

## Chapter 2

# Health and Folk Medicine

*...Healing is a matter of time, but it is sometimes also a matter of opportunity...*

Hippocrates

**Abstract** The effort to realize and uphold an optimum state of health has always drilled the minds of men and as a result, a number of healing systems have evolved around the world. Communities have devised systems to alleviate the tiresome condition arising out of illnesses using their own technique, which vary from one community to another. Each culture has set outlook regarding the disease causation and these are rooted in their belief systems. There are several theories which not only explain the cause of disease but also community's health care seeking approach. Archaeological and existing genetic facts state that human population voyaged to the Indian subcontinent and their familiarity with herbs and other naturally accessible material is as old as human civilization. Folk medicine includes healing practices and ideas on health care which are limited to a particular group in a culture, and are generally transmitted orally or word of mouth. In India, folk medicine is highly conditioned by the impact of folk deities and, sometimes it is so deep rooted that medicine and folk deities become an integrated whole. Across the whole Himalayan Region, folk healers have a remarkable knowledge of herbs, accumulated through generations and they have been developing the health care traditions through constant experimentation and years of experience which is rooted in understanding and realistic considerations.

**Keywords** Folk medicine • Health • Ayurveda • Unani medicine • Traditional healing systems • Local health tradition • Traditional Chinese medicine • Indigenous health care traditions • Atharvaveda • Hakims • Vaidyas

The endeavour to achieve and maintain an optimum state of health has always exercised the minds of men since ancient times. As a result, a number of healing systems evolved across the globe. People have devised systems to mitigate the wearisome situations arising out of diseases using their own method, which vary from one community to another. Health, or poor health condition, was once only attributed to biological or natural conditions. Socio-biologists have confirmed that

the spread of diseases is greatly influenced by the socioeconomic status of individuals, ethnical traditions or beliefs, besides other cultural factors. From the times of yore, people in different parts of world have been trying to explore the causes of ailments and have engaged themselves in discovering remedial measures. Human societies around the world have evolved a well-defined pharmacopoeia and therapeutic procedures, be it is religious, secular or logical. Such therapeutic procedures are influenced by traditional knowledge and practices, customs and habits, charms and invocations, as well as constant process of trial and error backed by years of experience. Tribal concept of disease and treatment, life and death is as varied as their culture. Traditional system of medicine has evolved as a result of time-tested experience of people who have been eagerly monitoring the behaviour-pattern of animals and plants through the ages. And most of the time, folk medicine is based on remedies found in nature. In tribal communities, magic has also played a great role in the emergence of system of medicine. Folk medicine has a deep rooted background and its patrons are drawn from ancient communities. Thus, folk medicine is said to have a long and honourable history; much longer than present-day western medicine, whose roots go into hoary antiquity.

Every culture has set attitudes regarding the causation of disease which are rooted in their belief systems i.e., naturalistic, *Ayurvedic*, biomedical, etc. Constant changes in economy, therapy, technology and insurance influences the way communities view and respond to medical care. The sociology of wellbeing and infirmity takes into account the interface between society and health. At the same time, it also looks at health and illness in context of social institutions such as the family, work, school and religion. Social scientists look at how social life governs morbidity and mortality rates and vice versa. There are apparent differences in patterns of health and illness across societies. Patterns of global change in health care systems make it very important than ever to investigate and understand the sociology of health and illness. Community's health care perceptions have a deep bearing on the choice of medical care. It can slow down the precautionary actions, hinder or obscure medical care. The range of insight which the communities have on illness is significant—it varies from witchcraft to germs and poor immunity. According to Western thought, the body is considered as a complex machine which must be kept “geared-up” and sickness is taken to be the breakdown of machine. This differs with Eastern thinking in which health is considered as a state of balance between the physical, social and super-natural environment.

There are numerous theories around the world which not only explain the cause of disease but also community's health care seeking approach. According to Personalistic system of belief, illness is caused by the intrusion of a human being or a supernatural, possessing special power. If someone happens to disobey a social norm or a religious taboo, he or she may call upon the wrath of a deity which manifest in form of sickness or taken as divine punishment. Similarly, illness in many cultures is seen as penalty for not carrying out rituals linked with the adoration of ancestors. In many cultures, illness is accepted as the result of bad

karmic action. Illness arising from personalistic causes can be treated through ritualistic performance, which is done by special practitioners. In the naturalistic system of belief, health is closely linked with the natural environment. A proper balance needs to be maintained for the same and when the balance gets disturbed, it resulted in illness. Biomedicine is based on the “body-as-machine” metaphor. This thought formed the basis of western medical practice. The health beliefs around the world are governed by permutation of these theories, and underlie the use of many conventional medicines and therapeutic practices.

Archaeological and contemporary genetic facts state that human populations migrated to the Indian subcontinent and their acquaintance with herbs and other naturally available curative matter and their use is as old as human civilization. The therapeutic wisdom that has evolved over the years is the outcome of trial and error and exchange of information among communities. The process of exchange and integration still continues, and the scientific community and public is becoming conscious regarding the value of folk medicine, which has brought *Ayurveda*, *Unani* and *Siddha* into the mainstream. The challenge nowadays is to combine the best of different healing traditions to meet the healthcare requirements of modern society.

Archaeological explorations carried out at different sites imply that therapeutic intercessions such as dentistry and trepanation were carried out as early as 7000 BCE in the Indian subcontinent. The importance that people of the Indus Valley civilization gave to herbs and the stress on cleanliness suggest a highly developed health management system. Trade routes linked the civilizations to other parts of the world and it is probable that botanical and medicinal commodities together with the knowledge were among the valued things of barter. The hymns of the Vedic period provide insights into diseases and their remedial measures. Most ailments, both physical and mental, were attributed to malicious spirits and treatments consisted of ritualistic performances, charms and incantations, medicines and surgical procedures. During the post *Vedic* period, when diverse cultures intermingled, there was growing understanding on health and well-being and many movements supported the free spirit of query, particularly in the field of medicine. The Buddhist and *Jaina* texts written in *Pali*<sup>1</sup> have enumerated the use of medicines, surgical trials, etc. essential for the health and well-being. The spirit of scientific enquiry influenced the intellectual world and in such a cultural milieu there emerged the formal scientific culture of healing, i.e. *Ayurveda*. Later, as a result of trade and exchange of herbs and knowledge, there was amalgamation of ideas and the *Ayurvedic* texts were translated into other languages. *Unani*, *Rasa-shastra*,<sup>2</sup> *Siddha*, and *Sowa-Rigpa*<sup>3</sup> were the other formal systems of medicine that were practiced in the subcontinent. *Unani* system of medicine originated in

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<sup>1</sup> *Pali* is a literary language belonging to Prakrit language family and was initially written down in Sri Lanka during the 1st century BCE.

<sup>2</sup> *Rasashastra* literally means the “Science of Mercury”.

<sup>3</sup> *Sowa-Rigpa* is traditional art of healing common in Tibetan communities.

Arabian countries incorporated the elements of *Ayurveda*, *Rasashastra*, *Yoga*<sup>4</sup> and *Tantra*.<sup>5</sup> However, even before the codification of medical knowledge into treatise, there was rich treasure of medical expertise in the subcontinent.

Classical *Ayurveda* has been augmented over the years through such communications and exchange with folk practices. Tribal Healing traditions of tribal people who had traditionally relied on forests for healthcare have made valuable contributions to the *materia medica* of conventional medicine. From 8th century onwards, texts called *Nighantus*<sup>6</sup> dealing exclusively with the *materia medica* of *Ayurveda* were composed. During the pre-colonial period, early Portuguese and Dutch settlers relied on the blooming healthcare systems they noticed in India. In the early period of the British East India Company, Indian health care knowledge and “native healers” were main resources for colonial organization. Later, after the settling of East India Company, many physicians assumed scholarly roles and Western medicine was looked upon as the leading system of medicine. After Independence, the government made efforts to recognize *Ayurveda*, *Siddha* and *Unani* at par with contemporary allopathic biomedicine. However, in the recent years, there has been increasing awareness in alternate therapies. Biomedical and *Ayurvedic* scientists are making attempts to integrate the two so as to have a holistic view of nature of disease in terms of modern biomedical notion (Perinchery 2013).

## 2.1 Categorization of Traditional Healing Systems

In India, folk medicine is highly conditioned by the impact of folk deities and, sometimes it is so deep rooted that medicine and folk deities become an integrated whole. *Ayurveda* has evolved as the natural way of healing or naturopathy and for centuries, it was the only system of medicine in the country. At the same time, the concept of ‘*Yin Yang*’<sup>7</sup> developed in China. With the passage of time, these systems progressed into independent branches of learning. These age-old systems, based on herbs and diet, offer an effective and mild ways of restoring health, with the minimal risk or side effects. Naturopathy based on an ancient and traditional system takes human beings back to the fundamental of nature. Natural cures cleanse the body and enhance the body’s system to treat itself and protect itself from germs.

Local health tradition is a vague term mostly used to set apart ancient and culture bound health care practices, which existed before the evolution of modern scientific medicine. Some frequently used synonyms for local health tradition are

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<sup>4</sup> *Yoga* is a generally known generic term for physical, mental, and spiritual disciplines which got evolved in ancient India.

<sup>5</sup> *Tantra* is a style of religious ritual and meditation that originated in medieval India.

<sup>6</sup> *Nighantu* is ancient pharmacology book written between the 12th and 14th centuries.

<sup>7</sup> *Yin Yang* represents the ancient Chinese perceptions of how things work.

indigenous, un-orthodox, alternative, folk, ethno, fringe and unofficial medicine or healing (Unnikrishnan 2004). While discussing the legal aspects, Stephan (1983) interpreted the term ‘traditional medicine’ in a broad sense as:

- a. Formalized traditional systems of medicine such as *Ayurveda*, *Unani*, and traditional Chinese medicine.
- b. The traditional healers as defined by an African expert group in 1976 is:

A person who is recognized by the community in which he lives as competent to provide health care by using vegetable, animal and mineral substances and certain other methods based on the social, cultural, and religious background as well as on the knowledge attitudes, and beliefs that are prevalent in the community regarding physical, mental and social well-being and the causation of disease and disability.

- c. The practice of chiropractic, naturopathy, osteopathy, homoeopathy and even Christian Science.

The definition of Jan Stephan encompasses all aspects of health care systems other than the modern medicine. However, Bannerman et al. (1983) uses terms such as ethno, folk, alternative, etc., as synonyms at micro level; in other contexts they denote different schools of health care practices. *Ayurveda*, *Siddha*, and *Unani* are the three major streams of Indian health care traditions whereas *Amchi*,<sup>8</sup> *Ayurveda* and folk medicine are the three major systems of health care in the state of Himachal which make use of natural products as raw drugs. *Ayurveda* is a scientifically codified and theoretically structured area of knowledge. The folk medicine, on the other hand, is a set of practices passed on from one generation to the next, most of which are oral. However, in the North-Western Himalayas all the streams are unified and function as synchronized systems. The inheritance of traditional health care system in the region is a result of the synthesis of all systems.

## 2.2 Folk Medicine: The Lesser Known Traditions

Folk medicine incorporates healing practices and ideas on health care which are confined to a particular group in a culture, and are usually transmitted orally or word of mouth. It may also be known as Traditional, Alternative, Indigenous or Complementary medicine. These terms are often comparable however, only Indigenous and Traditional medicine are well harmonizing with folk medicine, while others can be considered in contemporary context. History of folk medicine can be traced back as early as primeval Egypt in 3000 BC, despite the fact that much of contemporary medicine originated in Greece. The Greek manuscripts were afterward translated to Arabic and then undergone further investigations in the Islamic world. *Ayurvedic*, *Unani*, Traditional Chinese Medicine and medical

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<sup>8</sup> *Amchi* is the traditional Tibetan doctor.

herbalism have inherited a rich legacy from folk medicine. It integrates crude medicinal herbs, syrups, decoctions and infusions and is practiced by a few vendors, *Hakims*<sup>9</sup> and *Vaidyas*<sup>10</sup> in the inaccessible areas. People in a number of developing countries, still relies on folk practitioners, including traditional birth attendants, herbalists and bonesetters who make use of locally available herbs to meet their primary health care requirements. A few folk preparations are of incredibly high therapeutic value.

Traditional medicine has maintained its reputation in a number of Asian countries, such as China, India, Japan and Pakistan. In the last few years, there has also been a growing interest in traditional and alternative systems of medicine in many developed countries. Medicinal herbs are the oldest known health-care products and their value is increasing, though its percentage varies depending on the ethnological, medicinal and historical background of a nation. The history of the relationship between plants and healing medications takes us back to the evolution of medicine itself. Evidences from ancient scriptures-the *Atharvaveda*<sup>11</sup> from India, the Petrie collection from *Kahun* in Egypt, and the *Avesta* from Persia demonstrates that early medicine was not only based on religion and supernatural world but also narrates the use of herbal, animal and mineral products. Traditional Chinese Medicine (TCM) has been using many conventional practices and most of the information on early Chinese medicine has been gleaned from the Yellow Emperor's Nei Ching. Artemisinin, a potent anti-malarial drug was derived from *Artemisiaannua*, a plant used in China for the treatment of malaria. TCM is linked to Chinese Cosmology as a system of beliefs based on the principles of *Yin* and *Yang*. *Yin* and *Yang* are connected via a circular harmony, which connotes well-being, good weather conditions and luck, while disharmony leads to sickness, catastrophe and bad luck. Chinese medicine tries to restore harmony by making use of acupuncture, herbs and food to recuperate and maintain health. Herbal medicine is a vital part of Traditional Chinese Medicine. Herbs are recommended to the patient by taking into account individual's health status. It is believed that the herbal formulations normalize the natural balance of the body. These may be in form of pills, powders, decoctions and raw herbs administered orally or as balms for external use. *Kampo*, a Japanese system of herbal medicine, has a long history, which precisely makes use of herbs to treat diseases. The distinct aspect of *Kampo* is its method of diagnosis, which is done through abdominal palpation. The system is based on the assumption that disease occurs as a result of a cacophony in the flow of Qi (energy).

Similarly, Traditional Vietnamese Medicine (TMV) lays emphasis on nourishment of blood and vital energy, rather than focusing on precise indications. The system of medicine is based on the effect of energy on the body. This energy is

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<sup>9</sup> *Hakims* is the traditional *Unani* physician.

<sup>10</sup> *Vaidyas* is the folk herbalist.

<sup>11</sup> *Atharvaveda* is a sacred text of Hinduism and is one of the four Vedas, often called the 'fourth Veda'.

believed to be inherited from parents and extracted from food. The main methods employed by TVM are herbal medicine, acupuncture and moxibustion. Acupuncture is yet another traditional technique, where the acupuncturists insert tiny needles into precise points linked with the energy channels of the body, which encourages healing and free flow of energy in the body. Acupuncture treats many conditions including musculoskeletal disorders, headaches, respiratory disorders, gynecological problems, gastrointestinal disorders, as well as mental stress. Moxibustion, a traditional therapy makes use of *moxa*, or *mugwort* herb, which is converted to fluff after a series of processes and later burnt. This fluff is used together with acupuncture needles, or sometimes burn on a patient's skin.

*Gua Sha* or coin rubbing on the other hand is done to scrape away fever. It is one of the ancient techniques used to scrape away disease through sandy-looking objects. Cupping fire, or merely cupping, is a type of conventional art of healing found in number of cultures. It involves placing of glass, plastic, or bamboo cups on the skin. In traditional Chinese medicine, cupping is a system of applying acupressure by generating a vacuum in patient's skin. The therapy is used in the treatment of respiratory diseases and musculoskeletal disorders. Chiropractic healing evolved in the end of 19th Century by Daniel David Palmer, a magnetic psychotherapist from Iowa, USA. The tradition is based on connection between spine and nervous system and self-healing properties of human body. Homeopathy on the other hand, was initially pointed out by Hippocrates, but it was a German physician, Hahnemann, who established its basic doctrine. At present, Homeopathy has been incorporated in the National Health Care Systems of numerous countries.

The Indian System of Medicine has always recognized the medicinal value of plants, for instance the curative properties of *Rauwolfia serpentina* root in treating mental ailments was known at least 2500 years before the western countries recognized its therapeutic value in treating mental disorders. In early forties, Indian scientists isolated the active substances from *rauwolfia* and explored its value for treating high blood pressure. Recent clinical research has highlighted the role of *Bacopamonniera* as 'brain tonic'. In ancient system of medicine, the herb was widely prescribed by folk healers for treating memory-loss and finds its mention in old texts as *Medhyarasayana*. *Vinca rosea*, with its pink or white flowers popularly known as *Sadabahar*, or 'ever bloom' has been used in the contemporary medicine for treating Leukemia. Traditionally, the plant was used for the treatment of *diabetes mellitus*.

Folk medicine has been promoted by various folk communities. Unlike *Ayurveda*, this stream of health has no codified speculative foundations. Customs or traditional rituals rooted in the beliefs of communities formed its basis. Thus, folk medicine is a folk epistemology that brings together the diversity hidden in folklore. However, folk medicine can further be categorized as tribal or rural medicine. Many folk therapies are practiced by Indian tribes and rural people for

curing diseases. For instance, oil massage therapy, which traces its roots back to 3000 years, can cure a variety of physical and mental diseases, strains and tensions, arthritis, spondylitis, paralysis, obesity, sinusitis, migraine and rheumatism; magnetic therapy, involves the use of positive forces of a magnet to treat diseases; mud therapy, which is regarded as 1000 years old therapy, involves the use of mud paste on body to protect against diseases such as migraine, insomnia, mental disorders, sinusitis, asthma, indigestion, arthritis, viral infection, general ill health, etc. A range of traditional therapies have been described for incurable diseases including *talam*<sup>12</sup> for treating insomnia, improving eyesight, curing skin disorders and headache; *Chakra Basti*,<sup>13</sup> for curing dyspepsia and alleviating constipation; *Greeva Basti*<sup>14</sup> for curing the cervical spondylosis and chronic pain in the neck region and *Netra Dhara*<sup>15</sup> for treating cataract and improving eyesight.

In addition, there are numerous folk traditions linked with curing of snake and insect bite, birthing, bone setting, curing of jaundice, herpes, etc. which are carried out by specialized healers. Apart from herbal drugs, communities have been making use of animal products in various medical preparations. Healing by using products obtained from animals is known as zoo-therapy. Zoo-therapeutic procedures have been developed by rural communities who live in close contact with natural world. The animal body parts are not only used for healing purpose but also in magico-religious purpose, both by aboriginal and western societies across the globe. In India, almost 15–20 % of *Ayurvedic* preparations are derived from animals and different ethnic groups use animal-derived substances for healing human ailments (Oudhia 1995).

Thus, though various developmental processes have led to the homogenization of cultures, contemporary societies are fighting against diseases and sufferings using their traditional therapeutic procedures. Traditional and complementary or alternative medicine provides an important health care service to persons both with and without geographic or financial access to allopathic medicine. It has confirmed efficacy in areas such as mental health, disease prevention, treatment of non-communicable diseases and enhancement of quality of life for people with chronic diseases as well as for the ageing population. The World Health Organization has encouraged and supported its member states in incorporating traditional and complementary or alternative medicine in national health care systems so as to ensure its genuine use.

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<sup>12</sup> *Talam* is the process of applying medicated paste on the forehead of the patient.

<sup>13</sup> *Chakra Basti* is the process in which the *Bastior* the pot is applied to body's chakras, for instance, umbilical region.

<sup>14</sup> *Greeva Basti*, in Sanskrit the word *Greeva* refers to neck and *Basti* stands for a pot. So the process, in which lukewarm medicated oil is allowed to stand on back of neck, is called as the *Greeva Basti*. The process is very useful in maintaining normal structure and working of neck region.

<sup>15</sup> *Netra Dhara* is a special cleansing method of pouring herbal decoctions in eyes.



## 2.3 Research Studies on Healing Traditions of the Himalayan Region

Across the entire Himalayan Region, folk healers have a remarkable knowledge of herbs, gathered through generations and passed on through years of apprenticeship. The traditional healers in the region have been developing the health care traditions through constant experimentation and years of experience which is rooted in understanding and realistic considerations. Traditional wisdom of Himalayan communities is passed through proverbs, folklores, legends, customs and myths. These sources reveal how troubles emerge in life and how resolved by the combined efforts of a community. In the long history of local influences, there are deformations, distraction and alteration in folk healing practices on the negative side, and creativeness, revisions and improvements on the positive side. But, the folk systems have remained responsive to local needs and expectations.

Indigenous Health Care Traditions in the Himalayan region have two treatment methods- natural and supernatural. The natural method is indicative whereas the supernatural stream is etiological. The symptomatic way involves identification of disease by examining the symptoms followed by management using natural medicine. The super-natural methods allocate precise causes to diseases. However, the cause or etiology is considered different from modern medicine. According to the folk beliefs, the cause could be anything like wrath of deity, evil spirits or sorcery, black eye, violation of taboos, etc. In order to deracinate the cause of disease certain ritualistic performances are done. In the Central Himalayan region, a magical therapy, called *jagar* is practiced against diseases. According to people, this is the greatest cure for many non-curable diseases, especially the psychiatric disorders. *Jagar* is generally organized at night and takes one night or twenty-two nights depending upon the severity of the wrath of the local God.

People classify diseases into two categories (a) related to the body (b) related to mind and mystical world. The bodily ailments are cured by making use of herbal medicines, coupled with animal parts and psychosomatic diseases by using magico-religious practices coupled with herbal medicines. Healers believe that the efficacy of medicine is lost, if its formulation is exposed to strangers. Himalayan people consider that diseases are caused by discontentment of local deities and hence treat them accordingly. For treating such diseases, priests or mystic-healers play a significant role. The mystic-healers explain to people the cause of disease and provide remedial advice. If the cause is any spell of an evil-spirit, the healer treats the patient with the help of hymns and supposedly drives away the spirit. Such magico-religious ceremonies can be seen in any Himalayan village, even among the educated classes. *Thau-dam*, a traditional Himalayan therapy is practiced in the rural Himalayan region for liver troubles, stomach troubles, backache, etc. This therapy was also practiced by the ancient people and finds mention in *Ayurveda* as *agnikarma*. *Thau* therapy is normally practiced by the elder people of village and is obligatory for 6 months to one-year old children. In Tibet, the healing is done by *Sowa Rigpa*, meaning 'the science of healing'. The basic theory

is to provide stability to the chief energies of the body. The practitioner makes use of antique apparatus to find the root cause of disease. Treatment is carried out by adjusting diet together with herbal medicines. The healing is based on Buddhist principles and close relationship between mind and body. Gurmet (2004) gave an account of *Sowa-Rigpa*, commonly known as Tibetan or *Amchi* medicine practiced in Himalayan regions throughout Central Asia.

Numerous studies have been carried out to document the folk healing practices of Himalayan region. Pant and Pandey (1995) studied the ethno-botanical wisdom of *Tharu* community living in Nainital district of Kumaon region. During the survey, enumeration of 179 plants was done out of which 42 were of value in *Ayurveda* system of medicine. Samal et al. (2004) made an effort to document indigenous health care systems and its significance in physical well-being of people inhabiting Central Himalayan region. Panday (2004) gave an account of time-tested remedy, popular among the aborigines of Gonda, Bahraich and Balrampur districts using seed fume of *Solanum surattense* against tooth and gum disorders. Garbyal et al., carried out study in Darma valley of Dharchula Himalayas which is situated in Kumaon region of Uttaranchal state and reported the rare herbs and shrubs like *Aconitum heterophyllum*, *Bergenia ciliata*, *Cordyceps sinensis*, *Dactylorhiza hatagirea*, *Hippophae tibetana*, *Picrorhiza kurroa*, *Swertia ciliata*, *Taraxacum*, etc. Hamayun (2006) studied the ethno-botanical wisdom of people of District Buner regarding the use of shrubs and trees. He enumerated ninety four different plant species used for different purposes. Bhatt and Negi (2006) evaluated the plants used for Medicare by the tribal people of the Jaunsar area of Garhwal Himalayas. Kunwar et al. (2006) examined the ethno-botany and traditional use of plants extracted from the vulnerable Alpine zone in Nepal. The results indicated that a large number of plant species are used as traditional medicines. Kunwar and Bussmann (2008) reported the indigenous knowledge of communities living in Nepal Himalayas. The study reported that nearly 55 % of the flora had medicinal value. Dhyani et al. (2010) generated the database on Ethno-botanical aspects of *Hippophae salicifolia* D. Don. which has immense multipurpose properties and is traditionally utilized for food, medicine, veterinary, fuel, fencing, agricultural tools and dye mordant. Tiwari et al. (2010) carried out study in the Nanda Devi Biosphere Reserve, Uttarakhand and documented the ethno-botanical uses of plants belonging to 40 genera and 26 families.

Pant and Samant (2010) undertook a trip in the Mornaula Reserve Forest of Kumaun, West Himalaya and evaluated the uses of plants in medicine and religious ceremonies. Phondani et al. (2010) conducted a study on the medicinal plants and knowledge of diseases among *Bhotiya* tribal communities in the *Niti* valley of *Alaknanda* catchment in Central Himalaya. Indigenous knowledge of local traditional healers was assessed and eighty-six plant species were identified which are used for the treatment of 37 common ailments. Kunwar et al. (2010) evaluated the traditional herbal medicine in far-west Nepal which has flourished in rural areas. Rokaya et al. (2010) documented the use of plants in traditional herbal medicine for treatment of human and veterinary ailments in Western Nepal. The

team documented 161 plant species used for treating seventy three human and seven veterinary ailments.

Srivastava et al. (1984) intensively explored the Gurez valley, Kashmir from ethno-botanical point of view. During the exploration 258 species of the plants were collected, out of which 105, species were used in Indian system of Medicine. Sand and Badola (1987) carried out an ethno-botanical study of Jammu and Kashmir, which occupies the top most position in North-western Himalayas. Communities living in the area were depending upon local medicinal plants for cure of various ailments. Khan et al. (2004) recorded ethno-medicinal value of twenty seven plant species belonging to twenty families from Uri, Kashmir Himalaya. Khan et al. (2004) recorded the ethno-medicinal value of twenty-seven plant species belonging to twenty families from Kashmir Himalaya. Kumar et al. (2009) made an attempt to explore the knowledge of the native of Kishtwar, Jammu and Kashmir for curing diseases. The team documented seventy one ethno-medicinally useful plants grown in the region. An ethno-botanical survey was carried out by Shah et al. (2012) in Tehsil Budhal of District Rajouri to gather information from tribal communities on the ethno-medicines uses of plants.

Gupta et al. (1980) extensively explored district Ladakh from ethno-botanical and phyto-chemical point of view. During the exploration, more than 800 plant species were collected from different forest ranges and included about 250 medicinal plants used by the tribals, local inhabitants and folk healers. Gupta et al. (1981) carried out ethno-botanical and phyto-chemical screening of seventy High Altitude Plants gathered from Ladakh. Padam et al. (2000) studied twenty-two medicinal plants from Sapi Valley of Kargil district, Ladakh Himalayas, which are traditionally used for the treatment of various ailments in *Amchi* system of medicine.

The Sikkim Himalayas were explored by Srivastava and Kapahi (1991) and about 400 plant species of medicinal and aromatic values were found to be useful. Maiti et al. (2003) gathered information on medicinal uses of fifteen types of tubers, rhizomes or roots used by *Lepchas*, *Nepalese* and *Bhutias* medicine for different diseases and health care. Dolui et al. (2004) documented traditional methods of treatment among rural societies of Meghalaya. Maity et al. (2004) gathered information on medicinal uses of fifteen types of tubers, rhizomes or roots used for different diseases and health care by the inhabitants of North Sikkim. Acharyya and Sharma (2004) studied 35 medicinal plant species, from 35 genera belonging to 30 families in Assam. Folklore medicinal uses of 33 plant species belonging to 22 families used for various ailments among tribes of North Cachar Hills, Assam, were reported by Tamuli and Saikia (2004). Das et al. (2005) and his associates collected information on the use of *Jatropha curcus* for the treatment of dysmenorrhoea by the Koch-Rajbongshi tribe in Nalbari district of Assam. Ethno-botanical studies carried out by Khumbongmayum et al. (2005) in four sacred groves of Manipur revealed therapeutic applications of 120 plant species for the treatment of common ailments like skin disorders, ulcer, rheumatism, bronchitis, etc. Bhardwaj and Gakhar (2005) carried out ethno-botanical studies in the state of

Mizoram and documented the usage of wild plants by the native people for cure of cuts, wounds and blood-clotting properties of plants.

Jamir and Lal (2005) reported the traditional method of treating ailments using different vertebrates and invertebrates and/or their products by *Naga* tribes. Kala (2005) investigated medicinal plants used by the *Apatani* tribe of Arunachal Pradesh and documented 158 medicinal plant species used by them. In 2005, Kalita and his associates studied the plant and animal based folk medicine used by people of Dibrugarh district for treatment of ascites, body pain, carbuncle, diabetes, epilepsy, gastritis, obesity, piles, pimples and urinary tract infection. Medicinal value of herbaceous plants used by ethnic groups of North-Kamrup district of Assam was collected by Das et al. (2006). In a study carried out by Borah et al. (2006) in Dibrugarh district of Upper Assam, revealed the use of 38 plant species represented by 36 genera and 29 families for the treatment of various gastrointestinal diseases. In an ethno-botanical field survey carried out by Majumdar et al. (2006) documentation of medicinal use of 33 species of flowering plants used for the treatment of various ailments in the tribal areas of Tripura was done. An ethno-botanical study was carried out by Das and Tag (2006) in Arunachal Pradesh during which the use of medicinal plants was documented for the treatment of malaria, fever, bone fracture, anemia, snakebite, cancer, reproductive health, rabies, tuberculosis, diabetes and jaundice. Sajem and Gosai (2006) documented the traditional knowledge of medicinal plants used by the indigenous *Jaintia* tribes residing in few isolated pockets of northeast India. Nimachow et al. (2011) studied the ethno-medicines of *Aka* tribe residing in Arunachal Pradesh which play crucial role in the health care services of tribal society. Chakravorty et al. (2011) prepared a consolidated list of edible and therapeutic insects used in Arunachal Pradesh by two tribal societies. At least eighty one species of local insects were used as food among members of these two indigenous societies. Wangchuk et al. (2011) carried out ethno-botanical authentication and identification of Khrog-sman of Bhutan and identified the botanical names of 113 'Lower Elevation Medicinal Plants' described in the Bhutanese traditional medical texts.

Chauhan and Chauhan (1988) carried out ethno-botanical surveys in Trans-Giri Area of *Sirmour* District of Himachal Pradesh and documented use of wild medicinal and aromatic plants growing in the area. Srivastava et al. (1991) reported 41 plants together with their uses from Lahaul and Spiti, Himachal Pradesh. Meenakshi and Chauhan (2005) reported plant species with their ethno-botanical uses in Shilli Wildlife Sanctuary of Himachal Pradesh. Kanwar et al. (2006) carried out research in six villages of *Kangra* district of Himachal Pradesh to study the application of plants at household level for treating various kinds of ailments. Sharma et al. (2006) collected data on traditional phyto-therapeutic applications used by inhabitants of Spiti valley, a cold desert in western Himalayas. Rawat and Kharwal (2011) reported the use of 22 medicinal plants by traditional healers of district Mandi in curing gynaecological problems. Gautam et al. (2011) reported the diversity of plant resources of Bilaspur district of Himachal Pradesh for their medicinal, traditional and edible uses. About 10 types of diseases related to stomach, mouth, cough, cold, skin, blood, vitality and strength,

bones, muscles, and other like memory, swelling etc., were found to be cured by using the plant based medicines. The studies carried out by different researchers not only bring into limelight various techniques and methods opted by people for getting rid of disease, but also focus on their traditional wisdom and skills.

Thus, the sustenance of indigenous system of medicine depends on the accessibility of resources and is practiced among all Himalayan communities for curing various types of health disorders. However, different communities have distinct ethno-medico-religious practices which continue even though contemporary Medicare is available to them. Hence it would be wise to grow this arena of knowledge widely so as to develop a new horizon in the medical field.

## References

- Acharyya, B. K., & Sharma, H. K. (2004). Folklore medicinal plants of Mahmora area, Sivasagar district, Assam. *Indian Journal of Traditional Knowledge*, 3(4), 373–382.
- Bannerman, R. H. O., Burton, J., & Ch'en, W. C. (1983). *Traditional medicine and health care coverage: A Reader for health administrators and practitioners*. Geneva: World Health Organization.
- Bhardwaj, S., & Gakhar, S. K. (2005). Ethno-medicinal plants used by the tribals of Mizoram to cure cuts and wounds. *Indian Journal of Traditional Knowledge*, 4(1), 75–80.
- Bhatt, V. P., & Negi, G. C. S. (2006). Ethno-medicinal plant resources of Jaunsari tribe of Garhwal Himalaya, Uttaranchal. *Indian Journal of Traditional Knowledge*, 5(3), 331–335.
- Borah, P. K., Gogoi, P., Phukan, A. C., & Mahanta, J. (2006). Traditional medicine in the treatment of gastrointestinal diseases in upper Assam. *Indian Journal of Traditional Knowledge*, 5(4), 510–512.
- Chakravorty, J., Ghosh, S., Meyer-Rochow V.B. (2011). Practices of entomophagy and entomotherapy by members of the Nyishi and Galo tribes, two ethnic groups of the state of Arunachal Pradesh (North-East India). *Journal of Ethnobiology and Ethnomedicine*
- Chauhan, M., & Chauhan, N. S. (2005). Ethnobotanical studies in shilli wildlife sanctuary, Himachal Pradesh. *Ecology, Environment and Conservation*, 11(3/4), 395–398.
- Chauhan, V., & Chauhan, N. S. (1988). Ethno-botany of Trans-Giri Area of Sirmour district of Himachal Pradesh. *Bulletin Medico Ethno Botanical Research*, 3 and 4, 106–122.
- Das, A. K., & Tag, H. (2006). Ethno-medicinal Studies of the Khamti tribe of Arunachal Pradesh. *Indian Journal of Traditional Knowledge*, 5(3), 317–322.
- Das, N. J., Devi, K., & Goswami, S. R. (2005). Report on the treatment of dysmenorrhoea by the tribes of Nalbari district, Assam. *Indian Journal of Traditional Knowledge*, 4(1), 72–74.
- Das, N. J., Saikia, S. P., Sarkar, S., & Devi, K. (2006). Medicinal plants of North-Kamrup district of Assam used in primary healthcare system. *Indian Journal of Traditional Knowledge*, 5(4), 489–493.
- Dhyani, D., Maikhuri, R. K., Misra, S., & Rao, K. S. (2010). Endorsing the declining indigenous ethnobotanical knowledge system of seabuckthorn in Central Himalaya, India. *Journal of Ethnopharmacology*, 127, 329–334.
- Dolui, A. K., Sharma, H. K., Marein, T. B., & Lalhriatpuii, T. C. (2004). Folk herbal remedies from Meghalaya. *Indian Journal of Traditional Knowledge*, 3(4), 358–364.
- Gautam, A. K., Bhatia, M. K., & Bhadauria, R. (2011). Diversity and usage custom of plants of South Western Himachal Pradesh, India—Part I. *Journal of Phytology and Ethnobotany*, 3(2), 24–36.

- Gupta, O. P., Srivastava, T. N., Gupta, S. C., & Badola, D. P. (1980). An ethno-botanical and phyto-chemical screening of high altitude plants of Ladakh Part—I. *Bulletin Medico Ethno Botanical Research*, 3, 301–317.
- Gupta, O. P., Srivastava, T. N., Gupta, S. C., & Badola, D. P. (1981). Ethno-botanical and phyto-chemical screening of high altitude plants of Ladakh-II. *Bulletin Medico Ethno Botanical Research*, 2(1), 67–88.
- Gurmet, P. (2004). Sowa-Rigpa: Himalayan art of healing. *Indian Journal of Traditional Medicine*, 3(2), 212–218.
- Hamayun, M. (2006). Ethno-botanical studies of some useful shrubs and trees of district Buner, NWFP, Pakistan. *Indian Journal of Traditional Knowledge*, 5(3), 407–412.
- Jamir, N. S., & Lal, P. (2005). Ethnozoological Practices among Naga Tribes. *Indian Journal of Traditional Knowledge*, 4(1), 100–104.
- Stephan, J. (1983). A profile of traditional practices in the W.H.O. regions. In R. H. Bannerman et.al. (Eds.), *Traditional medicine and healthcare coverage*. Geneva: World Health Organisation.
- Kala, C. P. (2005). Ethno-medicinal botany of the Apatani in the Eastern Himalayan region of India. *Journal of Ethnobiology and Ethnomedicine*, 1, 11. Retrieved February 2013, from doi:[10.1186/1746-4269-1-11](https://doi.org/10.1186/1746-4269-1-11)
- Kanwar, P., Sharma, N., & Rekha, A. (2006). Medicinal plants use in traditional healthcare systems prevalent in Western Himalayas. *Indian Journal of Traditional Knowledge*, 5(3), 300–309.
- Khan, Z. S., Khuroo, A. A., & Dar, G. H. (2004). Ethno-botanical survey of Uri, Kashmir Himalaya. *Indian Journal of Traditional Knowledge*, 3(4), 351–357.
- Khumbongmayum, A. D., Khan, M. L., & Tripathi, R. S. (2005). Ethno-medicinal plants in the sacred groves of Manipur. *Indian Journal of Traditional Knowledge*, 4(1), 21–32.
- Kumar, M., Paul, Y., & Anand, V. K. (2009). An Ethno-botanical study of medicinal plants used by the locals in Kishtwar, Jammu and Kashmir. *Ethnobotanical Leaflets*, 13, 1240–1256.
- Kunwar, R.M. & Bussmann, R. W. (2008). Ethnobotany in Nepal Himalaya. *Journal of Ethnobiology and Ethnomedicine*, 4, 24. doi:[10.1186/1746-4269-4-24](https://doi.org/10.1186/1746-4269-4-24)
- Kunwar, R. M., Kunwar, R. M., Nepal, B. K., Kshhetri, H. B., Rai, S. K., & Bussmann, R. W. (2006). Ethno-medicine in Himalaya: A case study from Dolpa, Humla, Jumla and Mustang districts of Nepal. *Journal of Ethnobiology and Ethnomedicine*, 2, 27.
- Kunwar, R. M., Shrestha, K. P., & Bussmann, R. W. (2010). Traditional herbal medicine in far-West Nepal: A pharmacological appraisal. *Journal of Ethnobiology and Ethnomedicine*, 6, 35.
- Maiti, D. C., Chauhan, A. S. & Maiti, G. (2003). Ethnobotanical notes on some unexploited plants used by Lepchas and Nepalese Communities of North Sikkim. In V. Singh & A. P. Jain (Eds.) *Ethno-botany and medicinal plants of India and Nepal* (Vol. 1). Jodhpur, India: Scientific Publishers.
- Maity, D., Pradhan, N., & Chauhan, A. S. (2004). Folk uses of some medicinal plants from North Sikkim. *Indian Journal of Traditional Knowledge*, 3(1), 66–71.
- Majumdar, K., Saha, R., Datta, B. K., & Bhakta, T. (2006). Medicinal plants prescribed by different tribal and non-tribal medicine men of Tripura state. *Indian Journal of Traditional Knowledge*, 5(4), 559–562.
- Narnag, S. & Mitra, M. (1998). Indigenous knowledge and the treatment of disease in Abujmarh. In *Contemporary studies in human ecology*. New Delhi, India: Kamla-Raj Enterprises.
- Nimachow, G., Joshi, R. C., & Dai, O. (2011). Role of indigenous knowledge system in conservation of forest resources-a case study of Aka tribes of Arunachal Pradesh. *Indian Journal of Traditional Knowledge*, 10(2), 276–280.
- Oudhia, P. (1995). Traditional knowledge about medicinal insects, mites and spiders in Chattisgarh, India. *Insect Environment*, 4, 57–58.
- Padam, G., Chaurasia, O. P., Singh, B., & Attery, D. P. (2000). Medico-botanical survey of Sapi valley of Kargil (Ladakh Himalayas). *Bulletin Medico Ethno Botanical Research*, 21(1 and 2), 1–10.

- Panday, H. P. (2004). Seed fume of *solanum surattense*: A traditional panacea for teeth and gums. *Indian Journal of Traditional Knowledge*, 3(2), 206–207.
- Pant, S. C., & Pandey, G. (1995). Ethno-botanical studies on medicinal flora in Tharu tribal pockets in Kumaon region in Uttar Pradesh. *Bulletin Medico Ethno Botanical Research*, 16(1&2), 1–120.
- Pant, S. S., & Samant, S. S. (2010). *Ethnobotanical Leaflets* 14, 193–217. Retrieved in February 2013.
- Perinchery, A. (2013). History of Indian healing traditions: A science and society initiative. Retrieved March 2013, from <http://news.ncbs.res.in/story/history-indian-healing-traditions>
- Phondani, P. C., Maikhuri, R. K., Rawat, L. S., Farooquee, N. A., Kala, C. P., Vishvakarma, S. C. R., et al. (2010). *Ethnobotanical uses of plants among the Bhotiya tribal communities of Niti valley in Central Himalaya*. India: *Ethnobotany Journal*. 8.
- Rawat, D. S., & Kharwal, A. D. (2011). Traditional phyto-remedies for gynecological complaints in 'Balh Valley', District Mandi (Himachal Pradesh), India. *Ethnobotanical Leaflets*, 16, 546–550.
- Rokaya, M. B., Münzbergová, Z. & Timsina, B. (2010). Ethnobotanical study of medicinal plants from the Humla district of western Nepal. *Journal of Ethnopharmacology*, 130: 3(9): 485–504.
- Sajem, A. L., & Gosai, K. (2006). Traditional use of medicinal plants by the Jaintia tribes in North Cachar Hills district of Assam, Northeast India. *Journal of Ethno-biology and Ethno-medicine*, 2, 33. doi:10.1186/1746-4269-2-33.
- Samal, P. K., Shah, A., Tiwari, S. C., & Agrawal, D. K. (2004). Indigenous healthcare practices and their linkages with bio-resource conservation and socio-economic development in central Himalayan Region of India. *Indian Journal of Traditional Knowledge*, 3(1), 12–26.
- Sand, B. N. & Badola, D. P. (1987). An Ethno-botanical study of J & K State of North-West Himalaya. *Bulletin Medico Ethno Botanical Research*, 8 (3&4), 147–154.
- Shah, A., Abass, G., & Sharma, M. P. (2012). Ethnobotanical study of some medicinal plants from Tehsil Budhal, District Rajouri, Jammu and Kashmir. *International Multidisciplinary Research Journal*, 2(6), 05–06.
- Sharma, P. K., Sethi, G. S., Sharma, S. K., & Sharma, T. K. (2006). Ethno-medicinal observations among the inhabitants of cold desert area of Himachal Pradesh. *Indian Journal of Traditional Knowledge*, 5(3), 358–361.
- Srivastava, T. N., & Kapahi, B. K. (1991). Resource survey of plants of potential economic value of Sikkim Himalayas. *Bulletin Medico Ethno Botanical Research*, 12(1–2), 1–11.
- Srivastava, T. N., Badola, D. P., Shah, D. C., & Gupta, O. P. (1984). Ethno-medico-botanical exploration of Gurez Valley Kashmir. *Bulletin Medico Ethno Botanical Research*, 5(1& 2), 15–54.
- Srivastava, T.N., Kapahi, B.K. & Sarin, Y.K. (1991). Ethno-botanical studies in Lahul and Spiti, Himachal Pradesh. *Ancient Science of Life*, 11 3(4), 126–130.
- Tamuli, P., & Saikia, R. (2004). Ethno-medico-botany of the Zeme Tribe of North Cachar Hills district of Assam. *Indian Journal of Traditional Knowledge*, 3(4), 437–441.
- Tiwari, J. K., Dangwal, L. R., Rana, C. S., Tiwari, P., & Ballabha, R. (2010). Indigenous uses of plant species in Nanda Devi biosphere reserve, Uttarakhand. *India Report and Opinion*, 2(2), 58–61.
- Unnikrishnan, E. (2004). *Materia Medica of the Local Health Traditions of Payyannur*. Retrieved February 2013, from <http://www.cds.ac.in/krpeds/publication/downloads/80.pdf>
- Wangchuk, P., Pyne, S. G., & Keller, P. A. (2011). Ethnobotanical authentication and identification of Khrog-sman (Lower elevation medicinal plants) of Bhutan. *Journal of Ethnopharmacology*, 134(3), 813–823. doi:10.1016/j.jep.2011.01.034.

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