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INDIGENOUS KNOWLEDGE OF MEDICINAL PLANTS IN RURAL AREAS OF MAHABUBNAGAR DISTRICT

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ABSTRACT:

This study aims to gather and document information on indigenous knowledge of medicinal plants used in rural areas of Mahabubnagar district of Telangana State. The survey identifies 40 species of 36 genera of medicinal plants belonging to 21 families by indigenous people in rural areas of Mahabubnagar district for the treatment of different illness. The indigenous knowledge of medicinal plants depends on the surrounding plants. During the process of civilization and urbanization many medicinal plant species have been lost. The majority of the medicinal plants are locally available and are cultivated by tribal and rural people. Leaves, flowers, fruits and roots are principal part of the plants used. The indigenous community of Mahabubnagar district such as konda reddy, koyas, nayak, savera, valmikies and vaideyas played an important role healing different diseases by using medicinal plants locally available. The indigenous knowledge of the medicinal plants of these ethnic people is mostly confined to older people. This knowledge is transferred to trial and error basis and still in use. The oral route was the most commonly used mode of administration of herbal medicine. *Occimum sanctum*, *Aloe vera*, *Withania sonifera*, *Mucuna pruriens*, *Acorus calamus*, *Comiphora weighti*, *Veronia amygdalina*, *Cleodendron myricoides* are most repeatedly claimed medicinal plants of these people. The indigenous knowledge of the medicinal plants should be restored and maintained, as this provides large data regarding the medicinal properties of plants not known to the modern men.

Key words: medicinal plants, indigenous knowledge, tribal people, diseases, survey.

INTRODUCTION:

Plants play an important role in human civilization for food, medicine, cloth and shelter. Plants have traditionally been used as a source of medicine in India by indigenous people by different ethnic group. In ancient times the ethno medicine is known to use and practiced by a very few “medicinal men” in a community like Hakim, Kabhiraj who are very conservative and do not divulge. The medicinal knowledge is not documented any where. This ethno medicine is practiced by non literate people.

Indigenous culture has been enriched by the knowledge of traditional medicinal plants (Klchei et al; 2015). According to WHO, 80% population of world depends on traditional medicine for their treatment of different diseases (Kadhivel et al ; 2010). The knowledge of medicinal plants has been transmitted from one generation to other orally (Sinhababu and Banerjee; 2013). Large human population in developing countries is dependent on plant resources for healthcare because allopathic medicine can cure a wide range of diseases, but it is costly and cause side effects, that’s why many people use traditional medicine which is less costly and no side effects (Kala C.P. 2005).

The aim of the study is to study and document the medicinal plants by indigenous people of Mahabubnagar district for the treatment of different diseases. In this study a total number of 40 plant species 36 genera belonging to 21 families have been documented. Local people of the area depend on knowledge of local healers for simple ailments. They use locally available medicinal plants and also cultivated medicinal plants to cure common diseases such as fever, allergy, snake bites, scorpion bites, stomach disorders, diarrhea, dysentery, skin diseases etc. Herbal drugs are prepared from different parts of the plants such as leaves, fruits, flowers, roots, stem bark, rhizome, whole plant, gum, latex and seeds. Therefore, it would be important to document the traditional knowledge of medicinal plants for further healing purpose.

The detailed ethno medicine botanical surveys under taken by Hemadri (1971- 95), Hemadri et al (1980), Yoga Narsimhan et al (1975 – 1980), Srivastava (1978), Pushpangadam et al, R.R.Rao and Jamir, Rama Rao and Henry (1996), Reddy et al (2003), Raju and Reddy (2005) etc. Indigenous knowledge of using medicinal plants for healing ailments is, however in danger of gradually becoming extinct, because this knowledge is passed on orally from generation to generation without the aid of writing system and because many traditional healers do not keep written records.

MATERIAL AND METHOD:

Extensive survey have been conducted in different villages of Mahabubnagar district to collect information from different sources about medicinal plants. It involves direct interaction with tribal community, elderly person of the villages, hakims, medicinal men and common men about the medicinal plants use for the treatment of ailments, their vernacular name, useful part of the plant, mode of preparation and administration. Conducted field trips fro June 2022- Jan 2024 to gathered information of medicinal plants their cultivation, mode of collection etc. The information also discussed with different medicine men in other locality to validate the claims as far as possible. The study area is characterized by an abundance plant and biodiversity and agriculture is the main source of living for the population.

DATA ANALYSIS:

In Telangana state the total area of medicinal plants cultivation is 747.97 acres. Among this in Mahabubnagar district 97.01 acres s under the cultivation of medicinal plants. Tribal people live deep in forest and rural people in villages use medicinal plants to cure diseases. They use locally available medicinal plants or cultivated medicinal plants to cure diseases. During the study, 40 plant species were reported by their medicinal uses under 36 genera and 21 families. Of the 21 families 12 represent single species. The predominant families are fabaceae, combretaceae, euphorbiaceae, amaranthaceae are with 16 species. The medicine is prepared from leaves, stem bark, flower, fruit, seed, rhizome, whole plant, gum, latex, bulb.

The following table-1 shows medicinal plants, botanical name, vernacular name, family, useful part of plant, and ethnobotanical uses of people inhabiting in rural areas and in forest I Mahabubnagar district.

S.No	Family	Vernacular name	Botanical name	Useful part	Ethnomedicinal uses
1	Lamiaceae	Tulasi	Occimum sanctum	Whole plant	Cough, cold, fever, antibiotic, immune system
2	Fabaceae	Kaunch,gonca	Mucuna pruriens	Seeds	Nerve disorder, rheumatic
3	Fabaceae	Reonja	Acacia leucophloea	Bark, gum, leaves	Snake bites, dental caries, intermittent fever, dysentery, dyarrhea
4	Fabaceae	Safed siris	Albizia procera	Whole plants	Stomach, ulcer, problems of pregnancy
5	Fabaceae	Neel	Indigofera prostrata	Seed	Piles and fistula
6	Bursaraceae	Guggul	Commiphora weghti	Gum	Skin , urinary, nervous diseases, piles
7	Acoraceae	Vacha	Acorus calamus	Rhizome	Epilepsy, mental disorder,diarrhea
8	Solanaceae	Ashwagandha	Withania somnifera	Roots	Promote vigour stamina ,anti tumor, anti convulsive, anti inflamentory
9	Solanaceae	Thorn apple	Datura stromonium	Fruit	Psycoactive,fever, bronchitis, asthma, diarrhea, digestive disorder
10	Combretaceae	Karaka	Terminalia chebula	Fruit	Fever, heel wounds
11	Combretaceae	Arjun	Terminalia arjun	Leaves, bark	Cardiac tonic, earache

12	Combretaceae	Bahera	Terminalia bellerica	Bark, fruit	Anaemia, leucoderma, insomnia, cough
13	Combretaceae	Nalla madi	Terminalia alata	Stem bark	Eraha, heart pain
14	Asteraceae	Bhanraja	Eclipta alba	Whole plant	Insomnia, scorpion bite, asthma, bronchitis, fever, gastric disorder
15	Canabaceae	Bhang	Canabis sativa	Seed, leaves	Fever, bronchitis
16	Asclepiadaceae	Madargeladu	Calotropis procera	Flower, fruit	Malaria, cholera, reproductive problem
17	Asclepiadaceae	Gurmar	Gymnema hirsutum	leaves	Anti diabetic, jaundice
18	Apocyanaceae	Sadabaheer	Catharanthus roseus	Flower, leaves	Diabetics, high BP, bacterial, viral infection
19	Apocyanaceae	Satparni	Alstonia scholaris	Whole plant	Menstrual disorder
20	Apocyanaceae	Snake root	Rauwolfia serpentina	Roots, leaves, bud	Nervous disorder, snake bites, blood pressure, malaria
21	Acanthaceae	Vajradanti	Barleria prattensis	Whole plant	Paralysis
22	Acanthaceae	Gattugolmitti	Barleria priontis	Whole plant	Bone fracture, tooth problem, antiseptic, gout, mouth ulcer
23	Euphorbiaceae	Usiri	Emblica officinalis	Fruit	Diabetics, eye problem, body weakness
24	Euphorbiaceae	Dudhi	Euphorbia hirta	Gum	Snake bites
25	Euphorbiaceae	Bhuamla	Phyllanthus amarus	Whole plant	Jaundice, pus in ear, fever
26	Euphorbiaceae	Arandi	Ricinus communis	Seeds, leaves	Laxative and to start labour pain, boils, swellings,
27	Euphorbiaceae	Kuppinta	Acalypha hispida	Flowers	Diarrhea
28	Amaranthaceae	Addharaj, chitticaalu	Achyranthus aspera	Whole plant	Diuretic, piles, skin diseases, cold cough, scorpion bites
29	Amaranthaceae	Chaulai	Amaranthus viridis	leaves	Snake bite, scorpion bite, eolient
30	Amaranthaceae	Mountain knot grass	Aerva lanata	Whole plant	Snake bite, asthma, renal calculi, kidney stone
31	Amaranthaceae	Batukamma puvvu	Celosia argentea	Root, leaves	Skin diseases, stomachache
32	Crassulaceae	Patherchur	Bryophyllum pinnata	Whole plant	Kidney stone, kidney failure
33	Meliaceae	Vepa	Azadirachta indica	Whole plant	Skin disease, antibiotic
34	Rhamnaceae	Mullu renga	Ziziphus oenoplia	Fruits, bark	Dysentery
35	Commelinaceae	Mamidiallam	Curcuma amada	Rhizome	Diarrhea, skin disease
36	Liliaceae	Gheegavar	Aloe barbadensis	Whole plant	Skin disease, weight loss, boils, diarrhea, piles, hair fall
37	Liliaceae	Lehsun	Allium sativum	Bulb	Earache, high blood pressure, joint pain
38	Cleomaceae	Talati, vaminta	Cleome gynandra	Leaves	Earache, cold, fertility
39	Verbenaceae	Tella vaili	Vitex negunda	Leaves	Rheumatic pain, killing lice, migraine
40	Menispermaceae	Tippa teega	Tinospora codifolia	Root, stem	Bone fracture, wounds, intermittent fever

CONCLUSION:

The study showed that the area of Mahabubnagar district has plenty of medicinal plants to treat a wide range of human ailments. Nearly 100 acres of land being cultivated medicinal plants apart from this in many areas medicinal plants grows its own. Many rural people in study area still depending on medicinal plants for the treatment of diseases such as fever, cold, cough, dysentery, skin diseases, nervous diseases, diarrhea, urinary diseases, snake bites, scorpion bites, diabetics and many more. This indigenous knowledge is oral not documented. So it is necessary to acquire and preserve this traditional knowledge by proper documentation. So Telangana state TSMPB (Telangana State Medicinal Plant Board) has implemented a scheme with NMPB (National Medicinal Plant Board) to encourage farmers for the

cultivation of medicinal plants in their farm land through subsidies. The Girijan Cooperation Corporation has promoted cultivation of medicinal plants from forest lands by the tribal people and help in marketing. This study allows for identifying many high value medicinal plant species indicating high potential for economic development through sustainable collection of these medicinal plants.

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