

ETHNOMEDICAL PRACTICES AND INDIAN SCHEDULED TRIBES

P. C. JOSHI *

ABSTRACT

Traditional healing systems are indigenously rooted arrangements of social relationships, cultural patterns and therapeutic activities involving use of locally available or adopted resources which are used in the management of illness. All of the 705 scheduled tribes of India have their own distinct healing systems catering to natural and supernatural caused illnesses. The paper tries to look at and understand the ethnomedical systems of the Indian scheduled tribes by identifying common characteristics, healers and efficacy. Such healing systems needed to be seen as alternative forms of knowledge and medicinal practices having strong bearing for amelioration of the health care needs of the scheduled tribe communities as well as the larger humanity.

Keywords: *Healing Systems, Indian Scheduled Tribes, Efficacy, Ethnomedicines, India.*

Indian scheduled tribes counting 705 and consisting of more than 100 million are extremely heterogeneous communities of people. The diversity in terms of ethnicity, language, economic and political organization, material culture, fairs, festivals, myths and legends, customs and cuisines and sundry other features of culture makes India a unique laboratory of varied human existence. The diversity is also reflected in the ethnomedical healing practices as well along the regional, ecosystem, linguistic and cultural lines. What can better be termed as traditional healing practices shows enormous variation across scheduled tribes. Comparing mainland scheduled tribe with those found in the Island group of Andaman and Nicobar would reveal two distinctively diverse traditional healing practices. Within the mainland, the scheduled tribes inhabiting high altitude Himalayas and the central Indian scheduled tribes show diversity in the *materia medica*, supernaturalism and the healing experts. At the same time, there are broad

* Professor of Social Anthropology, University of Delhi, India, Department of Anthropology.
E-mail: pcjoshi@anthro.du.ac.in



similarities in their healing practices. For example, the notion of balance in the natural and supernatural forces as indicating normalcy is a common factor across scheduled tribes. The concept of health among the scheduled tribes covers a much broader canvas enveloping not only the individual but also the broader social fabric, assets and dependents.

The ethnomedical systems of the scheduled tribes has been a matter of curiosity for the explorers and ethnographers. Very recently, the Ministry of AYUSH looking after Indian Systems of Medicines has been earmarking special funds to explore the indigenously flourishing traditional healing systems besides botanists and pharmacologist searching for new molecules. The dominant perspective of looking at the traditional healing practices has been to focus upon a miniscule part of this knowledge in the form of material substances, the plants, roots, barks, flowers and seeds. The voluminous works done in India by botanists aka ethnobotanists, clinicians and even by the Department of Ayush which incidentally calls such systems as local systems would amply testify such a notion. But, this only reflects a part of the knowledge. The traditional healing practices cover a much wider spectrum of clinically relevant repertoire much of which is intangible, non material and oral. The non-material assemblage, the folklore, manner, procedures and other aspects of patient care, drug administration and therapeutic activities have enormous potentials in changing the way we currently manage and treat the sick people. A useful definition of the traditional healing systems would therefore be – *the traditional healing systems are indigenously rooted arrangements of social relationships, cultural patterns and therapeutic activities involving use of locally available or adopted resources which are used in the management of illness.*

The most important aspect in the traditional healing systems is that there is continuity in the sense that the knowledge, substances, procedures and folklore about what constitutes illness – how it is manifested, how it is treated and above all how it is managed – is handed down from father to son, from mother to daughter, and as such is the essential syllabi for socialization and enculturation. However, the knowledge and practice of healing system is not static and theoretical. It is on the contrary quite pragmatic and dynamic; constantly under use in variety of circumstances and as a result some sort of updating of the knowledge goes on in the society. The pragmaticity and hardheadedness of the traditional healing practice is an important feature as the healing practices have to be assessed (not necessarily verified or validated) constantly and continuously in actual instances of sickness. It is in this respect that we may term healing practices as non-scientific, folklore based, but we can not term these as superstitions. The healing practices are rational and logical within the context of knowledge that is available to the society at a particular moment of time. However, once an alternative rational explanation is put forth, the healing system has the requisite flexibility and capacity to change quite easily.

Traditional healing practices are also social in the sense that there exists a well-defined and socially recognized set of roles and statuses with well-marked role definitions and behavioural regulations. While we have the roles like Bharra, Gunia, Ojha, Vaid, Nyibus, Dai, etc. we also have the counterpart roles of patients and accompanying others. In a situation of therapeutic drama, these roles are enacted within the socially prescribed limitations, constraints, privileges, rights and obligations.

Thirdly, the traditional healing practices are cultural. The cultural dimension of traditional healing practices indicates the fact that the continuing and socially accepted heritage contains both the material and non-material aspects used within the context of sickness. The material aspects include the tangible and visible entities such as medicines, instrument, paraphernalia, ritual objects, etc. while the non-material aspects consist of oral tradition, the chants, skills, procedures and beliefs which constitute the indigenous knowledge. This ethno-medicinal heritage is learned, shared and transmitted from one generation to the other. As such this heritage provides the social group its distinctive identity as traditional healing practices are culture specific.

While every scheduled tribe may have its unique culture and thereby its unique ethno-medicinal culture, there is enormous scope in this domain for culture change through innovation, diffusion and acculturation. This happens for the fact that the ethno-medicinal practices are pragmatic and effect based. In this respect, the empirical efficacy of the ethno-medicinal healing practices is a matter of constant concern for the people who practice it. This is true for not only the herbs and other substances being used as medicines but also for the super-empirical procedures such as rituals, chants and prayers. The efficacy *per se* of the traditional healing practices is to be seen and understood within the context of demands and expectations put forth by the patient and the people accompanying the patient.

NATURE OF TRADITIONAL HEALING SYSTEMS

The traditional healing systems have been a matter of renewed attention in the recent decades for the reason that the acceptance of these systems has increased and also for the fact that the challenges such as Health for All demand greater coverage and equitable distribution of health care resources. In absence of a mechanism under which the excessively costly infrastructure of allopathic medicine can reach the poor and needy masses of the world, WHO has come out of strategy to incorporate traditional medicines in the health care so as to extend the health care coverage, especially to the disadvantaged and marginalized section of the world (WHO 1978). The traditional healing systems also known as indigenous medicines share some common features across cultures.

HEALING SYSTEMS ARE TRADITIONAL

These are the dynamic systems of knowledge and practices culturally routed and socially accepted. The practices are known and familiar and people regard these as their own. The familiarity of the practices is significant as the belief and practices are within the ambit of local context and meaning. Thus people using them have faith and trust in the healing system because these systems are persisting along successive generations. Being traditional in nature however does not mean that there is no scope for change in such practices. The healing systems constantly confront new ideas and practices and quite a few of such ideas and practices are incorporated in the system. We may therefore witness syncretism in the ideas and practices of the traditional healing systems.

HEALING SYSTEMS ARE SUSTAINABLE

The *materia medica* is locally available and familiar. From common home remedies to herbs, barks, concoctions and potions, the immediate vicinity and habitat is the primary source of medicines. The kitchen garden, the forest and pasture, the stream side and wilderness are the places where the medicines are found. This known knowledge is painstakingly transferred from the elder and experienced persons to the novice. The knowledge of medicines is located at two levels. The first level is the popular level, the home remedies, the grandmother's formulae and the kitchen medicines. This level of knowledge is widely shared and commonly used. The other level of medicinal knowledge is that of the specialists. This realm of medicine in the latter is shrouded in some kind of secrecy as medicine *per se* is considered to be containing some kind of inherent super empirical power. Therefore, the use of medicines is disciplined due to its being sacred, under the control of super-empirical powers.

As such the medicines used in traditional practices cannot be taken as equivalent of the medicines used by the formal practitioners. The traditional healing practices as a rule are sacred in nature and therefore, the cultural practice discourages overuse and overexploitation of these substances. This attitude in turn implies that the practitioners of such systems of medicines are not free to use these medicines at will. A supplicating attitude ensures that the ownership of super-empirical forces regulates the use of these medicines ensuring conservation and sustainability.

HEALING SYSTEMS ARE EXPERIENCE BASED

The basic difference in the process of validity for efficacy in the science based medical system and the traditional medical systems is that the formal systems are based on 'experiment' model while the traditional systems are based

on 'experience' model of efficacy. The traditional systems respect the experience while the formal systems are credential based. In the life time, a healer belonging to traditional systems learns the art of medicines as apprentice and then onwards used this knowledge (oral and memory based) in treating the patients. The healer, in the process, may refine this knowledge by excessive use and the words of the patient are sufficient for him/her to ascertain the efficacy. Furthermore, the healer does not bother to study deeply the mechanism of efficacy for the belief in the innate powers of the medicine rather than its constituents. In traditional systems in general, it is not the medicine *per se* but the giver of medicine who becomes important. The cause and effect relationship is established through repetitive outcomes without any control. As a result, the medicine may be effective in most of the times but not necessarily all the times.

HEALING SYSTEMS ARE HOLISTIC

The concept of health in traditional healing systems is very broad and integrated. Health, in such systems is indicative of harmonious state of physical, psychological, social, spiritual and environmental aspect believed to be contributing to the wellbeing of an individual. In fact, the individual is not an autonomous entity in such a concept of health but is held very intimately related to the family, ancestry, assets, community, forests, streams and the cosmos and therefore his health lies in the harmonious relations with all these entities. This holistic worldview may go contrary to the evidence base of contemporary Cartesian clinical science tradition but it is also true that we are now in a position to see the closer integration of body and mind along with body and spirituality. The holistic nature of traditional systems is very crucial for an entirely different non-clinical reason as well. The illness related beliefs and practices in traditional healing systems are functionally integrated with religious, political and economic systems. In other words, such beliefs support and reinforce moral order, social order and economic order.

HEALING SYSTEMS ARE PERSISTING IN ABSENCE OF ANY WORTHWHILE ALTERNATIVE

Traditional healing systems are culturally constructed and socially administered adaptive response to the undesirable ill-health situations. In marginalized and relatively isolated communities the acceptance of such systems is profound. This does not happen for any hatred on the part of people to the science based healing system. On the contrary, the available health care resources to these people are quite low in quality and therefore three important factors contribute to their excessive reliance on the traditional healing systems. Firstly, the public health

sector functioning in such places is characterized by lack of staff in the sense that either adequate staff is not positioned or even if the staff is positioned, it remains absent. The supply of equipment and medicines is generally erratic in such locations. Furthermore, there is low motivation and incentives to the staff that are posted in these places and posting in such places is considered as a punishment posting. This obviously results in low credibility of the science based healing system which is caused essentially due to low quality in the service. Secondly, in absence of quality service by the public health system, the service needs are fulfilled by the informal prescribers who are variously named as *jhola chhap* doctors, *bengali* doctors, *bush* doctors or *bus depot* doctors. The exposure of patients to such prescribers is dangerous because the informal prescribers merely copy the prescriptions of the formal prescribers without having any regard to the specific pathological state of the patients. Sometimes, they indulge in giving steroid or glucose drip which may not be required by the patient. Their easy availability, accessibility and low cost are the main factors for their popularity and widespread presence in these areas. In totality they may inflict more harm than good to the patients. Thirdly, the formal private prescribers are also present, especially in the urban centres near to these areas but they are very costly and beyond the economic reach of the majority of the patients. Due to these factors the traditional healing systems show its presence in the marginalized and under developed areas and are held in high esteem by the local population.

DIFFERENCE IN THE ELITE AND COMMONER'S PERCEPTION ON TRADITIONAL HEALING SYSTEMS

Traditional healing systems are generally looked down upon by the educated and elite class of the community which is also its staunch critic. This class of people does so for their quest to link and liaison with the outside world subscribing to modern values and therefore hails such systems as consisting of *numbo-jumbo*. On the contrary, the locally placed commoners find value and meaning in the medicines, rituals and procedures of the traditional healing systems. The healing system is effective and up to the expectations of the people sometimes but not all the times. Why sometimes the traditional healing systems are efficacious (see Kleinman and Sung 1979)? We precisely do not know because of our limited understanding of the very mechanism of healing. The science based clinical medicine is primarily concerned with healing based on externally introduced active constituents and is only now beginning to take notice of the potentials of the human body and non-medicinal factors contributing to the process of healing. However, the attitude of the science-based clinical medicine is skeptical in branding traditional healing systems as quackery laden with superstitions. This attitude unfortunately is based on falls perception and not on strict rigorous scientific scrutiny. In reality, the traditional healing systems consist of some harmful; some

not so harmful or neutral; while some useful practices and beliefs. It is the duty of the scientific community in general to examine these practices for identification of these aspects.

HUMAN RESOURCES IN TRADITIONAL HEALING SYSTEMS

Traditional healing systems are extremely rich in terms of skilled human resources. The skilled personnel are socially accepted and recognized to intervene in the situation of illness to the members of the community. While the manner in which such personnel, termed as traditional healers, are recruited may vary but there are always culture-specific ways by means of which such healers receive social legitimacy. The most common mode of recruitment into healer's role is through apprenticeship under a known and experienced healer. Sometimes such a transfer of knowledge and skills may remain within the confines of a family but its succession may go beyond the limits of the family also. Some important healing roles needing closer examination are described in the following paragraphs.

ETHNO-GYNECOLOGY AND ETHNO-OBSTETRICS

Science of child birth is ancient and all the traditional societies have the locally available human resources (generally female) who use the knowledge and expertise in guiding the pregnant women and assist in child birth. The gynecological knowledge known to such healers is deeply rooted in the etiological theory of the culture. Known as TBA (Traditional Birth Attendants), these women generally work for free or for kind and use herbs, message, recipes and sometimes acupressure for the delivery of children and treatment of women. WHO has recognized the enormous potentials inherent in this type of human resource and has therefore recommended incorporation of such expert in the task of improving safe birth practices by providing the TBAs necessary training and linking them with the formal health institutions (WHO, 1978). Two aspects related to such healers are crucial for their use in the system. One is the use of safe and hygienic means for the purpose of delivery and the second is to identify the danger signs in pregnancy needing expert intervention. As child birth is a natural phenomenon, safe and secure child birth can be greatly enhanced if such healers are adequately used and officially supported.

ETHNO-ORTHOPEDECS

The knowledge of bone fracture, bone dislocation and muscular strains are common problems to all human societies and therefore, the specialists having skills to intervene in such situations show universal presence. Generally known as bone-

setters, these healers have evolved their own system of intervention in musculo-skeletal related problems (Onuminya 2006). The *materia medica* of such specialist, consisting of herbs, oils, fats and bandages, is empirically tested. In absence of our inability to provide skilled access of science based orthopedics to every nook and corner of India, incorporation of these healers in preventive and curative orthopedic care would ensure greater coverage. As these healers do not have required knowledge of human anatomy and physiology, neglecting them altogether may result in them being providing adverse care for the complicated cases. It is therefore important that they are considered as the first level contacts in cases of musculo-skeletal problems. With adequate training such healers can greatly lessen the burden of orthopedic problems in the society (Omolulu, Ogunlade and Gopaldasani 2008). The herbs, oils, fats and other medicines being used by these healers also need to be examined for the pharmacological potency. As most of such healers, especially in the rural and tribal areas, function on gratis, it is important that they are not treated as second class experts. The science based medical system should treat them with dignity as collaborators for exchange of knowledge on equal footing.

ETHNO-PEDIATRICS

The vulnerability of children to health hazards is well recognized in all societies and within the available knowledge and means the parents do everything possible to ensure healthy life to their children. In traditional systems, this aspect is well recognized and therefore the system used the knowledge and personnel to take care of its children. The usefulness and efficacy of such practices have also received some attention from the scientific community (Heuschkel *et al.* 2002 and Sampson *et al.* 2003). However, in rural and scheduled tribal societies particularly, taboos, humoral and magico-religious world view at times may interfere with the proper care that a child may need. A plethora of healers provide health care to the children for services ranging from treatment to physical conditions such as diarrhea, vomiting, fever to warding of evil eye and other kind of spells. Generally the ethno-gynecologists also act as ethno-pediatrics but we may also locate healers specializing in treatment of children for their myriad health related problems. In Himalayas, for example a special category of paediatric 'worm healers' is found whose primary healing involves restoration of the disturbed worms in their respective place in the abdomen (Joshi, 2017).

ETHNO-PSYCHIATRIST

This is a very large group of local healers available in the scheduled tribe areas who intervene in variety of situation having mental illness components. The healers range from people believed to master supernatural powers to the vehicles/mediums of

the supernatural entities. They intervene in conditions of depression, anxiety, hysteria, melancholy, phobia and sundry other mental illness situations.

Through wide variety of therapeutic regimes, they use suggestion, psychotherapy, ritual, prayer, catharsis, hypnotism, milieu therapy and above all the faith and trust of people and often claim success in their operations (Joshi, 2000). In general, these healers make use of non-medicinal components in their therapy and as such the efficacy of such healers has to be examined for behavioural, emotional and psychological interventions that they use. Apart from providing mental health care, such healers are also conscience keepers and custodians of norms and values of the community. Though very important and widespread, this section of healers is the most neglected among the rests by the official health care sector and the mental health fraternity. Besides use of culturally specific therapeutic regime, the use of family and community in patient care is something of special relevance and the science of psychiatry has a lot to learn from this aspect. The burning concerns of Indian psychiatry in the realm of stigma of mental illness and mental patient rehabilitation are rightly addressed in the manner in which the mentally ill patients are cared for in the scheduled tribal societies of India (Joshi, 2010).

ETHNO-PHYSICIANS

They are the tribal equivalent of general physicians having expert knowledge of herbal medicines. Locally known as Jari Buti experts or Vaids, they intervene in general conditions like, fever, cough, cold, diarrhea, vomiting, pain, injury, etc. The common theory subscribed by them is humoral balance theory for treatment. The use of medicinal substances in the form of plant parts, animal remains, minerals, etc. is the valuable indigenous knowledge which needs to be scientifically examined not only for the community per se but also for the humanity at large. The mode of transfer of knowledge is generally apprenticeship under some known herbalist.

ETHNO-DENTISTS

The traditional systems catering to dentistry play a very vital role in the management of oral health (Cao and Sun 1998; McGrath 2005). However, there is always a problem with regards to the reliability and validity of this knowledge and associated practices (Finlayson *et al.* 2005). Besides expertise in tooth extraction, these healers also intervene in situation of cavity and tooth and gum related situations. They primarily make use of herbs, pastes, mouthwashes and sometimes instruments for tooth extraction. The practice of these healers has both the useful and harmful elements and therefore it is very important that the practice of the

ethno-dentists is scientifically scrutinized for harmful and useful elements in their practice.

DISEASE-SPECIFIC HEALERS

Depending upon the local problems, we often find healers specializing in specific disease condition. For a wide variety of illnesses, we may find healers following their family tradition. The disease conditions may range from jaundice, epilepsy, tumor, snake-bite to cultural specific disease conditions. The disease-specific healers are generally dispersed, often seeking payments for their services and keeping their vocation a secret.

SHIFTING FOCUS ON TRADITIONAL HEALING SYSTEMS

The resurgence of focus on the traditional healing systems on the world map has come about especially after the great initiative taken by the world health body, the World Health Organization (WHO 1978). The main reason for the WHO to look at the traditional healing systems under new light was due to the simple fact that it was impossible to extend and provide the science based medicines to all the people of the world for its cost and sophistication. Starting up its focus on mainstream Chinese, Ayurveda, Unani and other such classical systems, it started earnestly to look for the informal traditional healing systems especially the plant based medicines, the traditional birth attendants and other elements of the indigenous pharmacy. Besides this there is altogether a very different reason also for the renewed interest in the traditional healing systems. This has something to do with the paradigmatic shift in the pattern of morbidity and corresponding burden of disease that is taking place when as a result of the discovery of vaccination and better understanding of infection control; the communicable diseases are coming under control. The triumph of near conquering of infections is short-lived as we see a corresponding increase in the burden of non-communicable diseases (Murry and Lopez 1996). The new causes of morbidity and mortality are heart disease, stroke, depression, alcoholism, tobacco use and other such factors which are essentially linked to the lifestyle, food habits, pollution, environmental changes, isolation, alienation and other behavioural factors. Most of these causes are intrinsically linked up with the modern, high paced life and therefore looking at the traditional lifestyle including traditional medicines provides an alternative behavioural model.

The science based allopathic medicines has been at the receiving end of the criticism in the late half of the last century. This criticism has something to do with the failure of this system in the field of health promotion and enhancement of immunity. The major goal of science based system of medicine has always been to control and limit the bodily pathologies and therefore this system has dominantly

become the science of disease. Such an image is in contrast to the image provided by alternate systems like Ayurveda and Chinese medicines which are of principally different orientation. The literal translation of Ayurdeva would be 'science of life' and so the Chinese system of medicine with its dominant focuses on the balance of *yin* and *yang*. While the science based system has really little to contribute if a person is normal, the Ayurvedic and Chinese medicines have a lot to advice even under normal circumstances as their focus is on the right lifestyle and health. The science based system of medicine is really very weak in this domain and therefore we see quite variable and often contradictory conclusions coming from the evidence base of this system, as far as the lifestyle related reporting is concerned. The statistico-epidemiological reasoning that the science based medical science propagates for a healthy lifestyle thus has its obvious limitations. While the alternate systems, in binding together the physical, social, emotional, moral and spiritual domains in the lifestyle are in a better position to address this concern than the science based medical system.

Finally, one of the offshoots of the science based system of medicine is the nature of medicine itself. While the minutely researched double blind trial based medicinal interventions are able to target the specifically assigned body system, the invariable side effects and adverse reactions with all such interventions is a great cause of concern. Some interventions in particular are immuno-suppressant in nature while the others disturb the related body systems at the cost of one system. In relation to this fear, people turn to the plant based traditional systems of medicine in the hope that they will avoid the harmful side effects. Medical anthropological researches starting from Levi-Strauss (1967) have been grappling with the efficacy of plant based medicines along with the rituals and supernatural healing actions (Alkinson, 1987; Waldram, 2000).

RELEVANCE OF TRADITIONAL HEALING SYSTEMS

In an assessment made by the World Health Organization, the current usage of traditional medicines worldwide is in the tune of 80 percent by the people in Africa, 60 percent by the people in India and 40 percent by the people of China (WHO 2002). These are the countries that harbor large populations and have genuine difficulty in providing the reach of science based medicines to its population in entirety. But what about the developed and rich countries? By the name of complimentary and alternative medicines (CAM), it is seen that usage of CAM in France is 75 percent, in Canada 70 percent, in Australia 48 percent and in U.S.A. 42 percent (WHO, 2002).

The traditional healing practices are therefore going to stay and flourish. In the coming days, we are going to see more and more people making use of these

alternatives. There are two aspects that are of special importance at this juncture. One is about the growing market of indigenous medicinal products. In U.S.A. alone the estimated market for the indigenous medicines is worth 2.3 billion US dollars (WHO 2002). The global market for the traditional medicines is estimated to be in the tune of 60 billion US dollars (Tanaka, Kendal and Laland 2009). The traditional medicines is being sold through the clinics, pharmacies, malls and health shops (often in the form of food supplements but not always) just like the science based medicines. There is a good market for the herbal medicines and the choice and liking of people towards these medicines is a reality of today's world. We therefore see special treatise written for the promotion of such medicines (Barnes, Anderson and Phillipson 2002). In the market driven scenario, the quality and purity of the medicines therefore becomes significant. As it is, in the absence of any quality check and standardization procedure, there are reports of mixing of dangerous substances in the traditional medicines (Karri, Saper and Kales 2008; Saper *et al.* 2009). The market driven trend for the promotion of traditional medicines goes against the personalized and individual specific health care of the traditional healing systems. Therefore, it will be extremely important that the traditional herbal remedies are standardized and ensured for their quality through good manufacturing practices and clinical trials.

The other point of concern is to lessen the disease burden in the marginalized and uncovered areas where the traditional healing practices flourish due to lack of any worthwhile alternative. For these areas in particular, the traditional healing practices needed to be standardized and strengthened in the light of available expertise. The traditional healers can be promoted as primary health care workers (WHO 1995), as first line providers of intervention and linked to the secondary or tertiary health care facility. For standardization and strengthening of the practices, collaboration between healers, anthropologists, botanists, pharmacologists, clinical scientists, public health experts and psychiatrists would be required for identification of active constituents, correction of dosages. This activity should be undertaken with the intention of how the traditional medicine's intake can be further improved, especially for the substances which has the potentials of resulting in beneficial outcomes. As non-empirical elements are inseparable from the medicine, the evaluation of traditional remedies should be holistic in the sense that not only the evaluation of the medicine but also of the associated beliefs, behaviour, customs and procedure should be examined for the efficacy and promotion.

In a known fact that nearly half of the market sold pharmacopeia has come out of the traditional knowledge. WHO has done a commendable work in compilation of such a valuable treasure (WHO 1999, 2004, 2007). The knowledge retained by the traditional communities is for the general good of mankind but if the remedies known to the tribal and rural societies are marketed than they have a legitimate royalty right over its sale. Thus, the intellectual property right of the tribal communities over their traditional medicines needs to be protected and ensured.

CONCLUSION

Traditional healing practices prevailing in the rural and tribal societies are sum total of experience and wisdom of the people. With advancement in knowledge and increased funding for development, there is a need to build upon this treasure for providing better health care to the people harboring these practices. This approach would require an in-depth understanding of the content, mechanisms, procedures and human resources involved in providing health care in these areas. All these resources are crucial in planning for improved health care services. The approach for such an endeavour should focus upon providing the people best available health care. This would mean that the human and material resources of traditional healing are examined and integrated in the health care delivery. The traditional healers are trained and involved as partners in the health care services. Finally, there is a need to establish an appropriate mechanism for referral so that secondary and tertiary care is accessible to the people within their means and also in time.

REFERENCES

- ALKINSON, J. M. (1987). The Effectiveness of Shamans in an Indonesian Ritual. *American Anthropologist*. 89: 342–355.
- BARNES, J., ANDERSON L. A. AND PHILLIPSON J. D. (2002). *Herbal Medicines: A Guide for Healthcare Professionals*. IIInd Edition. London, Pharmaceutical Press.
- CAO, C. F. AND SUN, X. P. (1998). Herbal Medicine for Periodontal Diseases. *Int. Dent. J.* 48: 316–322.
- ERNST E. (2000). Herbal Medicines: Where is the Evidence? *BMJ*. 321: 395–396.
- FINLAYSON, T. L, SIEFERT, K, ISMAIL, A. I, DELVA, J. AND SOHN, W. (2005). Reliability and Validity of Brief Measures of Oral-health Related Knowledge, Fatalism, and Self-efficacy in Mothers of African American children. *Pediatric Dentistry*. 27: 422–428.
- HEUSCHKEL R, AFZAL N, WUERTH A, ZURAKOWSKI D, LEICHTNER A AND KEMPER K. (2002). Complementary Medicines use in Children and Young Adults with Inflammatory Bowel Disease. *Am. J of Gastroenterol*. 97: 382–388.
- JOSHI P. C. (2000). Relevance and Utility of Traditional Medical Systems (TMS) in the Context of a Himalayan Tribe. *Psychology and Developing Societies*. 12: 5–29.
- JOSHI P. C. (2010). Psychotherapeutic Elements in Shamanistic Healing in Context of Himalayan Tradition. *Delhi Psychiatry Journal*. 13 (2): 254–257.
- JOSHI P. C. (2017). Narratives on Obliging Worms: Childhood Illness in Rural Garhwal. *Journal of the Anthropological Society of India*. 66 (1–2): 1–18.
- KARRI S. K, SAPER R. B. AND KALE S. N. (2008). Lead Encephalopathy due to Traditional Medicines. *Curr. Drug Saf*. 3: 54–59.
- KLEINMAN A. AND SUNG L. H. (1979). Why do Indigenous Practitioners successfully Heal: A follow-up Study of Indigenous Practice in Taiwan. *Social Science and Medicines*. 13B: 7–26.
- LEVI-STRAUSS, C. (1967). The Sorcerer and His Magic. In *Structural Anthropology*. Pp. 167–185. New York: Basic Books.
- MCGRATH C. (2005). The Use of Traditional Chinese Medicine in Managing Oral Health – Hong Kong: One country, Two systems. *Int. Den. J.* 55: 302–306.

- MURRY C. J. AND LOPEZ A. D. (1996). *The Global Burden of Disease: A Comprehensive Assessment of Mortality and Disability from Disease, Injuries and Risk Factors in 1990 and Projected to 2020*. Cambridge, MA, Harvard School of Public Health (Global Burden of Disease and Injury Series Volume 1).
- OMOLULU A. B., OGUNLADE S. O. AND GOPALDASANI V. K. (2008). The Practice of Traditional Bonesetting: Training Algorithm. *Clin. Orthop. Relat. Res.* 466: 2392–2398.
- ONUMINYA J. E. (2006). Performance of a Trained Traditional Bone Setter in Primary Practice Care in Nigeria. *South African Medical Journal.* 94: 652–658.
- SAMPSON M., CAMPBELL K., AJIFERUKE I AND MOHER D. (2003). Randomized Controlled Trials in Pediatric Complementary and Alternative Medicines: Where can they be found? *BMC Pediatr.* 3,1.
- SAPER R. B., PHILLIPS R. S., SEHGAL A., KOURI N., DAVIS R. B., PAGWIN J., THUPPIL V. AND KALES S. N. (2009). Lead, Mercury and Arsenic in US and Indian-Manufactured Ayurvedic Medicines sold via the Internet. *JAMA.* 300: 915–923.
- SHI J., TONG Y., SHEN J. AND LI H. (2008). Effectiveness and Safety of Herbal Medicines in the Treatment of Irritable Bowel Syndrome: A Systematic Review. *World J of Gastroenterol.* 14: 454–462.
- TANAKA M. M., KENDAL J. R. AND LALAND K. N. (2009). From Traditional Medicine to Witchcraft: Why medical Treatments are not always Efficacious. *PLoS ONE* 4(4): e5192. doi:10.1371/journal.pone.0005192.
- WALDRAM, J. B. (2000). The Efficacy of Traditional Medicine: Current Theoretical and Methodological Issues. *Medical Anthropology Quarterly.* 14(4): 603–625.
- World Health Organization. (1978). *The Promotion and Development of Traditional Medicine: Report of a WHO Meeting*. Geneva.
- World Health Organization. (1995). *Traditional Practitioners as Primary Health Care Workers*. Geneva.
- World Health Organization. (1999). *WHO Monographs on Selected Medicinal Plants – Volume 1*. Geneva.
- World Health Organization. (2002). *Traditional Medicine Strategy 2002–2005*. Geneva.
- World Health Organization. (2004). *WHO Monographs on Selected Medicinal Plants – Volume 2*. Geneva.
- World Health Organization. (2007). *WHO Monographs on Selected Medicinal Plants – Volume 3*. Geneva.
- YINGER H. AND YENHALAW D. (2007). Traditional Medicinal Plant Knowledge and Use by Local Healers in Sekoru District, Jimma Zone, Southwestern Ethiopia. *Journal of Ethnobiology and Ethnomedicines.* 3: 24.