

Less Known Preventive Herbal Drugs Used Against Piles By Tribals and Rural Communities of Rayalaseema Region, Andhra Pradesh

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Abstract: The objective of the present study is to collect firsthand information from local/herbal healers and rural people of Rayalaseema region, Andhra Pradesh used for piles. Ethno botanical interviews were conducted in the different forest localities and rural communities of Rayalaseema region to collect folklore information used to cure piles. The collected crude drugs were identified by using local and regional floras. About forty crude drugs were collected from herbal healers for piles. Critical review on crude drugs yielded that, 50% of the information is hitherto not reported. The reported crude drugs were listed in Table 1 and newly reported crude drugs were depicted in Table 2. The statistical analysis of parts used (Figure 1) and mode of preparation and administration of crude drugs were summarized in Figure 2.

Key words: Herbal drugs, Piles, Rayalaseema, Andhra Pradesh

I. Introduction

Human culture has been augmented by plant and plant products since time immemorial. Ethnobiology is the first science that originated with the evolution or existence of man on this planet. Piles are generally associated with constipation, slight or profuse bleeding in rectum and other associated problems like general debility and weakness. It is prevalent in rural communities and commonly found through out the country. Delayed treatment or its persistence for long time may also lead to heart and liver complaints [1]. From the indigenous point of view, the herbal crude formulation for piles is an interesting aspect. Natural products as medicines although neglected in the recent past, have been gained popularity in the modern era.

Andhra Pradesh state is the 8th largest state in India, consisting two regions namely Coastal Andhra and Rayalaseema. Rayalaseema is a land –locked region with an area of 67,299 km, which is 42% of total area of the state. Geographically the region lies between 12° 41' - 16°21' N latitudes and 17°45' - 81°10' E longitudes and at an altitude of 300 to 700 meters above mean sea level. The study area consists of four districts viz, Anantapur, Chittoor, Kadapa, and Kurnool. The stud area is inhabited by different groups of ethnic people like Yanadis, Chenchus, Yerukalas, Sugalis and etc. The critical review of literature revealed that very few attempts were made on piles and its related ailments [2-12], hence present paper gains importance.

II. Methodology

The information recorded based on personal interviews with traditional healers who are formulating and advocating the therapeutic uses of wild plants to patients, residing in aforesaid villages since several decades. Based on the recorded information systematic explorations were conducted in the forests of the study area. The detailed information on scientific name, local name, family, part used, mode of preparation, dosimetry, etc., were recorded and systematically analyzed. The collected information was cross checked with the information from neighboring herbalists and also with available literature. The specimens were identified with the help of local / regional floras [13,14] and confirmed by comparing with the authenticated specimens housed at Sri Krishnadevaraya University Herbarium (SKU), Anantapur, Madras Herbarium (MH), Coimbatore and Central National Herbarium (CAL), Howrah. The voucher specimens were deposited in Sri Krishnadevaraya University Herbarium (SKU), Anantapur.

III. Results

The statistical analysis on the collected specimens yielded 40 species belonging to 40 genera and 30 families of flowering plants. The information on scientific name, vernacular name, family, part used, mode of preparation and administration of reported species is enumerated (Table-1). The critical analysis of the data in the light of literature resulted 19 species are not reported for piles (Table 2). The statistical analysis on different

parts of the drug yielding plants (Figure 1) and mode of preparation and administration of crude drugs were depicted in (Figure 2).

IV. Discussion

The present paper provides information on therapeutic properties of crude drugs used to cure piles by the tribal and rural people of Rayalaseema region. Field trips were conducted in the forest and rural areas of the study area to collect firsthand information from tribal and rural people. Repeated interviews were conducted with local herbal practitioners to collect ethnomedicinal importance of medicinal plants used for piles. The maximum number of crude drugs were represented by Fabaceae and Mimosaceae (3 spp each), followed by Acanthaceae, Asteraceae, Caesalpiniaceae, Lamiaceae, Liliaceae and Nyctaginaceae (2 spp each) and remaining were represented with single species. The crude samples were analyzed based on different parts, revealed that maximum samples contain leaves (15 spp), followed by stem & stem bark(7 spp), root (8 spp), whole plant (5 spp), fruits and seeds (3 spp each) latex (2 spp) while least is represented by inflorescence (1 spp) (Figure 1).

The present observations revealed that the crude drug formulations made by the local tribes were performed significantly. Figure 2 demonstrates that, most of the drugs has been using as external application in the form of paste. Decoction and powder/poultice using as oral drugs. Usage of latex from *Argemone mexicana* and ash obtained from burnt inflorescence of *Lepidagathis cristata* as external application is unique. Sometimes the tribal/rural people applying mixed drugs such as, paste obtained from *Aristolochia* mixed with *Blumea mollis* and *Leonitis* applying as external drugs. Crude drugs like *Commicarpus chinensis* root, *Mimosa pudica* leaf/root, *Sesamum orientale* seeds, preparing with animal drugs like goat milk and butter milk and giving as oral and as well as external. Further, the crude dugs have being analyzed in the laboratory to understand the molecular composition and active principle responsible for the therapeutic property.

Table 1. Systematic enumeration of reported crude drugs used for Piles

S.no	Botanical Name / Family	Vernacular name	Part used	Mode of preparation / Administration
1.	<i>Albizia amara</i> (Mimosaceae) Chelama / KVR (27046)	Cigara	Seed	Paste as application.
2.	<i>Aloe vera</i> (Liliaceae) Diguvametta / KVR (27047)	Chinna kalabanda	Leaf	Pulp as application.
3.	<i>Amaranthus spinosus</i> (Amaranthaceae) Akuthotapalli /AJR (20432)	Mullathotakura	Whole plant	Extract given orally and paste as application.
4.	<i>Argemone mexicana</i> (Papaveraceae) Diguvametta /KVR (26999)	Mulla pucchi	Latex	Applied on piles.
5	<i>Boerhavia diffusa</i> (Nyctaginaceae) chelama / KVR (27045)	Atikamamidi	Root	Paste as application
6	<i>Cardiospermum halicacabum</i> (Sapindaceae) Diguvametta / KVR (27015)	Tellabudama	Whole plant	Decoction given orally.
7	<i>Corchorus olitorius</i> (Teliaceae) Chinnabavi / SR (13092)	Parinta	Leaf	Paste as application.
8	<i>Datura metel</i> (Solanaceae) Diguvametta / KVR (26989)	Nalla ummetta	Leaf	Paste as application.
9	<i>Gloriosa superba</i> (Liliaceae) Nagaluti / AJR (18968)	Adavi nabhi	Root	Paste as application.
10	<i>Homoioia riperia</i> (Euphorbiaceae) GBM / (27049)	Cheppunjerial	Root	Paste as application.
11	<i>Lepidagathis cristata</i> (Acanthaceae) Rangampet / AJR (20422)	Nakkapentigadda	Inflorescence	Burnt and ash made into paste, applied externally.
12	<i>Manilkara hexandra</i> (Sapotaceae) Diguvametta / AJR (27051)	Palachettu	Stem bark	Ground and paste as poultice every day for a week.
13	<i>Mimosa pudica</i> (Mimosaceae) Puccharla / KVR (27052)	Nidra kanti	Leaf & Root	Powder mixed with goat milk applied externally and given orally.
14	<i>Persicaria glabra</i> (Polygonaceae) Ahobilam / RVR (1428)	Buradagogu	Root	Paste as application
15	<i>Pongamia pinnata</i> (Fabaceae) Bairluti / KVR (20521)	Kanuga	Stem bark	Ground and paste as poultice.
16	<i>Pseudarthria viscida</i> (Fabaceae) Jyothi forest / VRR (17836)	Mayakuponna	Root	Decoction given orally.
17	<i>Rhynchosia minima</i> (Fabaceae) Chelama / KVR (27060)	Nela alumu	Leaf	Paste as poultice
18	<i>Terminalia chebula</i>	Karaka	Fruit	Powder mixed in butter milk and given

	(Combretaceae) Ramanapenta /KVR (26926)			orally for a week.
19	<i>Vanda tesellata</i> (Orchidaceae) Etukalapadu forest /AJR (17830)	Veduru badanika	Whole plant	Paste as application
20	<i>Vitex negundo</i> (Verbenaceae) Kalasamudram / KN (16915)	Vavili	Leaf	Paste as application
21	<i>Wrightia tinctoria</i> (Apocynaceae) Ramanapenta / KVR (26939)	Palvareni	Stem bark & Latex	Decoction given orally.

Table 2. Systematic enumeration of newly reported crude drugs used for Piles

S.no	Botanical Name / Family	Vernacular name	Part used	Mode of preparation / Administration
1	<i>Aristolochia bracteolata</i> (Aristolochiaceae) Ragimukkalakunta / AJR (18986)	Gadidagadapaku	Leaf	Ground along with that of <i>Leonotis nepetifolia</i> and paste as application.
2	<i>Balanites aegyptiaca</i> (Simaroubaceae) Chelama / KVR (27058)	Gara	Fruit	Fruit pericarp remove and soaked in water overnight, the extract given orally early in the morning
3	<i>Barleria prionitis</i> (Acanthaceae) Diguvametta / KVR (27055)	Mullugoranta	Leaf	Paste as application.
4	<i>Bauhinia purpuria</i> (Caesalpiniaceae) Jyothi forest / VRR (17860)	Bodanta chettu	Stem bark	Macerated in water and extract given orally along with lime water 3 times a day for 3 days.
5	<i>Blumea mollis</i> (Asteraceae) Chelama / KVR (27023)	Jania	Leaf	Macerated along with that of <i>Aristolochia bracteolata</i> and paste applied daily for 15 days.
6.	<i>Cassytha filiformis</i> (Lauraceae) Kottacheruvu / SR (10078)	Seethamma pogulu	Whole plant	Ground with sesame oil and paste given orally.
7	<i>Commicarpus chinensis</i> (Nyctaginaceae) Etukalapadu forest / VRR (17850)	Pandekusir	Root	Boiled in goat milk, macerated, extract mixed with jaggery and given orally every early morning for 30 days.
8	<i>Dichrostachys cinerea</i> (Mimosaceae) Diguvametta / KVR (27041)	Veluturu chettu	Leaf	Ground and paste as poultice every day for a week.
9	<i>Enicostemma littorale</i> (Gentianaceae) GBM / KVR (27059)	Nelagulimidi	Leaf	Paste as poultice.
10	<i>Lagerstroemia parviflora</i> (Lythraceae) Puccharla / KVR (27050)	Chennangi	Stem bark	Paste as poultice.
11.	<i>Leonotis nepetifolia</i> (Lamiaceae) Galiveedu / AJR (18958)	Ranabheri	Leaf	Ground along with that of <i>Aristolochia bracteolata</i> and paste as application.
12.	<i>Nymphaea pubescens</i> (Nymphaeaceae) Diguvametta / KVR (27055)	Tella kaluva	Root	Powder given orally and paste as application.
13.	<i>Ocimum basilicum</i> (Lamiaceae) Siddavatam / KSM (6326)	Rudrajada	Leaf	Paste as application.
14	<i>Ottelia alismoides</i> (Hydrocharitaceae) GBM / KVR (27053)	Yedakula thamara	Leaf	Paste as application
15	<i>Pterolobium hexapetalum</i> (Caesalpiniaceae) Ranibavi / KSM (13003)	Erra seeki	Seed	Paste as application
16	<i>Rhus mysorensis</i> (Anacardiaceae) Sugalimitta / AJR (20690)	Amani	Leaf	Decoction given orally.
17	<i>Salvadora persica</i> (Salvadoraceae) Diguvametta / KVR (27054)	Varagogu	Fruit & Stem bark	Paste as application
18	<i>Sesamum orientale</i> (Pedaliaceae) Etukalapadu forest /AJR (17870)	Nuvvulu	Seed	Decoction given orally.
19	<i>Vicoa indica</i> (Asteraceae) Etukalapadu forest / AJR (17841)	Daldalmi	Whole plant	Paste as poultice

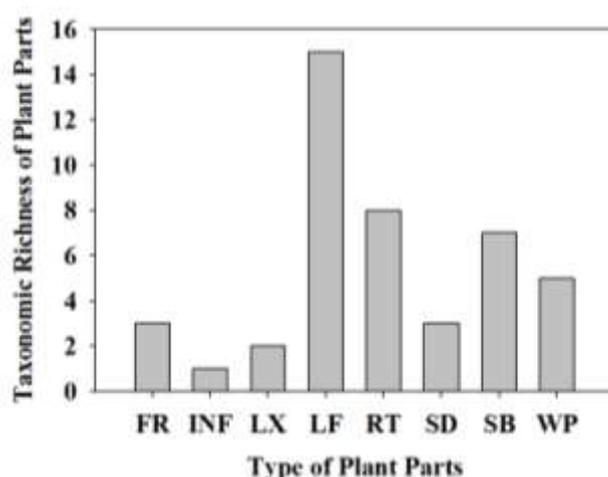


Figure 1. It shows the taxonomic richness of crude drugs part wise analysis. Here FR: fruit, INF: inflorescence, LX: Latex, LF: Leaf, RT: root, SD: seed, SB: stem bark, WP: whole plant

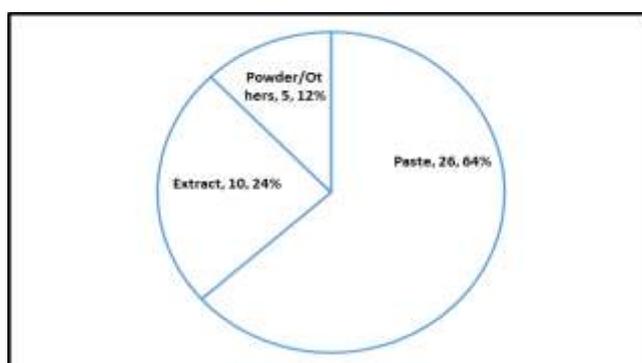


Figure 2. Pie diagram shows the mode of drug preparation and administration used to cure Piles

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