HOME REMEDIES OF A RURAL HOUSEWIFE IN JAMALPUR DISTRICT, BANGLADESH

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ABSTRACT

Background. Home remedies as practiced by rural housewives form an integral part of the folk medicinal system in Bangladesh. Evidences suggest that especially elderly women of families can possess considerable knowledge of medicinal properties of plants. It was of interest to document the medicinal plant used by a rural housewife in Jamalpur district, Bangladesh. Methods. Interview of the housewife was carried out with the help of a semi-structured questionnaire and the guided field-walk method. Results. The housewife used a total of 15 plants distributed into 12 families for treatment. The various diseases treated included pain, gastrointestinal disorders, fever, jaundice, coughs, and urinary problems. Conclusion. The medicinal plant knowledge of rural housewives, following scientific validation, can be beneficial in treating ailments at an affordable cost.

KEYWORDS: Rural housewife, medicinal plants, Jamalpur, Bangladesh.

BACKGROUND

Rural housewives form an integral part of the folk medicinal system of Bangladesh. The elderly women of rural homesteads can be observed to go out early in the morning to collect herbs and other plant parts, which they dispense to the rural folks seeking their medical help. We had been conducting ethnomedicinal surveys among folk medicinal and tribal medicinal practitioners for a number of years.\(^1\)\(^{-}\)\(^{20}\) Since home remedies are a part of the folk medicinal system, our surveys have also included interviewing rural and urban practitioners (both men and women), who act as part time folk herbalists or are knowledgeable on various home...
remedies. The objective of this study was to document the medicinal plants used by a rural housewife (RH) at Shekher vita village in Jamalpur district, Bangladesh.

METHODS
The RH who was interviewed was named Mst. Shahida Akter, age 40 years. Prior informed consent was initially obtained from the RH. The RH was informed as to the nature of our visit and consent obtained to disseminate any information provided including her name both nationally and internationally. Actual interviews were conducted in the Bengali language, which was spoken fluently by the RH 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\[21\] and Maundu.\[22\] In this method the RH took the interviewers on guided field-walks through areas from where she collected her 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 RH was observed to use a total of 15 plants in her formulations, which plants were distributed into 12 families. The Fabaceae family contributed the maximum of 3 plants followed by the Lamiaceae family with 2 plants. These plants were used for treatment of various ailments, which included pain, gastrointestinal disorders, fever, jaundice, coughs, and urinary problems. The results are shown in Table 1. It may be seen that the RH treated common problems in rural folks, which is important for it saved the rural people of her village considerable time, effort and money in visiting modern allopathic doctors, who do not usually practice in villages and practice in towns and cities which are always not accessible with ease to the village people.

The RH used plants both to treat diseases as well for preventive purposes. For instance, juice obtained from crushing whole plants of *Mimosa pudica* or leaves of *Hibiscus rosa sinensis* was advised by the RH to be orally taken to maintain good health. In other cases, where a disease was actually treated, the formulations were essentially simple, being juice from whole plant or plant part, which was advised to be orally taken or topically applied. In only one instance, two plant parts were used where the RH advised juice of young leaves of
Clerodendrum viscosum to be taken orally with leaf juice of Psidium guajava as treatment for blood dysentery.

Table 1. Medicinal plants and formulations of the rural housewife in Jamalpur District, Bangladesh

<table>
<thead>
<tr>
<th>S. N.</th>
<th>Scientific Name</th>
<th>Family Name</th>
<th>Local Name</th>
<th>Parts used</th>
<th>Ailments and mode of medicinal use</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Amaranthus spinosus L.</td>
<td>Amaranthaceae</td>
<td>Khure kanta</td>
<td>Root</td>
<td>Body ache. Root juice is orally taken.</td>
</tr>
<tr>
<td>2</td>
<td>Centella asiatica (L.) Urb.</td>
<td>Apiaceae</td>
<td>Dhol manik</td>
<td>Leaf</td>
<td>Dysentery. Leaf juice is orally taken.</td>
</tr>
<tr>
<td>3</td>
<td>Eclipta alba (L.) Hassk.</td>
<td>Asteraceae</td>
<td>Kala koite</td>
<td>Whole plant</td>
<td>Fever. Whole plant juice is orally taken.</td>
</tr>
<tr>
<td>4</td>
<td>Coccinia grandis (L.) Voigt</td>
<td>Cucurbitaceae</td>
<td>Tela kochu</td>
<td>Leaf</td>
<td>To keep head cool, headache. Leaf juice is topically applied to scalp.</td>
</tr>
<tr>
<td>5</td>
<td>Cajanus cajan (L.) Millsp.</td>
<td>Fabaceae</td>
<td>Arai kalai</td>
<td>Leaf</td>
<td>Jaundice. Leaf juice is orally taken.</td>
</tr>
<tr>
<td>6</td>
<td>Cassia occidentalis L.</td>
<td>Fabaceae</td>
<td>Arais</td>
<td>Lower part of plant</td>
<td>Jaundice. Juice obtained from lower part of plant is orally taken.</td>
</tr>
<tr>
<td>7</td>
<td>Mimosa pudica L.</td>
<td>Fabaceae</td>
<td>Lojjaboti</td>
<td>Whole plant</td>
<td>To maintain good health. Whole plant juice is orally taken.</td>
</tr>
<tr>
<td>8</td>
<td>Leucas aspera (Willd.) L.</td>
<td>Lamiaceae</td>
<td>Dom kolosh</td>
<td>Leaf</td>
<td>Body ache. Leaf juice is orally taken. Leaves are also soaked in water, warmed, and applied to painful areas.</td>
</tr>
<tr>
<td>9</td>
<td>Ocimum sanctum L.</td>
<td>Lamiaceae</td>
<td>Tulshi</td>
<td>Leaf</td>
<td>Coughs. Leaves are soaked in tea followed by drinking the tea.</td>
</tr>
<tr>
<td>10</td>
<td>Hibiscus rosa sinensis L.</td>
<td>Malvaceae</td>
<td>Rokto joba</td>
<td>Leaf</td>
<td>To maintain good health. Leaf juice is orally taken.</td>
</tr>
<tr>
<td>11</td>
<td>Azadirachta indica A. Juss.</td>
<td>Meliaceae</td>
<td>Neem</td>
<td>Leaf</td>
<td>Toothache. Leaves are used as toothpaste to brush teeth.</td>
</tr>
<tr>
<td>12</td>
<td>Musa paradisiaca L.</td>
<td>Musaceae</td>
<td>Bichi kola gach</td>
<td>Skin of trunk</td>
<td>Urinary problem. The skin is tied around the waist.</td>
</tr>
<tr>
<td>13</td>
<td>Psidium guajava L.</td>
<td>Myrtaceae</td>
<td>Peyara</td>
<td>Leaf</td>
<td>Acid taste. Leaves are chewed. See Clerodendrum viscosum.</td>
</tr>
<tr>
<td>14</td>
<td>Cynodon dactylon (L.) Pers.</td>
<td>Poaceae</td>
<td>Durbaghash</td>
<td>Aerial parts</td>
<td>To stop bleeding from external cuts and wounds. Paste of aerial parts is applied topically. Gastric problems. Juice obtained from aerial parts is taken orally on an empty stomach for a few days.</td>
</tr>
<tr>
<td>15</td>
<td>Clerodendrum viscosum Vent</td>
<td>Verbenaceae</td>
<td>Biatte gach</td>
<td>Young leaf</td>
<td>Blood dysentery. Juice of young leaves of Clerodendrum viscosum is taken orally with leaf juice of Psidium guajava.</td>
</tr>
</tbody>
</table>
DISCUSSION

Although the RH used plants to treat common disorders, it is worthwhile to examine the available scientific literature to determine whether the uses of at least some plants are scientifically validated. *Amaranthus spinosus* was used by the RH to treat body ache. The analgesic activity of extract of the whole plant has been reported.\(^{[23]}\) The use of *Centella asiatica* in treatment of dysentery has been mentioned;\(^{[24]}\) notably, the plant was used by the RH to treat dysentery. Analgesic effect has been shown for hydroalcoholic extract of *Coccinia grandis*,\(^{[25]}\) a plant used by the RH for treatment of headache. *Cajanus cajan* or *Cassia occidentalis* was used by the RH against jaundice; the hepatoprotective effect of the plants against carbon tetrachloride induced liver damage has been demonstrated.\(^{[26, 27]}\) *Leucas aspera* was used by the RH to treat body pain. Ethanolic extract of the plant has been shown to possess analgesic activity.\(^{[28]}\) The anti-tussive activity of *Ocimum sanctum* has been described,\(^{[29]}\) a plant used by the RH to treat coughs. The RH used *Azadirachta indica* to treat toothache. Analgesic property of hydroalcoholic extract of leaves of the plant has been reported.\(^{[30]}\) Thus a brief perusal of the available scientific literature suggests that the RH was scientifically validated in the use of a number of medicinal plants for treatment. This point is important, for it enables the RH to use medicinal plants in an effective manner to treat common diseases for which rural patients do not have to go for costly visits to far-away clinics or doctors.

CONCLUSION

A perusal of the scientific literature suggests that a number of plants used by the RH in her treatment are quite validated in their uses from the scientific view point. Such validations suggest that the scientists can seriously consider the medicinal plants used by the RH for further research.

Conflicts of interest: The authors declare that there are no conflicts of interest.

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