Ethnomedicinal plants used to cure skin diseases by tribals of Mahabubnagar district, Telangana state

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Abstract: An ethnobotanical survey was conducted to gather the information about utilization of plant resources for treatment of skin diseases in tribal habitations of Mahabubnagar district. The information on the utilization of the medicinal plants for the treatment of skin diseases was collected on the basis of personal interviews with traditional healers. The aim of the study is not only to prescribe remedies for skin diseases in human beings but also to draw attention for the need towards a detailed study on medicinal plants in this area which could provide novel remedies /leads for other dreadful diseases. In the present paper 21 plant species belongs to 15 different families were used to treat in skin diseases have been enumerated with botanical name, vernacular name, families, used parts and mode of treatment.

Key words: Ethnomedicine, Eczema, Swellings, Psoriasis, Leaves, Mahabubnagar

I. Introduction

Indian traditional medicine is based on different systems such as Ayurveda, Siddha and Unani used by various communities¹. Village communities from various ecosystems used largest proportion of biodiversity for human and veterinary healthcare. Of all different organisms, medicinal plants have been greatly considered by rural communities as they improve the economy of rural people. Thus there is now urgency for ethnobotanical research amongst aboriginal people^{2,3}. Today there is an increasing desire to unravel the role of ethno botanical studies in trapping the centuries old traditional folk knowledge as well as searching new plant resources of food, drugs, etc.. People living in the developing countries rely quite effectively on traditional medicine for primary health care^{4,5,6}.

Medicinal plants play a major role in the rural areas of the third world countries. The knowledge of these medicinal plants is inheriting orally from generation in tribals. The role of medicinal plants in resolving health problem is invaluable on a global level. In India, it is reported that traditional users use 2500 plant species of plants and 100 species of plants serve as regular source of medicine⁷. During the last few decades there has been increased interest in the study of medicinal plants and their traditional use in different parts of the world⁸. Documenting the indigenous knowledge through ethnobotanical studies is important for the conservation and utilization of biological resources. Mahabubnagar district has one of the oldest and richest cultural traditions of using the medicinal plants. The rural people of the district still depending on the traditional ethno medicine for their day to day primary health care. Extension study in relation to medicinal flora of the area has not been carried out so far. There is a paucity of information on the medicinal plants traditionally used in skin diseases like ring worm, scabies, eczema, swellings, black spots and wounds were treated completely with herbal drugs^{9,10,11,12}.

II. Material And Methods

An ethnobotany survey was conducted on medicinal plants for treatment of skin diseases during the year 2013-14. The information was gathered using various techniques such as open and structured interview and discussions with local people involving in traditional herbal medicine practice. Plants were identified using relevant scientific literature ^{13,14,15}. They were selected based on their knowledge of medicinal plants either for self medication or treating others informants were asked to conclude the habitat area and identify the plants local names, the species mentioned by informants were taxonomically identified.

III. Result and Discussion

In the present study ethnobotanical information of 21 species of medicinal plants belongs to 15 families was compiled from various habitats of the study areas. The study shows that among the skin diseases like scabies, wounds, black spots, psoriasis and boils are the major diseases in villages. During the treatment of the diseases various forms of preparations were used. In the following enumerations the plant species were enumerated by alphabetically by botanical names, vernacular name, family, useful parts and mode of treatment (Table 1).

During the present study total number of 21 plants of 10 families were reported to used to treat various skin diseases by the indigenous people and ethnic groups of Mahabubnagar district. Euphorbiaceae contain

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maximum number of species (3 each) followed by Asteraceae, Mimosaceae, Verbenaceae and Fabaceae (2 each), Meliaceae, Rutaceae, Solanaceae, Caesalpiniaceae, Annonaceae, Zingiberaceae, Lillaceae and Moringaceae (1 each)). Among the plant parts used whole plant preparation has been found to the most popular(2 cases), followed by rhizome(1), leaf(9), seeds(2), fruits(2), flowers(3), pods(1) and stem bark(1). The findings of the common medicinal plant families ^{16,17,18}.

The rural people preferred preparing medicines by combining several plants since the combination rapidly cures the disease and also enhance the immunity power of the patients. This is constant with the other general observation which has been reported earlier in relation to medicinal plant studied by Indian traditional system ^{19,20}.

IV. Conclusion

The present study demonstrated the persistence of folk medicine practices to cure in different kinds of skin diseases in Mahabubnagar district, that the people are still dependent on indigenous knowledge for health care that are being influenced by culture and socio economic aspects. But such knowledge of medicinal plants is restricted to a few a persons in an rural area. Therefore it is necessary that suitable requirements are needed in order to protect the traditional knowledge particular area with reference to medicinal plants utilization and it was found that traditional ethno medicine still persists among the Mahabubnagar district of Telangana.

Table: List of medicinal plants used for various skin diseases by the tribals of Mahabubnagar district

S.No	Botanical name	Common name / vernacular name	Family	Useful parts	Mode of treatment/ disease
1	Acalypha indica Linn.	Kuppi	Euphorbiaceae	Leaves	The extract of the leaves is applied externally for cure scabies.
2	Acacia arabica Linn.	Tumma	Mimosaceae	Bark	The powder of bark applied to cure the wounds.
3	Acasia sinuata Lour.	Soapnut/Sikakai	Mimosaceae	Pods	The powdered of the pods are used as shampoo. It prevents dandruff.
4	Aloe vera (Linn.) Burm. F.	Kalabhanda	Lilliaceae	Entire plant	The paste of the entire plant is used to cure burns, wounds, dark spots, wrinkles and also used for fairness.
5	Annona squamosa Linn.	Custard apple/Seetaphal	Annonaceae	Leaves	The warmed leaves bound against swellings and also used for anti-inflammatory.
6	Azadirachta indica A.Juss.	Neem/vepa	Meliaceae	Leaves, Stems, Flowers	The powder of leaves and stem mixed with coconut oil and applied for to cure skin diseases. Flowers boiled in Sesamum indicum oil and applied against the dandruff.
7	Cassia alata Linn.	Seema agathi	Fabaceae	Leaves	Pounded leaves, coconut oil and bee wax made into paste and applied on the effected parts to cure tinea versicularis.
8	Cassia ariculata Linn.	Tangedu	Caesalpiniace ae	Flowers	The paste of the fresh flowers cure black spots.
9	Citrus niman Linn.	Lemon/Nimma	Rutaceae	Fruits	Juice of fruit mixed with curd and applies to cure the black spots on the face.
10	Cocos nucifera Linn.	Coconut/Kobbari	Palmaea	Fruit layer	Ash of the coconut endocarp mixed with coconut oil and applied to cure black spots.
11	Curcuma langa Linn.	Turmeric/ Pasupu	Zingiberaceae	Rhizome	The paste of the rhizome is applied on the skin against the Psoriasis.
12	Datura metal Linn.	Ummetta	Solanaceae	Leaves	Applied coconut oil on surface of leaf then warmed it and applied against swellings.
13	Emblica officinalis Linn.	Indian goose berry/Usiri	Euphorbiaceae	Seeds	The powder of the seeds mixed with Terminalia bellerica seed powder and mixed with water and applied to cure Shobhi.
14	Lantana camera Linn.	Vallentha/ Puli compa	Verbenaceae	Leaves	The extract of the leaf is applied against wounds for fast relief.
15	Moringa oleifera	Drum stick plant/ Munaga	Moringaceae	Leaves	The warmed leaves applied against swellings.
16	Ocimum sanctum Linn.	Tulasi	Lamiaceae	Leaves	Leaf juice applied on the effected areas till to cure skin allergy.
17	Pongamia pinnata	Kanuga	Fabaceae	Bark	The bark paste boiled in coconut oil and

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	Linn.				applied to cure rashes.
18	Ricinus cummunis	Caster plant /	Euphorbiaceae	Seeds	The paste of the seeds is applied to cure
	Linn.	Amudham			swellings.
19	Tagetes erecta Linn.	Banthi	Asteraceae	Flowers	The paste of the fresh flowers applied to
					cure black spots.
20	Tridax procumbens	Gaddi chemanthi	Asteraceae	Leaves	The leaf extract is apply against wounds
	Linn.				for fast relief.
21	Vitex negundo	Vaavili	Verbenaceae	Roots,	The extract of the roots and leaves used
	Linn.			leaves	to cure eczema, ring worm and other
					skin diseases.

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