfied\_\_\_\_\_

21. For treatment do you stick to?

(i) Healers of own tribe\_\_\_\_\_

(ii) Any tribe without any restriction\_\_\_\_\_

22. What is your feeling about continuation of traditional healing practices?

(i) Will continue for ever\_\_\_\_\_

(ii) May stop with increase of Govt. health care facilities\_\_\_\_\_

(iii) Cannot say\_\_\_\_\_

(Investigators are required to edit correctly before making final recording)

THANK YOU FOR COOPERATION

***Annexure III***

**INTERVIEW SCHEDULE**

**KEY INFORMANT (KNOWLEDGEABLE PERSON)**

1. Name:
2. Village:
3. Block
4. District:

**PART-I (Personal Profile)**

1. Your age at present
2. Educational qualification
3. Caste Tribe
4. Religion
5. Major profession do at present
  - (i) Farming
  - (ii) Business
  - (iii) Service
  - (iv) Wage earning
  - (v) Any other
6. Do people of your village/ area seek your advice? Yes \_\_\_\_\_ No \_\_\_\_\_

If yes, on what matters

  - (i) Health/ treatment
  - (ii) Farming
  - (iii) Development
  - (iv) Conflict solution
  - (v) Political matter
  - (vi) Business
  - (vii) Any other
7. Who are the persons present in your locality (Kandha & Santal) perform traditional treatment?
  - (i)
  - (ii)
  - (iii)
8. Have you ever availed any traditional treatment from Kandha/ Santal healers?

Yes \_\_\_\_\_ No \_\_\_\_\_

9. What is your reaction about traditional healing practices?

Treatment	Response
1. All get cured	
2. Most of them are cured	
3. Some of them are cured	
4. Few of them are cured	
5. None of them are cured	

10. What are the common rituals that tribal healers perform for treatment of patient?

- (i)
- (ii)
- (iii)
- (iv)

11. What is your opinion about effects of the rituals?

- (i) Rituals really works
- (ii) It is an only belief
- (iii) It has no effect

12. What are the medicinal plants/ herbs/ shrubs are found in your locality?

Local name	Location
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	
13.	
14.	
15.	

13. How the medicinal plants are grown in your locality

- (i) Natural growth
- (ii) Planted by people
- (iii) Planted by govt.
- (iv) Planted by other sources

14. Do you feel that locally grown medicinal plants have good demand in market?

Yes \_\_\_\_\_ No \_\_\_\_\_

If yes, what are being done for this \_\_\_\_\_?

*Annexure IV*

**List of Healers Interviewed**

**1. KUTIA KANDHA (Kandhamal)**

Sl. No.	Name of the healers	Telephone No.	Village	Panchayat	P.O	Pincode	Block
1	Dambarudhara Bindhani	9439978998	Kutikia	Kutikia	Kutikia	762110	Baliguda
2	Rishu Mallick	9439978998	Kutikia	Kutikia	Kutikia	762110	
3	Adala Majhi	NA	Batipada	Belghar	Belghar	762107	Tumudibandh
4	Narendra Majhi	NA	Batipada	Belghar	Belghar	762107	
5	Kabichandra Majhi	8895222787	Belaghar	Belghar	Belghar	762107	
6	Pitula Jani	NA	Burlubaru	Belghar	Belghar	762107	
7	Ramachandra Jani	NA	Burlubaru	Belghar	Belghar	762107	
8	Girdapath Majhi	NA	Mandalkuna	Belghar	Belghar	762107	
9	Raghunath Majhi	NA	Rangaparu	Belghar	Belghar	762107	
10	Ramesh Jani	NA	Rangaparu	Belghar	Belghar	762107	
11	Tuna Majhi	NA	Rangaparu	Belghar	Belghar	762107	
12	Subunath Majhi	NA	Rangaparu	Belghar	Belghar	762107	
13	Rabana Majhi	NA	Sanatuakela	Belghar	Belghar	762107	
14	Hareswar Majhi	8895566260	Tuakela	Belghar	Belghar	762107	
15	Mandala Majhi	9439804638	Tuakela	Belghar	Belghar	762107	

**2. DESIA KANDHA (Kandhamal)**

Sl. No	Name of the healers	Telephone No.	Village	Panchayat	P.O	Pincode	Block
1	Lupi Mallick	9439244957	Banimila	Parampanga	Parampanga	762109	Baliguda
2	Bira Dandasuna	9437209683	Dadakangia	Parampanga	Parampanga	762109	
3	Ramachandra Mallick	9437209683	Dadakangia	Parampanga	Parampanga	762109	
4	Bidyadhar Mallick	8763651404	Kutikia	Kutikia	Kutikia	762110	
5	Bikeswar Mallick	NA	Kutikia	Kutikia	Kutikia	762110	
6	Sadananda Mallick	8763528612	Kutikia	Kutikia	Kutikia	762110	
7	Sahadev Mallick	8895401318	Kutikia	Kutikia	Kutikia	762110	
8	Syamsundar Mallick	8895401318	Kutikia	Kutikia	Kutikia	762110	
9	Debasish Mallick	NA	Parampanga	Parampanga	Parampanga	762109	
10	Dilip Mallick	NA	Parampanga	Parampanga	Parampanga	762109	
11	Gopa Mallick	NA	Parampanga	Parampanga	Parampanga	762109	
12	Sumasar Mallick	NA	Parampanga	Parampanga	Parampanga	762109	
13	Sambaru Mallick	NA	Tandapadar	Parampanga	Parampanga	762109	
14	Dubura Majhi	NA	Padikia	Parampanga	Parampanga	762109	Tumudibandh
15	Sambu Majhi	NA	Padikia	Parampanga	Parampanga	762109	



**3. DANGARIA KANDHA (Rayagada)**

Sl. No.	Name of the healers	Telephone No.	Village	Panchayat	P.O	Pincode	Block
1	Basudev Mutuka	9861623057	Chati kona	Kurli	Chati kona	765019	Bissam Cuttack
2	Janju Jakasika	8018480154	Gandeli	Kurli	Kurli	765019	
3	Kadraka Bama	8658407195	Gandeli	Kurli	Kurli	765019	
4	Muguni Sikaka	NA	Gandeli	Kurli	Kurli	765019	
5	Salpu Sikaka	8895264991	Khajuri	Kurli	Kurli	765019	
6	Aku Jakasika	NA	Khajuri	Kurli	Kurli	765019	
7	Chanu Hikaka	NA	Khajuri	Kurli	Kurli	765019	
8	Shyam Wadaka	8763248772/ 9937398570	Khajuri	Kurli	Kurli	765019	
9	Sikaka Druku	8895187195	Khajuri	Kurli	Kurli	765019	
10	Sikikambu Kalu	9437362483	Khajuri	Kurli	Kurli	765019	
11	Admi Wadaka	9439046683	Khambesi	Kurli	Kurli	765019	
12	Bandisi Sikaka	9668700773	Khambesi	Kurli	Kurli	765019	
13	Bari Jakasika	NA	Khambesi	Kurli	Kurli	765019	
14	Pana Wadaka	8658584642	Khambesi	Kurli	Kurli	765019	
15	Pidikaka Manu	NA	Khambesi	Kurli	Kurli	765019	

**4. SANTAL (Mayurbhanj)**

Sl. No.	Name of the healer	Ph. No.	Villages	Panchayat	Pincode	Block
1.	Laxmidhar Hembram	7381255475	Bidyadharpur	Baripada Municipality	757107	Palabani
2.	Surendra Hansda	8763441265	Badajamuna	Basipitha	757074	Khunta-1
3.	Srimad Marandi	8594872686	Basipitha	Basipitha	757074	
4.	Surendra Nath Murmu	7894902835	Bangra	Bangra	757074	
5.	Salku Kisku	7894072255	Bangra	Bangra	757074	
6.	Durgachandra Hembram	7894237227	Bhupad	Bangra	757074	
7.	Bhulanath Hembram	9777513207	Bhupad	Bangra	757074	
8.	Raghunath Hansda	7853923993	Girishchandrapur	Badapathar	757074	
9.	Shyamsundar Murmu	8763495318	Goudagan (Mahuli Sahi)	Basipitha	757074	
10.	Kuanr Tudu	9776650315	Goudagan	Basipitha	757074	
11.	Kuanr Soren	8457910710	Kandalia	Dukura	757075	
12.	Chaitanya Soren	7894148755	Nuagaon	Dukura	757075	
13.	Chhatish Chandra Marandi	9178383277	Nuagaon	Dukura	757075	
14.	Laxmana Tudu	9178687343	Nuagaon	Dukura	757075	
15.	Muchiram Murmu	9556816702	Nuagaon	Dukura	757075	

16.	Padmalochan Majhi	8457812238	Sanatanpur	Basipitha	757074	
17.	Narayan Tudu	9777007894	Sanatanpur	Basipitha	757074	
18.	Samarai Soren	9668837346	Satakhania	Bangra	757074	
19.	Sana Soren	9668837346	Satakhania	Bangra	757074	
20.	Dhananjaya Kisku	7873826428	Sudiam	Sirishbani	757049	Samakhunta

**5. SANTAL (Keonjhar)**

Sl. No.	Name of the healers	Ph. No.	Village	Panchayat	Pincode	Block
1.	Pitambar Majhi	9439170084	Teliarshala	Arshala	758031	Jhumpra
2.	Dambrudhar Majhi	7077425271	Teliarshala	Arshala	758031	
3.	Jarman Majhi	8895819266	Ambrutpada	Parjanpur	758031	Sadar Keonjhar
4.	Suklal Majhi	7377216292	Ambrutpada	Parjanpur	758031	
5.	Singu Majhi	9438336243	Ambrutpada	Parjanpur	758031	
6.	Sundarmani Majhi	07787844220	Ambrutpada	Parjanpur	758031	
7.	Mahendra Majhi	9090632119	Dabank	Padampur	758013	
8.	Rabindranath Hansda	9938388828	Danardampur	Danardampur	758013	
9.	Mansha Hembram	9777779625	Danardampur	Danardampur	758013	
10.	Dillip Hansda	9777980503	Danardampur	Danardampur	758013	
11.	Jatia Majhi	8658962301	Dhatika	Raisuan	758013	
12.	Bangali Hansda	9668144737	Dhatika	Raisuan	758013	
13.	Budhram Majhi	7064209522	Dhatika	Raisuan	758013	
14.	Sunaram Kisku	9178681233	Totasahi	Raisuan	758013	
15.	Saharai Tudu	9178681233	Totasahi	Raisuan	758013	
16.	Pradhan(Khetu) Majhi	9090008302	Kashira	Parjanpur	758031	
17.	Gobinda Hansda	8908784329	Rajbandh	Raisuan	758013	

*Indigenous Ethno-Medicinal Practices among the Kandha and Santal of Odisha*

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18.	Shibasankar Mardi	9437214323	Rajbandh	Raisuan	758013	
19.	Rohin Soren	9658147915	Tikarpada (Kudiaghara sahi)	Mahodei Joda	758013	
20.	Bhatta Majhi	9668145879	Silisuan	Kandarapasi	758031	

*Annexure V*

**List of Patients Interviewed**

**1. DANGARIA KANDHA (RAYAGADA)**

Sl. No.	Name of the patient	Village	Block	District
1.	Dalei Pidikaka	Ambaguda	Bissam Cuttack	Rayagada
2.	Kintu Pidikaka	Ambaguda		
3.	Kisum Pidikaka	Ambaguda		
4.	Rajaram Jilkara	Ambaguda		
5.	Sabita Patika	Ambaguda		
6.	Siba Jani	Ambaguda		
7.	Laku Niska	Bandili		
8.	Jiban Pidikaka	Bhatiguma		
9.	Pula Sikaka	Bhatiguma		
10.	Rudra Wadaka	Bhatiguma		
11.	Anusaya Jhlikara	Chati kona		
12.	Banika Pujari	Chati kona		
13.	Ramachandra Lalla	Chati kona		
14.	Tirtha Sabal	Chati kona		
15.	Anda Jakasika	Gandili		
16.	Buli Jakasika	Gandili		
17.	Bukulu Pusika	Gandili		
18.	Dama Jakasika	Gandili		
19.	Gundhudi Wadaka	Gandili		
20.	Hundadu Jakasika	Gandili		
21.	Kumtadi Pusika	Gandili		
22.	Minda Jakasika	Gandili		
23.	Sindu Jakasika	Gandili		
24.	Sita Kadraka	Gandili		
25.	Jilkar Kadra	Hadasinkula		
26.	Paika Praska	Hadasinkula		

27.	Deu Shrambuka	Hadasinkula		
28.	Basudeba Sikaka	Hadasinkula		
29.	Bikash Jakasika	Hadasinkula		
30.	Bana Jakasika	Kandraguma		
31.	Baska Kadraka	Kandraguma		
32.	Adri Sikaka	Khajuri		
33.	Bama Jakasika	Khajuri		
34.	Bangari Wadaka	Khajuri		
35.	Bari Wadaka	Khajuri		
36.	Draku Sikaka	Khajuri		
37.	Katlu Jakasika	Khajuri		
38.	Kundungi Wadaka	Khajuri		
39.	Kumradi Wadaka	Khajuri		
40.	Laxman Sikaka	Khajuri		
41.	Maduka Hikaka	Khajuri		
42.	Malladi Sikaka	Khajuri		
43.	Mami Wadaka	Khajuri		
44.	Nakul Wadaka	Khajuri		
45.	Rama Takri	Khajuri		
46.	Shyama Wadaka	Khajuri		
47.	Suresh Kadraka	Khajuri		
48.	Wadaka Laku	Khajuri		
49.	Wadaka Mahendra	Khajuri		
50.	Wadaka Sindhe	Khajuri		
51.	Ambe Wadaka	Khambesi		
52.	Asdi Jakasika	Khambesi		
53.	Bisi Sikaka	Khambesi		
54.	Budhai Jakasika	Khambesi		
55.	Chaita Kandapani	Khambesi		
56.	Chutri Wadaka	Khambesi		
57.	Dasru Wadaka	Khambesi		

58.	Ghasi Sikaka	Khambesi		
59.	Jiban Kadraka	Khambesi		
60.	Kumradi Wadaka	Khambesi		
61.	Karunakar Kadraka	Khambesi		
62.	Lakhnu Jakasika	Khambesi		
63.	Lakhanu Wadaka	Khambesi		
64.	Nila Jakasika	Khambesi		
65.	Seema Sikaka	Khambesi		
66.	Sinda Jakasika	Khambesi		
67.	Rajit Jakasika	Kurli		
68.	Drinju Hikaka	Kurubelipadar		
69.	Wangesika Hunkata	Lohunikhunti		
70.	Kunduli Wadaka	Sogadi		
71.	Rama Sikaka	Sogadi		
72.	Solo Kadraka	Sogadi		
73.	Sunira Jakasika	Sogadi		
74.	Kamblu A	Upparbarangpadar		
75.	Rajesh Kadraka	Upparbarangpadar		



## 2. DESIA KANDHA (KANDHAMAL)

Sl. No.	Name of the patient	Village	Block	District
1.	Dambru Mallick	Balakia	Baliguda	Kandhamal
2.	Tumuka Mallick	Banimila		
3.	Pusali Mallick	Banimila		
4.	Susanta Mallick	Banimila		
5.	Namanti Mallick	Banimila		
6.	Kaleskar Mallick	Banimila		
7.	Arati Mallick	Dadakangia		
8.	Jani Mallick	Dadakangia		
9.	Mikali Mallick	Dadakangia		
10.	Bed Dalai	Dadakangia		
11.	Harish Chandra Pujari	Dadakangia		
12.	Nupur Digal	Dadakangia		
13.	Degu Mallick	Dadakangia		
14.	Bira Majhi	Dadakangia		
15.	Sanpati Majhi	Dadakangia		
16.	Subi Mallick	Dadakangia		
17.	Krusna Mallick	Dasugan		
18.	Kusha Mallick	Dasugan		
19.	Aska Mallick	Dasugan		
20.	Gaura Mallick	Dasugan		
21.	Ahalya Mallick	Dasugan		
22.	Sodala Mallick	Dasugan		
23.	Gaye Digal	Dasugan		
24.	Anjana Mallick	Dasugan		
25.	Mahendra Mallick	Dasugan		
26.	Surubali Behera	Dasugan		
27.	Kera Mallick	Gasamaha		
28.	Katlu Mallick	Kameri		
29.	Piring Digal	Kilisingi		
30.	Kundu Mallick	Kutikia		
31.	Ribo Mallick	Kutikia		
32.	Sulba Mallick	Kutikia		
33.	Bisukadi Digal	Kutikia		
34.	Nabin Mallick	Kutikia		
35.	Kale Mallick	Kutikia		
36.	Laxman Mallick	Kutikia		
37.	Kasinath Mallick	Kutikia		

38.	Chaitanya Mukhi	Kutikia		
39.	Radhika Mukhi	Kutikia		
40.	Mamata Mukhi	Kutikia		
41.	Rambuli Majhi	Kutikia		
42.	Kera Majhi	Kutikia		
43.	Sudali mMajhi	Kutikia		
44.	Pata Digal	Madaguda		
45.	Pagu Mallick	Madaguda		
46.	Surekha Pujari	Madaguda		
47.	Tandenk Mallick	Madaguda		
48.	Lambira Kunhar	Majabali		
49.	Gobardhan Patra	Majabali		
50.	Changu Mallick	Majamaha		
51.	Sananda Patra	Padarpada		
52.	Nusaar Mallick	Palamaka		
53.	Kajara Mallick	Palamaka		
54.	Gramrakhiya Mallick	Palamaka		
55.	Sinu Majhi	Palamaka		
56.	Suresh Mallick	Palamaka		
57.	Sumitra Mallick	Palamaka		
58.	Tapan Majhi	Panguramila		
59.	Mingura Mallick	Parampanga		
60.	Krushna Mallick	Parampanga		
61.	Mandala Mallick	Parampanga		
62.	Puhi Mallick	Parampanga		
63.	Suma Mallick	Parampanga		
64.	Anjali Mallick	Parampanga		
65.	Silesh Bisoi	Situpadi		
66.	Sukuru Mallick	Sukunga		
67.	Chau Mallick	Sukunga		
68.	Lobo Nayak	Surupada		
69.	Salba Mallick	Tengeri		
70.	Dukhisyam Majhi	Guguri	Tumudibandh	
71.	Sukanti Majhi	Guguri		
72.	Jaee Majhi	Padarpada		
73.	Lasari Majhi	Padarpada		
74.	Deba Majh	Padarpada		
75.	Dasarath Bindhani	Tidipadara		

### 3. KUTIA KANDHA (KANDHAMAL)

Sl. No.	Name of the Patients	Village	Block	District
1.	Janard Jani	Baliguda	Baliguda	Kandhamal
2.	Mukesh Mallick	Dadakangia		
3.	Hironti Behera	Majabali		
4.	Belarason Sahoo	Majabali		
5.	Kritana Mallick	Kutikia		
6.	Prasana Mallick	Kutikia		
7.	Rina Mallick	Kutikia		
8.	Sunita Mallick	Kutikia		
9.	Gajendra Mallick	Kutikia		
10.	Amrut Bindhani	Kutikia		
11.	Bikeswor Mallick	Kutikia		
12.	Bathi majhi	Batipada	Tumudibandh	
13.	Manu Mallick	Batipada		
14.	Purna Majhi	Batipada		
15.	Nabasmita Majhi	Batipada		
16.	Malaka Majhi	Batipada		
17.	Debaraj Jani	Belaghar		
18.	Siba Jani	Belaghar		
19.	Balisaradu Jani	Burlubaru		
20.	Brundabati Jani	Burlubaru		
21.	Abhimanyu Jani	Burlubaru		
22.	Ramakanta Jani	Burlubaru		
23.	Banguradu Jani	Burlubaru		
24.	Dibesa Majhi	Burlubaru		
25.	Khambeswar Majhi	Burlubaru		
26.	Ramakanta Majhi	Burlubaru		
27.	Raghuram Majhi	Burlubaru		
28.	Bhaskar Majhi	Burlubaru		
29.	Gita Jani	Burlubaru		
30.	Suka Majhi	Deogada		
31.	Sapana Jani	Galebada		
32.	Ali Majhi	Germel		
33.	Ditika Majhi	Gochhaka		
34.	Deu Majhi	Gochhaka		
35.	Dagharnath Majhi	Gochhaka		
36.	Kumbrabaladu Jani	Jhalipada		
37.	Parasiti Naik	Jhalipada		

38.	Gunjeija Majhi	Jhalipada		
39.	Bisoi Majhi	Jhalipada		
40.	Dinabandhu Majhi	Jhalipada		
41.	Tikaban Majhi	Jhalipada		
42.	Abhimanyu Jani	Jhalipada		
43.	Asish Majhi	Jubenal		
44.	Goli Muska	Jubenal		
45.	Jinu Majhi	Jubenal		
46.	Majira Jani	Kadapana		
47.	Rampsa Mallick	Karlangi		
48.	Dhibu Majhi	Karlangi		
49.	Gede Mallick	Karlangi		
50.	Krushna Jani	Kumudi		
51.	Duli Majhi	Kumudi		
52.	Kiari Majhi	Kumudi		
53.	Bandhed Majhi	Mandalpadar		
54.	Bimal Majhi	Mundati		
55.	Mandakini jani	Rangaparu		
56.	Balisaradu Jani	Rangaparu		
57.	Nanda Jani	Rangaparu		
58.	Bapanda Majhi	Rangaparu		
59.	Sabi Majhi	Rangaparu		
60.	Kalia Majhi	Rangaparu		
61.	Methedi Majhi	Rangaparu		
62.	Chinaram Majhi	Rangaparu		
63.	Sukanti Nayak	Rangaparu		
64.	Narendra Majhi	Rangaparu		
65.	Samanta Majhi	Rangaparu		
66.	Prakash Majhi	Rangaparu		
67.	Pipada Majhi	Rangaparu		
68.	Lila Jani	Rangaparu		
69.	Hiralal Majhi	Sadangi		
70.	Basanti Jani	Sadangi		
71.	Rodamadu Majhi	Sanatuakella		
72.	Palkadu Majhi	Sanatuakella		
73.	Girmiladu Majhi	Tuakela		
74.	Bide Majhi	Tuakela		
75.	Ranjan Majhi	Tuakela		

#### 4. SANTAL (KEONJHAR)

Sl. No.	Name of the patient	Village	Block	District
1.	Mohan Majhi	Srirampur	Jhumpra	Keonjhar
2.	Dharman Majhi	Srirampur		
3.	Panmuni Majhi	Srirampur		
4.	Muni Majhi	Srirampur		
5.	Budrei Majhi	Srirampur		
6.	Sita Majhi	Teli Arshala		
7.	Pitambar Majhi	Teli Arshala		
8.	Akhila Majhi	Teli Arshala		
9.	Rutraj Murmu	Teli Arshala		
10.	Malati Majhi	Teli Arshala		
11.	Tika Majhi	Teli Arshala		
12.	Sukrumani Majhi	Teli Arshala		
13.	Hemanta ku. Majhi	Teli Arshala		
14.	Nandita Majhi	Teli Arshala		
15.	Phulmani Soren	Amrutpada	Sadar Keonjhar	
16.	Panmani Soren	Amrutpada		
17.	Srimati Tudu	Amrutpada		
18.	Koila Murmu	Amrutpada		
19.	Sambari Munda	Amrutpada		
20.	Chaitanya Majhi	Amrutpada		
21.	Lili Majhi	Amrutpada		
22.	Sartha Majhi	Amrutpada		
23.	Raibari Majhi	Amrutpada		
24.	Dulari Hembrum	Amrutpada		
25.	Rajesh Murmu	Dabank		
26.	Niranjan Marandi	Dabank		
27.	Dasara Munda	Dabank		
28.	Rema Majhi	Dabank		
29.	Raghunath Majhi	Dabank		
30.	Lembu Majhi	Dabank		
31.	Maguni Kisku	Dabank		
32.	Subiman Majhi	Dabank		
33.	Nabin Hansa	Dabank		
34.	Guni Majhi	Dabank		
35.	Jibana kumar Beshra	Danardanpur		
36.	Ajay kumar Hasda	Danardanpur		
37.	Anjali Beshra	Danardanpur		
38.	Rina Hembram	Danardanpur		

39.	Kuni Tudu	Danardanpur		
40.	Pramila Hembram	Danardanpur		
41.	Meena Murmu	Danardanpur		
42.	Srimati Marandi	Danardanpur		
43.	Jibana Hasda	Danardanpur		
44.	Lalmohan Munda	Danardanpur		
45.	Dilip kumar Soren	Dhatika		
46.	Thibu Majhi	Dhatika		
47.	Dhama Majhi	Dhatika		
48.	Natha Majhi	Dhatika		
49.	Raghu Murmu	Dhatika		
50.	Narayan Soren	Dhatika		
51.	Sankara Murmu	Dhatika		
52.	Raghu Mardi	Dhatika		
53.	Siva kumar murmu	Dhatika		
54.	Sita Hasda	Dhatika		
55.	Deulia Murmu	Dhatika		
56.	Giri Majhi	Dhatika		
57.	Prasana Munda	Dhatika		
58.	Purandara Mohanta	Dimirimunda		
59.	Laxman Munda	Gopalpur		
60.	Tuna Munda	Gopalpur		
61.	Dunia Munda	Gopalpur		
62.	Siba Majhi	Jagannathpur		
63.	Sankhi Majhi	Jagannathpur		
64.	Chabilal Majhi	Jagannathpur		
65.	Jyosnarani Majhi	Kashira		
66.	Jhadeswar Majhi	Kashira		
67.	Umesh Majhi	Kashira		
68.	Thakura Majhi	Kashira		
69.	Sunaram Majhi	Kashira		
70.	Mukura Majhi	Kashira		
71.	Surendra Majhi	Kashira		
72.	Dasarathi Majhi	Kashira		
73.	Debendra Majhi	Kashira		
74.	Laxmi Murmu	Raisuan		
75.	Sukanti Murmu	Raisuan		
76.	Raibari Khanda	Raisuan		
77.	Mukesh Murmu	Raisuan		
78.	Tulsi Mardi	Raisuan		

79.	Lillimani Murmu	Raisuan		
80.	Laxmana Murmu	Raisuan		
81.	Doktar Murmu	Raisuan		
82.	Babita Hasda	Rajbandh		
83.	Neha Mardi	Rajbandh		
84.	Aditya kumar Mardi	Rajbandh		
85.	Tusar Mardi	Rajbandh		
86.	Aditi Hasda	Rajbandh		
87.	Gopal Soren	Rajbandh		
88.	Sankar Marandi	Rajbandh		
89.	Suryamani Murmu	Rajbandh		
90.	Laxmana Murmu	Rajbandh		
91.	Pinki Murmu	Rajbandh		
92.	Kamala Bentkar	Silisuan		
93.	Bhimsen Majhi	Silisuan		
94.	Sadananda Majhi	Silisuan		
95.	Chintamani Majhi	Silisuan		
96.	Sadha Naik	Silisuan		
97.	Dilip Majhi	Silisuan		
98.	Golapa Majhi	Silisuan		
99.	Jabamani Majhi	Silisuan		
100.	Sukanti Majhi	Silisuan		

## 5. SANTAL (MAYURBHANJ)

Sl. No.	Name of the patient	Village	Block	District
1.	Jagannth Hembram	Dublabeda	Kuliana	Mayurbhanj
2.	Arjun Murmu	Kolasini		
3.	Surendra Hansda	Bangra	Khunta	
4.	Rani murmu	Bangra		
5.	Teacherva Soren	Bangra		
6.	Madan Kisku	Bangra		
7.	Sakra Hembram	Bangra		
8.	Susanta Kisku	Bangra		
9.	Ramdas Kisku	Bangra		
10.	Kanakdei Marandi	Basipitha		
11.	Jaypal Marandi	Basipitha		
12.	Budhan Singh	Basipitha		
13.	Lambodar Marandi	Basipitha		
14.	Jaysingh Majhi	Basipitha		
15.	Ludhimani majhi	Basipitha		
16.	Asmani Ray	Basipitha		
17.	Gangamani Marandi	Basipitha		
18.	Mangala Murmu	Basipitha		
19.	Samaya Murmu	Bhupad		
20.	Sadhu Hembram	Bhupad		
21.	Malati Mahanta	Bhupad		
22.	Samarai Hemram	Bhupad		
23.	Sakila Soren	Bhupad		
24.	Daktar Soren	Bhupad		
25.	Hapna Soren	Bhupad		
26.	Sambari Hansda	Bhupad		
27.	Kajal Soren	Bhupad		
28.	Govinda Murmu	Bhupad		
29.	Laxman Murmu	Badajamuna		
30.	Rameswar Soren	Badajamuna		
31.	Rebati Hansda	Badajamuna		
32.	Muguni Singh	Girishchandrapur		
33.	Nini Singh	Girishchandrapur		
34.	Larhora Singh	Girishchandrapur		
35.	Pandu Singh	Girishchandrapur		
36.	Samara Mardi	Girishchandrapur		
37.	Gourmohan Murmu	Goudagan		



38.	Ajen Murmu	Goudagan		
39.	Ruya Hembram	Goudagan		
40.	Gobinda Tudu	Goudagan		
41.	Manda Tudu	Goudagan		
42.	Nimai Hemram	Goudagan		
43.	Kalicharan Murmu	Goudagan		
44.	Kuanr Tudu	Goudagan		
45.	Laxman Singh	Juradihi		
46.	Raisen Murmu	Kusagadia		
47.	Chotrai Marandi	Kusagadia		
48.	Jagannath Soren	Kusagadia		
49.	Rankini Soren	Kusagadia		
50.	Rajaram Tuddu	Kusagadia		
51.	Jabamani Murmu	Kusagadia		
52.	Muchura Marandi	Kusagadia		
53.	Honga Soren	Kandalia		
54.	Narayan Murmu	Kandalia		
55.	Dalai Murmu	Kandalia		
56.	Sita Murmu	Kandalia		
57.	Santosh Naik	Kandalia		
58.	Gouri Tudu	Mahuldihi		
59.	Madan Tudu	Mahuldihi		
60.	Surujimani Hemram	Mahuldihi		
61.	Purnachandra Murmu	Mahuldihi		
62.	Bangidei Hembram	Nuagan		
63.	Pallu Hembram	Nuagan		
64.	Dangi Hansda	Nuagan		
65.	Sita Murmu	Nuagan		
66.	Fulla Murmu	Nuagan		
67.	Dhanu Hembram	Nuagan		
68.	Malati Hembram	Nuagan		
69.	Kailash Maghi	Nuagan		
70.	Brundaban Hansda	Nuagan		
71.	Kapura Murmu	Nuagan		
72.	Dullary Marandi	Nuagan		
73.	Swarup Hasda	Nuagan		
74.	Govinda Marandi	Purunapani		
75.	Kanda Marandi	Purunapani		
76.	Jamuna Marandi	Purunapani		
77.	Namita Tudu	Purunapani		

78.	Purna Chandra Hansda	Purunapani		
79.	Sarbeswar Murmu	Purunapani		
80.	Bhaktu Majhi	Sanatanpur		
81.	Badra Majhi	Sanatanpur		
82.	Chandu Majhi	Sanatanpur		
83.	Narayan Tudu	Sanatanpur		
84.	Nand9alata Mahanta	Sanatanpur		
85.	Mungei Murmu	Sanatanpur		
86.	Shreedhar Murmu	Sanatanpur		
87.	Datu Hemram	Sanatanpur		
88.	Rengu Mahanta	Sanatanpur		
89.	Lakhai Murmu	Sanatanpur		
90.	Debendar Mahanta	Talkunda		
91.	Basanta Singh	Talkunda		
92.	Sangahya Singh	Danamara	Samakhunta	
93.	Rasmiranjan Mohanta	Kendua		
94.	Ramchandra Kisku	Sudiam		
95.	Mayadevi Kisku	Sudiam		
96.	Sudhir Chandra Hembram	Masinakathi	Suliapada	
97.	Kanhei Murmu	Masinakathi		
98.	Sakila Hembram	Podugiriso		
99.	Thimu Soren	Podugiriso		
100.	Sibasoren Mardi	Sialia	Udala	

*Annexure VI*

**List of Diseases**

Sl. No	Local name of the disease	English name of the disease	Disease name in Santal language	Disease name in Kandha language
1.	Abu	Tumour	Duhu	Broma
2.	Agarjiva	Dislocation of bone		Prenuvringa
3.	Akhi dhara	Conjunctivitis	Mendak/ Maindbysau	Kanga apha
4.	Amla	Acidity	Srahapa	Srahapa
5.	Anta daraja	Back bone pain	Danda nova	Deti nova
6.	Anthu ganthi bata	Rheumatism	Thitna thanj bat	Menda gani nova
7.	Anthuganthi byatha	Joint pain	Dordo (Harmo Haso)	Menda gani nova
8.	Arsha	Piles	Izadkaaleka	Pindarirug
9.	Basanta	Small pox	Basonta/ Mariguti	Kaubiheni
10.	Bata	Epilepsy	Haluman buy	Batoa/Gada nomeri
11.	Bata jwara	Filaria	Lutkum/Fulau bemar	Sidinamenisori
12.	Beenchi	Eczema	Chinga	Gimipidka
13.	Bhatudi	Wart	Uju	Batoa
14.	Bhuta lagiba	Ghost attack	Dan vut lagaore	Pideri pita/penu ranja
15.	Bichha kamudiba	Scorpion bite	Bind kininj binjer bisra	Salerikospa
16.	Bisa khaiba	Intake of poison	Bisjunre	Osotinba
17.	Chanda roga	Balad disease	Chadrak	Tapal/daga daga
18.	Charma roga	Skin disease	Punradad	Kasa
19.	Chuti jhadiba	Hair fall	Up nuruk	Burijelba
20.	Dadma	Dysentery		Jidapinga or sirupukri
21.	Dahani lagiba	Evil spirit	Dan vut lagaore	Daska
22.	Danta bindha	Tooth ache	Regreg	Padu bikali
23.	Dhala chau	Leucosis	Sukali chhau	Lingi pritka
24.	Dhatu khaya	Metal fatigue	Haris	
25.	Ecsira	Scrotal hydrocele	Dadehe	Mesa/Mesu

1.	Galua	Swelling in chick	Pakneint	Rapandi
2.	Garmi	Mania	Gurmi	Kanda
3.	Ghaa	Ulcer	Kausa	Soju/prada/madevi
4.	Guni	Hypnotism	Ajha	Klega
5.	Hada bhanga	Bone fracture	Jan rapudok	Prenu vringa
6.	Hada phuti	Chicken pox	Basonta	Bineni
7.	Haija	Cholera	Hawaduksemeram lachodak	Raju
8.	Jalantaka	Hydrophobia	Jalantak	
9.	Jhada	Dysentery	Chidir	Bandra
10.	Jwara	Fever	Tan rua	Sidinamerigori
11.	Kalajai	Black mole	Bhatuli	Kalimanda
12.	Kamala	Jaundice		Jaundice
13.	Karkata	Cancer		Cancer
14.	Karna bindha	Ear ache	Luturhaso	
15.	Karna pachiba	Otorrhoea	Luturghao	
16.	Kasa	Cough	Khog	Depoka
17.	Khadyabhaha	Malnutrition	Hormo vagi dono	
18.	Kurmi	Worm disease	Patwaa	
19.	Kustha roga	Leprosy	Murhutjanm	Kiding/Kudhi
20.	Madhumeha	Diabetes	Bahumut	
21.	Malakantaka	Constipation	Birmaha	Mundabati
22.	Malaria	Malaria	Pali rua/ Bandarby	Pili nomeri
23.	Milimila	Measles	Talsa/ Milmilia	Gunda
24.	Mirigi jwara	Mirigi Fever	Hanahaguguh	
25.	Munda bindha	Headache	Bohok haso	Torga/ Sepa
26.	Murchha roga	Fainting disease	Halme na Jalme	Bovmiava
27.	Najar lagiba	Put an ill eye on others	Gidra aahao/Hai hasit/Ahaa	Kanu dibyasn
28.	Nasa rakta sraba	Nasal bleeding	Sepa	Kanudiba
29.	Pakastali pradaha	Gastritis	Lach haso	Brohiava/ Tutunab
30.	Pakhya ghata	Paralysis	Bayebara/Banmara	Slernadibyn
31.	Peta byatha	Stomach pain	Lach haso/ Bindkai	Tutu nova
32.	Pihuda jwara	Pihuda fever	Rengus rua	Maska nakuri

33.	Pita banti	Secretion of bile in vomiting	Hadhat sisir Ulabebej	Tepka
34.	Raja jakhama	Tuberculosis	T.B. namre Rajraj	
35.	Rakta hinata	Anaemia	Hadhusum/Hamusnuha	Rakajupri
36.	Rutu sraba	Disorder of menstruation	Dele	Madu pada
37	Sarpa dansana	Snake bite	Sanam lekanbinger bisra	Srasu kaspā
38.	Stana roga	Breast disease	Toa anjedok	Srangu nomer gori
39.	Swapna dosa	Night pollution	Sapan nala pila	Krinja
40.	Swasa roga	Asthma	Paks paks	Kadinga
41.	Tarala jhada	Diarrhoea	Laodokok	Gadhipukri
42.	Thanda	Esunphulia	Reyar lagho	Jili inba / Tirga
43	Thariba	Trembling	Thartharas	Karenga/ Tirga
44.	Ucha rakta chapa	High blood pressure		

*Annexure VII*

**List of Plants**

Sl. No.	Local Name	Botanical Name	Plant name in Santal language	Plant name in Kandha language
1.	Aankaranti	<u>Solanum surattense</u>		
2.	Aanla	<u>Embllica officinalis</u>	Tandi meral	Jursakanga
3.	Aata	<u>Annona squamosa</u>	Mandargam	Gupiteiga
4.	Ada	<u>Zingiber officinalis</u>	Gadaa	Sing
5.	Akhu	<u>Saccharum officinarum</u>	Aank	Aku
6.	Amarpoi	<u>Kalanchoe pinnata</u>		
7.	Amba	<u>Magnifera indica</u>	Uldare	Priha/Maska
8.	Ambada	<u>Spondias pinnata</u>	Amala	
9.	Ame	<u>Apocynum cannabinum</u>		
10.	Ankal	<u>Alangium chinense</u>	Dapatrangaini	
11.	Apamaranga	<u>Achyranthes aspera</u>	Budhidatram	Audamerdi
12.	Arakha	<u>Calotropis gigantean</u>	Auaona	Adaka
13.	Arjun	<u>Terminalia arjuna</u>	Kaa uhaa	Mardinga
14.	Asan	<u>Grewia tiliifolia</u>	Atna	
15.	Ashoka	<u>Saraca asoca</u>		
16.	Aswagandha	<u>Withania somnifera</u>	Aswagandha	
17.	Babul	<u>Acacia nilotica</u>	Babla dare	
18.	Badiaanla	<u>Crossandra undulaefolia</u>	Etka	Jurga
19.	Baghanukhi	<u>Martynia annua</u>	Gomakhi	
20.	Bahada	<u>Terminalia bellirica</u>	Lupung	Bademanhu
21.	Baidanka	<u>Mucuna pruriens</u>	Etka	Tuleri
22.	BaiKumbha	<u>Careya arborea</u>		
23.	Bainchakoli	<u>Flacourtia cataphracto</u>	Bhainch	
24.	Bana kadali	<u>Corchorus aestuans</u>	Birkaeda	Tadi

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25.	Bana khajuri	<u>Phoenix Pusilla</u>	Ban halech	Gasa Kajuri
26.	Bana kolatha	<u>Atylosia scarabaeoides</u>	Birhalech	
27.	Bara	<u>Ficus bengalensis</u>	Baledare	Bradi
28.	Barakoli	<u>Ziziphus mauritiana</u>	Dedali	Barekau
29.	Basanga	<u>Adhatoda vasica</u>		Basanga
30.	Baula	<u>Mimusops elengi</u>	Bal dare	
31.	Baunsa	<u>Bambusa arundinacea</u>	Maand	Madi
32.	Begunia	<u>Vitex negundo</u>	Sindhuari	
33.	Bela	<u>Aegle marmelos</u>	Bel/Sinjja	Belanga
34.	Bena	<u>Vetiveria zizanoloides</u>	Bena ghas	
35.	Beta	<u>Calamus tenuis</u>	Beint	Bete
36.	Bhuin champa	<u>Ochna objusata</u>		Bhuin champa
37.	Bhuin kain	<u>Nymphaea lotus</u>	Kalh upalbahar	Tada kainpaj
38.	Bhuin kakharu	<u>Ipomoea digitata</u>		Tana pudra
39.	Bhuin nimba	<u>Andrographis paniculatus</u>	Birnam	Bukuri
40.	Bichuati	<u>Laportea interrupta</u>	Sengelasi dare	Kaseli
41.	Bisalyakarani	<u>Tridax procumbens</u>		
42.	Brahmi	<u>Bacopa monnieri</u>		
43.	Champa	<u>Michelia champaca</u>	Champabaha	Sampa
44.	Chatana chheli	<u>Alstonia scholaris</u>		
45.	Dalimba	<u>Punica granatum</u>	Dalim dare	
46.	Dhala palasa	<u>Butea monosperma</u>	Parad murud	
47.	Dhala tarat	<u>Ervatamia divaricata</u>	Towabaha	Langitagarpuj
48.	Dhanua lanka	<u>Capsicum spp</u>	Hulumarich	Patapirtikau
49.	Dhaturi	<u>Woodfordia fruticosa</u>	Dhatura dare	

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50.	Dimiri	<u>Ficus glomerata</u>	Dimbu dare	Toga/Daga manuh
51.	Duba ghasa	<u>Cyndoon dactylon</u>	Dubighans	
52.	Dudhi	<u>Wrightia tinctoria</u>	Dudhi nadi	
53.	Dudura	<u>Datura stramonium</u>	Dudura dare	
54.	Dugdhika	<u>Euphorbia thymifolia</u>		
55.	Eswarjata	<u>Celosia cristata</u>		
56.	Gaba	<u>Ricinus communis</u>	Gabajada	Gaba
57.	Gada	<u>Ricinus comunis</u>	Gada	
58.	Ganga siuli	<u>Nyctanthes arbortristis</u>	Saparam	Gangasiuli
59.	Ganjei	<u>Cannabis sativa</u>	Ganjaa	Ganje
60.	Ghikuanri	<u>Aloe vera</u>	Ghikuanri	
61.	Gil	<u>Caesalpinia decapetala</u>		
62.	Girili	<u>Indigofera cassioides</u>		
63.	Golamaricha	<u>Piper nigrum</u>	Gutimarich	
64.	Golden chain	<u>Laburnum anagyroides</u>		
65.	Gudchi	<u>Tinospora cordifolia</u>	Susuj dare	
66.	Gudumari	<u>Gymnema sylvestre</u>		
67.	Hadajala	<u>Vitis quandrangularis</u>		
68.	Haladi	<u>Curcuma domestica</u>	Hardi/Sansa	Singa
69.	Harada	<u>Cajanus cajan</u>	Rahel	Katikau
70.	Harida	<u>Terminalia chebula</u>	Ral	Tadahu
71.	Hemsagar	<u>Kalanchoe laciniata</u>	Hemsagar	
72.	Jada	<u>Ricinus communis</u>	Samarjada	Kasagaba
73.	Jaifala	<u>Myristica fragrans</u>	Jayafal	Jaifal
74.	Jamu	<u>Syzygium cumini</u>	Kud dare	Lindu
75.	Janhi(Ridged gourd)	<u>Luffa acutangula</u>	Jhinga	Siseli



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76.	Jari	<u>Ficus microcarpa</u>		
77.	Jastimadhu	<u>Glycyrrhiza glabra</u>		
78.	Jira	<u>Cuminum syminum</u>	Jara	
79.	Juani	<u>Anethum gravealens</u>	Juaani	
80.	Kadali	<u>Musa sapientum</u>	Kayara	Tadi
81.	Kain	<u>Nymphaea alba</u>	Nupalbana	
82.	Kaincha	<u>Abrus precatorius</u>	Bhaincha	Gunjelikau
83.	Kainkanda	<u>Nymphaea lotus</u>	Uladha	Taru
84.	Kala jira	<u>Nigella sativa</u>	Kalajira	Kaljira
85.	Kala tulasi	<u>Ocimum sanctum</u>	Kalitursi	Kalitulsi
86.	Kaladudura	<u>Datura metel</u>		Kalidudura
87.	Kalara	<u>Momordica charantia</u>	Karuyala	Kare
88.	Kaniar	<u>Thevetia nerifolia</u>		Kaniar
89.	Kanteikoli	<u>Flacourtia indica</u>	Kalamanta	Sidekau
90.	Karanja	<u>Pongamia glabra</u>	Karanj dare	Kranje
91.	Kasmar	<u>Gmelina arborea</u>	Kasmar	
92.	Kayen	<u>Nymphaea alba</u>	Jaja	Nedi/neli
93.	Kendu	<u>Diospyros melanoxylon</u>	Tiril dare	Keendu
94.	kolatha	<u>Dolichos biflorus</u>	Kurthi/Halez	Kalta/Korta
95.	Kolathia	<u>Tephrosia purpurea</u>	Halej	Kolta/ Korta
96.	Kuchila	<u>Mallotus repandus</u>	Kuchiladare	
97.	Kusuma	<u>Carthamus tinctorius</u>	Barudare	Punganari
98.	Labanga	<u>Eugenia caryophyllus</u>	Gaoti marich	Labang
99.	Lajakuli lata	<u>Mimosa pudica</u>	Janpitdare	Laja Sola
100.	Lanka	<u>Capsicum annum</u>	Marich	Pirti Kau
101.	Limba	<u>Azadirachta indica</u>		Lima dare
102.	Mahakala	<u>Trichosanthes bracteata</u>	Mahakal	
103.	Mahul	<u>Madhuca longifolia</u>	Matakam dare	Irpi

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104.	Maka	<u>Zea mays</u>	Dhibrijanla	Jaeli
105.	Mandaar	<u>Hibiscus rosasinensis</u>	Jababaha	Mandar punga
106.	Mandia	<u>Eleusine coracana</u>	Mandiaa	Dedi
107.	Manjuati	<u>Lawsonia inermis</u>	Mehendi	Menje/Benda
108.	Maranga	<u>Moringa oleifera</u>		
109.	Mayura chulia	<u>Elephantopus scaber</u>		
110.	Mehendi	<u>Lawsonia inermis</u>		
111.	Methi	<u>Trigonella foenumgraecum</u>	Aonramethi/ Mithi	Methii
112.	Muthaganda	<u>Cypripedium rotundus</u>	Muthaghas	
113.	Muturi lata	<u>Smilax zeylanica</u>	Mutralada	
114.	Muturikathi	<u>Smilax zeylanica</u>	Mutra	
115.	Nadia	<u>Cocos nucifera</u>	Nunia	Ladia
116.	Nageswar	<u>Mesua ferrea</u>		
117.	Nali apamarga	<u>Achvranthes aspera</u>		
118.	Nimba	<u>Azadirachta indica</u>	Nimdare	Lima
119.	Nirgundi	<u>Vitex negundo</u>		Tiberi
120.	Olua	<u>Amorphophallus sylvaticus</u>	Bundu	Samobu
121.	Osta	<u>Ficus religiosa</u>	Hesa dare	Pipali
122.	Paja	<u>Litsea glutinosa</u>	Paja	
123.	Palasa	<u>Butea monosperma</u>	Murud dare	
124.	Palua	<u>Curcuma zedoaria</u>	Palaa	Pallu
125.	Patala garuda	<u>Rauvolfia serpentina</u>		Bukuri
126.	Pedipedica	<u>Abutilon indicum</u>		
127.	Pijuli	<u>Psidium guajava</u>	Pellaa	Jami
128.	Pippali	<u>Piper longum</u>	Pipall	Danderi
129.	Pita lau	<u>Lagenaria siceraria</u>	Meral	Pita Lauo
130.	Pitamari	<u>Naregamsia alata</u>		

131.	Rakta chandan	<u>Santalum album</u>	Rakat chandan	Rakachandan
132.	Rohani	<u>Fagus sylvatica</u>	Ruhindare	
133.	Sajana leaf	<u>Moringa oleifera</u>	Munga	Ming
134.	Sala	<u>Shorea rebusta</u>	Banga Sarjam	Jargi
135.	Saptapheni	<u>Opuntia dillenii</u>		
136.	Saru	<u>Amorphophallus titanums</u>	Kachhu	Samu
137.	Satabari	<u>Asparagus gracilis</u>	Sadabihar bana	Penu Seperi
138.	Sikakai	<u>Acacia sinuata</u>		Barungi
139.	Simili	<u>Salmalia Malabarica</u>	Uedeldare	Kamatula
140.	Singhera	<u>Trapa natans</u>		
141.	Sisu	<u>Dalbergia latifoli</u>	Sisu dare	Dureni
142.	Sisua	<u>Dalbergia sissoo</u>		Siska
143.	sunamukhi	<u>Casia aunsustiatolia</u>		
144.	Sunari	<u>Cassia Fistula</u>	Unjun dare	Pundeli
145.	Sunthi	<u>Curcuma aromatic</u>	Sunthi	
146.	Talamuli	<u>Curculigo orchioides</u>	Setaketa	
147.	Tentuli	<u>Tamarindus indicus</u>	Jaaj dare	Nedi/ Neli
148.	Tulasi	<u>Ocimum sanctum</u>	Tursi	Tulsii

**Annexure VIII**

**List of Animals**

Sl. No.	Local name	English name	Zoological name	Animals name in Santal language	Animals name in Kandha language
1.	Badudi	Bat	<u>Pipistrellus</u> <u>Pipistrellus</u>	Badlachene	Treka
2.	Bajrakapta	Pangolin	<u>Manis</u> <u>gigantea</u>		
3.	Bhalu	Bear	<u>Ursidae</u> <u>carnivore</u>	Bana	Oli
4.	Dhamana sapa	Monocled cobra	<u>Naja</u> <u>kaouthia</u>	Jambulu	Damara
5.	Endua	Garden lizard	<u>Calotes</u> <u>versicolor</u>	kakala	Taki dai
6.	Gai	Cow	<u>Bos</u> <u>primigenius</u>	Dangri	Kodi
7.	Genda	Snail	<u>Calcareous</u> <u>epiphragm</u>	Gangghaa	Jidiladedi
8.	Ghara chatia	Sparrow	<u>Passer</u> <u>domesticus</u>	Ghalwa	Titihipata
9.	Ghutar poka	Milliped	<u>Spirostertus</u> <u>giganteus</u>	Gandhi	
10.	Gobar poka	Bettle	<u>Rhinotia</u> <u>henistictus</u>	Izera/Gurich tizu	Koibiduri
11.	Gunduchi bird	SKuirrel	<u>Rodentia</u> <u>sciurus</u>		Sirudipatanga
12.	Hati	Elephant	<u>Elephas</u> <u>maximus</u>	Hatii	Ati
13.	Jhinkari	Cricket	<u>Cryllus</u> <u>assimilis</u>	Sasraj	Lirii
14.	Kainchha	Turtle	<u>Herbivora</u> <u>testudinidae</u>	Ratam	Semi/ Sembi
15.	Kankada	Crab	<u>Liocarcinus</u> <u>vernalis</u>	Katkam	Kiskangtori
16.	Kankada Bichha	Scorpion	<u>Archinida</u> <u>scorpionida</u>	Kidinj kat kam	Kiskangteri
17.	Karandi macha	Minnow fish	<u>Pimephales</u> <u>promelas</u>	Khaya haku	
18.	Kochila khai	Hornbill	<u>Ocyeros</u> <u>griseus</u>	Kuchula	
19.	Kukuda	Chicken	<u>Gallus</u> <u>gallus</u>	Jhanti kakar	Koju/Kaska
20.	Kukura	Dog	<u>Cannis</u> <u>familiaris</u>	Seta	Nahuri
21.	Mankada	Monkey	<u>Macaque</u> <u>monkey</u>	Sakam gani	Maki/ binu/ makra

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22.	Mati poka	Silk worm	<u>Bombyx mori</u>		
23.	Mayura	Peacock	<u>Pava cristatus</u>	Maraha	Medu/ melu/ piale
24.	Naga sapa	Cobra-de-capello	<u>Naja naja</u>	Dati/Jerenj jampa binj	Arpendi/dafi
25.	Odasha	Bug	<u>Abax coleopteran</u>	Aalmaj/Halmuch	Neta
26.	Panda	Panda	<u>Alurpoda melanoleuca</u>	Koru	Koru
27.	Para	Pigeon	<u>Columbidae colombiformes</u>	Parwaa	Paru kau
28.	Rohi machha	Breeding fish	<u>Cyprinus carpio</u>	Ruhi haku	Minu
29.	Samuka	oyster	<u>Pinctada margaritifera</u>	Jhinuk	Gola/gali/daki
30.	Siala	Fox	<u>Vulpes vulpes</u>		

*Annexure IX*

**List of Minerals**

Sl. No.	Local name	English name	Minerals name in Santal language	Minerals name in Kandha language
1	Abhara	Mica	Abhraa/ lipindiz	
3	Gandhak	Sulphur		
5	Ispat	Steel	Ispatu/ Menhed	Loha
7	Luha	Iron	Bhinda/Menhed	Loha
8	Pitala	Brass	Pital	Digali
9	Rupa	Silver		Rupanga
10	Tamba	Copper	Taamba	Darab

*Annexure X*

**List of KIs Included in the Survey**

Sl. No.	Name	Village	Block	District
1	Ananta Majhi	Nuagaon	Khunta	Mayurbhanj
2	Jaising Majhi	Basipitha	Khunta	Mayurbhanj
3	Surendranath Majhi	Sriram pur	Jhumpura	Keonjhar
4	Sanatana Murmu	Teliarshla	Jhumpura	Keonjhar
5	Dhaneswar Majhi	Silisuan	Keonjhar	Keonjhar
6	Jaraman Majhi	Amrit pada	Sadar Keonjhar	Keonjhar
7	Teachercharan Naik	Dabank	Sadar Keonjhar	Keonjhar
8	Timika Murmu	Dhatika	Sadar Keonjhar	Keonjhar
9	Biswanath Kisku	Tota sahi	Raisuan	Keonjhar
10	Rajkishor Mardi	Rajbandh	Sadar keonjhar	Keonjhar
11	Pitula Jani	Bulabaro	Tumudibandh	Kandhamal
12	Laku Wadaka	Khajuri	Bissam cuttack	Rayagada
13	Ramchandra Mallick	Dadkangia	Baliguda	Kandhamal
14	Benarsingh Behera	Kutikia	Baliguda	Kandhamal
15	Sindhe Wadaka	Khajuri	Bissam cuttack	Rayagada
16	Purna Chandra Baliarsingh	Muniguda	Muniguda	Rayagada