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MEDICINAL PLANTS USED BY TRADITIONAL HEALERS IN POONCH DISTRICT OF JAMMU AND KASHMIR

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ABSTRACT:

An ethno medical survey was undertaken to collect information from traditional healers on the use of medicinal in Poonch Distt of Jammu and Kashmir during July 2011 to December (2011). The indigenous Knowledge of local traditional healers and the native plants used for medicinal purposed were collected through questionnaire and personal interviews during fields trips.

The traditional healers total used 65 (species) of pants distributed in 56 (genera) belonging to 32 (families) to treat various disease. The documented medicinal plants were mostly used to cure skin disease, poison bites stomachache and nervous disorder. The study showed that many people in the studied parts of Poonch district still continue to depends on medicinal plants at least for the treatment of primary health care in the study the most dominant family was *euphorbiceae* and leaves were most frequently used for the treatment of disease.

KEY WORD: Medicinal plants, various diseases, *Euphorbiaceae*, Traditional Healers, Distt Poonch, Jammu and Kashmir.

INTRODUCTION:

Today according to the world Health organization (WHO), as many as 80% of the world's people depend on traditional medicine for their primary healthcare needs. There are considerable economic benefits in the development of indigenous medicines and in the use of medicinal plants for the treatment of various diseases [8]. Due to less communication means, poverty, ignorance and unavailability of modern health facilities, most people especially rural people are still forced to practice traditional medicines for their common day ailments. Most of these people form the poorest link in the trade of medicinal plants [9]. A vast knowledge of how to use the plants against different illnesses may be expected to have accumulated in areas where the use of plants in still of great importance [10].

Ethnobotany is not new to India because of its rich ethnic diversity. Jain [13] printed out that there are over 400 different tribal and other ethnic groups in India. The tribals constitute about 7.5 percent of India's population. During the last few decades there has been an increasing interest in the study of

medicinal plants and their traditional used of different parts of India and there are many report on the use of plants in traditional healing by either tribal people or indigenous communities of India [14-21]. Apart from the tribal groups, many other forest dweller s and rural people also posses' unique knowledge about plants [13].

Plants have been used in traditional medicine for several thousand years [1]. The knowledge of medicinal plants has been accumulated in the course of many centuries based on different medicinal systems such as ayurveda, Unani and Siddha. In India, it is reported that traditional healers used 2500 plants species and 100 species of plants serve as regular sources of medicine [2]. During the last few decades there has been an increasing interest in the study of medicinal plants and their traditional used in different parts of the world [3-7]. Documenting the indigenous knowledge through ethnobotanical studies in important for the conservation and utilization of biological resources.

The objective of this study was to interact with local traditional healers and document their knowledge on medicinal plants, their, usage and the types of diseases treated etc. Poonch is one of the 22 districts in Jammu & Kashmir and the traditional healing systems are still popular here. The present-day traditional healers are very old. Due to lack of interest among the younger generation as well as their tendency to migrate to cities for lucrative jobs, wealth of knowledge in this the area is declining. So far no systematic ethnobotanical survey has been made in this area and this is the first report on the medicinal plants used by the local traditional healers. During the course of exploration of ethnomedicinal plants of the district, the information's have been gathered from the healers of rural village found near forest areas where the people depend mostly on forests for their need and sound knowledge of herbal remedies.

MATERIALS AND METHODS:

Jammu and Kashmir is 6th largest state of India as per area (222, 236 Sq. Km.) 17th largest state as per population of India. Area under illegal occupation by Pakistan is 78, 114 Sq Kms and 5180 Sq km illegally handed over by Pakistan to China and 37-55 Sq. Kms under illegal occupation of China. The J & K state is located between 320.15 and 370.05 north latitude and 720.35 east and 830.20 east longitude. It is 640

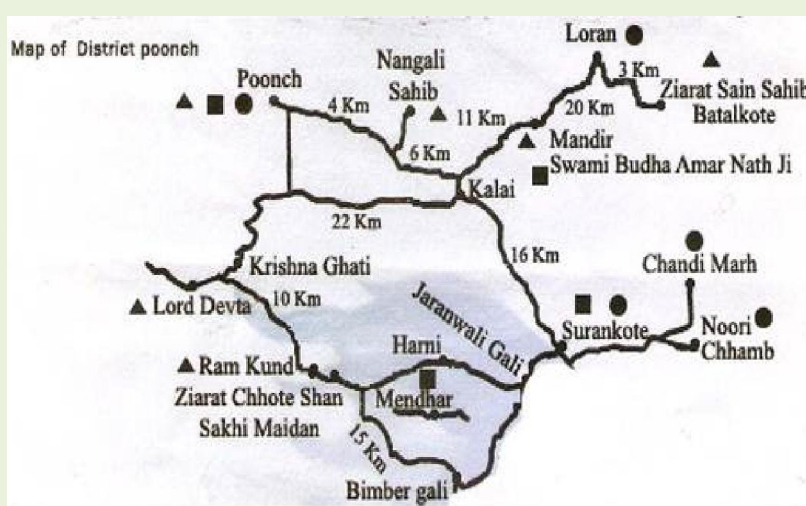


Figure 1: Location of the study area

Kms in length from north to south 480 Kms from east to west. As per geographical position to its east is Tibet to its north China and Afghanistan to its west is Pakistan. The total under forest area is (20.441 Sq

km.) (Excluding the area under illegal occupation of Pakistan to Chinna) i.e. 9.95 % of the state area forest cover area in Jammu division 45.89 % Kashmir division 50.97% Ladkha division. 3.14%.

Poonch district is location and direction. 33.97° N. 74.1° E It is located to west J & K Fig. 1.

This district is situated on the northwest coast of Jammu and Kashmir which is the boundaries line of Pakistan. In the year of 1965 30% of Poonch district has gone in the custody of Pakistan. In this district the major crop cultivated is paddy and Zea-mays and followed by tomato cereals and pulses. Poonch district is a hilly district and different types of spots are found in this district i.e. Budha Amaranth forest, Noori chamb, Krishna Ghati forest area, Dherakigali. All of the tourist spots.

Local Traditional Healers:

Local tradition healers having practical Knowledge of plants medicine were interviewed 10 village of the district during July 2011 and December 2011. During the course of study five field trips were carried out in the study are totaling 46 days. Method of selecting informants depended upon the distribution of local people having Folk Knowledge. These informants were traditional healers. Themselves or had traditions of healing in their families and had knowledge of the medicinal use of plants. Fuel wood from the surroundings was the main energy source of cooking and eating. This knowledge has been transmitted orally from generation to generations; however it seems that it is vanishing from the modern society since younger people are not interested to carry on this tradition.

Interview with traditional healers :

Adopting the method of Jain [28], Ethnomedicinal data were collected through general conversations with the informants. The questionnaires were used to obtain informants on medicinal plants with their local names, parts, used, mode of preparations and administrations. A Total no of 29 informants, Comprising 20 males and 9 females were identified between the ages of 54 and 72. They were selected based on their Knowledge of medicinal plants either for self-medications or for treating others informants were asked to come to field and show the plants with local name, the species mentioned by the informants were taxonomically identified.

RESULTS AND DISCUSSION:

The present investigation comprises 65 species of ethnomedicinal plants distributed in 56 genera belonging to 32 families. For each species botanical names, family, local name, parts used, methods of preparation, administration and ailments treated are provided. Traditional healers are using these plants to cure diseases related to skin problems, cold, fever, cough, headache, diarrhoea, fertility problems, toothache, stomach ache, wounds, diabetes, rheumatism, asthma, dysentery, small pox, bone fractures, earache, hair loss and poison (snake, scorpion and insect) bites.

Herbs (31 species) were found to be the most used plants (figure-2) followed by trees (17 species), shrubs (10 species and climbers (17 species) in descending order). The most dominant families in the study were *Euphorbiaceae* (7 species), *Verbenaceae* (5 species), *Caesalpiniaceae*, *solanaceae* and *Apocynaceae* (4 species), *Acanthaceae*, *Asclepiadaceae*, *Asteraceae*, *Fabaceae*, *lamiaceae*, *Malvaceae*, *Moraceae*,

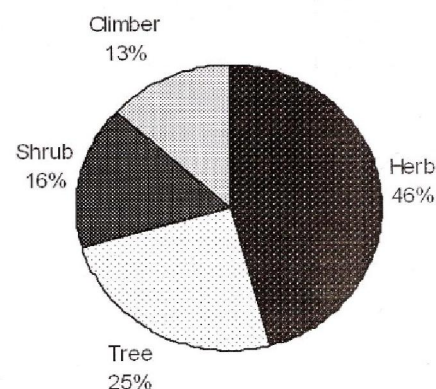


Figure 2: Habit.

Rubiaceae and *Rutaceae* (3 species). Other families with low

number are listed below : *Amaranthaceae*, *Anacardaceae*, *Convolvulaceae*, *Lauraceae*, *Meliaceae*, *Poaceae*, *Nyctaginaceae*, *Myrtaceae*, *Moringaceae*, (1 species)

Local traditional healers are commonly using the following plants to treat more number of diseases. They are : *Vitex negundo*, *Ocimum gratissimum*, *Solanum nigrum*, *Azadirachta indica*, *Pongamia pinnata*, *Solanum trilobatum*, *Adhatoda vasica*, *Phyllanthus emblica*, *Ocimum sanctum*, *Murraya koenigii*, *Ficus benghalensis* and *Cassia auriculata*. Preference for their use may be related to their availability.

Different parts of medicinal plants were used as medicine by the local traditional healers. Among the different plant parts, the leaves were most frequently used for the treatment of diseases followed by whole plant parts, fruit, stem, root, stem and root bark, seed, flower and latex. The methods of preparation (Figure-3) fall into four categories, viz.: plants applied as a paste (38%), Juice extracted from the fresh plant parts (24%), powder made from fresh or dried plant parts (20%), some fresh plant parts (6%), and decoction (12%).

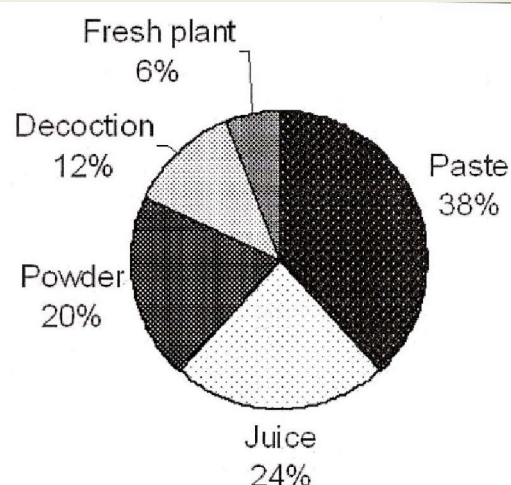


Figure 3: Method of preparation

External applications (mostly for skin disease, snake bites

and wounds) and internal consumption of the preparation were involved in the treatment of disease.

It was observed that, most of the remedies consisted of single plant part and more than one method of preparation. However, many of the remedies consisted of different parts of the same plant species to treat single or more disease. For example, *Andrographis paniculata* – leaf paste is used to treat poison bites and leaf powder is used to treat diabetes; *Gymnema sylvestre* – root powder is used to treat poison bites and leaf powder is used to treat diabetes; *Ricinus communis* – juice extracted from leaves is used to increase secretion of milk and oil obtained from seeds is used to treat stomach ache; *Azadirachta Indica* – leaf paste is used to treat small pox, rheumatism and skin diseases and young twigs are used as tooth brush; *Ficus benghalensis* – stem latex is used to treat heel cracks and young twigs are used as tooth

brush; *Moringa oleifera*- boiled leaves are used to reduce body heat, to treat indigestion and eye diseases and flowers are used to cool the eyes and increases sperm production ; *Zizyphus mauritiana* – decoction of leaf is used to get relief from body pain and bark powder is used to treat wounds; *Solanum torvum* – Juice extracted from the leaf is used to reduce body heat and unripe fruits are used to strengthen the body.

Moreover a single plant is used for more than one disease. For example, *Andrographis paniculate* (Constipation and asthma), *Aerva lanata* (Cough, sore throat and wounds), *Gymnema sylvestris* (diabetes and scorpion bites), *Wattakaka volubilis* (rheumatic pain, cough, fever and sever cold), *Sphaeranthus indicus* (skin diseases and piles), *Heliotropium indicum* (wounds and skin affection), *Cassia absus* (wounds and skin affections), *Cassia occidentalis* (scabies and bone fractures), *Terminalia arjuna* (wounds, headache and tooth infections), *Mukia maderaspatana* (cold and cough), *Cyperus rotundus* (milk secretion and scorpion bites), *Euphorbia hirta* (wounds and lip cracks), *Phyllanthus emblica* (cold and cough), *Ricinus communis* (milk secretion ad stomachache), *Clitoria ternatea* (eye disease and headache), *Cinnamomum verum* (cough, dysentery and body cooling), *Aloe vera* (hair loss and good sleep), *Azadirachta indica* (small pox, rheumatism and skin disease), *Moringa oleifera* (body heat, indigestion, eye diseases and to increases sperm production), *Syzygium cumini* (swellings and body Heat), *Zizyphus mauritiana* (body pain and wounds), *Citrus aurantifolia* (fever, Headache and cold), *Cardiospermum halicacabum* (throat infection and headache), *Solanum torvum* (to reduce body heat and to strengthening the body), *Solanum Trilobatum* (cough and itching) and *Vitex negundo* (headache, fever, cold and cough) and these recipes are prepared using different ingredients of non-plant origin such as water, salt, honey, etc.

Common health problems in the sites of the study area were skin problems such as wounds, cuts, burns and skin diseases and the largest number of the remedies (wounds- 16 remedies and skin disease-9 remedies) was used to treat these troubles. Several studies have enumerated the plants used for wound healing and skin diseases in various parts of the world [14,32-34]. 24 remedies were used to alleviate problems of the respiratory system such as cold, cough and asthma. Most of the plants in *Lamiaceae* were used to treat cold, cough, fever, headache and asthma. Ghorbani [35] reported 16 plant species that were used for respiratory diseases in north Iran and safety and efficacy of the treatments for respiratory tract infections were reviewed [36]. In the present study eight remedies (*Terminalia arjuna*, *leucas aspera*, *Ocimum sanctum*, *sida acuta*, *Citrus aurantifolia*, *Cardiospermum halicacabum*, *Lantana camara* and *Vitex negundo*) were used to get relief from headache. Recently Ignacimuthu et al [37] reported that *ceropogia candelabrum*, *pergularia daemia* and *Vitex negundo* were used by tribals for the treatment of headache.

Traditional healers of Poonch district used nine plant species to treat stomach problems (three plants to treat stomachaches and six plants to cure digestive problems). In north-Western Patagonia the people of Curruhuinca community were affected with digestive problems and the highest fidelity level was found for species utilized for treating digestive ailments [38] and Ghorbani [35] reported that there were 48 plants for the treatment of gastrointestinal disorders in north of Iran. The tribal people of western Madhya Pradesh of India used 13 plants for the treatment of jaundice [19]. In the present study only *Phyllanthus amarus* was used for the treatment of jaundice, *abutilon indicum*, *Azadirachta indica*, *figus benghalensis* and *Terminalia arjuna* were used to treat dental problems. Various studies have reported on the indigenous use of medicinal plants in the treatment of oral diseases ([39] & [21]). *Andrographis paniculata*, *catharanthus roseus* and *Gymnema sylvestre* were used to treat diabetes by the local traditional healers. Chherti et al [15] reported that the tribal people of Sikkim and Darjeeling Himalayan region in India utilized 37 species of plants belonging to 28 different families as antidiabetic agents.

CONCLUSION:-

The survey indicated that, the study area has plenty of medicinal plants to treat a wide spectrum of human ailments. Earlier studies on traditional medicinal plants also revealed that the economically backward local and tribal people of Jammu and Kashmir prefer folk medicine due to low cost and sometimes it is a part of their social life and culture [40-45]. It is evident from the interviews conducted in different villages; knowledge of medicinal plants is limited to traditional healers, herbalists and elderly persons who are living in rural area. This study also points out that certain species of medicinal plants are being exploited by the local residents who are unaware of the importance of medicinal plants in the ecosystem. This study concluded that even though the accessibility of western medicine for simple and complicated diseases is available, many people in the studied parts of Poonch district is still continue to depend on medicinal plants, at least for the treatment of some simple diseases such as, cold, cough, fever, headache, poison bites, skin diseases and tooth infection. Well-knowledge healers have good interactions with patients and this would improve the quality of healthcare delivery. The present-day traditional healers are very old. Due to lack of interest among the younger generation as well as their tendency to migrate to cities for lucrative jobs, there is a possibility of losing this wealth of knowledge in the near future.

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REFERENCES:

1. Abu- Rabia A: Urinary diseases and ethnobotany among pastoral nomads in the middle East. *Journal of Ethnobiology and Ethnomedicine* 2005. ,1:4:
2. Pei SJ : Ethnobotanical approaches of traditional medicine studies : some experience from Asia. *Pharmaceutical Bioloty* 2001, 39:74-79.
3. Lev E: Ethno-diversity within current ethno-pharmacology as part of Israeli traditional medicine – A review. *Journal of Ethnobiology and ethnomedicine* 2006., 2:4:
4. Gazzaneo LR, Paiva de Lucena RF, Paulion de Albuquerque U : Knowledge and use of medicinal plants by local specialists in an region of atlantic forest in the state of pernambuco (Northeastern Brazil). *Journal of Ethnobiology and Ethnomedicine* 2005., 1:9:
5. Al-Qura'n S: Ethnobotanical survey of folk toxic plants in southern part of Jordan. *Toxicon* 2005, 46:119-126 .
6. Hanzaki N, Tamashiro JY, Leitaio-Filho H, Gegossi A: Diversity of plant uses in two caicaras communities from the Atlantic forest coast, Brazil. *Biodiversity and conservation* 2000, 9:597-615.
7. Rossato SC, Leitaio-Filho H, Gegossi A: Ethnobotany of Cai (Brazil). *Economic botany* 1999, 53:387-395.
8. Azaizeh H, Fulder S, Khalil K, Said O : Ethnomedicinal Knowledge of local Arab practitioner s in the Middle east Region. *Fitoterapia* 2003, 74 :98-108.
9. Khan AU : History of decline and present status of natural tropical thorn forest in Punjab. *Pakistan biological conservation* 2002, 63 : 210-250.
10. Dialoo D, Dveem B, Mahmoud MA , Berge G, Paulasen BS, Maiga A: An ethnobotanical survey of herbal drugs of Gourma district, Mali. *Pharmaceutical Biology* 1999, 37:80-91
11. Principe P : Monetising the pharmacological benefits of plants. US. *Environmental protection agency, Washington, D.C.; 1991*
12. Busia K : Medical provision in Africa – Past and present. *Phytotherapy Research* 2005, 19:919 - 923.
13. Jain SK : Dictionary of Indian Folk Medicine and ethnobotany. *Deep publications, Paschim Viha, New Delhi. ; 1991.*
14. Chhetri DR, Parajuli P, Subba GC : Antidiabetic Plant used by Sikkim and Drjeeling *Journal of ethnopharmacology* 2005, 99 : 199-202.
15. Harsha VH, Hebbar SS, Hegde GR, shripathi V: Ethnomedical Knowledge of plants used by Kunabi Tribe of Karnataka in India. *Fitoterapia* 2002, 73:281-287.
16. Natarajan B, Paulsen BS: An ethnopharmacological study from Thane district, Maharastra, India : Traditional knowledge compared with modern biological science. *Pharmaceutical biology* 2000, 38 : 139 – 151.
17. Maruthi KR, Krishana V, Manjunatha BK, Nagaraja VP: Traditional medicinal palnts of Devanagera district, Karnataka with reference to cure skin diseases. *Environment and Ecology* 2003, 18:441-446.

18. Samvatsar S, Diwanji VB: Plant sources for the treatment of Jaundice in the tribal's of western Madhya Pradesh of India. *Uournal of Ethnopharmacology* 2000, 73:313-316.
19. Dwarakan P, Ansari AA: Ethnobotanical notes of valikadupatti and surroundings of Kollimalai of Salem district, Tamil Nadu. *Journal of Economic and taxonomic botany additional series* 1992, 10:495-499. *Return text*.
20. Ramachandran VS, Nair NC : Ethnobotanical observations on Irulars of Tamil Nadu, India. *Journal of Economic and taxonomic Botany* 1981, 2:83-190.
21. Jain SK, Rao RR: A handbook of field and herbarium methods. *Today and tomorrow printers and publishes. New Delhi; 1976*.
22. Ayyanar M, Ignacimuthu S: Ethnomedicinal Plants used by the tribals of Tirunelveli hlls to treat poisonous bites and skin diseases Indian. *Indian Journal of Traditional Knowledge* 2005, 4:229-236.
23. Ganesan S, Suresh N, Kesavan L: Ethnomedicinal Survey of lower Palni Hills of Tamil Nadu. *Indian Journal of Traditional Knowledge* 2004, 3:299-304.
24. Rajan S, Sethuraman M, Mukherajee PK : Ethnobiology of the Nilgiri Hills, India. *Phytotherapy – Research* 2002, 16:98-116.
25. Udayan PS, Sateesh G, Thushar KV, Indira B : Ethnomedicine of Chellipale comunit of Namakkal district, Tamil Nadu. *Indian Journal of Traditional knowledge* 2005, 4 : 437 – 442.