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Tying or hanging of plants to body to cure diseases: an esoteric method of treatment

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Abstract

Oral administration and topical application of plant paste, decoction, juice and fermented plants are the usual methods of treating diseases in traditional phytotherapeutic practices. Other less common modes of phytotherapeutic practices are tying of plants to the body, wearing plants or plant parts in the form of garlands, and wearing amulets containing a tiny section of a plant or plant part. The less common modes of plant-based therapy can be considered esoteric ways of treating diseases, which are practiced by folk medicinal practitioners in Bangladesh. We herein describe two such esoteric methods of treatment. The first comprises wearing a garland of small branch pieces of *Achyranthes aspera* on the head to cure jaundice. In the second treatment, one inch piece of root of *Heterophragma adenophyllum* is tied around the waist with a string to cure waist pain. Whether any cure from such esoteric treatments result from volatile components emitted from the plant parts or merely reflect a placebo effect is an open question but which merits further studies, since such treatments are practiced in different parts of the world.

Keywords: folk medicine, esoteric, Gopalganj, Bangladesh

Introduction

Folk medicine, although possibly the most common form of treatment in Bangladesh, is also the most diverse in terms of treatment ingredients and mode of treatment. Folk medicinal practitioners (FMPs) do not need to undergo any formal training or Governmental approval to initiate their medical practices. Anybody can start practicing anytime; whether the practice is successful depends on the experience and medicinal plant knowledge of the FMP. Most FMPs use medicinal plants as their chief and only ingredient in their treatment. The mode of administration of a given plant or plant part is also simple being either oral or topical. However, occasionally unusual modes of treatment bordering on the esoteric are used by FMPs as well as households (the latter in the form of home remedies) and tribal people of Bangladesh to treat diseases [1-3].

Documentation of indigenous medicinal practices has led to discovery of many modern allopathic drugs [4]. Not only because of this, but also documentation of indigenous medicinal plants is important from the view point of their conservation and further scientific studies. With the rapid growth of urbanization and human habitat, previous forest lands, fallow lands, and water bodies are disappearing at a rapid rate, which is disturbing because these are the prime places for wild medicinal plants to grow. As such, we have been documenting folk and tribal medicinal practices of Bangladesh for a number of years, which documentation includes mode of usage [5-30]. Among various esoteric usages of medicinal plants observed in our studies are use of plants in amulets, which are then worn around the waist, neck or wrist, and use of numerology and verses from holy books along with plants. In this study we document the use of two plants, which are tied to the body to cure jaundice and waist pain. It is to be noted that besides tying the plants to the body, the plants were not administered to the patient in any way like oral or topical and the plants were not used in the form of decoction, juice or paste.

Materials and Methods

Information was collected from Kiron Chandra Mondol, Debashur village, Gopalganj district, Bangladesh, male, age 75 years, and by religion belonging to the Hindu religion. Interviews were conducted with the help of a semi-structured questionnaire and the guided field-walk method as described by Martin [31] and Maundu [32]. In this method, the FMP took the interviewers to locations from where he collected his medicinal plants, pointed out the plants,

and described their uses along with providing the local names. Plant specimens were collected, pressed and dried in the field and later identified at the Bangladesh National Herbarium in Dhaka. Informed consent as to dissemination of any information provided by the FMP including mentioning the FMP's name, age, religion and gender was obtained followed by interviews conducted in Bengali. Plant specimens were deposited with the Medicinal Plant Collection Wing of the

University of Development Alternative.

Results and Discussion

The FMP used two plant species distributed into two families in his treatment method of tying the plant or plant part to the body for the purpose of curing diseases. The results are shown in Table 1.

Table 1: Plants, diseases and mode of treatment by the FMP of Gopalganj district

Scientific Name	Family Name	Local Name	Parts used	Ailments treated
<i>Achyranthes aspera</i> L.	Amaranthaceae	Bilai-achra	Branch	Jaundice. Branches are cut into 101 small pieces and the pieces are made into a garland. The patient has to wear the garland in the morning around the head; it will become bigger as the day goes and at the end of the day it falls off by itself because of the larger size.
<i>Heterophragma adenophyllum</i> (Wall. ex G. Don) Seem. ex Benth.	Bignoniaceae	Kawa-jhinge	Root	Waist pain. One inch of root is cut and tied around the waist.

In the first instance 101 small pieces of a branch or branches of *Achyranthes aspera* were stringed together to make a garland, which was put on top of the head. The garland was made to such a size so as to not slip over the head down to the neck or below, but would remain over the top of the head. The garland was put in the morning. As the morning led into the evening, the FMP claimed that the garland would grow larger and larger and fall from the head to the neck and ultimately slide down to the ground. In conjunction with this event, the yellow coloration in the eyes and skin, indicating that the patient has jaundice would disappear, that is the jaundice would be cured. There was no reasonable answer from the FMP as to why 101 pieces of the branch were used to make the garland and not more or less. However, in the Vedic ritual of horse sacrifice, the horse was decorated with 101 pearls^[33], so the number 101 has significance in the Hindu religion. Interestingly, *Achyranthes aspera* has been reported to be used for jaundice treatment in traditional medicines^[34]. Hepatoprotective activity of aerial parts of the plant has been seen against paracetamol-induced hepatotoxicity^[35].

To our knowledge, this is the first reported use of *Heterophragma adenophyllum* to reduce waist pain. The Chakma tribe of Bangladesh uses the plant against piles and constipation^[36]. Any analgesic activity of the plant is yet to be studied.

Strange as it may seem and on the surface unexplainable, tying of the plants to the body to cure diseases is also practiced in other countries besides Bangladesh. In Bangladesh, roots of the plant *Mimosa diplotricha* are worn around the neck in the form of a garland for treatment of jaundice; roots are put in an amulet and tied around the waist to prevent snake bite^[37]. A garland consisting of 1 cm long root pieces of *Boerhaavia diffusa* is also worn around the neck in some parts of India for jaundice. With time, the garland gets larger in size with concomitant decrease in jaundice^[38]. In Arunachal Pradesh, India, pieces of bark of *Alstonia scholaris* are worn around the neck in the form of a garland to cure jaundice^[39].

While a placebo effect cannot be ruled out, it is apparent that studies need to be conducted in a scientifically established manner as to the efficacy of this type of esoteric treatment on the actual cure of the disease. It is quite possible that the garlands might be producing a chemical or some sort of aroma (chemical-derived), which is useful in alleviating the disease or disease symptoms.

References

1. Khatun A, Jannat K, Ahamed T, Jahan R, Rahmatullah M. Some esoteric home remedies practiced in Narayanganj district, Bangladesh. *J Med Plants Stud* 2018; 6(4):166-168.
2. Bhuiyan P, Khatun Z, Jahan S, Morshed MT, Rahman S, Afsana NA *et al.* Use of Quranic verses, amulets, numerology, and medicinal plants for treatment of diseases: a case study of a healer in Narsinghdi district, Bangladesh. *Am.-Eur J Sustain Agric* 2013; 7(5):415-425.
3. Seraj S, Rahmatullah M, Monjur-E-Khudha M, Aporna SA, Khan MSH, Jahan R. Amulets and other uncommon treatments prescribed by traditional medicinal practitioners of the Bede community residing in Porabari village of Dhaka district, Bangladesh. *J Alternat Complement Med.* 2011; 17(11):987-993.
4. Yuan H, Qianqian M, Ye L, Piao G. The traditional medicine and modern medicine from natural products. *Molecules.* 2016; 21:559.
5. Khatun Z, Bhuiyan P, Roney MSI, Rahmatullah M. Traditional knowledge on zootherapeutic practices among some folk medicinal practitioners of Bangladesh. *Am.-Eur J Sustain Agric.* 2013; 7(3):155-161.
6. Nahar S, Rahmatullah M. Plants, animals, birds, insects, minerals – all are medicines to a folk medicinal practitioner in Nilphamari district, Bangladesh. *World J Pharm Pharm Sci.* 2016; 5(4):2422-2439.
7. Rahmatullah M, Ferdausi D, Mollik MAH, Jahan R, Chowdhury MH, Haque WM. A Survey of Medicinal Plants used by Kavirajes of Chalna area, Khulna District, Bangladesh. *Afr J Tradit Complement Alternat Med.* 2010; 7(2):91-97.
8. Rahmatullah M, Khatun MA, Morshed N, Neogi PK, Khan SUA, Hossain MS *et al.* A randomized survey of medicinal plants used by folk medicinal healers of Sylhet Division, Bangladesh. *Adv Nat Appl Sci.* 2010; 4(1):52-62.
9. Rahmatullah M, Kabir AABT, Rahman MM, Hossain MS, Khatun Z, Khatun MA *et al.* Ethnomedicinal practices among a minority group of Christians residing in Mirzapur village of Dinajpur District, Bangladesh. *Adv Nat Appl Sci.* 2010; 4(1):45-51.
10. Rahmatullah M, Momen MA, Rahman MM, Nasrin D, Hossain MS, Khatun Z *et al.* A randomized survey of medicinal plants used by folk medicinal practitioners in Daudkandi sub-district of Comilla district, Bangladesh.

- Adv Nat Appl Sci. 2010; 4(2):99-104.
11. Rahmatullah M, Mollik MAH, Ahmed MN, Bhuiyan MZA, Hossain MM, Azam MNK *et al.* A survey of medicinal plants used by folk medicinal practitioners in two villages of Tangail district, Bangladesh. *Am.-Eur J Sustain Agric.* 2010; 4(3):357-362.
 12. Rahmatullah M, Mollik MAH, Islam MK, Islam MR, Jahan FI, Khatun Z *et al.* A survey of medicinal and functional food plants used by the folk medicinal practitioners of three villages in Sreepur Upazilla, Magura district, Bangladesh. *Am.-Eur J Sustain Agric.* 2010; 4(3):363-373.
 13. Rahmatullah M, Jahan R, Khatun MA, Jahan FI, Azad AK, Bashar ABMA *et al.* A pharmacological evaluation of medicinal plants used by folk medicinal practitioners of Station Purbo Para Village of Jamalpur Sadar Upazila in Jamalpur district, Bangladesh. *Am.-Eur J Sustain Agric.* 2010; 4(2):170-195.
 14. Rahmatullah M, Ishika T, Rahman M, Swarna A, Khan T, Monalisa MN *et al.* Plants prescribed for both preventive and therapeutic purposes by the traditional healers of the Bede community residing by the Turag River, Dhaka district. *Am.-Eur J Sustain Agric.* 2011; 5(3):325-331.
 15. Rahmatullah M, Azam MNK, Rahman MM, Seraj S, Mahal MJ, Mou SM *et al.* A survey of medicinal plants used by Garo and non-Garo traditional medicinal practitioners in two villages of Tangail district, Bangladesh. *Am.-Eur J Sustain Agric.* 2011; 5(3):350-357.
 16. Rahmatullah M, Biswas KR. Traditional medicinal practices of a Sardar healer of the Sardar (Dhangor) community of Bangladesh. *J Altern Complement Med* 2012; 18(1):10-19.
 17. Rahmatullah M, Hasan A, Parvin W, Moniruzzaman M, Khatun Z, Jahan FI *et al.* Medicinal plants and formulations used by the Soren clan of the Santal tribe in Rajshahi district, Bangladesh for treatment of various ailments. *Afr J Tradit Complement Alternat Med.* 2012; 9(3):350-359.
 18. Rahmatullah M, Khatun Z, Hasan A, Parvin W, Moniruzzaman M, Khatun A *et al.* Survey and scientific evaluation of medicinal plants used by the Pahan and Teli tribal communities of Natore district, Bangladesh. *Afr J Tradit Complement Alternat Med.* 2012; 9(3):366-373.
 19. Rahmatullah M, Azam MNK, Khatun Z, Seraj S, Islam F, Rahman MA *et al.* Medicinal plants used for treatment of diabetes by the Marakh sect of the Garo tribe living in Mymensingh district, Bangladesh. *Afr J Tradit Complement Alternat Med.* 2012; 9(3):380-385.
 20. Rahmatullah M, Khatun Z, Barua D, Alam MU, Jahan S, Jahan R. Medicinal plants used by traditional practitioners of the Kole and Rai tribes of Bangladesh. *J Altern Complement Med.* 2013; 19(6):483-491.
 21. Rahmatullah M, Pk SR, Al-Imran M, Jahan R. The Khasia tribe of Sylhet district, Bangladesh, and their fast-disappearing knowledge of medicinal plants. *J Altern Complement Med.* 2013; 19(7):599-606.
 22. Mahmud MR, Parvin A, Anny IP, Akter F, Tarannom SR, Moury SI *et al.* Home remedies of village people in six villages of Dinajpur and Rangpur Districts, Bangladesh. *World J Pharm Pharm Sci.* 2015; 4(2):63-73.
 23. Akhter J, Khatun R, Akter S, Akter S, Munni TT, Malek I *et al.* Ethnomedicinal practices in Natore district, Bangladesh. *World J Pharm Pharm Sci.* 2016; 5(8):212-222.
 24. Khatun A, Jannat K, Jahan R, Rahmatullah M. Some plant-based home remedies used in Narayanganj district, Bangladesh. *J Med Plants Stud.* 2018; 6(4):104-106.
 25. Eatimony S, Urmee NK, Sultana M, Ara N, Rahmatullah M. Folk medicinal practices in Khutmura village, Narshingdi District, Bangladesh. *J Med Plants Stud.* 2019; 7(1):86-88.
 26. Rahman S, Rahmatullah M. Medicinal plants used by a folk herbalist. *World J Pharm and Pharm Sci.* 2015; 4(8):187-195.
 27. Rahmatullah M, Ishika T, Rahman M, Swarna A, Khan T, Monalisa MN *et al.* Plants prescribed for both preventive and therapeutic purposes by the traditional healers of the Bede community residing by the Turag River, Dhaka district. *Am.-Eur.-J Sustain Agric.* 2011; 5(3):325-331.
 28. Rahmatullah M, Hossain S, Khatun A, Seraj S, Jahan R. Medicinal plants used by various tribes of Bangladesh for treatment of malaria. *Malar Res Treat.* 2012; 2012:371798.
 29. Munni MJ, Jahan N, Noor-E-Jannat, Parvin J, Mushtari T, Yeasmin MM *et al.* A survey of medicinal plants used by folk medicinal practitioners in two villages of Sherpur district, Bangladesh. *World J Pharm Pharm Sci.* 2015; 4(1):238-250.
 30. Zahan T, Ahmed I, Omi SI, Naher K, Islam S, Mahmud ASMSHB, *et al.* Ethnobotanical uses of medicinal plants by the Tudu sub-clan of the Santal tribe in Joypurhat district of Bangladesh. *Am.-Eur J Sustain Agric.* 2013; 7(3):137-142.
 31. Martin GJ. *Ethnobotany: a 'People and Plants' Conservation Manual*, Chapman and Hall, London, 268.
 32. Maundu P. *Methodology for collecting and sharing indigenous knowledge: a case study.* *Indigenous Knowledge and Development Monitor.* 1995; 3:3-5.
 33. Murthy SSN. Number symbolism in the Vedas. *Electronic Journal of Vedic Studies.* 2005; 12(3):86-98.
 34. Srivastava PK. *Achyranthes aspera*: A potential immunostimulating plant for traditional medicine. *Int J Pharm Sci Res.* 2014; 5(5):1601-1611.
 35. Kuymar SVS, Chandrika G, Mahesh K, Meghanath PVS. Hepatoprotective activity of *Achyranthes aspera* Linn against paracetamol induced toxicity. *Int J Pharm Pharm Sci.* 2012; 4(5):299-302.
 36. Rahmatullah M, Samarra W, Jahan R, Rahman S, Sharmin N, Miajee ZUMEU *et al.* An ethnomedicinal, pharmacological and phytochemical review of some Bignoniaceae family plants and a description of Bignoniaceae plants in folk medicinal uses in Bangladesh. *Adv Nat Appl Sci.* 2010; 4(3):236-253.
 37. Karim MS, Rahman MM, Shahid SB, Malek I, Rahman MA, Jahan S *et al.* Medicinal plants used by the folk medicinal practitioners of Bangladesh: a randomized survey in a village of Narayanganj district. *Am.-Eur J Sustain Agric.* 2011; 5(4):405-414.
 38. Fatma N, Uphadhyay RP. *Euphorbia nivulia* Buch. Ham.: A boon for jaundice (A case study). *Ann Plant Sci.* 2015; 4(6):1137-1139.
 39. Shankar R, Rawat MS, Deb S, Sharma BK. Jaundice and its traditional cure in Arunachal Pradesh. *J Pharm Sci Innov.* 2012; 1(3):93-97.