



Ethnobotanical Studies on Some Common Diseases: Transfer of Indigenous Knowledge from Person to Society

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Authors' contributions

This work was carried out in collaboration between both authors. Author MNM designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Author BMR managed the analyses of the study and managed the literature searches. Both authors read and approved the final manuscript.

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ABSTRACT

A total of 15 medicinal plants are identified for the treatment of different diseases from Arambha village locality of Samudrapur Tahsil (Dist. Wardha). The traditional healer of the locality knows a large number of medicinal plants used for various diseases. He provides information about a few plants used against some diseases. These diseases are diabetes, toothache, impotency, jaundice, poisoning, wound healing, dry cough, fever, dysentery, faint, piles and cancer. The medicinal plants, *Azadirachta indica*, *Aegle marmelos*, *Ocimum sanctum*, *Hyptis sauolance*, *Bombax ceiba*, *Cayratia trifolia*, *Achyranthus aspera*, *Euphorbia humifusa*, *Clerodendron infortunatum*, *Tridax procumbens*, *Cassia tora*, *Kirgelia reticulata* and *Balliospermum montanum* are used against above-mentioned diseases. The plant parts like leaves, roots and whole plants are commonly used. The leaves are abundantly used to treat different diseases.

Keywords: Diseases; traditional healer; medicinal plants; locality.

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1. INTRODUCTION

Ethnobotanical studies has upraised the Indian Ayurveda and its nurturing, protecting and rejuvenating medicinal products. The Government is conserving on a priority basis the treasure of a wide variety of medicinal flora, which has wide application in Indian systems of medicine. According to Dr. Mao of the Botanical Survey of India, Itanagar, 1500 species of medicinal plants found in Arunachal Pradesh had been arrived at under a conservative estimation. It has been estimated that herbal medicines are used by more than 80% of the world's population in developing countries to meet their primary healthcare needs [1].

Ethnobotany is an indigenous knowledge that should be percolated to human beings for several generations. Due to our hectic lifestyle, we fully depend on the allopathy medicines which have so many side effects. To overcome the side effects of allopathy, the knowledge and practice of medicinal plants are essential. Therefore this topic has been taken for the present study. The collected information is purely based on the experiences of a traditional healer.

The information was collected from traditional healer from Arambha village locality of Samudrapur Tahsil (Dist. Wardha). The data were collected through the personal interview during the field trip. The photography of plants was taken by the camera for the identification. Photos were identified in the laboratory with the help of flora (Almeida, and Ugemuge) [2,3]. The data of 15 medicinal plants were collected from the traditional healer. The traditional healer of the locality knows a large number of medicinal plants used for various diseases. He provided information about a few plants used against some diseases. These diseases are diabetes, toothache, impotence, jaundice, poisoning, wound healing, dry cough, fever, dysentery, faint, piles and cancer.

2. METHODS

2.1 Biography of Practitioner

A traditional healer referred to in this paper is named Mr. Kawaduji Milmile aged 91 years residence of Post Arambha, tehsil Samudrapur of District Wardha (Maharashtra state). He is a regular practitioner of various ailments for last 60 years. At the age of 91 he is very energetic and quite healthy. He is very experienced as far as

various plants and diseases are concerned. His practice to control many of the congenital diseases is appreciable. He has been practising with more than 100 plants used against different human and veterinary diseases. Some of the diseases, plants used and methods of application are being given in the observation.

2.2 Observations

1. Name of the Diseases: Diabetes

Vernacular, Botanical and Family Name: Neem, *Azadirachta indica* A. Juss. (Meliaceae) Fig. 1, Bel *Aegel marmelos* (L) Corr., (Rutaceae) Fig. 2, Tulsi *Ocimum sanctum* L. (Lamiaceae) Fig. 3.

Part used: leaves

Method of application

- i). Take equal amount of fresh tender leaves of neem, bel and tulsi, dry them and crush to make powder. Take pinch of powder twice a day for about 15 days to control the intensity of diseases.
- ii) Take equal amount of fresh tender leaves. Make its decoction and use as per the intensity of diseases. No side effect if it is taken regularly and it is natural.

2. Name of the Diseases: Toothache

Vernacular, Botanical and Family Name: American mint, *Hyptis suaveolens* (L) Poit. (Lamiaceae) Fig. 4.

Part used: leaves

Method of application: Fresh leaves of Hyptis chewed and placed in between tooth, practised it 3 to 4 times as per the intensity of toothache.

3. Name of the Diseases: Infertility (Impotency)

Vernacular, Botanical and Family Name: Katsawar, *Bombax ceiba* L. (Bombaceae) Fig. 5, Tifan *Cayratia trifolia* (L.) Domin (Vitaceae) Fig. 6.

Part used: Root

Method of application: Take equal amount of root tubers of tifan and rhizome of Bombax. Chew root tubers of tifan first and then chew

equal amount of rhizome of *Bombax* to increase the fertility of male. It is also used to prevent

white discharge of female. It is also used to prevent Dhaturug.



Fig. 1. *Azadirachta indica* A. juss



Fig. 2. *Agel marmelos* (L.) corr



Fig. 3. *Ocimum santum* L.



Fig. 4. *Hyptis suaveolens* (L.) poit



Fig. 5. *Bombax ceiba* L.



Fig. 6. *Cayratia trifolia* (L.) domin

Plate 1.

4. Name of the Diseases: Jaundice

Vernacular, Botanical and Family Name: Kutri (Aghada), *Achyranthus aspera* L. (Amaranthaceae) Fig. 7.

Part used: leaves

Method of application: Take a glass of decoction of *Achyranthus* leaves in early morning for 3 days only. Do not eat oily food during practice.

5. Name of the Diseases: Poisoning

Vernacular, Botanical and Family Name: Godhan *Euphorbia humifusa* Willd. (Euphorbiaceae) Fig. 8.

Part used: Whole plant

Method of application: Make decoction of the whole plant. Drink till the stomach become full.

6. Name of the Diseases: Wound healing

Vernacular, Botanical and Family Name: Khanduchakka, *Clerodendron infortunatum* L. (Verbenaceae) Fig. 9.

Part used: Leaves

Method of application: Mix powder of dry leaves in coconut oil and apply on wound. Apply paste of fresh leaves on the wound.

7. Name of the Diseases: Dry cough

Vernacular, Botanical and Family Name: Kambarmodi *Tridax procumbens* L. (Asteraceae) Fig. 10.

Part used: Leaves

Method of application: Take powder of leaves with honey twice a day for 3-5 days.



Fig. 7. *Achyranthus aspera* L.



Fig. 8. *Euphorbia humifusa* Willd.



Fig. 9. *Clerodendron infortunatum* L.



Fig. 10. *Tridax procumbens* L.



Fig. 11. *Cassia tora* L.



Fig. 12. *Kirganelia reticulata* (Poir) Bail

Plate 2.



Fig. 13. *Ailanthus excelsa* Roxb



**Fig. 14. *Balliospermum montanum* (Willd.)
Mull. Arg**



Fig. 15. *Blumea erientha* DC

Plate 3.

8. Name of the Diseases: Fever

Vernacular, Botanical and Family Name: Tarota, *Cassia tora* L. (Caesalpiniaceae) Fig. 11.

Part used: Leaves

Method of application: Use decoction of fresh leaves 2 times a day to control fever.

9. Name of the Diseases: Dysentery

Vernacular, Botanical and Family Name: Kali Pitundi, *Kirganelia reticulata* (Poir) Baill (Euphorbiaceae) Fig. 12.

Part used: leaves

Method of application: Take juice of tender leaves with cow's milk twice a day for 3-5 days.

10. Name of the Diseases: Faint

Vernacular, Botanical and Family Name: Maharukh, *Ailanthus excelsa* Roxb. (Simaroubaceae) Fig. 13.

Part used: Leaves

Method of application: Take 2-3 tablespoon decoction of fresh leaves.

11. Name of the Diseases: Piles

Vernacular, Botanical and Family Name: Dati, *Balliospermum montanum* (Willd.) Mull. Arg. (Euphorbiaceae) Fig. 14.

Part used: Leaves

Method of application: Eat tender leaves 2 to 3 times a day to control severe pain due to piles.

12. Name of the Diseases: Cancer

Vernacular, Botanical and Family Name: Gangawan, *Blumea eriantha* DC. (Asteraceae) Fig. 15.

Part used: Whole plant

Method of application: Take decoction of whole plant with milk twice a day for 7 days.

3. RESULTS AND DISCUSSION

In the present study the total 15 medicinal plants used by the traditional healer are given. These species belongs to dicotyledons. The dominant

family is Euphorbiaceae with three species followed by Lamiaceae and Asteraceae with two species and Meliaceae, Rutaceae, Bombaceae, Vitaceae, Amaranthaceae, Verbenaceae, Ceasalpiniaceae and Simaroubaceae with one species each. These plants are used against diseases like diabetes, toothache, impotency, jaundice, poisoning, wound healing, dry cough, fever, dysentery, faint, piles and cancer.

These observations are well supported by Sankaranarayanan, et al. [4] in whose study 46 plant species were included. The information collected from the traditional healers was used to compare with the already accessible literature on the ethnobotany of India. The conventional ethnomedicinal plants were mostly used for fever, dysentery, skin diseases, poison bites, wounds, piles and rheumatism. Yabesh, et al. [5] identified a total of 102 species of medicinal plants as commonly used ethnomedicinal plants by traditional healers in Silent Valley of Palakkad district for the treatment of 19 ailments. Leaves were the most frequently used plant parts. Jima and Megersa's [6], the study focused on documentation of 70 medicinal plants species used to treat various human diseases where Euphorbiaceae is the leading family with the highest proportion of medicinal plants.

Some other authors also supported the view of Kakulte, et al. [7] about ethnobotanical plants tulsii and bel being used against diseases such as skin disease, cough and cold; Chavhan and Margonwar [8] observed that ethnobotanical plants *Aegel marmelos* (L.) Corr. used against anti dysentery and *Tridax procumbens* L. against cracking foot, swelling; Bodele and Sahare [9] studied the different medicinal plants such as *Achyranthus aspera* L. used against piles, wounds, jaundice, asthma, pneumonia and anthelmintic, *Aegel marmelos* (L.) Corr. Against diarrhoea and dysentery, *Bombax ceiba* L. cure pre-maturation, *Clerodendron infortunatum* against injury and bone joining, *Kirganelia reticulata* against stimulant, astringent, antidote of snake bite, *Tridax procumbens* L. treat injury, wound, pain, ulcer and scorpion bite and Wagay, et al. [10] observed *Aegel marmelos* (L.) Corr., *Achyranthus aspera* L. and *Bombax ceiba* L. used against relieve gastric disorder, cough and blisters and ulcers.

4. CONCLUSION

Researchers are trying to transfer the medicinal knowledge from traditional healer to common people. It is the wealth of our Indian culture that

is vanishing day by day with traditional healer's departure and this information does not percolate into the society. Researchers also try to bring the attention of people and researchers for conserving, nurturing and using such valuable information. Researchers interviewed traditional healer and collected information of 12 important common diseases and 15 medicinal plants.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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