

RESEARCH ARTICLE

OPEN ACCESS

Ethnomedicinal Survey on plants used in treatment of Boils and Piles by traditional healers from Bhandara District (M.S.), India

Jagiya AA

Department of Botany, M.B. Patel College, Sakoli, Dist. Bhandara, MS, India Email: <u>amitjagiya@gmail.com</u>

Manuscript Details

Received :18.02.2023 Accepted: 05.04.2023 Published: 07.04.2023

Available online on <u>https://www.irjse.in</u> ISSN: 2322-0015

Editor : Dr. Arvind Chavhan

Cite this article as:

Jagiya AA. Ethnomedicinal Survey on plants used in treatment of Boils and Piles by traditional healers from Bhandara District (M.S.), India. *Int. Res. Journal of Science & Engineering*, 2023, Volume 11(2): 75-78.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this license, visit http://creativecommons.org/ licenses/by/4.0/

Abstract

Ethnomedicinal survey on plants used by traditional healers (THs) to treat hemorrhoids (Boils and Piles) was carried out in Forest areas of Bhandara district. The herbalists, small scale herbal product sellers and traditional healers were interviewed by standardized questionnaires. The survey revealed a total of 35 different medicinal plant [MP] species having ethnomedicinal uses against hemorrhoids. Taxonomically, the plants used by the THs of this area were classified under 24 families of angiosperms. Being most prominent families, Fabaceae and Euphorbiaceae families represented 3 species each, which is an indication of the significance of these families in the treatment of piles. The modern, advance studies should have been done, so as to find the key bio-active compound, found to be common among these MPs. Further studies can be conducted to develop a new drug(s) for effective treatment against hemorrhoids.

Keywords: Ethnobotany, Hemorrhoids, Traditional healers, Fabaceae, Euphorbiaceae

Introduction

Hemorrhoids, also called piles, are swollen veins in the anus and lower rectum. The ailment is mainly caused by increased pressure in the veins due to straining when trying to have a bowel movement, or any activity that causes strain [1] Mostly, begin with the constipation, hemorrhoids are often complicated by anal pain, itching, inflammation, thrombosis and bleeding. It is also a vascular cushions, consisting of thick sub mucosa containing both venous and arterial blood vessels. The term "hemorrhoid is derived from the Greek word "haema" meaning blood and "rhoos" meaning flowing." And, the word "pile is derived from Latin meaning a ball or a mass." It is a common ailment among adults, that affects nearly 5-10 % of the world population, and it is further increasing due to consumption of unhygienic, fast foods, depriving of essential dietary fibres. Patients in later ages have persistent hemorrhoid symptoms, even during their lifetime. These are one of the most prevalent diseases worldwide, and its incidences are rising globally [2,3].

The disease is considered a significant cause of morbidity and has economic as well as social impacts on society. Mostly, it affects the routine lifestyles, as it put burden on health systems, loss of working days, food and hygiene, and sexual habits. Furthermore, the disease causes distress, displays petulance and causes bad temper in the patient's quality of life due to bleeding occurring with or without defaecation [4,5]. Considering the existing situations, studies on ethnomedicinal plants and their pharmacological activity on piles are often being encouraged to be used in disease management. The herbal products today symbolize safety in contrast to the synthetic drugs that are regarded as unsafe, non reliable and developing long term side effects to human health and environment [6,7].

The objective of this work was to undertake a comprehensive survey of ethnomedicinal plants used by tribals of Bhandara district. The survey comprises interaction with several herbalists, small scale herbal product sellers and THs, and it is an attempt to document information on the ethnomedicinal plants used in the treatment of hemorrhoids. However, most of the traditional uses of the medicinal plants are yet to be documented that result in the unawareness about ethnic

culture and herbal remedies prepared by THs. Therefore, it has become necessary to document and proclaim the knowledge and share the experiences precisely to ensure their quality and preservation for future generations.

Material and Methods

Traditional healers (THs) were interviewed by standardized questionnaires. Extensive surveys of the selected area were carried out in predetermined phases, in the year 2021-2022. Information was obtained from THs / Vaidus, Mukhiyas, and Pradhaan villagers and later, the name of the plants and parts used against hemorrhoids were listed. The gathered information was tabulated and selected plants along with their parts used were preserved in the form of herbarium sheets and digital herbarium was also prepared with the help of their photographs. Identifications of the collected plants were done by using available literature and floras [8,9].

Results and Discussion

Ethnomedicinal survey on plants used by traditional healers to treat hemorrhoids (Boils and Piles) was carried out in Forest areas of Bhandara district. The herbalists, small scale herb sellers and traditional healers (THs) were interviewed by standardized questionnaires. The survey revealed a total of 35 different plant species having ethnomedicinal uses against hemorrhoids. Taxonomically, the plants used by the THs of this area were classified under 24 families of angiosperms. Being most prominent families, Fabaceae and Euphorbiaceae families represented 3 species each, which is an indication of the significance of these families in the treatment of piles.

Table	1
-------	---

S.N.	Name of the Family	Name of the Plant	Part used
1.	Amaranthaceae	Amaranthus virdis L.	Leaves
2.	Amaranthaceae	Celosia argentea Linn	Leaves
3.	Anacardiaceae	Mangifera indica L.	Seeds
4.	Bombacaceae	Adansonia digitata Linn	Bark
5.	Caricaceae	Carica papaya Linn	Leaves
6.	Combretaceae	Terminalia catappa Linn	Bark
7.	Combretaceae	Terminalia chebula Retz	Fruit
8.	Compositae	Bidens pilosa Linn	Roots
9.	Crassulaceae	Bryophyllum pinnatum (Lam) Oken	Leaves
10.	Cucurbitaceae	Luffa cylindrical (Linn) M.J.Roem	Roots
11.	Cucurbitaceae	Momordica charantia L.	Leaves
12.	Discoreaceae	Dioscorea alata Linn.	Tuber
13.	Euphorbiaceae	Euphorbia hirta L	Whole plant
14.	Euphorbiaceae	Jatropha curcas Linn.	Leaves
15.	Euphorbiaceae	Ricinus communis Linn.	Leaves
16.	Fabaceae	Butea monosperma (Lam.)Taub	Fruits
17.	Fabaceae	Albizia lebbeck (Linn.)	Roots
18.	Fabaceae	Abrus precatorius Linn.	Leaves
19.	Labiatae	Ocimum basilicum Linn	Leaves
20.	Liliaceae	Allium sativum Linn.	Bulb
21.	Liliaceae	Allium cepa Linn.	Bulb
22.	Liliaceae	Aloe barbadensis Mill.	Leaves
23.	Malvaceae	Hibiscus sabdarriffa Linn.	Leaves
24.	Meliaceae	Azadirachta indica A. Juss	Bark
25.	Moraceae	Ficus benghalensis L	Fruit, Latex
26.	Moraceae	Ficus racemosa L.	Stem, Latex
27.	Moringaceae	Moringa oleifera Lam.	Leaves
28.	Myrtaceae	Psidiun guajava Linn	Root
29.	Nyctaginaceae	Boerhavia diffusa Linn	Whole plant
30.	Poaceae	Cymbopogon citratus (D.C) Stapf.	Leaves
31.	Poaceae	Cynodon dactylon (Linn.) Pers	Whole plant
32.	Sapindaceae	Cardiospermum halicacabum Linn	Leaves
33.	Rutaceae	Aegle marmelos L.	Fruits
34.	Umbelliferae	Centella asiatica Linn.	Root
35.	Zingiberaceae	Zingiber officinale Rosc.	Rhizome

Conclusion

Agricultural expansion, followed by deforestation, fire and overgrazing were found to be the major threats to the Medicinal plants (MPs) resources. Youth are unwilling to learn these traditional healing practices, which could probably results in loss of great deal of important information regarding MPs [1]. An interactive communication among pharmacologists, THs and ethnobotanists should be encouraged so that the local herbal medicines and herbal practitioners could have been accepted and more concern and care should be given to protect and conserve our diverse flora [10-13].

It is thus crucial that phytochemical and pharmacological studies should be done on these ethnomedicinal plants so that the remedies provided by THs could be more effective, more rational and more scientific. The phytochemical extracts should have been investigated in detail, so as to find the key bio-active compound, found to be common among these MPs. Hence, the modern studies may provide evidences to understand the exact mechanism of bio-action of different phytoconstituents.

Conflicts of interest: The author stated that no conflicts of interest.

References

- 1. Kacholi D.S., Halima M. Amir. Herbal remedies used by traditional healers to treat haemorrhoids in Tabora region, Tanzania, *Pharmaceutical Biology*, 2022; 60(1), 2182-2188
- Odewo SA, Fapojuwomi OA, Ojani BA, Adepoju OD, Sikiru GK. Ethnobotanical Survey of Some Medicinal Plants for Curing Pile or Hemorrhoids in Ago-Owu Forest Reserve, OsunState Nigeria, *Journal of Natural Sciences Research*, 2014; 4(20), 3-20
- 3. Parvaiz M, Hussain K., Tufail M, William G, Shoaib M, Danish M, Jamil. Ethnobotanical Survey of Wild Plants Used to Cure Piles in District Gujrat, Punjab, Pakistan. *Global Journal of Pharmacology*, 2013; 7 (3): 337-341,
- 4. Km. Ruby, R Chauhan, J Dwivedi. Cure of Hemorrhoids Using Indian Medicinal Plants: Hemorrhoids Cure With The Help Of Herbs. Lambert Academic Publishing Germany, 2012.
- 5. Rajani Chauhan, Km. Ruby, Jaya Dwivedi. Golden Herbs used in Piles Treatment: A Concise Report *International Journal of Drug Development and Research*, 2012; 4 (4).
- Rani S, Rana JC, Jeelani SM, Gupta RC, Santosh K. Ethnobotanical notes on 30 medicinal polypetalous plants of district Kangra of Himachal Pradesh. Academic Journals, 2013; 7(20): 1362-1369
- 7. Mukherjee P.K. 2013. Quality control of herbal drugs. Business Horizon Pharmaceutical Publishers, 13.
- Zingare, A. Ethnomedicinal Plant Diversity of Sakoli Taluka of Bhandara District (M.S.). J. Sci. Infor., 2012; 3:58-69.
- Zingare A. Plants Used as Source of Dyes by Tribals of Sakoli Taluka, District Bhandara (MS). International Journals of Researches in Biosciences, Agriculture and Technology, 2015; 1:136-138
- 10. Mike O. Soladoye, Michael O. Adetayo, Emmanuel C. Chukwuma, Amusa N Adetunji. Ethnobotanical Survey

of Plants Used in the Treatment of Hemorrhoids in South-Western Nigeria, *Annals of Biological Research*, 2010, 1 (4) : 1-15.

- Getachew M, Belayneh A, Kebede B. Alimaw Y, Biyazin Y, Abebaw A, Abebe D. Medicinal plants used for management of hemorrhoids in Ethiopia: A systematic review. *Heliyon*, 2022; 8(8) :1-8
- 12. Erbay ME, A Sar. Plants used in traditional treatment against hemorrhoids in Turkey. *Marmara Pharm J.* 2018; 22 (2): 110-132.
- 13. Astana PRW, Nisa U, Triyono A, Ardiyanto D, Fitriani U, Zulkarnain Z, Adwaita KP, F Novianto, 2021. Earth and Environmental Science 913: 1-8.

© 2023 | Published by IRJSE