

Research Article

Use of medicinal plants to serve mankind: a key study of local health traditional practices of piles in western Assam

Kishor Deka*, Dr. Namita Nath

Department of Botany, Goalpara College, Goalpara, Assam

***Corresponding author**

Kishor Deka

Email: dekakishor300@gmail.com

Abstract: The tribal dominated North Eastern part of India is well known for rich traditional health care practices from time immemorial. These local health traditional practices are found to be very significant and have scientific background. In this paper an attempt has been made to find out various such traditional knowledge that are practice in some parts of Western Assam to cure one of the prominent disease that is Piles or Hemorrhoids. The present work was conducted during the year of 2012-2013. It was found that the practices are having significant effect which helps to cure the diseases and serve the mankind from generation by generation.

Keywords: Traditional health practices, Piles, western Assam

INTRODUCTION

The tribal dominated North eastern part of India is well known for traditional health care practices. North East India is a rich diversified part of Indian subcontinent which is rich by its ethno-cultural diversity. Traditional health care practices are very common among the different tribes and communities of this region for human welfare. Assam is known for its rich flora and diverse forests and vegetation due to its unique topography, climate and altitude patterns [1]. This region of India is also a homeland of people belong to more than 100 ethnic tribes and sub tribes [2]. All these tribes have their own traditional method of treatment based on herbal drugs. These medicines are practiced by the local people since generations with a notable degree of efficiency in preventing or in controlling different diseases.

The World Health Organization has estimated that about 80% population in the developing countries depends directly on plants for medicines [3,4]. WHO defines medicinal plants as any plant which is one or more of its organs contain substance that can be used for the therapeutic purpose or which are procured for the synthesis of useful drug. The present work focuses on few medicinal plants which are being widely used by the local tribes of Western Assam for curing piles. This is a very common disease in which the blood vessels around the anus and in the rectum stress under pressure and may swell or bulge which is a very painful disease.

MATERIAL AND METHODS

Western Assam is located at the extreme western part of Assam it extends from 89°49'20" E to 91°48'16" longitude and 25°27' N to 26°54" latitude covering lower Brahmaputra valley. It covers eight districts- Dhubri, Kokrajhar, Bongaigaon, Goalpara, Barpeta and Nalbari, Chirang and Baksa. Out of which Barpeta and Nalbari districts were visited for extensive data collection. Nalbari with a longitudinal extension of 91°15'8" E to 91°30'52" E and latitudinal extension of 26°12' N to 26°45'10" N latitude and an area of 2257 sq. km. Barpeta district 90°45'11" E longitude to 91°50'4" E and 26°25'5" N to 26°45' E latitude with an area of 3345 sq. Km. This region is inhabited by several ethnic tribes like-Bodo kachari, Sarania kachari, Hajong, Rabha, Koch and Modahi which are Indo-Mongoloid racial stock.

The present work was carried out during the year of 2012-2013. The data were collected using a specially designed questionnaire and ultimately data were analyzed. So, for primary data collection the different locations of the study area were visited frequently to meet the local people specially those people who are well experienced with the knowledge of local health practices. Sometimes data was also collected from common villagers like ploughman, Fishman, cowboy, old aged man and women. The fresh herbal specimens were collected from the study area and were dried and made into herbarium specimens by following the standard herbarium method [5]. The identification of the dried specimens was done with the help of local floras and herbarium of Botanical Survey of India, Shillong

RESULT

The present study demonstrated that traditionally the tribes of this region use about eight (8) species of ethno medicinal plants (distributed in 7 genera belonging to 7 families) to cure piles. Among these the family Piperaceae includes two species which is followed by Rutaceae, Amaranthaceae, Nymphaeaceae, Verbinaceae, Agavaceae, Crassulaceae

that represented one species only. Data obtained from this survey is compiled in 4 Tables, which are commonly mention here as Item1, 2, 3 and 4. For its plant species botanical name, family, local name, part used and quantity are provided. Different plant parts are used to cure piles. Among this leaf (37.5%) is found to be most used than other, bark (25%), fruit (25%) and flower (12.5%).

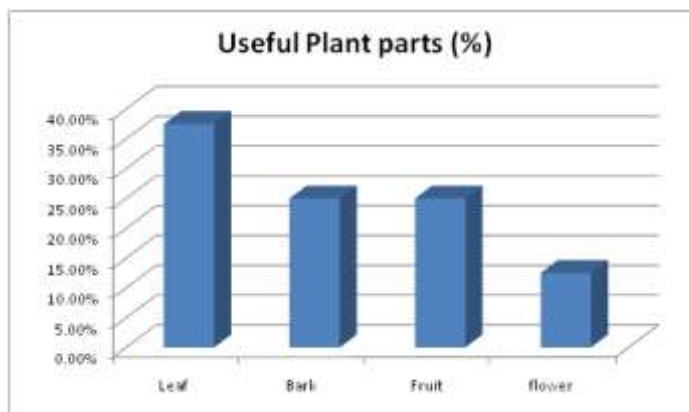


Fig-1: Distribution of medicinal plants parts used in the treatment of Hemorrhoids.



Fig-2: *Clerodendrum viscosum*



Fig-3: *Cordyline terminalis*

Table-1: The Medicinal plants used in item 1 to cure piles in Western Assam

| Sl.No | Scientific name | Family | Local name | Parts used | Quantity |
|-------|--|------------|------------|------------|------------|
| 1 | <i>Glycosmis arborea</i> (Roxb.) DC., Syn. <i>G. pentaphylla</i> Corr. | Rutaceae | Chauldhoa | Stem bark | 50 gm |
| 2 | <i>Piper longum</i> L. | Piperaceae | Pepoli | Fruit | 10 numbers |
| 3 | <i>Piper nigrum</i> L. | Piperaceae | Jaluk | Fruit | 10 numbers |

Mode of preparation:

50 grams of stem bark of *Glycosmis arborea* grinded along with ten (10) numbers of fruits of both *Piper longum* and *Piper nigrum* to make a

paste. Then the paste is mixed with 1 litre of water and allowed to boil to make the volume about half litre. Half (½) cup of this juice is prescribed to the patient, twice daily for 10-12 days.

Table-2: plants used in item 2 against piles.

| Sl.No | Scientific name | Family | Local name | Parts used | Quantity |
|-------|--------------------------------------|---------------|-------------|------------|--------------|
| 1 | <i>Iresine herbstii</i> Hook. Lindl. | Amaranthaceae | Bishohari | Leaves | 1 kg (Fresh) |
| 2 | <i>Nelumbo nucifera</i> Gaerth | Nympeaceae | Podoom phul | Dry flower | 1/2 kg |

Mode of preparation:

For preparation of this medicine two plant ingredients are necessary i.e. *Iresine herbstii* and *Nelumbo nucifera*. In this case one kilogram of leaves of *Iresine herbstii* is collected which is a very common medicinal plant often planted for its beautiful reddish habit. ½ kg dried flowers of *Nelumbo nucifera* is also an indispensable component in this preparation. Here all

the ingredients are boiled in 3 liters of filtered water where 25 grams of black salt is added. The mixture is allowed to boil till the volume reaches about 2 liters. Then it is allowed to pass through a sieve to get a clean uniform juice which is a very significant medicine that bears the capacity to cure piles. One cup of this juice is prescribed to take thrice a daily before food for three days continuously.

Table-3: The Medicinal plants used in item 3

| Sl. No. | Scientific name | Family | Local name | Parts used | Quantity |
|---------|------------------------------------|-------------|------------|------------|----------|
| 1 | <i>Clerodendrum viscosum</i> Vent. | Verbenaceae | Vetmali | Leaf | 45-50 gm |

Moe of preparation:

45-50 grams of fresh leaves of *Clerodendrum viscosum* are crushed and filtered to get a green leaf extract. The extract or the leaf Juice is mixed with ½ glass of water and a pinch of salt. The liquid mixture is allowed to take internally at the rate of

1 cup thrice daily before lunch continuously for three days. If the disease is detected at very early stage then it is allowed to take at a rate of ½ cup only. The patients are advised not to take spicy food; rather they are allowed to have boiled food only as far as possible.

Table 4: The Medicinal plants used in item 4

| Sl. No | Scientific name | Family | Local name | Parts used | Quantity |
|--------|--|--------------|------------|------------|----------|
| 1 | <i>Cordyline terminalis</i> Kunth | Agavaceae | Horisankar | Stem bark | 10 gm |
| 2 | <i>Kalanchoe pinnata</i> (Roxb.) Pers. | Crassulaceae | Duportanga | Leaf | 2 nos. |

Mode of preparation:

This is a very simple preparation where only two plant species are required that are *Cordyline terminalis* and *Kalanchoe pinnata*. Here 10 grams of bark of *Cordyline terminalis* Kunth and two matured leaves of *Kalanchoe pinnata* are crushed finely. The liquid extract is allowed to take internally at the rate of 2 tea spoonful thrice daily continuously for three days. Patients were reported to get rid from severe piles by consuming this herbal preparation.

CONCLUSION

Thus in the study area there is immense use of various plants to prevent or to cure Piles and these practices are transmitted from generation to generation as local health traditional practice.

The scope for analysis, research, modifications and refinements in such secrecy maintained family based occupation are very limited. Such secrecy restricted the growth of Indian Traditional

Medicinal System besides absence of sustained research and development and gradual erosion of knowledge about medicinal plants have contributed to the decline of traditional herbal health care practices.

So, it is very much essential to document such types of practices as it is concerned from the property right point of view. Steps should be taken to enhance these practices, if necessary scope of modification regarding preparation and other aspects should also be given importance.

Acknowledgment:

We are thankful to the provider of the Traditional Knowledge that is the healers of both Nalbari and Barpeta district for providing us the required data in local language.

REFERENCES

1. Mao AA, Hynniewta TM; Floristic Diversity of North East India. Journal of the Assam Science Society, 2000; 41(4):255-266.
2. Dutta ML, Nath SC; Ethno-medico Botany of the Deories of Assam India. Fitoterapia, 1998;69 (2): 147-154.
3. Pareek SK; Medicinal plants in India: Present status and future prospects. In Prospects of Medicinal Plants (Edited by Gautam PL. et al.). Indian Society for Plant Genetic Resources, New Delhi, 1996; 5-14
4. Mukhopadhyay S; Conservation, protection and biodiversity of medicinal plants. In Prospects of Medicinal Plants (Edited by Gautam P L. *et al.*) Indian Society for Plant Genetic Resources, New Delhi, 1998; 15-28
5. Jain SK, Rao RR; A Handbook of Field And Herbarium Methods. Today & Tomorrow's Printers and Publishers, New Delhi, 1997