

Traditional Medicine Among Tribals of Rajasthan

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ABSTRACT In this paper an attempt has been made to study the traditional medical system among tribals of Rajasthan. The traditional medicinal care practiced in the area having both herbal as well as ritual forms of curing is not considered important by official agencies. The cultural importance of ritual cure and the role of medicinal plants (their properties as they relate to healing, their symbolic values and their procurement from environment) in the traditional medical system of tribals is of great value. It can be seen from the appendix I that there are large numbers of illnesses where oral application of herbal preparations are a frequent part of the treatment (e.g. fever, dysentery, diarrhoea, Malaria, cough and cold, eye ailments, Guinea worm (*Nadu*), stomachache etc). But, at some point the tribals see the limits of such phytotherapeutic forms of treatment. Any illness that is associated with severe pain, long lasting and is not responding to any herb requires help of the supernatural. The tribals relate their ritual needs to supernatural powers and ask for help and forgiveness. The state sponsored medical system does not look "at indigenous medicine" as a whole and fails to see the socio-cultural basis of its uses.

INTRODUCTION

Medical system is one of the central aspects of any culture. The field of art and science of medicine, "is a culture, an island of cognition, affects social structure and institutions, codified language; it has boundaries that include members and exclude others. As an information system, the field of medicine is a relatively closed system of knowledge; it has many vested interests in remaining that way". (Romanucci-Ross and Moermann, 1997: 281). The traditional, indigenous or non-western forms of treatment are still practised in many parts of the world.

"Traditional Medicine" or "Traditional System of Health care", refers to the long standing indigenous systems of health care found in developing countries and among indigenous populations. These traditional medical systems view humanity as being intimately linked with the wider dimensions of nature. The World Health Organization has referred to these systems as "holistic i.e. that of viewing man in his totality within a

wide ecological spectrum, and of emphasizing the view that ill health or disease is brought about by an imbalance, or disequilibrium of man in his total ecological system and not only by the causative agent and pathogenic evolution". The treatment strategies used in traditional systems of health include the use of herbal medicines, mind/body approaches such as meditation, and physical therapies including massage, acupuncture and exercise programmes. These low cost, locally available treatments which according to WHO are utilized as the source of primary health care by 80 per cent of the world's population. There are two types of Traditional Health System:- the *naturalistic systems* and *personalistic systems*. The *naturalistic* systems are those which are natural sciences with controlled investigation of documented material-medicines having a comprehensive theoretical framework against which treatments are tested and new treatments are generated. The *personalistic* traditions have been described as those which have the knowledge of healing, possessed by an individual either selected by some one in the community or by process of divine revelation, or revelation of some form.

In colonial times, traditional medical systems were frequently outlawed by authorities. In post-colonial times the attitudes of biomedical practitioners and government officials have maintained the marginal status of the traditional health care providers despite the fact that among rural people in the developing countries the traditional medicines serve an important function. Organizational relationship between cosmopolitan and traditional medicine can come into being in four different ways: monopolistic, tolerant, parallel and integrated. Factors influencing the status of traditional medicine in policy making are economic, cultural, national crisis (war and epidemics) and international pressure to conserve traditional knowledge, which will otherwise disappear, because of lack of documentation. Indian Medical Council Act formally established the Traditional Systems - Ayurveda, Unani and Siddha as official components of national health

care India. In Rajasthan, among tribals, a traditional medical system functions with no official status. It runs parallel to the cosmopolitan medical system but has not been incorporated into national health planning. It is based on personalistic traditions of supernatural healers (*Bhopas*) and their ministrations; *Jaangars* (herbalists), and religious technician *Devala* (grain-diviner). Apart from spiritual healing, the major part of traditional therapy involves the use of plant extracts. Studies have been carried out that document tribal medicinal plants from a botanical point of view (Joshi, 1995). However no anthropologically oriented ethnopharmacological research has been carried out.

In this paper the traditional medical practices of six tribal groups namely Bhil, Mina, Garasia, Kathodi, Damor and Sahariya have been discussed. The socio-cultural basis of indigenous plant use as part of medical system of tribals, as it relates to the roles of the healers has also been analyzed. The study inquires into (i) concept of diseases; (ii) treatment strategies; (iii) the role of healers and their form of treatment; and (iv) the persistence or continuation of traditional practices.

Ethnographic Background: A profile of the six tribal communities in southern Rajasthan highlights considerable heterogeneity. The data was collected from villages of Udaipur, Dungarpur, Sirohi, Swaimadhopur and Baran districts. The districts of Udaipur, Dungarpur and Sirohi are situated in hilly regions of Aravalli range. These hills are traversed by small rivers. In Udaipur district, Kotra and Jhadol tehsils (from where Bhil and Kathodi data was collected) are backward with few amenities, while theoretically available health and education facilities function only sporadically. The Swaimadhopur and Baran district from where data for Mina and Sahariya tribe was collected respectively are located in the South-eastern plateau of Rajasthan with stony and high table land. The rainfall is frequent in all the districts. Amenities and services are largely available, as are a host of private health and educational facilities. However tribal villages remain at the periphery and are devoid of these facilities. Owing to the nature of the socio-historical factors, these tribal groups occupy distinct and unequal position with regard to their access to material resources, knowledge base and social conditions existing in society. The ecological

conditions in the area dictate many aspects of traditional life, especially settlement pattern and disease pattern. The tribals possess poor assets, meagre resources and petty means of livelihood. Small, hilly, fragmented land holdings devoid of irrigation facilities are the basic assets. The forests which were main source of their food, fodder and fuel are rapidly depleting.

The tribal villages under study tend to be poorly connected by roads, have severe water supply problems and are often reduced to depending on rain and river water. In the rain-fed region, agriculture does not offer a reliable and adequate source of income, is constrained by the uncertainty of water supply, and is chiefly geared to subsistence production with the main crops being wheat, maize and millet. A large numbers of men are employed in non-agricultural occupations - particularly labour.

The tribals of southern Rajasthan have retained their deep rooted animistic faith and totemic concepts with a high level of superstitions in spite of proximity or contact with Hinduism. Though having absorbed several traits of neighbouring regions - even the deities, gods and goddesses, the sphere of tribal religion have been least affected and has maintained its identity. Among tribals, religion provides ethical guidelines for living, for interpreting natural events including disease, misfortunes and disasters. Anything which, cannot be explained pragmatically is believed to be caused by supernaturals. The findings of the study show that the greater the extend of traditionalism in tribal society, the wider is the tendency of consulting the traditional healers. However, the belief in supernatural cause may exist alongside the belief in natural causes.

Methods: The data presented here were collected from six tribes of Rajasthan during 1997-1999. The traditional medical practitioners-*Bhopas*, *Jaangars*, *Devala* (grain diviner) and *Khoont*(priest) were interviewed. Healers were observed during their treatment sessions. Structured interviews were conducted on the treatment strategies for different diseases.

Common Diseases: Both infectious as well as contagious diseases dominate the scene. The most common diseases of the area are abdominal disorders, dysentery (*Dast*), cough and colds, Acute Respiratory Disorders(*Sans Chalna*), fevers (*Bukhar/Taap*), Guinea worm(*Nadu*), Uri-

nary tract disorders, skin diseases, eye troubles, wounds, tooth and Jaw diseases. Most of the tribals suffer from trachoma as a result of exposure to dust, Gastroenteritis and acute respiratory infections are greatest killer in children. Infections and nutritional deficiency cause major health problems in adult population. Other problems common among adult females are leucorrhoea (*Safed Pani*), followed by swelling (*soojan*), Syphilis (*Challe*) and Gonorrhoea (pus-discharge). Sexually transmitted Diseases (STD) are common but are not reported officially.

Disease Concepts:- To the tribals, minor ailments of relatively short duration are of little concern. Such illnesses include superficial cuts, bruises and other minor dermatological conditions, common cough and cold, headache, stomach etc. They are generally treated with herbs and medicinal plants. These are thought to be caused by natural forces and are treated accordingly. They believe that eruption of boils is caused because of bad-blood (*Khoon-Kharab*). Indigestion may lead to diarrhoea.

Apart from these, diseases attributed to natural causes are an imbalance between hot and cold humours of the body. When heat enters the body through head and ears, heat stroke (*lapat lagna*) occurs. Tribals cover their head and ears with a cotton scarf during afternoons of the summer months. As a result of excessive heat to the body, a person suffers from a high fever.

The tribals consider an illness more severe: if it is seen as debilitating, dangerous or life threatening to the patient; if it is associated with a severe pain, if it is long lasting or when a person stops eating. It is believed by tribals of Southern Rajasthan that sickness is caused by social offences against dead or living or celestial world. Spirits and ghosts cause various kinds of suffering and are agents of illness and death. These include *Bhairon*, the main male deity, two female deities: the *Kul-devi* (clan goddess) and *Sheetla Mata* (pox goddess). Most of the tribals believe that the small-pox is caused by the *Sheetla Mata* and that the government in trying to stop her progress through such measures as inoculation would enrage her still further. The male deity *Bhairon* and the two female deities are strong and powerful, because these are accompanied by *Veers* (spirits). All physical ailments are caused by the annoyance and displeasures of *Veers*. These *Veers* (spirits) can be male or female and

can be either helpful or harmful. Tribals often blame these spirits for illness and ailments in the community. These harmful or dissatisfied spirits which afflict people are known by different names among the tribals. These deities and their spirits cause sickness if they are neglected or offended or sometimes if they develop special attachments to certain humans with whom they come in contact, Garasias believe that there are as many as 100 *Veers*, of which 52 are of importance; and these spirits are *Gobru* (malevolent) and *Bhello* (benevolent). The *Gobru* spirits are charged off with magical powers. These have close relations with magicians and sorcerers. Role of these spirits is called *Maila* (dirty) and hence dirty things are offered to them. *Gobru* spirits consists of all types of *Bhoots*, *Bhootnis* and *Chudel* who cause diseases like locking of jaw, blurring of eyes, strong headache and high fever etc. A sorcerer after his death turn in to a *Magi* and *Hikotri* who have to be worshipped annually to appease them. The *Bhello* spirits are guardian spirits who protect from injury and evil influence.

Among Bhils, Minas and Kathodis curse and wrath of benevolent deity, carelessness towards the deity, mistake or doing a wrong deed, taking a false oath or not fulfilling a pledge, or an act of malevolent deity e.g. *Sikotra* are considered causes of sickness. Violation of taboos related to totems, work of evil spirits, spirits of ancestors, evil magic craft or evil eye are other reasons.

Sahariyas believe that most of the diseases are caused when one of their deities or an evil power inflicts *Khor* or *Achan* on a victim. If *Thakur Baba* or *Mata* is not worshipped properly at a proper time, their wrath may invoke disease. A *Bhoot* (ghost) is capable of taking away the soul of the victim who becomes unconscious. Like all other tribals, Sahariya also believe that evil spirits have to be propitiated so as to control their nefarious activities. Sahariyas recognize *Dard* and *Dukhana* as separate types of illness categories. The *Dard* includes wide range of diseases like cough, cold, fever, dysentery, diarrhoea, pneumonia and other respiratory diseases. Though *Khor* and *Acchan* are used interchangeably, but at contextual level they may be distinguished. If a person does not attend the *Jaat* of *Mata* or forgets to propitiate her, he may get a sty (*phooli*) in his eye as a result of *Mata ki Acchan* against a deity or when a deity

is not remembered at the time of festival or one forgets to offer coconut and sugar wafer (*Batasha*) to his/her *Got Devta* or *Devi*, *Khor* is inflicted. Sahariya believe that third generation ancestors become *Prait* and if not appeased show their wrath by inflicting diseases to show their power and remind them of their existence. Besides these, there are other evil spirits roaming outside the village or inhabiting definite places like cremation ground, dried nallahs, certain trees and rivers etc. These evil powers do not attack the individual inside his village or in the vicinity of a *than*, as Sahariya believe that village is protected by *Devi-Devta*. Each Sahrana has a *Bhopa* and the deity whom he propitiates protects the village from evil influence.

Small pox, chicken pox measles are attributed to three mother goddesses. A number of child deaths are attributed to the wrath of goddesses. *Moti Jhara* (Typhoid) is attributed to *Moti Jhara Thakur's* infliction.

Tribals establish relationship with physical environment like deep water, dry nallahs, cremation ground, forests trees, hilltops etc through evil spirits inhabiting these. They also make a distinction between 'inside the village' and 'outside the village'; where and when one can get attacked by evil forces or the places where there is no danger of such attacks are well knitted in their system. But this system does leave scope for diseases caused by human intervention. Tribals of Rajasthan surmise that sickness by human intervention is possible. Magic, sorcery, evil eye of *Dakan* (witch) can cause damage to health, psyche and property. Their belief in evil eye, *Dakan* (witch), *Mooth* (zooming through, grains appearing like dazzling) and crossroad motif in disease transference show their belief in magic. People believe that jealousy or 'difference' as important factors for inviting *Mooth*. Bizarre phenomenon like *Mooth* are operated by *Dakan* (witch). The tribals believe that certain women can instigate spirit of powerful deities or powerful humans to attack on a living soul indicting displeasure of the attacker. These women are regarded as '*Dakan*' and are supposed to be in possession of secret evil power which can be used to instigate malevolent spirit to attack people. These spirits are considered very powerful because they are highly mobile. People of the locality know about the women who have such powers but are afraid to provide details less they become victims themselves.

Mooth

Among the tribals of Rajasthan, *Mooth* is feared as Voodoo was feared among British residents in the earlier colonial Africa. Elaborate description, incidents and examples are quoted to affirm this evil craft by the tribals. Grains are essential materials of *Mooth*. This practice is mastered in cremation grounds or under a specific tree. It is said that extent of perfection achieved is tested by using this craft on trees. The effect produced is gradual wilting, drying and almost definite death of completely blooming full sized green tree. The same fate would be met by a tribal on whom the *Mooth* is blown, in most of the cases by an enemy or *Dakan* in collaboration seeking vengeance. Among Garasias, the *Malri* inflict pain through spells called *Mooth*. The degree and potency of the *Mooth* varies and art too may differ regionally as well as ethnically. The caste groups residing in the area also recognize this phenomenon. Singh and Pandey (1982), mention the use of *Vigna mungo* only as carrier of this magic, grown in the skull of the dead and thrown, chanting *Mantras* on maturity. Flying in the air, they attack the victim who dies following a great pain in the body. A dead snake's mouth may be used instead, for raising plants from the seeds - called *Bhanasur mooth*. Doshi (1971) gives an account of a such a witch craft though not evidently a *Mooth*, adding that since such a charm cannot cross a water body and in cases when the would be victim's hut is beyond such a range, the witch boards the charm comprising Mung grains, lemon and vermillion on a small boat (*Tapa*) and sends it floating. It is said to reach the door of the victims and cause harm to the person who accidentally steps on it. Kothari (1984) describe another form of *mooth* where in tribals make dolls of stuffed cotton resembling the human figure of the person to be harmed. These dolls are pierced by thorns of *Bawal* or any other pointed objects accompanied with magical rites leading to wasting away of the victim. Another type of *Mooth* (*Gattar Mooth*) where in a named stuffed doll of intended victim is subjected to magical rites and placed on the crossing of three or seven ways leading to the victims house. The duration of effect of this type of *Mooth* is decided before hand. This results in wasting away of body. *Agni Mooth* results in a burning sensation all over accompanied by stomach ache. *Vadili Mooth* produces a

needle pricking sensation in the victim's body.

Cross-road Motif in Disease Transference: The tribals of Rajasthan believe that by keeping charms on the crossings of four ways, the disease can be transferred to other people. The charms are kept on the crossings with the belief (i) that it will inflict harm to the person passing by or touching it accidentally; (ii) to appease an evil spirit or deity the believed cause of suffering; and (iii) to leave suffering there. The charms consists of sweets, lighted dough lamps, vermilion, *Mung daal* grains and lemon, but other variations are also common e.g. coconut, *charmol* seeds and flesh etc. Doshi (1971) reports that a cross enclosed in a circle is made on the cross roads and lemon slices along with other ingredients are kept on it to inflict suffering or for transference of disease. Garasias in case of child sickness, keep a *Rot* (a large *chapatti*) on any of the village crossing to drive illness away.

Crossroad motif in disease transference is common in many countries. Penzer (1968), felt that the 'spot' was particularly efficient in unburdening oneself of disease and owning probably to its connection with illness and death was a fit place to conjure up evil spirits e.g. Gujrati tribals on the first day of *Kartik* (November) sweep their houses, collect the refuse in a pot and keep the pot on the crossroads. It is done with an intention of dispensing evil or passing it on to some travellers.

Among the Wagogo of Tanganjika (Africa), the doctor takes his patient to the crossroads along with herbs. He prepare medicine with the herbs and administer a part of the prepared medicine to the patient. He places rest of the medicine under an inverted pot at the road juncture, with a hope that the patient would be relieved of his sickness as someone steps on the pot and get the disease transferred to him. The disease transference motif at the cross roads is prevalent among people of Japan, Bali, Guatemala, Cochinchina, Bohemia and even England according to Frazer in his 'Golden Bough' (cf. Penzer, 1968).

The Evil Eye (Nazar Lagna): Evil eye or *Nazar* is considered an another cause of sickness. It is believed to be doing of an enemy or ill wisher, or an inadvertent act of a jealous person. The good health of a male, beauty or a voice of female, the vigour and the smiles of a child of a happy parents to a barren woman the

exceptionally lushing crop of a farmer to a neighbour, luxuriantly flowering and fruiting of mango or *mahua* trees in some one's possession by the passer by are all may be cause of evil eye. Not even cattle are exempted by a evil eye, a high yielding buffalo may be an eyesore to many (Joshi, 1983).

As result of evil eye or *Nazar*, humans may develop sudden disease e.g. a child may fall sick for no obvious or explainable reasons. Bloated abdomen, dazed mental conditions, fits, instantaneous depressions and stupor are some of symptoms described for the evil eye victims. The affected crop would undergo instaneous change, blood would come with the milk while milking the animal, the trees would start wilting and shedding leaves uncharacteristically as a result of the evil eye.

Reproduction health problem (ant-natal and post-natal) are not paid much attention and are considered as a built in part of the child bearing and child rearing. Termination of pregnancies are resorted in cases of pre-marital and extra-marital relationship, with the help of local herbalist without attracting much attention. In the study area, pre and extra marital relations are of common place, but care is taken not to attract public attention. The studies of Malvi (1980), Vyas (1980) and Vyas (1980) also report high incidence of STDs among the tribals of Rajasthan. In regions where mines and industrial units are located and tribals work as labour, there is high interaction of tribal women with non-tribals in high risk areas including truck drivers along National Highway # 8. Tribals believe that there are three different sources from which such diseases (*Sujak*) may be contacted and none of it is remotely connected with sexual behaviour. These are namely: (1) if *Sakkar* or *Gur* is eaten together with the *Bajri Roti* (millet bread) immediately followed by drinking cold water, (ii) if a person passes urine at a wet fence where someone inflicted with *Sujak* has urinated before; and (iii) *Sujak* may be contracted from a inflected person. The folk aetiology of sexually transmitted diseases is in consonance with the socio-cultural conditions of the area. Here popular medical notions make it possible to maintain a convenient morality in matter of sexuality. These local medical notions help in maintaining clandestine extramarital sexual outlets and officially acclaimed standards of pre-

marital chastity and marital social loyalties. Stability of ethical norms and culture as such is hence reinforced. The folk aetiology attributes transmission of venereal diseases to innocent sources. This Tribals use charms, amulets, perform rituals to please the annoyed dieties, sacrifice animals and also allows free discussion of subject quite openly in the community and medical counter measures can be taken unimpeded by shame and secrecy. So far as AIDS and HTV are concerned, tribals are least knowledgeable.

Health Care Among Tribals of Rajasthan: The health care among tribals of Rajasthan is pluralistic in nature with emphasis on preventive, curative and promotive measures. Four systems of treatment are available to tribals: herbal, devotional or ritual cure (super natural), allopathy and Ayurvedic. Allopathy and Ayurvedic treatment systems have been introduced by the State government. There are government sponsored Public Health Centres (PHCs), private medical practitioners practicing biomedicine as well as Ayurvedic medicine (herbal and mineral tradition of Indian Medicine). The traditional healers who cater to the needs of tribals are:- 'specialists in home remedies; ritual cure practitioners (*Bhopas*); herbalists (*Jaangar/Jaankar*); *Nabj* or *Nadu* (pulse) specialists; grain diviner (*Devala*); priest (*Khoont*); and midwives.

Specialists in Home Remedies: The 'specialists' in home remedies are elder people who do not consider themselves healers, but suggest and give plants remedies in case of illness. These person are generally knowledgeable with respect to plants that can be used in treatment of common, minor illnesses and ailments. Tribals of the study area are well versed with the plants and mediural herbs of the area which they use extensively during sickness while making home remedies. These herbs or plant based materials are administered in various modes. Raw plants/parts/products without any physical treatment are administered; juices of plants, simple rubbing of plants; plant part in edible from either by powdering, burning or frying it and mixing with other ingredients or with food; extracts by crushing fresh plants or slicing it; ashes of plants; poultices, decoction, suppositories pate as tooth brush; wet bath (bath in water in which plant drug is crushed); by tying plant to body part; vapour bath (by

burning/boiling the plant part vapour produced are inhaled); oil extracted from plant parts are applied; and treatment with more than one plant (Appendix I).

Ritual Cure Practitioners: The other set of practitioners are *Bhopas* (mediums) who are also referred as *Shayana/Gothia/Godle* by some tribals. Diagnosis and propitiation are carried out by *Bhopas*. The *Bhopa* is attached to a diety without any specific training or and is not entitled to remuneration. A *Bhopa* is a medium either self selected or chosen by the diety through which supernatural manifest itself. Once the diety has specified the human medium it will frequent that person. The *Bhopa* can himself entice the spirit to enter his body at times when communication is desired and can reveal the cause of ailment under the state of possession. *Bhopas* make a distinction between natural and supernatural causation. They believe that bodily diseases are caused by a former and thus, legitimately fall under the purview of herbal treatment. Mental illness and cases of possession have their origin in supernatural causation for which supernatural treatment is sought. *Bhopa* act as an exorcist in removing evil eye influence or in warding off spirits or as divining and curing sickness. He reveals the wishes of the diety or spirit that he brings upon himself. He is a part time specialist who through the controlled trance or state of possession is able to diagnose disease and misfortune. *Bhopas* are not priests, since they do not constitute a clerical hierarchy with a spiritual head. However, the *Bhopas* finds his place in all major rites and rituals of tribals. Generally the tribals do not visit *Bhopas* for blessings. *Bhopas* are approached in case of sudden illness and physical ailments that persists inspite of trying all available cures. He acts as an exorcist in removing evil eye influence or as medicine men in recurrent cases of miscarriage, and female infertility. The tribals have great faith in his therapy which applies to physical as well as psychic problems.

Though *Bhopas* do not constitute a clerical hierarchy, however certain practices are common to all *Bhopas*. They all perform a *pooja* to their tutelary spirit on certain days. However, the activities and forms of worship may vary from one *Bhopa* to another. These variations are due to individual training of the *Bhopa* (besides variation due to a difference of tribal origin, social situation etc.). They have the same social

and economic responsibilities as the other members of society i.e. they can many, have children, can participate in all type of economic activities. Because of their special capabilities, they have an elevated status but are lower than other religious practitioners. Their activities as a *Bhopa*, generally takes place at night. It is exhausting to be possessed by spirits and the *Bhopas*, often called for nocturnal consultations frequently suffer from the lack of sleep. This essentially nocturnal activity of the *Bhopa* coupled with the fact that the *Bhopa* tradition is entirely oral, explains the limited research on the subject.

The *Bhopa* becomes possessed by a tutelary spirit-*Bhairon* for a controlled possession. The *Bhopa* calls upon the tutelary spirit during a seance or ritual to possess him or take over his body for the duration of the ritual ceremony. His possession is periodic and specific, but the place in which he conducts his activities as a result of possession is sporadic and unspecified and is determined solely by individual choice or—as the situation demands. It might be some one's home, in a forest, or field but mostly at the *than* of *Bhairon* or *Mata Ji*. *Bhopas* differ primarily from priests in that they are not confined to a sacred space or temple. The assistance of *Kotwal*, *Punjara* and *Hajuria* is available to *Bhopa* in some communities.

Among *Bhopas* of southern Rajasthan, an initiation under the guidance of *Guru* (teacher) is unknown. For them the *Guru* is identical with the tutelary diety and they deny initiation by a human being. Among most of the *Bhopas*, the predisposing experiences were similar: uncontrollable trembling, especially head, feeling of light physical sickness (fever, impression that the body was light, but not feeling much pain); conviction that their condition was caused by a specific god or spirit, dreams in which their gods gave them orders and taught *Mantras*. This experience always occur in private and only after successfully performing a seance will the person be recognised as a *Bhopa*. Everything is learned from the tutelary spirit which can be called upon any time by offering *Dhoop* (incense), any types of leaves or flowers and applying some ash on his forehead and *Trishul* (trident). The spirit enters the body of *Bhopa* through his head which begins to shake, called *Bhav-ka-ana*. Then he starts chanting the *Montras* after which the spirits speaks through him. According to the

spiritist belief, the *Bhopa* is only a medium for the spirit, the spirit is the actual healer. As the divine intervention is high and the charisma plays a significant role, the skills may not be transmitted to next generation.

Herbalists: The other set of specialist are *Jaankar/Jangar* (herbalist) who recommend herbal remedies and also prepare the medicines. A herbalist may teach his son a knowledge of the herbs he uses for preparing various drugs. These herbalists learn about plants and their uses from their elders. They usually diagnose by checking the pulse (*Nabj*).

Devala: or grain diviner are religious technicians who perform oracle using grains. Its performance is restricted to situations of chronic ailments. Where evil spirits or witch craft are suspected using grains, the healer predicts the future of the patient and indicates whether the treatment is going to be successful or not.

In plucking grain (*Aks*), a handful of grains (maize or wheat) is passed over the head of a sick person thrice. This grain is taken to diviner who counts and infers on number of grain, select some and declare the cause. The selected grain are sent to the patient where these are put in a pot of water. Some of it is sipped and rest is thrown away with the grain. In other cases the diviner himself picks up a handful of grains brought by the patient and counts the odd or even number. The process is repeated and this time the odd or even should be reversed. The grain diviners are religious technicians who undergo specialized training in order to identify the afflicting spirits through the means of grains.

Another group of specialists are Ayurvedic doctors and university trained medical doctors.

Treatment Strategies

Self Treatment: Self or home treatment is usually the first step in medical care, consisting primarily of herbs, barks of trees, flowers, roots, leaves, seeds etc. Many of these are commonly known. Some grow wild in the area, some are cultivated in home gardens and others are bought in the market. Herbs are assigned a hot, cool or cold quality and are incorporated into the local hot-cold classification system relevant to illness causation and treatment. The treatments are known to elders in the house or neighbourhood or are suggested by folk curers. Traditional medical knowledge is coded into household

cooking practices, home remedies and ill health prevention and health maintenance beliefs and routines. Treatment is generally a family based process, and the advice of family members or other important members of a community has a major influence on health behaviour and the type of treatment that is sought. (Appendix I, Herbal and home remedies).

It can be seen from the appendix I, that the manner and duration of usage that tribals use curative material from a single plant and that too raw and or untreated e.g. tying leaves, smearing latex or using the plant as a tooth brush. They use extracts, which are made by squeezing or crushing the plant. The extract is dropped on wounds or bleeding parts while crushed plants are used locally as paste. This type of treatment must have been discovered first. The oral administration must have come later because the external injuries or ailments like diarrhoea and vomiting etc are easily visible. The aerial plant portions must have been used initially and subterranean later.

It must have been difficult for tribals to diagnose the cause and nature of internal disorders, which were usually assigned to supernatural cause. In the later stages they must have used plants in combination or alternate plants for similar diseases. Experimentation must have helped in attaining the desired results e.g. drugs in Guinea worm (*Nadu*) disease.

Tribal Practitioners: When self treatment does not help tribals seek the help of supernatural healers. Though focused mainly on the psyche, supernatural healing has physiological effects. This is specially true of bodily ailments that originate in fear and tensions. Where anxiety is the primary factor, supernatural healing is helpful.

In case of illness of long duration, *Bhopa* is consulted who finds cause of illness and usually prescribes a propitiatory offering by which offended spirits are appeased and induced to cure. In difficult cases, the help of grain diviner is taken to decide the cause of sickness. Once the cause is decided, the patient may do the needful. Before doing this however one may tie charmed amulets for one cannot be always certain of physical aetiology of the illness. Tying of a charmed amulet is common preliminary act which serves two purpose (i) if the disease is caused by external agents, then the amulets may cure the disease. The charms also protect the

individual against demonic interference. The efficacy of the amulet is generally for a limited period. If disease is not cured by amulet, a bigger ritual is required; (ii) an amule may act as protection even if the cause is physical manifestation, for spirits can attack a person in physically weak state. In this way person is immunized against future spiritual interference. Hence while a physical remedy is necessary for immediate relief from illness, ritual curing is necessary for eliminating the deeper cause. In case of illness where cause is physical as well as non-physical, both physical and ritual cures are necessary. For physical cure people consult *Jaangars* (herbalist) who diagnose by examining the pulse of the patient and prescribe certain medicines. *Bhopas* and *Jaagars* are specialists in their own way, as the ones who possess spiritual and herbal knowledge respectively.

Driving of Spirits by Bhopa: The patient is brought to *Bhopa* for consultation. A cloth is spread over a platform on which a lemon is placed: Maize, clarified butter and jaggery is thrown over a burning cow dung cake arranged on slightly raised ground to produce smoke. Incense is burnt. With a bomboo stick a bronze gong is beaten. Incantations are murmured at a varying pitch. The spirit is asked to reveal the cause of trouble and the nature of the propitiation it demands.

'Jhada': 'Jhadas' are conducted mainly for exorcism; removing effect of evil eyes and magic; mental or physical sickness of long duration; bites by venomous animals; and for general benefit of the family or community.

The Bhopa's Jhada Act: In case of severe illness, the *Bhopa* is asked to perform the healing ceremony, wherein he acts as an exorcist who helps in driving the spirits away. During *Jhada* act incense is burnt and patient sits in front of *Bhopa* who moves leaves and twigs of some special plants in front of the patient along with chanting of some *Mantras*. Generally the Neem Leaves (*Azadirachta indica*) and twigs are used however Kathodi *Bhopa* uses *'Aldana Bhoot Jhad* (*Ailanthus excelsa*) leaves, and and Garasia *Bhopa* employ *Khajoor* (*Phoenix sylvestris*) fronts. (also used in cough and cold infections). The leaves and twigs of Neem are moved from head downwards. In some cases stems of *Amarbel* (*Cuscuta reflera*) are used which are swirled round the head in circular fashion from

above. Among Garasias a mature fruit of *Kolal* (*Cucurbita maschata*) is moved around the head of a patient and taken to forest and left under *Peepal* (*Ficus religiosa*) tree.

Snake-bite 'Jhada': Snake bites are a particularly life threatening and disturbing incidences. Tribals of Rajasthan still use the indigenous forms of therapy. It is not just the bite itself and the poisonous effects that are to be treated but also the shock as well. Therefore the treatment of snake bite require special rituals. Generally, the snake bite victims are carried to *Goga ji than* (shrine) at Gogameda near Ganganagar as he is supposed to have power to heal snake-bite victims. There is Kala Kura Bhagora of Kodia gaon in Dungarpur who is suppose to cure snake bite victims by his '*Jhada*'. He goes into trance and invokes his deity who possesses him. In trance state he grabs *Thuar* (*Euphorbia nerifolia*) shrubs and starts biting and chewing its dendrons. After this he sucks venom out of the wound. He does not vomit out poison. The regurgiation of the mixture of latex rich stem pulp and poison from the snake bite annuls the poison affect.

In some cases of snake bite *Bhopa* performs only '*Jhada*' which is not accompanied by physical sucking of poison. The mere presence of *Bhopa* and his magical powers are sufficient to save the victim. As tribals frequently encounter snakes, even they are aware of the identity of poisonous and non-poisonous snakes. The persistent faith of tribals in *Jhada* may have the plausible explanation of autosuggestion or mesmerism.

Evil Eye Treatment: Evil eye or *Nazar Lagna* is considered an another cause of sickness. This is an illness that afflicts persons who are not very strong or resistant to illness. Treatment of such type of illnesses or conditions require an approach based on more than simply the utilization of medical plants. In case of evil eye both preventive and curative measures are taken.

In case of distended abdomen and reddened eyes of a child which is inferred to be the effect of evil eye, the Bhils give bath of crushed root bark of *Kali doodhi* (*Ichnocarpus frutescens*) dissolved in water to the patient to wash off the embodiment.

The crushed roots of *Kavach* (*Mucura pruriens*) are administered with milk to child victim of evil eye. The abnormally distended stomach is reduced to normal following vomiting.

This treatment is given to children aged four to six years with the belief that the embodiment of evil eye is vomited out.

A lemon sliced into four quarters up to nearly $\frac{3}{4}$ of its vertical diameter with two strips of red cloth and vermillion passed diagonally through the cuts is moved around the face of the victim. After this the lemon is kept in a clay pot and is set adrift in water after sealing the pot. In the absence of flowing water source, the pot is buried in the ground. It is believed that the embodiment of an evil eye is absorbed by the lemon and is got rid off.

It has been reported by Doshi (1971) that tribals leave charm of five red peppers, five crystals of salt and one lemon at sunset on the junction of four roads. The same embodiment is transferred through the charm to the cross road where probably it might pass on to some one going from that crossing.

Tribals also apply the crushed roots of fresh young saplings of *Roonjaro* (*Acacia eucophloea*) on forehead, around the eye and nose of the child for protection from evil eye.

Bhopa also prescribes a treatment in case of evil eye. The treatment may be carried out by relatives or parents of the victim or by *Bhopa* himself. They (any one of them) are asked to perform a worship of *Gulari* (*Solanum surattense*) tree by offering money and vermillion at the base of the plant. The position of the plant should be between the propitiator and the rising sun, so that no shadow falls on the plant. This rite is performed to invite benign spirit of the plant to come and help.

Next morning the propitiator is required to go and dig the roots of the plant keeping the plant between him and the rising sun. The roots are crushed and are given with fresh milk of a black goat to the child. The effect is purgative and the child is cured.

Preventive Measures: In case of evil eye preventive measures are taken. To prevent the child from evil eye affect, a root piece of *Roonjaro* (*Acacia leucophloea*) is placed between bamboo clips of a cradle. Alternatively, a knife with wooden handle is placed in the creadle. In case of adults, charms comprising *Chanbol* (*Abrus precatorius*) seed lockets, barks and pieces of *Roonjaro* (*Acacia leucophloea*) and *Gaya Khair* (*Dichrostachys Cinerea*) are tied on any part of the body.

Other preventive or precautionary measures

are village gods who provides protection to settlements. '*Toranyo*' among Bhils and *Jangal-Ka-Palet* or *rakhwalo* among Kathodis are installed to ward off evil spirits. At the beginning of the Kathodi settlement, an effigy (made of bamboo strips stuffed with grass) with bow and arrow hung fixed on a pole is possibly an analogous diety.

Engravings on stone slabs—images of men and women after death (i.e. *Bhomia* and *Matlok* respectively) to make them behave as guardians are represented with bow and arrow, swords, guns and riding on horseback mostly.

It is believed by tribals that a preventive measure like rituals connected with death must be performed correctly, as there is always the fear that a dissatisfied *Jeev* may return to harass the living. Under such circumstances, it is only the females who are inflicted with diseases, because it is believed that in-laws of women always give her more trouble than her natal kins. A similar study among Brahman, Gujar and Rajput caste females living close to Jaipur has been carried by Lambert (1990) describing similar beliefs regarding spirit-induced aches and pains.

Garasia keep and worship the figures of clay horses on a platform outside village believed to be the village protector. It is worshipped once a year when crops are ready. The maize cobs are roasted and eaten by all at the place as a token of faith in '*Ghoda Dev*'. At times '*Bhumiya*' is also appeared as the deity, believed to be the field protector in the form of an image on the stone slab painted red. Coconuts and maize grains are offered and incense is burnt.

Large number of Garasia women wear black thread in the lower portion of their legs as protection against magic.

Minas erect stone or clay images as death memorials. The figures, made or carved out, resemble those of snakes, horses etc. These resemble *Bhomias* of Bhils and are erected for the appeasement of spirits and deities.

In case of bullock sickness, among Bhils a vow is taken to offer a small symbolic wooden yoke in the shrine of 'Hanuman ji'

Wooden limbs are offered to '*Vejwa Mata*' shrine in village Copra (6 kilometer west of Banswara) in case of deformity of limb or eye a promise is made to offer wooden limb to the goddess in case of cure.

Since health care is a constant choice of

individuals, their perception of available alternatives and their motivation to seek cure is important. The services of various practitioners are sought only after the diagnosis has been made. The diagnosis has two types of consequences, conceptual and physiological. Of course different treatments can have different kinds and degrees of physiological consequences.

The process of healing is deeply embedded in culture. The conceptual consequences of sickness, diagnosis and treatment and other their interaction are important in understanding and managing sickness. Sickness a fundamental assault on person and society, is a matter of the deepest human concern; affecting the life and death, it can induce deep emotional arousal. Not surprisingly, the act of healing often including intensely dramatic ritual, shares qualities of the "numinous" in religious experience—it can be ineffable, absolute and undeniable (Rappaport 1979: 211-216). It implies that the experience of healing can be highly marked. The patient experiences some pain and goes to healer for a diagnosis, who after diagnosis suggests treatment. The actual representation of metaphors for illness and cure act upon to restore harmony to the disturbed community.

The strategy a person chooses for the treatment of his or her illness or that of a relative depends on personal experiences and preferences. The tribal response to health problems reveal a multiple and simultaneous usage of home remedies and multiple therapy. The various practitioners whose services are sought are spiritist (*Bhopa*), traditional herbalists (*Jaankar/Jaangar*) and public health practitioners. The public health practitioners include Ayurvedic as well as biomedical practitioners (Indian Medical Council Act formally established the Traditional Medical System, Ayurveda as one of the official component of the Natural Health Care, India). In Rajasthan among the existing indigenous medical system which includes supernatural healers or spiritists (*Bhopa*) and herbalist, though very popular lack official status as *Amchi* system in Ladakh (Bhasin, 1999). The tribal traditional medical system is based on personalistic tradition of super natural healers (*Bhopas*) and their ministrations and *Jaangars* (herbalists). The theoretical side of traditional medical system, the

religious background, particularly the belief in the fear of evil spirits, healing performed according to spiritual rites explain the persistence of indigenous system. These traditional healer-diviners operate within a religious paradigm, with no printed or written material to conform or support the tradition. It is assumed that these are sanctioned by their religion but with no proof. This system works on the accepted popularity of the individual *Bhopa's* methods, reputation and performance. The indigenous medical system has sustained in society's social cultural complexes through deeply rooted processes. It is a set of concepts of health and illness that reflect certain values, traditions and beliefs based on people's way of life. It is a "constant process of conformity to contemporary psychological needs with in a recreated cultural identity". (Wijsen and Tanner, 2001). Levi-strauss (1967) description of the Shaman and his healing techniques sheds light on the relationship between process and consequences of healing. The "Shaman provides a language (p. 198) and like psychoanalyst, allows the conscious and unconscious to merge." This he achieves through a shared symbolic system and curing of one sick person improves the mental health of the group. In this context, the patient performs a very important social function and validates the system by calling into play the groups sentiments and symbolic representation to have them" become embodied in real experience (pp. 180-182). For these healers, the mind, the body, and the experiential field are one. The *Bhopa* can best be understood as a healer of the mind and body as well as community. This is achieved through his or her status as the interpreter of symbols, those cultural instruments for perceiving and arranging reality. They are significant vectors of a force that compels mind, matter and experience (Romanucci-Ross, 1980 b). The *Bhopas* are specialists possessing power to heal or prevent illness and disaster. It is believed by tribals that illness emanates from a disjunction of a quasi-equilibrium maintained between man, his environment and the supernatural. An individual or superindividual force can disrupt the established order. The reestablishment of the order or the return to the health can only be achieved through a healer or medicine man. The medicine man has recourse to the use of medicinal plants, animal products or minerals. In

other cases, he has recourse to rituals with the help of which he goes into trance and counteract the evil forces. The availability of different healers enables them to switch from one type of health practitioner to another in search of the best. The tribals who can avail the facility of bio-medicine or Ayurvedic do so without being familiar with the theoretical principle of medical system. Though the economic status of the households differ, they show certain similarities in their behaviour in case of illness. They employ pluralistic strategies not perceiving any conflict among these alternatives, nor do they seem to perceive them as different systems, but rather as a variety of options, among which they can choose.

Most usage is sequential but some is simultaneous. For example, an infant who is being given prescribed medicine for diarrhoea, may also be-taken concurrently to a *Bhopa* for the evil eye or given home remedies. Although certain illnesses such as evil eye are thought to be cured only by indigenous healers, this does not preclude the use of bio-medicine to treat the symptoms. Gonzales (1966) reports that in Guatemalan, the symptoms are treated with bio-medicine, while the cause of illness is dealt with through a folk specialist. Traditional theories of illness aetiology are often multifactorial and multilevel (i.e. immediate and ultimate levels of causation) which permits the use of different treatment resources for different causal factors and levels (Cosminsky, 1977). As reported by Cosminsky (1980) for Guatemalan plantation, pluralistic behaviour among tribal population groups is pragmatic, often based on trial and error, perceived effectiveness, uncertainty of illness causation and expectation of quick results. In addition to this empirical and pragmatic behaviour, however, is the role played by faith in the supernatural or spiritual in curing. As a person is simultaneously a body, a self (psyche) and a social being, so are the healers of the tribals. As explained by Adams Tribal healers "pursued a dialogic, relational remedy for its patients through reciprocal relationships that encouraged community, such as in gift giving to spirits and etiologies based on real social conflicts" (Adams, 1992: 154). Among tribals of Rajasthan, *Bhopas* attempt to resolve sickness caused by the disorder of the "social self", *Jaangars* on the other hand claim to cure diseases which arise

from disorders of body by means of an elaborate diagnostic system and pharmacopeia. The tribal healers emphasize different aspects of tribal self. Social or cultural bound syndromes (illnesses caused by the annoyed spirits, evil eye) are generally treated by ritual cleansing ceremonies (*Jhada-act*), and physical ailments by (*Jaangar*/herbalist), through administration of herbal extracts. In the tribal areas there are unregistered medical doctors called "Bengali doctor" or Gujarati doctor who are popular among tribals. These doctors are not fully qualified but know about common medicines and injection etc.

The pluralistic medical situation in tribal areas provide flexibility and fulfills different needs of the population. The folk system are open as manifested by eclecticism of both the clients and practitioners, who adopt and adapt aspects from an array of co-existing medical traditions. This openness of folk systems, as Press (1978) point out, is manifested by the acceptance of inputs from other/alternative health systems, and also inputs from institutional sectors such as religion and the family. According to Landy (1974) the traditional healer role stands at the interstices religion, magic and social system and gain its power from this position. This contrasts sharply with the closeness of cosmopolitan medicine, which is "discontinuous from ordinary social process" (Press, 1978; Manning and Fabrega, 1973) and is unaccommodating to alternative systems.

A general quantitative survey on the utilization of multiple therapy system among tribals give an impression that they have inclination towards indigenous type. The multiple medical systems available to tribals and the options available to any specific group are many. Most tribals fail to see little conflict between medicines and healing rituals. Throughout their lifetime they have used the two (the ritual healing and herbal administrations) simultaneously. If the biomedical doctors have replaced the '*Jaangar*', tribals do not find odd to continue to use 'medicines' alongside the rituals of *Bhopa*. The traditional model is an ideology shared by healer and patient. These healers are consulted from time to time.

People modify pre-existing practices if the economic costs are within their reach. People are pragmatic in trying and evaluating new alternatives. In case of health behaviour the cost-

benefit mode of analysis and the empirical evidence help in deciding, whether it is to their advantage or not. There is a change in overt behaviour of people, but it does not necessarily explain or mean changes in the belief system. In the study area, it was found that the traditional beliefs about fertility, pregnancy and abortion have remained unchanged though some females delivered their babies at health centre. The tribals of Rajasthan despite having their traditional medical system strongly supported by beliefs and practice, were when offered government sponsored medical services, they accepted them and put these to test even if as a last resort. They do not in all cases continue to use bio-medicine, but they show open mindedness in trying them out. The situation among these tribals is similar to what Wagner found among Navaho. Wagner found that Navaho, "have a very open, pragmatic and nondiscriminatory attitude towards various magico-religious options available in time of need: White medicine, traditional *chantways*, peyotism and even christian sects on reservation tend to merge in their minds into alternative and somewhat interchangeable avenues for being used" (Wagner, 1978: 4-5). Tribals acceptance of any or a combination of these multiple medical systems depend on the individual or household decision. As far as curative medical services are concerned, these are embraced more easily than preventive services, as was seen in case of immunization. All groups were not ready to immunize their children. Garasia refused immunization for small pox for the fear of wrath of goddess *Sheetla*. Likewise, many other tribals were reluctant to receive immunization and vaccination for other diseases, as the results of the scientific curative medicine are much more easily demonstrated than the results of the preventive medicine. "Cause and effect are easily comprehended when serious illness give way to no illness in a few hours or days, cause and effect are less easily seen when, in the case of immunization and environmental sanitation programmes no disease is followed by no disease" (Foster and Anderson, 1978: 245-246). As there are multiple medical systems available to tribals to opt for, the course of action to follow depends on the situation and condition of the sick. The strategies that underline these decision making processes have come to be called the "hierarchy of resort in curative practices."

(Schwartz, 1969). The way in which people structure their personal hierarchies of resort tell us about their preferences.

Among different tribal groups in Rajasthan, a sequence of resort does not seem to exist, although the trend is to begin with home remedies to *Bhopa* to *Jaangar* to biomedical doctor, as the course of the illness proceeds and become more serious. However, there is also a back and forth movement between resources or a shorten approach, often based on referrals and advice from relatives and neighbours and other practitioners, which seems to be associated with desperation over the perceived increasing severity of an illness. When a person is sick, he or his family members are primarily interested in getting his health restored, for which they unhasitatingly combine different treatments irrespective of their ontological, epistemic, moral and aesthetic foundation. Medical pluralism results out of this orientation where attainment of health is primary objective and the individual is treated in its holistic self. When one system of treatment fails to provide relief, individual moves onto another and if this treatment fails to provide relief, individual moves on to another and this is individuals or his group's choice. In fact it is customary, therefore, "for an individual to present his symptoms to his relatives and friends for their appraisal before he takes step to obtain medical treatment. The patient alone is not authorized to decide whether or not he is ill, even though he himself may be convinced that he is sick enough to warrant special attention, his inmates must still be persuaded of the seriousness of his complaints" (Foster and Anderson, 1978).

Each medical system is not only a product of particular historical milieu and cultural apparatus, it has also its own cognitive categories. Human beings caught in illness episodes are less bothered about the issue of combination, they are singularly concerned with recovery and relief. For this, distinction between 'rational' and 'non-rational' methods of diagnosis and treating illness is abolished. Here the distinction between, 'science' and 'faith' categories collapses; and so is the distinction between magic and religion. Systems of thought and explication, like astrology and sufism, which primarily are not medical, are approached for curative as well as therapeutic purposes, on the premise that religion is to be

resorted in case of suffering, and illness is a kind of suffering, the alleviation of which can be sought through prayers, touch invocation of spirits, sacrifice; libation, appeasing the unfavourable planetary configuration and wearing talisman and charms on body.

In tribal Rajasthan, there is no medicalization of folk-medicine by western medicine-the active attempt by official providers of health care to impose a standard structure on diagnostic and curing practices as discussed by Romanucci-Ross of medicine in Italy (Romanucci-Ross, 1997:2). Despite opening up of Public Health Centres (PHCs) and massive propaganda, traditional ideas of disease and health prevail. It is believed by tribals that traditional medical system is considered to have monopoly on restoring health of the body (herbalist) or the mind (*Bhopa*). Among tribals, the failure of the cure did not call for questioning the efficacy of the system, but on the dissonance of ritual behaviour. The total commitment of the believers in the traditional system (which is sometimes doubted by failure) persists and so does the belief of the patient in the healer, regardless of result.

The government sponsored Public Health Centres in the tribal districts of Rajasthan are poorly provided for. Absence of doctors and non-availability of medicines characterises the PHCs. In Bhil, Garasia and Damor settlements as huts are scattered, these remain cut off for days during monsoon (the time for major illnesses) by fast flowing streams. The muddy drinking water causes diarrhoea and other water-borne diseases. During this period, when areas are cut off and health workers are unable to reach, the tribals have to depend on traditional medical system. It was seen that in tribal areas where both the facilities (namely cosmopolitan and traditional) were available, the tribals often accepted and availed of the bio-medical facility. However, side-by-side they also performed traditional rituals. Now-a-days tribals do not completely depend on *Bhopas*, but prefer herbal medication as they have faith in herbal medicines. As compared to allopathic medicines, herbal medicines are cheaper and are easily available in the vicinity. These herbal medicines are free from side effects which many tribals suffer from after taking the allopathic medicines.

In the tribal areas of Rajasthan medicinal plants are an important resource in treating

illnesses and ailments. In case of severe illness, ritual healing is considered central along with other treatments. Ritual and empiric forms of treatment are integrated. In case of diseases which are diagnosed by religious technicians-*Devata* or grain diviner, phytotherapeutic form of treatment may be recommended. In such cases, patients are asked to look for appropriate plants and are told to prepare and use these in specific way. If required plant is not found by the family, it can be acquired from the professional herbalists on payment.

The bifurcation between traditional and modern medical systems still obtains in the anthropological literature, in spite of its erroneous and deceptive representation. All traditional medical systems are not irrational and not alike and even bio-medicine has its own tradition. It was believed by earlier authors that these two systems are discrete and bio medicine will replace traditional medical systems over time (Foster and Anderson, 1978). This study is one of many that show that traditional medical practices as well as bio-medicine co-exist. The concept of medical pluralism relates the existence of more than one medical system in societies (Leslie, 1979; Elling 1980). Within this concept the focus remains on medical traditions as bounded systems rather than as social institution. As traditional medical system have survived in this area for such a long time, its therapeutic value and what is retainable of traditional system and how these can be upgraded through education, licensing and incorporation in to state health planning becomes important. The state health programmes are well intended but lack anthropological consultation. As a consequence, the traditional medicinal care practiced in the area having both herbal as well as ritual form of curing is not considered important. The cultural importance of ritual cure and role of medicinal plants (their properties as they relate to healing, their symbolic values and their procurement from environment) in the traditional medical system of tribals is of great value. It can be seen from the appendix I that there are large number of illnesses where oral application of herbal preparations are a frequent part of the treatment (e.g) fever, dysentery diarrhoea, Malaria, cough and cold, eye ailments, Guinea worm (*Nadu*), stomachache etc). But, at some point the tribals see the limits of such phytotherapeutic forms of treatment. Any illness

that is associated with severe pain, long lasting and is not responding to any herb requires help of the supernatural. The tribals relate their ritual needs to supernatural powers and ask for help and for givenness. The state sponsored medical system do not look "at indigenous medicine" as a whole and fail to see the socio-cultural basis of its uses.

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**APPENDIX I
HERBAL AND HOME REMEDICS**

| <i>Name of Disease</i> | <i>Treatment</i> |
|-----------------------------|---|
| Fever (<i>Tap/Bukhar</i>) | (i) Decoction of roots of <i>Aldua Bhoot Jhad</i> (<i>Ailanthus excelsa</i>) is administered. |
| | (ii) Decoction of <i>Lal babusi</i> (<i>Ammanra basifera</i>) is orally administered in case of seasonal fever |
| | (iii) Extract of fresh leaves of <i>Gubra</i> (<i>Anisomeles India</i>) is rubbed over body |
| | (iv) The juice of leaves of <i>Navli</i> (<i>Enicostemma hyssopifolium</i>) is orally administered |
| | (v) Crushed leaf paste of <i>Jangli Tulsi</i> (<i>Ocimum canum</i>) is rubbed on body, forehead, near nose and inhaled. |
| | (vi) Water extract of stem of <i>Neemglol</i> (<i>Tinaspora cordifolia</i>) is orally administered. |
| Dysentery | (i) The roots of <i>Jangli Bhenda</i> (<i>Abelmoschus maschatus</i>) are sliced, crushed and strained. The extract is administered orally. |
| | (ii) The extract of crushed root bark of <i>Jangli Bhenda</i> is orally administered |
| | (iii) The extract of stem of <i>Adarvela</i> (<i>Asparagus racemosa</i>) after slicing it in water is administered orally in case of chronic dysentery. |
| | (iv) The root of <i>Hingota</i> (<i>Balanites acgyptiaca</i>) is sliced in water and its extract is orally given |
| | (v) Equal amounts of gums (resin) of <i>Amb/Kairi</i> (<i>Mangifera Indica</i>) and <i>Hargna</i> (<i>Moringa oleifera</i>) and 10 gms of <i>Kasuda</i> (<i>Butea monosperma</i>) are orally administered in case of chronic dysentery. |
| | (vi) 1-2 seeds of <i>Tendu</i> (<i>Diospyros melanocylon</i>) are orally administered. |
| | (vii) Extract of whole plant of <i>Jangli Urad</i> (<i>Gymnema sylvestre</i>) in water is orally administered. |
| | (viii) Flowers of <i>Kadwa</i> (<i>Malarrhena antidysenterica</i>) are baked between two <i>Kasuda</i> (<i>Butea monosperma</i>) and eaten in case of diarrhoea and dysentery |
| | (ix) The roots of <i>Jameen Ghota/Meethidodi</i> (<i>Lepidagathis Cristata</i>) are crushed and extract is orally given 2-3 times. |
| | (x) The stem bark of <i>Jamun</i> (<i>Syzygium Cumini</i>) is crushed and given orally along with gums of <i>Amb</i> and <i>Hargua</i> |
| Malaria | (i) Stem bark of <i>Tendu</i> (<i>Diaspyras melanorylon</i>) is crushed and extract is mixed with <i>Kadwa</i> (<i>Holarrhena</i>) root bark and orally administered |
| | (ii) The juice of leaf of <i>Navri</i> (<i>Enicostemma hysopifolnini</i>) is orally administered |
| | (iii) The extract of root bark of <i>Kadwa</i> (<i>Holarrhena</i>) |

| Name of Disease | Treatment |
|---------------------------------------|---|
| Boils (<i>Phora-phunsi</i>) | <p><i>antidysenterica</i>) and <i>Tendu</i> (<i>Diospyros melanoxylon</i>) is orally administered.</p> <p>(i) Lime water is applied locally.</p> <p>(ii) Bark of <i>Neem</i> (<i>Azadirachta Indica</i>) tree and bamboo is rubbed on a stone and then applied.</p> <p>(iii) The crushed root of <i>Birbata</i> is applied locally.</p> <p>(iv) Root of <i>Karo Ghaghra</i> is washed and applied.</p> <p>(v) The boil is cleaned several times a day with the roots of <i>Hins</i> dipped in water.</p> |
| Abdominal Pains (<i>Pet Dukhna</i>) | <p>(i) The extract of crushed <i>Jangli Bhenda</i> (<i>Abelmoschus moschatus</i>) root is stained and taken orally.</p> <p>(ii) Boiled leaves of <i>Baam</i> (<i>Bacopa monnieri</i>) are tied over the abdomen in case of stomachache of children.</p> <p>(iii) Crushed seeds of <i>Junglee jeera</i> are given to cattle in case of abdominal pain.</p> <p>(iv) Hot poultice of crushed <i>Mahua</i> (<i>Madhuca longifolia</i>) leaves is applied locally.</p> <p>(v) Boiled <i>Erand</i> (<i>Ricinus communis</i>) leaves are tied locally.</p> <p>(vi) Hot poultice of crushed <i>Till</i> (<i>Sesamum indicum</i>) leaves is tied locally.</p> |
| Diarrhoea (<i>Dast/Jharna</i>) | <p>(i) A resinous exude of <i>kher</i> (<i>Acaeia catechu</i>) tree (<i>katira</i>) is grounded, roasted and soaked overnight in butter milk in covered clay pot. It is mixed with more butter milk in the morning and is administered to the patient.</p> <p>(ii) Boiled fruit of <i>Umar</i> (<i>Ficus racemosa</i>) tree is administered to the patient.</p> <p>(iii) The crushed leaves of <i>Gudavi</i> are mixed in water and are fed to child patient once or twice a day depending on the frequency of the loose motions. It is very effective and a child can be cured in three days.</p> <p>(iv) Flowers of <i>Kadwa</i> (<i>Holarrhena antidysenterica</i>) baked between 2 <i>Butea</i> leaves and eaten by patient.</p> <p>(v) Flowers of <i>Gulari</i> (<i>Solanum Surattense</i>) are crushed and orally administered.</p> <p>(vi) Extract of stem bark of <i>Sagwar</i> (<i>Tectona gradis</i>) is orally administered.</p> |
| Anaemia (<i>Khoon ki kami</i>) | <p>Decoction of fistful of <i>Bebli/Biya</i> (<i>Pterocarpus marsupium</i>) stem bark in one liter water is taken orally for seven days. It is regulated with grain diet.</p> |
| Conjunctivitis (<i>Anakaana</i>) | <p>(i) Ground '<i>Phitkari</i>' is put in the eyes before going to the sleep.</p> <p>(ii) Honey (<i>Shaid</i>) taken out from a three year old honey comb is put in the eyes before going to sleep.</p> <p>(iii) Paste of <i>Lapana</i> (<i>Bridelia retusa</i>) leaves is used</p> |

| <i>Name of Disease</i> | <i>Treatment</i> |
|---|--|
| Loss of Appetite (<i>Bhook-na-Lagna</i>) | (i) <i>Chulai (Amaranthus/caudatus)</i> leaves are eaten in the form of vegetable. (ii) In case of cattle, the extraction of <i>Glol (Amaranthus caudatus)</i> stem dissolved in water is given. |
| Scabies (<i>Khaaj</i>) | (i) Mobil oil is applied on the affected area. (ii) Oil extracted by heating forms of <i>Bicchaankedi (Marfynia annus)</i> is applied. |
| Earache (<i>Kaan Dukhna</i>) Asthma (<i>Dam/Shaski Bimari</i>) | (i) The pulp of <i>Kinja</i> fruit is stuffed in the aching ear. (ii) Thick root strak of AK (<i>Colatropis procera</i>) is hollowed cylindrically and filled with bajra ock grains and seated. It is roasted and left overnight. It is eaten as baked bred of bajra. |
| Heat Stroke (<i>lapat</i>) | (i) Dried gram leaves (<i>chane ka saag</i>) mixed in water and rubbed on the limbs, palms and the soles (ii) <i>Palash</i> flowers are soaked and left in the water for the whole day. The same water is used for bathing in the evenings. The tribals keep some dried leaves of gram and <i>Palash</i> flowers in their house as in summer due to the strong sun and hot winds one may get a heat stroke. (iii) Mashed onion is rubbed on the fore-head, face, limbs, palms and soles. |
| Cough and Cold | (i) One cake (<i>Pania</i>) made of ash of <i>Dintara (Achyranthes aspera)</i> plant + maize flour sandwiched between two leaves and baked and eaten. The treatment is held for eight to ten days. (ii) Stem bark of <i>Adua Bhoot Jhar (Ailanthus excelsa)</i> is boiled in water and its vapours are inhaled. (iii) Stem bark of <i>Dhao (Anogeisus pendula)</i> is chewed for relief. (iv) Maturing yellow leaves of <i>Ak (Calotropis procera)</i> are burnt and its ash is placed on tongue of the patient. |
| Sty (<i>Phooli</i>) <i>Name of Disease</i> | In case of a sty, four <i>Dabnas*</i> are made—The first <i>Treatment dabna</i> is made on the head in the shape of X, second in the form of a single horizontal line on the dorsal side of neck and two round <i>Dabnas</i> on both eyes <i>Dabna</i> does not necessarily require the services of any specialists. It can be done by an one on human beings. However, in case of animals, services of specialists or experts are required, as they measure the effected area and then makes <i>Dabna</i> in a required manner. |
| Backache | Paste of <i>Bagulia (Sida orientalis)</i> leaves is applied locally. |
| Bitter mouth | Slender tender twigs of <i>Umar (Ficus racemosa)</i> are used as tooth-brush. |
| Bleeding | Juice of <i>Kalal (Tridax procumbens)</i> plant is dripped over injured spot |

*The concept of *Dabna* is also prevalent among tribals. *Dabna* is stamping the affected part of the body with a hot iron piece. There are different patterns made for different ailments.

| <i>Name of Disease</i> | <i>Treatment</i> |
|----------------------------------|---|
| Burns, Scalds | (i) The <i>Jameen ghota</i> (<i>Lepidogather cristata</i>) plant is burnt, powdered and made into a paste. This paste is applied as ointment. (ii) Paste of <i>Daden</i> (<i>Sesbania bispinosa</i>) seeds is mixed with white stone powder and applied as an ointment. (iii) Leave paste and root paste of <i>Bagulia</i> (<i>Sida-orientalis</i>) is applied locally. (iv) Paste of stem bark of <i>Dando</i> (<i>Ehretia laevis</i>) is applied as an ointment on the buns. |
| Guinea Worm (<i>Nadu</i>) | (i) Crushed leaves of <i>Guar Patta</i> (<i>Aloe barbadensis</i>) are applied locally. (ii) The steamed leaves of <i>Kesuda</i> (<i>Butea monosperma</i>) are tied over swelling, which helps in rupturing the mouth of swelling to expel worm. (iii) Latex of <i>Datura</i> spp is applied locally. (iv) Warm leaves of <i>Ratanjot</i> (<i>Jatropha curcus</i>) are tied locally to promote on suppuration. (v) The paste of <i>Lal babusi</i> (<i>Ammania basifera</i>) is applied locally. (vi) The paste of roots of <i>Hingota</i> (<i>Balanites aegyptiaca</i>) is applied locally and taken orally for prevention. (vii) The latex of <i>Ak</i> (<i>Calotropis procera</i>) is applied locally. (viii) The boiled leaves of <i>Vanno</i> (<i>Grataeva nurvala</i>) when still hot are tied locally. (ix) The latex of <i>Thuar</i> (<i>Euphorbia nerrifolia</i>) is locally applied. (x) The crushed paste of roots of <i>Padeiri</i> (<i>Gardenia turgida</i>) is applied on knee. (xi) Fruit exudate of <i>Amal</i> (<i>popaver somniferum</i>) is locally applied for speedy expulsion. (xii) Paste of leaves of <i>Doodhi</i> (<i>Pergularia daemia</i>) is locally applied. (xiii) Boiled leaves of <i>Erand</i> (<i>Ricinus communis</i>) are tied locally and are changed evenly night. (xiv) Extract of root bark of <i>Semul</i> (<i>Sabmalia Malabarica</i>) is administered orally. (xv) Vapours of boiling fresh green leaves of <i>Sagwan</i> (<i>Tectona grandis</i>) are inhaled; affected parts are fumigated with fumes of burnt dry leaves of <i>Sagwan</i> . |
| Fracture (<i>Haddi Tootna</i>) | A variety of cactus <i>Arjuri</i> is mashed and mixed in a cup of milk and given to the patient for ten to fifteen days for a speedy recovery. This cactus has a number of nodes. A single node is given in case of one fracture and two are given when a person has two fractures. Before giving the mixture the broken |

| <i>Name of Disease</i> | <i>Treatment</i> |
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| | limb is strengthened so that the bones are arranged in original or normal position. After this a cloth is tied around it. On top of the cloth four or five bamboo clips are placed all around the circumference and are tied with a rope. The same treatment is given to animals in case of fracture. <i>Anjari</i> is available near a Neem or <i>Mahua</i> tree. Its effect is doubled if this climber climbs on these two trees. |
| Blisters in the Throat | (i) <i>Tipni</i> is tied in a black thread around the neck. (ii) A small herb, <i>Hansraj</i> is rubbed on a stone and then applied on the blisters inside the throat with fingers. This disease is considered contagious. |
| Stomach ache | All around the naval small <i>Dabnas</i> are made with hot point of the sickle. |
| Glaucoma (<i>Mathasir</i>) | For glaucoma a circular <i>Dobna</i> is made on the side of the eye. |
| Migrane (Adhasir) | The scalp hair of the affected side are cut and <i>Dabna</i> is made. |
| Pneumonia | (i) In case of pneumonia, seven <i>Dobna</i> under the rib-cage and one below the sternum is given. Generally, a iron sickle is used but the golden earring (<i>sunne ki murki</i>) is considered more effective. (ii) Stem bark of <i>Bhoot Jhad</i> is boiled in water and its vapours are inhaled. (iii) Kathodis chew bark of some trees. (iv) One <i>laddoo</i> made of baked <i>Mahua</i> flowers pounded separately and <i>sesamum</i> seeds pounded separately is eaten separately. |
| Cut or an Injury | (v) Extract of <i>Kadwa</i> sapling root is taken orally. (i) Red exude from <i>Chhola tree</i> is applied on the cut. (ii) Lime is warmed in clarified butter and applied on the injury. (iii) Powder of sand stone (<i>Kakroa</i>) is mixed with exuder of <i>Chhola tree</i> is applied on the cut. |
| Toothache (<i>Dant me Dard</i>) | (i) Stem of <i>Bajdanti</i> a kind of shrub which grows in the river is chewed. If one is unable to chew it, then it is rubbed on a stone and the liquid is applied on the teeth. It (<i>Vajradant</i>) is also used in ayurvedic medicine. (ii) Baked clay of the hearth is used to brush the teeth. |
| Swelling of gums (<i>Masuda Phoolna</i>) | (i) The fruit of <i>Chilbaittha</i> tree is boiled in water. The water is used as mouthwash. (ii) The bark of <i>Kachnavar</i> tree is boiled in water and is used for mouth wash. The twig of the tree is used for brushing the teeth. (iii) Steaming of the face is done by covering the head with a cloth and taking steam from a pot containing hot water. |