

Psycho Medicinal Uses of Some Indigenous Plants in Tehri Garhwal, Uttarakhand (Western Himalaya)

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ABSTRACT

Present investigations was carried out in different blocks of district Tehri Garhwal, (Uttarakhand) to study the folk or traditional uses of some indigenous plants for ailments of various psychological disorders. 30 plant species belonging to 24 families were identified from study area, which is used by local peoples. Some psychological demurs i.e. religious deities, devil soul, ghostly elements and super natural powers are common in hills, and these demurs caused various psychological disorders. Even peoples of hills region depend on modern allopathic medicine but because of their deep-rooted beliefs in religious metaphysical and ghostly elements of their villages, also believe on their traditional practices for ailments of some psychological disorders.

INTRODUCTION

Uttarakhand is known as Devbhoomi land of God. People living in the area are religious and spiritually inclined. Their beliefs are evident in the daily living routine and therefore people especially women suffering from various psychological disorders; are believed to be affected by the super natural powers and wrath of religious deities. People have been using different types of plants for ailments of psychological disorder for generations. Nowadays, traditional medicinal plants are extensively utilized for treating ailments ^[1]. Most of the population use traditional medicine for health care. Indigenous knowledge of medicinal plants is regarded as an important source for health care, entire the world ^[2]. Approximately 80% of world population in developing countries depends on traditional medicines for primary healthcare ^[3]. However, an oral uses of spiritual plants and their parts is to prone significant role in the treatment of various psychological disorders in Garhwal region of Uttarakhand. Traditional medical knowledge of plants and their uses by indigenous people are useful not only for conservation of inherited traditional medicine, but also for health development ^[4]. Psychological disorders primarily appear as abnormalities of thought, feeling or behavior, producing either distress or impairment of function ^[5]. As positive aspects of traditional medicine, researchers have mentioned diversity, flexibility, accessibility, relevance in developing countries, relatively low cost, and few side effects of medicinal plants ^[6]. According to the local peoples, wrath of various super natural powers and religious deities such as Devata, Bhoot (ghost), Seli, Chhaya, Dareoo, Massan etc. are common in Garhwal regions. They feel that supernatural powers have a negative impact in their life. To get rid of psychological diseases, people take the help of plants generated medicines to prone that a person from their community is being affected by supernatural powers. The people of community prone this to be true by claiming the same person who has affected by supernatural power, called "Baaki" (Traditional practitioner). They have extensive knowledge as use of plants and their parts to cure psychological disorders.

MATERIALS AND METHODS

Tehri Garhwal is a hill district of Uttarakhand state. It has 9 blocks i.e. Chamba, Jakhanidhar, Thauldhar, Pratapnagar, Kritinagar, Fakot (Narendernagar), Jounpur, Hindolakhhal (Devprayag) and Bhilangna, having total 1898 villages, among them 45 villages

(5 villages from each block) were selected for present investigation. Study is a result of extensive and intensive field surveys conducted in the area. Plant species were collected and authenticated in the department Botany, at HNBG Central University, Campus Badshahithaul, Tehri Garhwal. Information regarding the psycho medicinal uses of collected plants; gathered through direct observation, guided field walk, survey and semi-structured personal interviews from the local persons. Random sampling techniques were employed to choose traditional practitioners and common informants. Informant's demographic features including sex, age, and occupation were also taken into account. Eighty informants (35 males and 45 females) with different age groups 22 to 75 were interviewed from all the selected villages. 20 traditional practitioners (Baaki) from different villages and different age groups were also interviewed. The major part of the interviews focused on the local names of plants, their habits, remedy preparation methods and materials used during treatments. Data observed from informants and traditional practitioners during interviews were maintained for record and further investigation.

RESULTS AND DISCUSSION

The plants that used by the local people for different psychological ailments have been observed in present investigation. The study explored 31 psycho medicinal plant species belonging to 24 families and which part of each plant is used for which psychological disorders is described in **Table 1**. People of hills are facing the problem of various psychological disorders, they believe on god after possessed by many divine powers for ailments. They also believed that psycho medical therapy is cheaper in comparison to modern medical system. Indigenous communities living in rural and mountainous territories of developing world consider livestock a vital source for economy, social security, and food and are thought to be a symbol of prestige for a particular family [7]. When people suffering from psychological diseases, the patient is made to sit in the appointed place and the "Baaki" (traditional practitioner) are worshiped by particular method. Baaki know about all types of traditional plants, their products and habitat (**Figures 1,2**). The people of hills adopt traditional medicine along with modern medicine. It has often been observed that the women's of hills are afraid of ghosts and wrath of super natural powers during marriage and pregnancy, and they use fruit bearing trees i.e., Bedu, Khaina, Umra, Kaphal, Amla and Dalimmu etc. to overcome the outbreak of psychological diseases. Therefore, they occupied wild fruiting trees for worship for limited time as per the instruction of traditional medical practitioner.

Table 1. Psycho medicinal uses of some indigenous plants in Garhwal regions.

S.N.	Botanical name	Family	Common Name	Parts used	Psycho medicinal uses
1	<i>Areca catechu</i> (L.)	Areaceae	Supari	Seed	Seeds used during worship of super natural power and religious deities to remove the effects from affected person.
2	<i>Benincasa hispida</i> (Thub., Cn. DC)	Cucurbitaceae	Bhujeloo	Fruits	Unripe fruits used in worship of devil soul and super natural powers.
3	<i>Betula utilis</i> (D. Don, Pr. Fl. Nep.)	Betulaceae	Bhojpatra	Bark	Bark used for making necklace. The necklace is worn by the affected person to prevent the effects of religious deities and celestial power.
4	<i>Brassica rapa</i> (L. ssp.)	Brassicaceae	Peeli sarsoun	Seed	Seeds commonly used during the worship of divine powers.
5	<i>Capsicum frutescens</i>	Solanaceae	Mirch	Fruits	Dry fruits burn during worship of devil soul and ghostly elements to remove its effects from affected person.
6	<i>Citrus</i> sps.	Citraceae	Khatain	Fruits	Fruits used during worship of devil soul and dreadful diseases.
7	<i>Cucurbita maxima</i> (D., L., E)	Cucurbitaceae	Kaddu	Fruits	Ripe and unripe fruits used during worship of devil soul, religious metaphysical deities and ghostly elements.
8	<i>Curcuma domestica</i> (V., B., J., Bot., B., s)	Zingiberaceae	Haldi	Rhizome	Powder and paste used during treatment of effected person. Paste commonly inoculate forehead of possessed person after worship of divine powers.
9	<i>Emblica officinalis</i> (L.)	Euphorbiaceae	Amla	Whole plant	Whole plant occupied for one year to worship of supernatural powers.
10	<i>Ficus auriculata</i> (L. Fl. Coch.)	Moraceae	Timla	Whole plant	Whole plant occupied for worship of divine powers.
11	<i>Ficus palmate</i> (For. Fl. Aeg.)	Moraceae	Bedu	Whole plant	Whole plant occupied for worship of religious deities.
12	<i>Ficus racemosa</i> (L. Sp. Pl.)	Moraceae	Umra	Whole plant	Whole plant occupied for worship of supernatural powers.

13	<i>Ficus religiosa</i> (L., Sp.Pl.)	Moraceae	Peepal	Leaves and wood	Leaves and wood used during worship of various supernatural powers to reduce its effects.
14	<i>Ficus semicordata</i> (Buch. Ham. Ex.JE)	Moraceae	Khaina	Whole plant	Whole plant occupied of worship for one year.
15	<i>Gossypium</i> sps.	Malvaceae	Cotton	Fiber	Fiber used to make four-side wick of Diya during treatment and worship of different super natural powers.
16	<i>Hordeum vulgare</i> (L., Sp. Pl.)	Poaceae	Jou	Seed	Seeds used for worship of super natural power.
17	<i>Lens culinaris</i> (Vor., Ch., Phys. G.)	Fabaceae	Masoor	Seed	Seeds used during treatment and worship of all dreadful diseases.
18	<i>Myrica esculanta</i> (L.)	Myricaceae	Kaphal	Whole plant	Whole plant occupied for one year to remove the effects of supernatural powers from possessed woman during pregnancy.
19	<i>Oryza sativa</i> (D. L. E.)	Poaceae,	Chawal	Seed	Rice (<i>Oryza sativa</i>) mixed with urd (<i>Vigna mungo</i>) and seven round moves on head of possessed person and then through in all four directions during worship.
20	<i>Piper betle</i> (D.Don, Pr. Fl. Nep.)	Piperaceae	Pan	Leaves	Leaves used in worship for celestial power.
21	<i>Punica granatum</i> (L.)	Punicaceae	Dalimmoo	Whole plant	Whole plant occupied for one year during worship of divine powers.
22	<i>Prunus cerasoides</i> (D.Don,Pr.)	Rosaceae	Painya	Leaves and wood	Leaves and wood used during worship of various dreadful diseases.
23	<i>Saccharum spontaneum</i> (L., Mant. Pl.)	Poaceae	Kansh	Leaves and stem	Leaves and stem used during worship of super natural power and devil soul.
24	<i>Sesamum orientale</i> (L., Sp. Pl.)	Pedaliaceae	Til	Seed	Seeds used in worship for various super natural powers.
25	<i>Stephania glabra</i> (Roxb.)	Menispermaceae	Gendanu	Rhizome	Fruit used during worship of devil soul and ghostly elements.
26	<i>Syzigium aromaticum</i> (Linn.)	Myrtaceae	Long	Bud	Odd number buds tied with thread and hang in neck of possessed person to remove the effects of super natural powers.
27	<i>Triticum aestivum</i> (L., Sp. Pl.)	Poaceae	Gehun	Seed	Seed used during worship of celestial power.
28	<i>Urtica dioica</i> (L., Sp.Pl.)	Urticaceae	Kandali	Whole plant	Healthy plant used to hit into the body of possessed person during treatment.
29	<i>Vigna mungo</i> (L. H.KB)	Fabaceae	Urd	Seed	Seeds mixed with rice and move it in seven times over the head of affected person.
30	<i>Vitex negundo</i> (L., Sp.Pl.)	Vitaceae	Siwanli	Leaves	Twig with leaves used during worship of celestial power, devil soul, religious deities and ghostly elements.
31	<i>Zenthoxylum armatum</i> (DC., Pr.,)	Zannichellaceae	Timroo	Stem	Stick used during worship and treatments of super natural powers.

It is believed that after worship, the wrath of super natural power ends. The fruits of the worshiped trees are prevented from eating for all people. If a person eats the fruits of the worshiped tree, then it is believed that the person gets the wrath of divine power. Plants and animals are also used by the people here in the traditional medical system. There are several thousand plants across the globe being utilized for various therapeutic purposes both animals and humans^[8]. Mixed Urd (*Vigna mungo*) and Rice (*Oryza sativa*) are commonly used in all psychological diseases and is thrown around the head of affected person, then thrown in all four directions for reduce the effects of divine power and ghost. Indigenous knowledge can be used as a tool to conserve and maintain the green diversity, and could be further utilized for scientific validation^[9,10]. In traditional medical therapy, diseases are diagnosed without touching the parts of the plant (except *Urtica dioica*) into the body of the affected person. The therapy activated by the special process, which is controlled, and regulated by the traditional medical practitioner. The increasing use of traditional therapies demands more scientifically sound evidence for the principles behind therapies and for effectiveness of medicines^[11].

When people suffering from any kind of diseases, 90% adopt Allopathic, Ayurvedic and Homeopathic remedies, as well as adopt psycho medicine and traditional medicines. Therefore, it is not unusual that a number of other practices are adopted for the

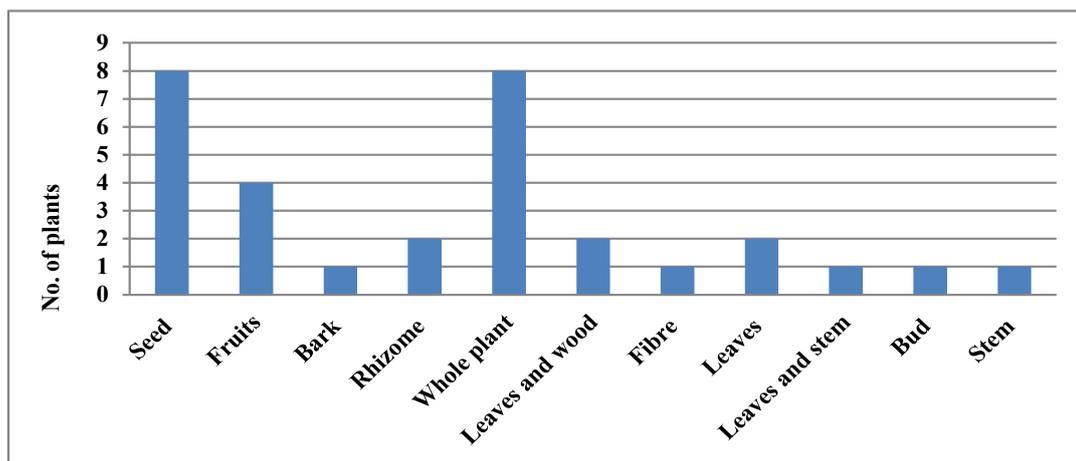


Figure 1: Total no. of identified plants and their products which are used in psychotherapy.

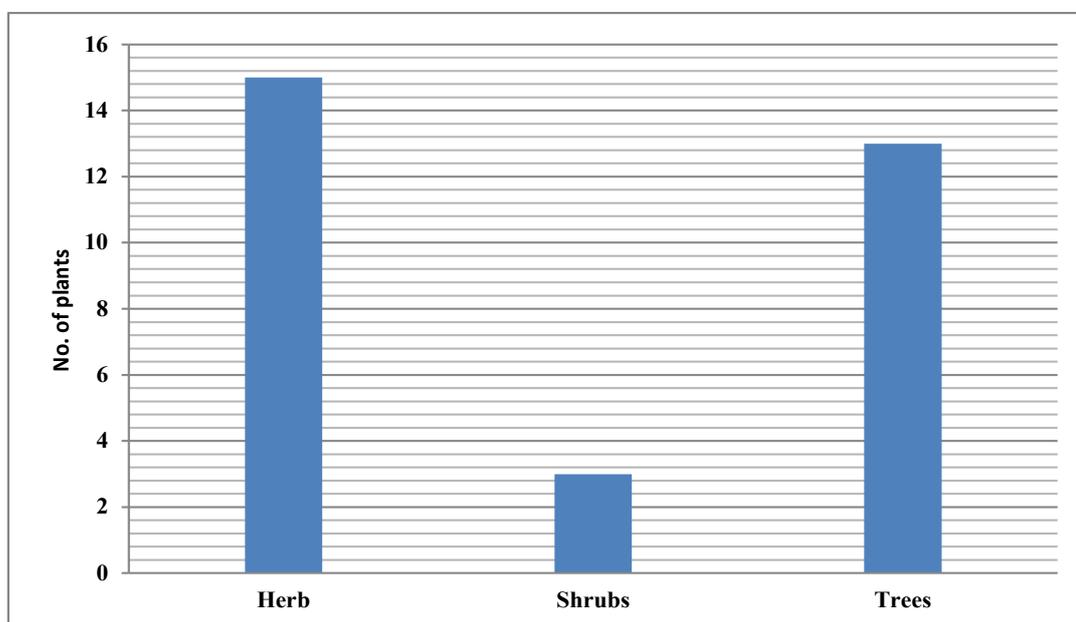


Figure 2: Total no. of identified plants and their habitat.

purpose, which may not have a direct relation with the medicine [12,13]. Even for the diagnosis of other serious diseases as cancer, cardiac, leprosy, paralysis and insanity, the people of hills are also uses the method of psychotherapy. In these serious diseases, people here use psychotherapy as alternative medicine. The traditional values, faith and indigenous knowledge of the healthcare system of the present society face serious challenges due to migration of young people to cities, and these urban migrants tend to undermine their own cultural beliefs and knowledge of the traditional healthcare system, as also found in other parts of Himalayas [14-19]. The ghost wrath is also another common type of psychological disorder in hills. *Kandali (Urtica dioica)* is commonly used to reduce its effect from affected person. The twigs of *Urtica dioica* are used to drive away the ghost, the person who is affected, is attacked by *Urtica dioica* on his body and on being hit, after that person tells the name of the power by which he has been affected and it is believed that the ghost escapes from *Urtica dioica*. The traditional medical systems are generally based on the uses of natural and local products which are commonly related to the people's perspective on the world and life [20]. After marriage, there is no wrath of ghosts and deities on the married girls, so that ghosts and deities are worshiped in the maternal home by plants.

Along with adopting today's modern medical system to diagnose various types of diseases, he also gets the patient treated through traditional medicine. People belief in the traditional medical system remains unshakable even when modern medical treatments fail. Migrated peoples also believe on traditional medical system in hills. The affected person even when perfectly cured, the role and importance of supernatural powers doesn't ignored and people who have migrated from their villages of hills, return back to perform same religious rites, so that they are not affected by those illnesses in future. If they do not do this, are afraid of suffering from diseases, there is no harm in adopting this type of medical system, it is directly related to peace of mind. The folk knowledge on traditional herbal remedies usually transfers from one generation to another generation through oral way [21-25]. In today's modern era, where medical science is very advanced, there such superstitious medical system also exists in itself.

CONCLUSION

People in the hilly areas of Devbhoomi Uttarakhand still believe in traditional medicine. In case any disease, the people here start traditional treatment along with modern medical treatment. The reason for this is also that the people here are very poor and due to the geographical disparity, they do not get modern medical treatment on time. Some people believe that diseases are caused by only due to the effects of ghosts and divine powers. They don't believe in modern allopathic medical system due to which sometimes there is a possibility of huge losses. Along with traditional remedies, it is very important to believe in modern medical system, which can not cause any harm in future. Along with the traditional practitioner, plants and their products play a significant role in traditional therapy. There is a need to promote superstitious medical system so that the coming generation can follow it and there should be time to time documentation of this type of traditional therapy.

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