

Ethnopaediatrics in Garhwal Himalaya, Uttarakhand, India (Psychomedicine and Medicine)

Jay Krishan Tiwari¹, Radha Ballabha¹ and Prabhawati Tiwari¹

1. Department of Botany, HNB Garhwal University, Srinagar Garhwal, Uttarakhand- 246 174, India
Authors E-mail: jktiwari31@rediffmail.com, radhekuniyal.2007@rediffmail.com,
ptiwari29@rediffmail.com

Abstract: Garhwal Himalaya has its peculiar topography, vegetation, people and traditions. In the remote areas traditional customs and beliefs are still maintained and modern trends are yet to reach, which provide interesting scope of ethnobotanical studies. The present paper pertains to typical practices in ethnopaediatrics in Garhwal Himalaya, India. The inhabitants use different plants in primary health care of children. Different charms and amulets associated with the common ailments of children have been discussed. [New York Science Journal 2010;3(4):123-126]. (ISSN: 1554-0200).

Key Words: Ethnopaediatrics, Garhwal Himalaya, indigenous knowledge, local communities.

1. Introduction

According to WHO approximately 80% of World population in developing countries depends on traditional medicines for primary healthcare (WHO, 2002) and in modern medicine too, nearly 25% are based on plant derived drugs (Tripathi, 2002). Garhwal Himalaya lying between the latitudes 29° 26' to 31° 28' N and longitudes 77° 49' to 80° 06' E (Figure 1) occupies an important place in Indian subcontinent. About 80% of the total population is rural and the inhabitants are called the Garhwalis or Paharis. Besides Garhwalis the area is inhabited by populations of different tribal communities such as Gujjars, Bhojas, Tharus, Koltas, Kinnaurians, Junsaris, etc. (Anonymous, 1961; Atkinson, 1882; Berreman, 1972; Joshi, 1929). They have their own cultures, medicines, foods, etc. and are well versed with valuable knowledge accumulated through a long period of experience. Even now they are dependent on the natural resources from the forests for their sustenance and for the treatment of various ailments.

The plants are still serving as remedies for various ailments in crude form, as modern medicine has not adequately armed the therapeutic arsenal of the natives of remote areas. The literature abounds in investigations on folk medicines in different parts of India (Jain, 1963; Jain and Kapoor, 2007; Rao and Jamir, 1982; Gaur *et al.*, 1985; Gaur, 1999; Tiwari, 1986; Maheswari, 2000; Singh *et al.*, 2002; Ayyanar and Ignacimuthu, 2005; Prusti, 2007; Semwal *et al.*, 2010) but little attention has been paid on plants used in ethnopaediatrics. Documentation of such practices is required in view of gradual disappearance of this knowledge in new generations. Therefore, an attempt has been made to record the indigenous uses of plants in

ethnopaediatrics particularly covering psychomedicinal aspects as practiced in remote areas of Garhwal Himalaya, India.

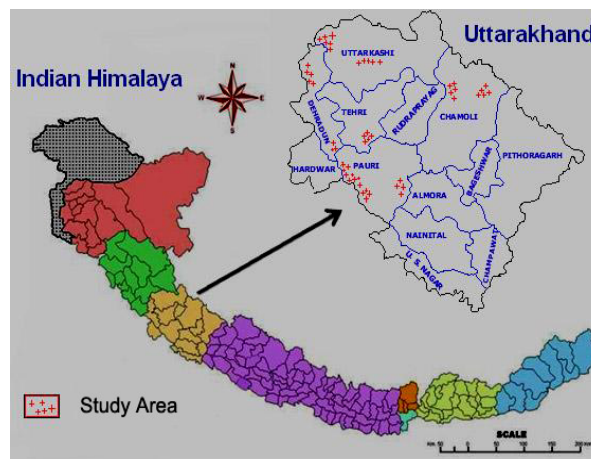


Figure 1. Map showing study area in Garhwal Himalaya

2. Methodology

Extensive field surveys were made in different villages of Garhwal Himalayan region of Uttarakhand. Information on plants used in paediatrics by the inhabitants was collected from peasants, shepherds, housewives, people practicing medicine and psychomedicine from different pockets of Garhwal Himalaya. The plant specimens have been deposited in the Garhwal University Herbarium (GUH). In the following text the botanical names have been followed by the vernaculars, the plant parts, preparation and the ailment in which particular plant is used.

3. Results & Discussion

The sole purpose of medicine or other practices of prevention and remedies is to lead healthy life and longevity. Therefore, it is not unusual that a number of other practices are adopted for the purpose which may not have a direct relation with the medicine (Sen Gupta, 1906; Van Wart, 1948).

The present study explored 45 plant species employed as medicine by the local communities in the different ailments of children, out of which 13 were used as psychomedicine (Table 1) and remaining 32 as medicine (Table 2). It is evident from the investigation that the local communities have own beliefs and practices regarding the use of herbal medicines with preventive and curative measures as suggested by the practitioners. The survey also reports that the properties of medicinal plants are known only to the traditional healers and few older persons of the community which generally do not reveal this knowledge to others.

Beside psychomedicine a good number of plants were used in medicine of children as household remedies. The common preparations were powder, paste, juice, decoction, infusion, etc. The herbal preparations were generally made up of single plant species. It has been observed that the diseases of children are treated somewhat different than that of adults.

The concept of health, diseases and treatment amongst the inhabitants varies with respect to their culture and settlements. The common theory of diseases implies that every illness which is not connected with visible influence is caused by breach of some taboo or hostile spirits. Such beliefs become more conspicuous when the inhabitants feel that medicine used for certain ailments is not responding, consequently they begin to depend on omens and totems, under the belief that physical troubles in the normal system of life are due to effect of supernatural powers. On such occasions, several peculiar psychomedicinal practices associated with specific hymns (Mantras) and apparatus (Tantras) are followed. Thus two systems of medicine exist in the area:

1. Using the medicine through hymns i.e. psychomedicine, and
2. Using the medicine directly i.e. general medicine.

Of these the formal is restricted to a selected band of practitioners the mystery men, who generally do not disclose the identity of plant or the process of activation, while the latter is used in the form of household remedies. In psychomedicine the plant is activated by the process.

Table 1. Plant species used in Psychomedicine.

Botanical Names	Vernacular	Part used	Uses
<i>Achyranthes aspera</i> L.	Sajji	Root	Exorcism
<i>Artemisia nilagrica</i> (Cl.) Pamp.	Kunja	Whole plant	Insanity
<i>Berberis aristata</i> DC.	Kingor	Root	Exorcism
<i>Betula utilis</i> D. Don	Bhujyar	Bark	Amulet
<i>Cuscuta reflexa</i> Roxb.	Akashlagula	Whole plant	Exorcism
<i>Echinops cornigerus</i> DC.	Kandara	Whole plant	Insanity
<i>Geranium wallichianum</i> D. Don ex Sweet	Ratanjot	Whole plant	Cholera
<i>Mallotus philippensis</i> (L.) Muell.	Ruina	Whole plant	Insanity
<i>Prunus cerasoides</i> D. Don	Payya	Bark	Amulet
<i>Trichosanthes tricuspidata</i> Lour.	Ilaru	Fruit pulp	Psoriasis
<i>Urtica ardens</i> Link.	Kandali	Whole plant	Exorcism
<i>Verbascum thapsus</i> L.	Setia Tamakhoo	Root	Jaundice
<i>Zanthoxylum armatum</i> DC.	Timru	Wood	Exorcism

3.1 Charms and amulets

Several charms and amulets are used either as prevention or cure to various ailments of children, most of which lack the explanation of properties attributed to them. Some of them are:

1. Amulets made of *Betula utilis* (Bhojpatra) or *Prunus cerasoides* (Paiyan) bark is hung around the neck of children or tied in the arm or waste for their well being.

2. Beeds made of soaked grains of wheat are tied on the hands, neck and feet of infants suppose to control diarrhoea and vomiting.
3. Beeds made of *Acorus calamus* rhizome are hung around the neck of children as prevention for diarrhoea and indigestion.
4. A small pouch containing seeds of *Trachyspermum ammi* is hung around the neck of children with the assumption that it strengthens the

digestion.

Table 2. Plant Species predominantly used in the ailments of children in Garhwal Himalaya, India.

Botanical Name	Vernacular	Part used	Preparation	Ailment
<i>Aconitum heterophyllum</i> Wall. ex Royle	Atis	Roots	Powder	Fever, stomachache
<i>Acorus calamus</i> L.	Bauj	Rhizome	Powder	Spasmodic pain
<i>Actaea acuminata</i> Wall. ex Royle	Mamira	Roots	Powder	Cough
<i>Allium wallichii</i> Kunth.	Pharan	Leaves	Paste	Indigestion
<i>Angelica glauca</i> Edgew.	Choru	Roots	Powder	Colic, flatulence
<i>Arnebia benthamii</i> (Wall. ex G. Don) John	Balchhari	Roots	Paste	Cuts and wounds
<i>Bergenia stracheyi</i> (Hook. f. et Thoms.) Engl.	Shilphari	Roots	Paste	Sores
<i>Boerhavia diffusa</i> L.	Punyara	Roots	Powder	Jaundice
<i>Carum carvi</i> L.	Siya jeera	Seeds	Powder	Constipation
<i>Delphinium daundatum</i> Wall. ex Hook. f.	Nirbishi	Roots	Paste	Sores
<i>Fumaria indica</i> (Haussk.) Pugsl.	Pitpapa	Whole plant	Powder	Fever
<i>Hedychium acuminatum</i> (Roscoe) Wall.	Kapporkachri	Roots	Powder	Dyspepsia
<i>Megacarpa polyandra</i> Benth.	Bharmola	Roots	Powder	Fever, stomachache
<i>Origanum vulgare</i> L.	Van tushi	Leaves	Powder	Whooping cough
<i>Paeonia emodi</i> Wall. ex Royle	Dhandaru	Roots	Paste	Skin diseases
<i>Paris polyphylla</i> Smith	Satwa	Roots	Powder	Diarrhoea
<i>Picrorhiza scrophulariflora</i> Pennell	Karwi	Roots	Decoction	Fever, stomachache, cough
<i>Rheum australe</i> D. Don	Dolu	Roots	Paste	Body swellings
<i>Rhododendron anthopogon</i> D. Don	Bhotiacha	Leaves	Infusion	Cough and cold
<i>Roylea cinerea</i> (D. Don) Baill.	Karwi	Leaves	Juice	Fever
<i>Saussurea lappa</i> (Decne.) Sch.-Bip.	Kuth	Roots	Paste	Skin diseases
<i>Swertia chirayita</i> (Roxb. ex Flem.) Karst.	Chirayita	Whole plant	Decoction	Fever, intestinal worms
<i>Taraxacum officinale</i> Wever	Dudhlla	Leaves	Paste	Wounds
<i>Terminalia chebula</i> Retz.	Haira	Fruits	Powder	Constipation
<i>Thalictrum foliolosum</i> DC.	Pilijari	Roots	Juice	Eye inflammations
<i>Thymus linearis</i> Benth.	Van ajwain	Leaves	Decoction	Cough
<i>Trachyspermum ammi</i> (L.) Sprague.	Ajwain	Seeds	Powder	Spasmodic pain
<i>Viola betonicifolia</i> Smith	Banafsa	Leaves	Decoction	Cough
<i>V. biflora</i> L.	Banafsa	Leaves	Decoction	Cough
<i>V. canescens</i> Wall.	Banafsa	Leaves	Decoction	Cough
<i>Zanthoxylum armatum</i> DC.	Timaru	Bark	Infusion	Toothache
<i>Zingiber officinale</i> Roscoe	Aadu	Rhizome	Juice	Cough

The information obtained from the local communities is useful for future researches in the field of pharmacology, in clinical and biological studies. In the recent years practice of folk medicine system has been diminishing fast among the people due to

modernization and little interest of younger generation towards inherent knowledge. This is leading to the loss of several customs, rituals and traditional healing art. Therefore, it is essentially warranted to make efforts for retrieval of folk knowledge, before it is wiped out.

Correspondence to:

J. K. Tiwari
Department of Botany
HNB Garhwal University, Srinagar Garhwal
Uttarakhand 246 174, India
Telephone: 01370-267417
Cellular phone: +919412949893
Email: jktiwari31@rediffmail.com

References

1. WHO, WHO Traditional Medicine Strategy 2002-2005. World Health Organization, Geneva, 2002.
2. Tripathi G. Indigenous Knowledge and Traditional Practices of Some Himalayan Medicinal Plants. In: Samant SS, Dhar U, Palni LMS (eds) Himalayan Medicinal Plants Potential and Prospects, Gyanodaya Prakashan, Nainital, 2002;151-156.
3. Anonymous. Report of Kolta Enquiry Committee. Govt. of U.P. Printing Press, Lucknow, 1961.
4. Atkinson ET. The Himalayan Gazetteer. Vols 1-10. Govt. Press Allahabad, 1882.
5. Berreman GD. Hindus of the Himalayas; Ethnography and Change. 2nd ed. Univ. of California Press, California, 1972.
6. Joshi LD. The Khasa family law in Himalaya districts of the United Provinces of India. Govt. Press, Allahabad, 1929.
7. Jain SK. Observations on ethnobotany of tribals of Madhya Pradesh. Vanyajati 1963;11:177-183.
8. Jain SK, Kapoor SL. Divine botany-universal and useful but under explored traditions. Indian J Traditional Knowledge 2007;6(3):534-539.
9. Rao RR, Jamir NS. Ethnobotanical studies in Nagaland-I, Medicinal plants, Eco. Bot. 1982;36: 176-181.
10. Gaur RD, Tiwari JK, Negi KS. Plants used for magico-religious practices by tribals of Garhwal Himalayas. Proceedings of 2nd Annual Workshop on MAB Projects. Dept. of Environment, New Delhi, 1985;88-95.
11. Gaur RD. Flora of the District Garhwal, Northwest Himalaya (with Ethnobotanical Notes). Trasmadia: Srinagar Garhwal, 1999.
12. Tiwari JK. Medicinal Plants of Garhwal Himalaya: An Ethnobotanical Survey. D. Phil. Thesis University of Garhwal, Srinagar Garhwal (U.P.), 1986.
13. Maheswari JK. Ethnobotany and Medicinal plants of Indian Subcontinent. Scientific Publishers, Jodhpur, India, 2000.
14. Singh AK, Raghubanshi AS, Singh JS. Medical ethnobotany of the tribals of Songhati of Sonbhadra district, Uttarpradesh, India, J. Ethnopharmacol., 2002;81:31-41.
15. Ayyanar M, Ignacimuthu S. Traditional knowledge of Kani tribals in Kouthalai of Tirunelveli hills, Tamilnadu, India, J. Ethnopharmacol. 2005;102: 246-255.
16. Prusti AB. Plants used as ethnomedicine by Bondo tribe of Malkangiri district, Orissa, Ethnobotany, 2007;19:105-110.
17. Semwal DP, Kala CP, Bhatt AB. Medicinal Plants and Traditional Health Care System of Vaidyas, Palsi and Others, A Case Study from Kedarnath Valley Of Uttarakhand, India. Medicinal Plants, 2010;2(1):51-57.
18. Sen Gupta NN. The Ayurvedic System of Medicine. Vols. 1-2. Neeraj Publishing House, Delhi, 1906.
19. Van Wart AF. The Indians of Maritime Provinces. Their disease and native cures. Canad. M.A. J., 1948;59:573-577.

05/02/2010