Folk therapy for eczema, bone fracture, boils, sores and gingivitis in Taragtal province of Uttaranchal

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The communication provides the findings of the folk therapy used for the treatment of eczema, bone fracture, boils, sores and gingivitis of Taragtal province at Ganai block of Almora district in Uttaranchal. The study area is extremely remote part of the district and is inhabited by majority of Kumaoni and few of them are Garhwali. The general population and the traditional herbal healers continue to rely on their folk system of medication for their healthcare. A total number of 15 participants from general public, 14 traditional herbal healers, and 24 patients suffering from above diseases were involved in the study as a source of information. The aim of the study is to explore the folklore therapy of this region for the treatment of eczema, bone fracture, boils, sores and gingivitis for the betterment of the common people and wider application.

Key words: Folk medicine, Garhwali, Kumaoni, Eczema, Bone fracture, Boils, Sores, Gingivitis, Uttaranchal

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Uttaranchal represents one of the significant traditional heritage inhabited by number of ethnic or aboriginal group mainly, Bhotia, Raji, Boxas, Tharu, Jonsari, Dharmis, Byansi, Joharis, etc. The state has its international boundaries with China (Tibet) in the North and Nepal in the East. In remote past, people resided in remote hilly areas had developed close rapport with the people of these countries for trade and exchange of knowledge in herbal medicines. Various studies on folklore practices of these tribal communities have been documented for the treatment of several diseases. However, very less attention has been paid to document the folk practices on common problems like eczema, bone fracture, boils, sores and gingivitis. Taragtal is a well known remote area in Almora district for folk medicinal practices and cross cultural diversity of Kumaoni and Garhwali. The knowledge and expertise in folk remedies conserved by these peoples need to be documented and investigated for modern drug therapeutics. Due to lack of modern medical facilities, 60–70% populations of these villages still depend on the folk therapy for their healthcare. During 2002–2003 expedition to Kumaon Himalaya, a survey study on the folk therapy of eczema, bone fracture, boils, sores and gingivitis has been conducted and detail information collected are presented.

Taragtal, the study area is about 96 km North of Almora city in Ganai block of Uttaranchal state. The area of the study includes several villages, viz. Barao gaon, Dhanad, Baskani, Palie, Basarkhet, Bairchua, Kalyani, etc. altitude ranging between 1000-3000 m from sea level. The temperature varies from 9–32°C in summer and 4.0–15°C in winter. The average rainfall is about 828 mm. The main occupation of the inhabitants is agriculture, handicraft, selling of agricultural instruments from forest produce and collection of raw materials for pharmaceutical values from wild resources. Due to lack of proper modern medical facilities 60–70% populations of these villages still depend on the folk therapy for their healthcare. The study area also represents various evergreen and deciduous tree components dominated with conifers either from pure strands or occur mixed with broad leave species. The important dominating tree elements are Pinus roxburghii and Quercus leuchotrichophora followed by Alnus nepalensis, Bombax ceiba, Cupressus sempervirens, Celtis ausrtralis, Dendrocalamus strictus, Grewia optiva, juglans regia, Melia azedarach, etc. Whereas,

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Berberis spp, Callicarpa macrophylla, Cryptolepis buchananii, Dioscorea spp, Lyonia ovalifolia, Pyracantha crenulata, Rubus ellipticus, Tinospora cordifolia, Verbascum thapsus, Zanthoxylum armatum, etc. are the common shrubby and climber elements found within this locality. Acorius calamus, Ajuga bracteosa, Bergenia ciliata, Centella asiatica, Geranium wallichianum, Solanum incanum, Swertia angustifolia, Urtica dioica, Valeriana jatamansii etc. are the other source of medicinal herbs for herbal practitioners and traders.

Methodology

The plant materials used in folk therapy of eczema, bone fracture, boils, sores and gingivitis (Table 1) are enumerated with botanical name, family, local name (s) and uses. Plant materials used during the treatment were collected from the wild resources. The Flora of district Garhwal, Northwest Himalaya was consulted for their identification. Voucher specimens are housed in departmental herbarium of Central Drug Research Institute (acronym-CDRI) Lucknow. Folklore therapeutic information reported in the paper are collected from three groups of local participants comprises 15 participants from general public (Gn), 24 patients suffered with the problems (Pt) and 14 traditional herbal healers (Th). Among them Mr Prem singh, and Mr Mohan Singh, Village Basarkhet (Taragtal), Mr Chinta Giri, and Mr Dharm Giri, Village Quarali, (Ganai), Mr Govind Singh Kirola, Village Basbhida (Ganai), Mrs Develi Devi, Village Rampur (Ganai) and Mr Teg Singh Barao gaon (Ganai) were the main participants (Vaidyas) used as a source of informants during the study.

Folklore therapeutics on eczema, bone fracture, boils, sores and gingivitis were investigated in three groups of participants at Taragtal province of Almora district in Uttaranchal. The first group comprised 15 members of general public (Gn) from 7 villages (Baskani, Paile, Basarkhet, Bairchuwa, Barao gaon, Dhanad and Kanayali) aged about 25-70 yrs. This group took part in the initial discussion for providing the basic information on geographical situation of the areas, language used for discussion, socioeconomic status of the inhabitants, their healthcare problems and expertise about the traditional herbal healers (Vaidyas) involved actively in folk therapy within Taragtal province. The second group contained 14 traditional healers (Th) aged about 60-70 yrs had supplied the detailed therapeutical information on these diseases and plants used for the treatment. All of them were well experienced in their profession and inherited this knowledge from their ancestors. The third group was of 24 patients (Pt) aged in between 15–50 yrs, who were suffering with these problems and have undergone for the treatment. All these three groups were approached individually and interviewed. The detailed information collected from these groups is discussed (Table 1).

Results and discussion

In the province of Taragtal, both the general population and the traditional healers are still continuing to rely on plant based folk remedies. During the study, initially the herbal healers showed non-cooperation as they felt that they will loose their secretes by sharing the formulations of these diseases. By making several attempts & requests and sharing of knowledge, gradually they were motivated to share their formulations on these diseases. The information collected from one traditional herbal healer (Vaidya) was verified from the other Vaidyas of another village. All the information was found to be almost same with some dissimilarity in plants local name and parts used for the treatments. Information on the plant species reported for the treatment of sore, bone fracture, and boils have also been reported earlier from other regions. A comprehensive list of

<table>
<thead>
<tr>
<th>Plant name, family &amp; local name</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dicliptera bupleuroides Nees, (Acanthaceae)</td>
<td>Crushed fresh leaves are applied gently on the effected portion of the body thrice a day for one week in eczema.</td>
</tr>
<tr>
<td>Kuthi, Pateev, Sommi</td>
<td></td>
</tr>
<tr>
<td>Ulmus wallichiana Planchon, (Ulmaceae)</td>
<td>Fresh stem bark paste of Ulmus wallichiana mixed with Cuscuta europaea in a ratio of 4:1 is applied on fractured bone part thoroughly and tightened with thin cloth by giving support with a hard cardboard paper and allow the patient bed rest for 30-45 days to get cured.</td>
</tr>
<tr>
<td>Chamor-mao, Mairu,</td>
<td></td>
</tr>
<tr>
<td>Cuscuta europaea L (Cuscutaceae)</td>
<td>Young stem paste is applied gently on and around boils twice a day for one week to get complete cure</td>
</tr>
<tr>
<td>Akash bel, Akash lagali</td>
<td></td>
</tr>
<tr>
<td>Premna mucronata Roxb., (Verbenaceae)</td>
<td>Fresh leaf decoction is used as regular mouth wash for 3-5 days or until recovery from sores &amp; gingivitis.</td>
</tr>
<tr>
<td>Againbai, Agnimatha</td>
<td></td>
</tr>
<tr>
<td>Callicarpa macrophylla Vahl., (Verbenaceae)</td>
<td></td>
</tr>
<tr>
<td>Dahya</td>
<td></td>
</tr>
</tbody>
</table>
211 ethnobotanically important wild plant species of Western Himalaya including 4 species, i.e. *Boehmeria platyphylla*, *Debregeasia salicifolia*, *Ulmus wallichiana*, and *Prunus cerasoides* are also reported for fractured bone healing. Such kinds of similarities in other region of the country support the view and strengthen the folk claims reported. In developing countries, where modern health services are limited, the plant based folk medicines enjoy a respectable position. Information from ethnic or indigenous traditional medicine has played a vital role in discovering of novel products from plants as chemotherapeutic agents. In true sense the ethnic and rural inhabitants having deep association with the plants and their medicinal uses, are the key source to provide the basic information to find out the lead molecules in modern drug discovery programme. To enrich and conserve the folk tradition of the country much more works have to be done on the legislation of traditional knowledge and implementations of equitable sharing of benefits arising out of the use of such kinds of knowledge innovation and practice of bioresources for the conservation of their socioeconomic benefits of ethnic and rural people. The study has highlighted the scope of potential research for the researchers to test the efficacy of folk remedies for their wider application, and prescription of efficient and save folk remedies at the primary healthcare level.

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**References**