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A Systematic review on Indian Herbal formulation for the Management of Haemorrhoids

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ABSTRACT

Herbal medicine, also referred to as phytomedicine, pertains to the utilization of a plant's seeds, berries, roots, leaves, bark, or flowers for the treatment of diseases. Herbs possess numerous valuable phytochemicals or secondary metabolites effective in treating piles disease. They have a longstanding tradition of application beyond conventional medicine. The treatment of hemorrhoids or piles through herbs has proven efficient and offers a promising solution without adverse effects. Piles represent a prevalent condition of the gastrointestinal tract, commonly known as hemorrhoids or abnormal tissue clusters in the rectum. Hemorrhoids are characterized by the symptomatic enlargement and distal displacement of the normal anal cushions. Symptoms of piles may include a protruding mass, painful bleeding, discomfort during bowel movements, incontinence, or itching. Piles can lead to significant discomfort for patients, interfering with their daily activities and consequently diminishing their quality of life. A majority of individuals encounter this condition at least once in their lifetime. Many individuals maintain confidentiality regarding this ailment due to social stigma in its early stages, ultimately resorting to surgery in the chronic phase when hemorrhoids worsen. The recurrent nature of the disease necessitates the development of new treatment strategies. The objective of this review is to assess the significance of the herbal formulation for the management of hemorrhoids. This herbal formulation comprises a distinctive combination of plant-based components, including *Azadiracta indica, Terminalia chebula, Mimosa pudica, Symplocos racemosa, Curcuma longa, Aegle marmelos, Glycyrrhiza glabra,* and *Foeniculum vulgare*, all of which are advantageous in managing piles by alleviating symptoms and thereby aiding in the promise of hemorrhoidal edema.

Keywords: Piles/haemorrhoids, Anorectal disorders, Plant formulation,

INTRODUCTION

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 use 2500 plant species and 100 species of plants serve as regular sources of medicine (Pei, 2001). In recent years, there has been a tremendous range of interest in the medicinal plants especially those used in traditional systems of medicines. Drugs obtained from plant are believed to be much safer and exhibit a remarkable efficacy in the treatment of various ailments (Siddiqui, et.al. 1995).

The folk medicinal traditions play a reflecting and prominent role in human and environment interaction (Chopra, et.al.1956). It is estimated that 70 to 80% of the people worldwide rely chiefly on traditional health care system and largely on herbal medicines (Farnsworth et.al. 1985, 1991, Shengii 2002, Shanley, et.al. 2003; Hiremath et al.,2010).

Haemorrhoids is an anorectal condition which affect millions of people around the world and this disease represents a major health and socio-economic problem (Lossiriwat,2009). Haemorrhoids is characterized by alteration in vasculature of the anal canal including blood vessels supporting tissues, muscles, and elastic fibres. There is a network of small veins within the inner lining of the anus and lower rectum. These veins occasionally become wider and engorged with more blood than usual, developing into areas of swelling known as haemorrhoids (Gurelet al.,2015). The word ‘‘haemorrhoid” is derived from the Greek word ‘haema’ means (blood) and ‘rhoos’ means (flowing) and implies the flow of blood from the veins of the anus. The term ‘‘piles’’ is derived from the Latin word “pila” meaning a ball. There are two types of piles-Internal and External haemorrhoids (Najar et al.,2018; Jaspreet and Ashish , 2023). The present review study deals with the documentation of plants used for haemorrhoid/piles treatment in Karnataka.

MATERIALS AND METHODS

The present review study is an attempt to know the diversity of plants used to cure haemorrhoids/piles in Karnataka. Secondary data was collected through local vaidyas, village elders and native medicine men residing around various areas of Karnatakathrough personal communication. Standard methods were followed for the collection of plant materials and preservation of plant species. Voucher specimens were collected, identified, by referring standard flora (Hooker,1884; Gamble ,1936; and Saldhana,1984).

Figure 1 : Study area map

RESULTS AND DISCUSSION

A total of 60 plant species used especially for the treatment of Haemorrhoids/Piles by the herbal healer communities of Karnataka. These plants belongings to 58 genera comprising of 37 families. The different parts of the plants used for piles treatment is shown in Table 1. They had been cross checked by literature previously reported for Piles. As per the Table 1 Fabaceae family is dominant with 8 species followed by Lamiaceae by 4 species. The

families such as Apiaceae, Apocyanaceae and Myrtaceae having 03 species each respectively. However, Malvaceae, Rutaceae, Asteraceae and Moraceae with 03 species each and rest of the families with single species each respectively. Regarding the piles treatment major plant parts used are fruit, leaf and whole plants followed by root and bark.

Among the different plant parts, the fruits were most frequently used for the Piles treatment followed by leaf, whole plant parts, root/ bark. The methods of preparation fall into four categories viz; plant parts applied as a paste, juice extracted from the fresh plant parts, powder made from fresh or dried plant parts, some fresh plant parts and decoction. External applications and the internal consumption of the preparations involved in the treatment of piles.

The traditional knowledge about utilization of local plant species is vital in alternate healthcare system as well as for the self sustenance of local population. High costs coupled with numerous side effects of synthetic drugs are forcing people to depend on the locally available herbal medicine for their healthcare needs. Methods of medical treatment used by knowledgeable elder people and local herbal healers in Shivamogga taluk were totally traditional, very effective and acquired through their ancestors orally. It is high time that these herbal species are scientifically evaluated and conserved for the well being of mankind. These traditional herbal formulations need further pharmacological investigations to prove their efficacy and also develop new drugs for the effective treatment of chronic diseases (Shivanna & Rajakumar,2010).

Figure 2: Plants used in haemorrhoid treatment

CONCLUSION

The present study documented the plants used in the treatment of piles by the people of Karnataka. This study can serve as baseline information on the medicinal plants prosperity of this area. Further study will throw more light about the vast wealth of ethnobotanical information. Further pharmacological and clinical studies on these plants will provide

effective natural medicines for piles treatment and it will also be useful to determine in the bio-prospecting potential of these plants.

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Table 1: List of plants used for piles treatment in Karnataka

Sl.No	Scientific name	Family	Parts used
1.	*Azadirachtha indica*	Meliaceae	Leaf,seed
2.	*Allium cepa*	Amaryllidaceae	Bulb
3.	*Aloe vera*	Asphodelaceae	Root
4.	*Abutilon indicum*	Malvaceae	Leaf,Root
5.	*Achyranthus aspera*	Amaranthaceae	Whole plant
6.	*Aegle marmelos*	Rutaceae	Whole plant
7.	*Butea monosperma*	Fabaceae	Bark
8.	*Carica papaya*	Caricaceae	Fruit
9.	*Citrus limonum*	Rutaceae	Fruit
10.	*Centella asiatica*	Apiaceae	Leaf
11.	*Coriandrum sativum*	Apiaceae	Leaf, Seed
12.	*Calotropis procera*	Apocynaceae	Root
13.	*Cocos nucifera*	Arecaceae	Fruit
14.	*Cyperus rotundus*	Cyperaceae	Root
15.	*Cynodon dactylon*	Poaceae	Whole plant
16.	*Cassia fistula*	Fabaceae	Bark
17.	*Euphorbia hirta*	Euphorbiaceae	Whole plant
18.	*Eucalyptus globulus*	Myrtaceae	Leaf
19.	*Eclipta alba*	Asteraceae	Leaf
20.	*Ficus benghalensis*	Moraceae	Bark
21.	*Ficus religiosa*	Moraceae	Bark
22.	*Gloriosa superba*	Colchicaceae	Tuber
23.	*Hemidesmus indicus*	Apocynaceae	Leaf
24.	*Hibiscus rosa sinensis*	Malvaceae	Leaf
25.	*Ipomea*	Convolvulaceae	Whole plant
26.	*Jatropha curcus*	Euphorbiaceae	Leaf
27.	*Jasminum multiflorum*	Oleaceae	Flower
28.	*Leucas aspera*	Lamiaceae	Leaf
29.	*Lantana camara*	Verbenaceae	Leaf,Shoot
30.	*Mimosa pudica*	Fabaceae	Whole plant
31.	*Mangifera indica*	Anacardiaceae	Seed, Bark
32.	*Momordica charantia*	Cucurbitaceae	Fruit
33.	*Moringa oleifera*	Moringaceae	Leaf, Root
34.	*Musa sp.*	Musaceae	Fruit
35.	*Millettia pinnata*	Fabaceae	Leaf
36.	*Nelumbo nucifera*	Nelumbonaceae	Whole plant
37.	*Nerium indicum*	Apocynaceae	Flower
38.	*Ocimum bassilicum*	Lamiaceae	Leaf
39.	*Oxalis corniculata*	Oxalidaceae	Whole plant
40.	*Phyllanthus emblica*	Phyllanthaceae	Fruit
41.	*Psidium guajava*	Myrtaceae	Fruit
42.	*Piper nigrum*	Piperaceae	Fruit
43.	*Punica granatum*	Lythraceae	Fruit
44.	*Raphanus sativus*	Brassicaceae	Whole plant

45.	*Solanum nigrum*	Solanaceae	Fruit
46.	*Saraca indica*	Fabaceae	Bark
47.	*Syzygium cumini*	Myrtaceae	Fruit
48.	*Terminalia chebula*	Combretaceae	Leaf
49.	*Terminalia bellerica*	Combretaceae	Leaf
50.	*Tinospora cordifolia*	Menispermaceae	Root
51.	*Tagetes sp*	Asteraceae	Bud
52.	*Tamarindus indica*	Fabaceae	Root
53.	*Tectona grandis*	Lamiaceae	Bark
54.	*Vitex negundo*	Lamiaceae	Root
55.	*Vachellia nilotica*	Fabaceae	Seed
56.	*Zingiber officinale*	Zingiberaceae	Rhizome
57.	*Curcuma longa*	Zingiberaceae	Rhizome
58.	*Glycyrrhiza glabra*	Fabaceae	Whole plant
59.	*Foeniculum vulgare*	Apiaceae	Whole plant
60.	*Symplocos racemosa*	Symplocaceae	Seed,Bark, WP

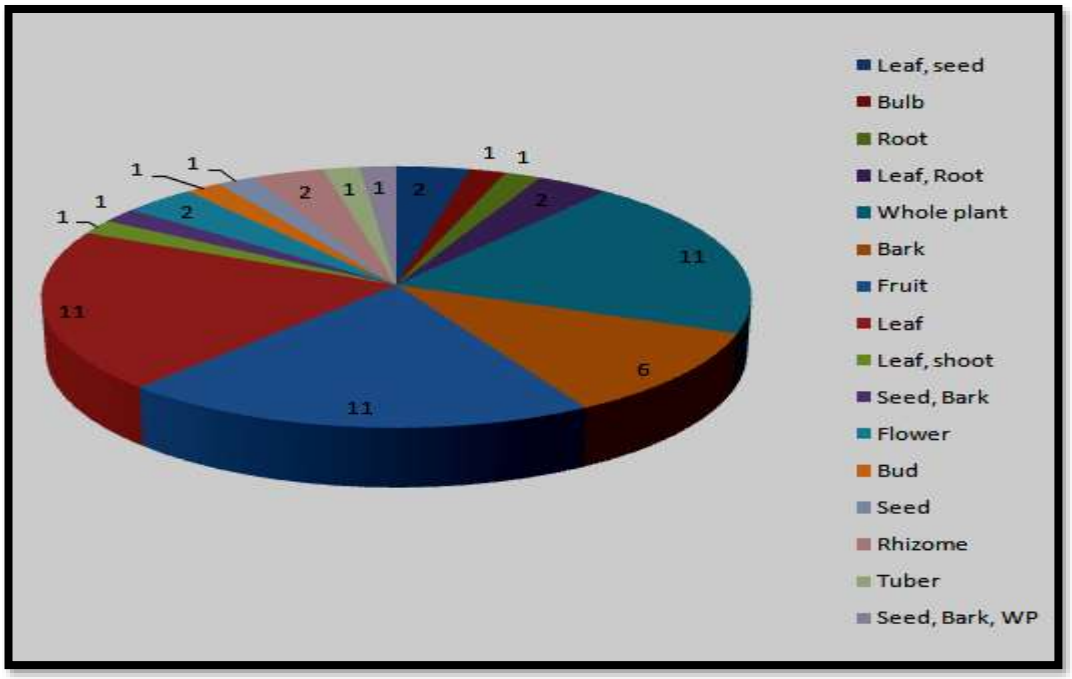

Figure 3: Various plant parts used for the treatment of haemorrhoids