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PHYTOTHERAPEUTIC PRACTICES OF A SPIRITUALIST FOLK MEDICINE PRACTITIONER OF BANGLADESH

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ABSTRACT

Background. Folk medicine is one of the oldest forms of traditional medicinal practices in Bangladesh. Folk medicinal practitioners (FMPs) are quite common and there is usually at least one FMP in each of the 86,000 villages of Bangladesh. FMPs do not require any formal medical training and consequently can practice any time and at any place. Most FMPs acquire their medicinal knowledge (mostly phytotherapeutic knowledge) from elderly members of the family and through experimentation or learning from a 'guru'. However, some FMPs (and they are very rare) claim to obtain their phytotherapeutic knowledge in dreams or through interaction with spiritual powers in dreams or otherwise. **Methods.** The objective of the present study was to document the phytotherapeutic practices of a FMP in Keraniganj, Dhaka district, Bangladesh, who claimed to obtain his knowledge in dreams through interaction with spiritual powers. Interviews were carried out with the help of a semi-structured questionnaire. **Results.** Although the FMP used only eight plant species, the therapeutic uses of these plant species were varied and some uses were quite unconventional. **Conclusion.** The plants used by the FMP merit further studies as possible sources of new drugs.

KEYWORDS: Ethnomedicine, Keraniganj, folk medicine, spiritualist, Bangladesh.

BACKGROUND

Folk medicine is one of the oldest forms of traditional medicinal practices in Bangladesh. Folk medicinal practitioners (FMPs) are quite common and there is usually at least one FMP in each of the 86,000 villages of Bangladesh. Besides villages, FMPs can be found in towns and cities, where their clients usually come from the less affluent section of the population.

FMPs do not require any formal medical training and consequently can practice any time and at any place. Most FMPs acquire their medicinal knowledge (mostly phytotherapeutic knowledge) from elderly members of the family and through experimentation or learning from a 'guru'. However, some FMPs (and they are very rare) claim to obtain their phytotherapeutic knowledge in dreams or through interaction with spiritual powers in dreams or otherwise.

To document the hitherto largely undocumented medicinal plants of Bangladesh, we had been conducting ethnomedicinal surveys among folk and tribal medicinal practitioners of the country for a number of years[1-33] Such surveys are important not only for documenting and conservation of floral species, but also important from a therapeutic point of view, because even in modern times, plants have been sources of many important allopathic drugs.[34] Many of these drugs have been discovered based on traditional knowledge.[35] As such, documentation of any form of traditional knowledge represents an opportunity for new drug discovery.

Introduction of a spiritual element is not uncommon in traditional medicine. Shamans or medicinal men in various traditional medicinal practices of many countries have from ancient times claimed to have communion with 'alien spirits' to gain their medicinal knowledge.[36] The Mising tribe of Assam has medicinal plants in connection with their magico-religious beliefs.[37] Among the Tharus of Nawalparasi district in central Nepal, the medicinal man (known as Gurau) function as a medium between the supernatural and the natural world.[38] Even among the 'developed' societies and 'civilized' people, an element of the supernatural exists in the conception of a 'Creator' (monotheistic religions) or multiple deities (polytheistic religions), who are believed to have the power of healing as well as of giving diseases. Some FMPs in Bangladesh claim to obtain their medicinal knowledge in dreams or through supernatural entities known as 'jinns' (in Arabic). Since these FMPs are rare and still more rarely divulge their information, the objective of the present study was to document the phytotherapeutic practices of a FMP in South Keraniganj, which is a suburb of Dhaka city, and who claimed to gain his phytotherapeutic knowledge through dreams.

METHODS

The FMP was named Mir Fakir, and gave his age as 60 years. He was male, practicing for 40 years, and mentioned that he obtained his plant recipes in dreams. He resided at South Keraniganj, a suburb of Dhaka City in Dhaka district. Prior informed consent was initially

obtained from the FMP. The FMP was informed as to the nature of our visit and consent obtained to disseminate any information provided, including his name both nationally and internationally. The FMP agreed to divulge some information regarding his phytotherapeutic practices, which he mentioned were obtained from dreams. Actual interviews were conducted in the Bengali language, which was spoken fluently by the FMP as well as the interviewers. The interviews were conducted with the help of a semi-structured questionnaire and the guided field-walk method of Martin[39] and Maundu.[40] In this method the FMP took the interviewers on guided field-walks through areas from where he collected his medicinal plants or plant parts, pointed out the plants, and described their uses. All plant specimens were photographed and collected on the spot, pressed, dried and brought back to Bangladesh National Herbarium at Dhaka for identification. Voucher specimens were deposited with the Medicinal Plant Collection Wing of the University of Development Alternative.

RESULTS

The FMP was found to use a total of 8 plants distributed into 7 families for treatment. However, even these few plants were used to treat a diverse number of disorders like eye, skin, liver, gastrointestinal, and respiratory tract disorders along with other problems like hypertension, pain, poisonous insect bites, diabetes, rheumatic fever, dog bite and menstrual disorders. Different parts of the same plant were used for treatment of different ailments, suggesting that the FMP was aware that different parts of the same plant may have quite different pharmacological and therapeutic properties. In two cases, the FMP used a combination of two plants for treatment. The results are shown in Table 1.

Among the diseases treated, hypertension and diabetes are complicated disorders, which cannot be fully cured with any forms of medication thus far reported – traditional or modern. The FMP used *Santalum album* along with *Zingiber officinale* to treat hypertension. Scientific studies have shown that *Santalum album* has antihypertensive properties; in India, the bark is considered good for meditative purposes, which can possibly lower high blood pressure; bark paste of the plant is also considered good for skin.[41] *Zingiber officinale* rhizomes have also been shown to have blood pressure lowering effect.[42] Thus the combination of the two plant parts can in reality prove beneficial in lowering high blood pressure.

Methanol extract of *Abroma augusta* leaf has been shown to attenuate diabetes induced nephropathy and cardiomyopathy in experimental rats.[43] In oral glucose tolerance tests also,

methanol extract of leaves of *Abroma augusta* lowered serum glucose in glucose-loaded mice, suggesting that the leaves can have beneficial effect in diabetes.[44]

Table 1: Medicinal plants and formulations of the FMP.

Serial Number	Scientific Name	Family Name	Local Name	Parts used	Ailments and mode of medicinal use
1	*Heliotropium indicum* L.	Boraginaceae	Hatishur	Leaf, root	Cataract, abscess, skin diseases, poisonous insect bite. Leaf juice is taken orally for 7 consecutive days with a glass of water. Jaundice. Root juice is taken orally for 7 consecutive days with a glass of water.
2	*Bauhinia purpurea* L.	Fabaceae	Kanchon	Leaf, root	Diarrhea, diabetes, and asthma. Leaf paste is mixed with water and taken orally. Bruises with pain. Root juice is taken orally.
3	*Senna alata* (L.) Roxb.	Fabaceae	Dad mordon	Leaf	Eczema, hookworm. Leaves are boiled, made into a paste and taken orally. Skin diseases, scabies, and poisonous insect bite. Leaves are boiled, mixed with one glass of water and taken orally in the morning.
4	*Piper nigrum* L.	Piperaceae	Gol morich	Fruit	See *Abroma augusta*.
5	*Santalum album* L.	Santalaceae	Chandan	Wood, oil	Hypertension, headache, bronchitis. Oil is mixed with water and rhizome juice of *Zingiber officinale* and taken orally. Skin disease, prolonged coughs. Paste of wood is rubbed on skin for skin diseases and chest for coughs.
6	*Datura mete* L.	Solanaceae	Kalo dhutra	Leaf	Skin disorders, rheumatic fever, ear ache, eye disorders, dog bite, and poisonous insect bite. Two leaves are fried and taken orally in the morning and evening on 7 consecutive days.
7	*Abroma augusta* L.f.	Sterculiaceae	Ulot kombol	Root, leaf	Dysentery, burning sensations during urination, menstrual disorders like excessive menstruation, stoppage of enstruation, whitish discharge with menstruation. Paste prepared from roots of *Abroma augusta* and fruits of *Piper nigrum* is mixed with water and taken orally in the form of a sherbet. Uterine disorder, diabetes, rheumatic fever. Leaves are sliced into small pieces and soaked in a glass of water overnight. The water is strained and taken orally in the morning. This is done for 7 consecutive days.
8	*Zingiber officinale* Roscoe	Zingiberaceae	Ada	Rhizome	See *Santalum album*.

Aqueous whole plant extract of *Heliotropium indicum* has been shown to have anti-cataract potential by inhibiting selenite-induced cataract in rat pups.[45] The FMP used the plant to treat cataract. However, the use of the plant by the FMP for treatment of jaundice

remains to be scientifically validated and thus merits further scientific research. The FMP also used the plant to treat skin diseases and poisonous insect bites. Traditional healers in Kancheepuram district of Tamil Nadu, India, use the plant for the same purpose.[46] Thus the common ethnomedicinal use of the plant in two very different regions strongly suggests that the plant be scientifically studied for treatment of skin disorders.

Although not every plant used by the FMP has been reviewed, the above discussion strongly indicates that irrespective of how the information was obtained, the phytotherapeutic uses of the FMP have scientific validations. These plants, even in crude extract or decoction or other crude forms can form a readily available and affordable means to treat both common disorders as well as serious disorders like diabetes and hypertension. At the same time, validation of their traditional uses can help conservation effort of these medicinal plant species and can help people living in remote areas or people unable to afford costly allopathic treatment an alternative means of treatment of a number of disorders.

CONCLUSION

Although the FMP claimed that his phytotherapeutic practice knowledge has been obtained in dreams, enough scientific reports exist to suggest that the plants used by the FMP merit more scientific attention towards discovery of possible lead compounds and new drugs.

Conflicts of interest

The author(s) declare that they have no competing interests.

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