



Original Article

Traditional Oral Healthcare Practices in Pathardi Areas of Ahmednagar District, Maharashtra, India

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ABSTRACT

The present communication reveals the traditional herbal therapies used in Pathardi tahasil areas of the Ahmednagar district against various liver diseases and disorders from Maharashtra, India. In all total 19 plant species belonging to 19 plant species belonging to 17 genera from 14 angiosperm families used for treating certain teeth borne diseases and disorders are documented. Of these, uses of --plant species found unknown or less known to India.

Keywords: Folklore, oral health care, toothache, Pathardi

INTRODUCTION

In India, traditional healers are using 2500 plants for ethnobotanical purposes out of which 100 alone used on regular basis for medicinal purposes [1]. In recent years, it has been realized that traditional herbal drugs are going to play a very significant role in curing certain acute and chronic diseases and disorders. Most of the modern synthetic drugs and medicines have attacked the targets blindly and thus badly affected several related metabolic processes. On contrarily, the herbal drugs probably have more accuracy in working, more effective, target specific action and without side effects. Further the drugs are affordable, eco-friendly and easily available in local market.

ABOUT THE STUDY AREA

The area under the study is an ideal religious place famous for diverse flora of ethno-medicinal significance. It is situated at distance of 65 km on North-eastern side of Ahmednagar district (M.S.) India. It covers an area of 1214.10km² (i.e 468.8 miles²) and lies at an altitude of 394-413 meters from MSL (Mean Sea Level) and is located in between 20°38'38"N-20°46'31"N latitude and 75°93'47"E-75° 99'78"E longitude. The area under the study is occupied by forest area of 64.26 km² with 42.5% mixed-deciduous forests with an average rainfall of about 595mm (2004) and temperature range of 22°C to 41.8°C [2]. So far the study concerned, area under the study is unexplored up to today.



Figure 1- Map of the study area

REVIEW OF LITERATURE

Recent interest in ethno-medicinal explorations has increased due to the work of [3-12].

METHODOLOGY

Frequent field visits were arranged in the area under the study during the period from pre-monsoon of 2009 to post-monsoon of 2011 to collect the data on ethno-medicinal uses of the wild ethno-flora among the local inhabitants. The plant specimens were collected with the help of traditional healers and medicine men by knowing their local names as per suggestion [13-14]. The ethno-medicinal information was confirmed through the traditional healers and medicine men through verbal and informal interviews.

The voucher specimens were prepared, tagged and confirmed by referring the standard floras [15-19]. They were preserved as per plan suggested by [20] in the Department of Botany, Shri Dnyaneshwar Mahavidyalaya, Newasa for future study.

RESULT/ENUMERATION

1. *Abrus precatorius* Linn. 'Lal-gunj' (Fabaceae)

Plant part used: leaf

Use: Young and tender leaves of the plant are chewed by the live traditional singers to improve voice quality.

2. *Barleria prionitis* Sant. 'Kate-koranti' (Acanthaceae)

Plant part used: leaf

Use: Paste from one to two gram of fresh leaves in 20-25ml of water is applied topically on painful gum and teeth twice a day for 4-5 days for effective cure.

3. *Caesalpinia pulcherrima* (Roth.) Sw. 'Shankasur' (Caesalpinaceae).

Plant part used: root

Use: 2-3 tolas of (aprox.20gm) of root powder is boiled in 100 ml of water for 3-4 minutes and the extract is applied on gums and teeth externally to cure toothache and gingivitis.

4. *Capparis decidua* (Forsk.) Edgew. 'Kiral' (Capparaceae).

Plant part used: stem (shoot)

Use: A handful (aprox.200 gm) tender shoots is crushed in a glass of sheep's milk and the extract is given with 1-2 tsp of sugar or a piece of gur (Jaggery) twice daily for 6-8 days to relieve pains due to gingivitis and pyorrhoea.

5. *Ceiba pentandra* (Linn.) Gaertn. 'Pandhara-sawar' (Bombacaceae)

Plant part used: stem (bark)

Use: Shade dried stem bark pieces ground with 2-3 dried nilgir (*Eucalyptus globulus*) leaves and 1-2 tolas of Arjun sadada (*Terminalia arjuna*) stem bark pieces and the fine powder is used as tooth powder once daily in early morning to relieve from toothache.

6. *Clematis gouuriana* Roxb. ex DC. 'Shendvel' (Ranunculaceae)

Plant part used: root

Use: 1-2 tolas (aprox.10-20 gm) of fresh root pieces are crushed and is taken in mouth two times in a day for 3-4 days to get relief from toothache.

7. *Eucalyptus globulus* Labill. 'Nilgir' (Myrtaceae)

Plant part used: leaf

Use: An extract from fresh leaves is applied painful gums and teeth to relieve toothache effectively.

8. *Ficus benghalensis* Linn. 'Wad' (Moraceae)

Plant part used: latex

Use: Fresh latex from the plant is applied on teeth as toothpaste once daily for 10-12 days to relieve pains due to pyorrhoea and dental caries.

9. *Jatropha gossypifolia* Linn. 'Mogali erand' (Euphorbiaceae)

Plant part used: latex

Use: Latex from the plant mixed in mixture of mohri (*Brassica campestris*) oil and clove (*Syzygium aromaticum*) oil (5 ml each) and the formulation is applied on painful gums and teeth twice a day up to 10-12 days to cure gingivitis and pyorrhoea.

10. *Mentha spicata* Linn. 'Pudina' (Lamiaceae)

Plant part used: leaf

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Use: Fresh leaves are boiled with tea powder in cup of goat's milk is given twice a day for 3-4 days to control bad mouth odour.

11. *Mimosa pudica* Linn. 'Lajalu' (Mimosaceae)

Plant part used: leaf

Use: 2-3 mase (aprox 2-3 gm) of leaf powder mixed in equal amount of Gondhan (*Cordia gharaf*) stem bark powder with a pinch of common salt is boiled in a glass of water and the decoction is gargled for relieving pains in gums and teeth.

12. *Occimum americanum* Linn.syn. *O.canum* Sims. 'Ram-Tulasi' (Lamiaceae)

Use: *Fresh and healthy leaves of the plant are considered as mouth fresheners and chewed whenever necessary and available.

13. *Occimum basilicum* Linn. 'Sabja' (Lamiaceae)

Use: Fresh leaves are chewed regularly by the inhabitants to cure mouth sores

14. *Phoenix sylvestris* (Linn.) Roxb. 'Shindali' (Palmaceae)

Plant part used: root

Use: A handful of dried root powder is mixed with one tsp of sunth (*Zingiber officinale*) rhizome powder and used as tooth powder once a day in early morning to prevent dental caries and toothache.

15. *Solanum surattense* Burm.f. 'Kate-ringni' (Solanaceae)

Plant part used: fruit

Use: Powder from dried fruits is filled in cigarette and smoked for 2-3 minutes alternately once a day at night for 10-12 days to relieve scurvy and pyorrhoea.

16. *Spilanthus oleracea* Linn. 'Akkal-kara' (Asteraceae).

Plant part used: root

Use: Fresh roots are chewed and the juice is swallowed twice a day for 3-4 days to control pyorrhoea and gingivitis.

17. *Tephrosia perpurea* (Linn.)Pers. 'Unhali' (Fabaceae).

Plant part used: root

Use: A handful of root powder and 1-2 tola of deo-babhlul gum (*Acacia arabica*) are boiled in a glass of goat's milk and the infusion given with 1-2 tsp of honey twice a day up to 4-5 days for curing toothache and pyorrhoea.

18. *Terminalia arjuna* Retz. 'Hirda' (Combretaceae)

Plant part used: fruit

Use: Fine powder made from dried fruits is mixed with 1-2 tsp of shatawari (*Asparagus racemosus*) tuber powder and this homogeneous mixture is used as tooth powder to cure gingivitis and pyorrhoea.

19. *Terminalia chebula* Retz. (Combretaceae) 'Hirda'

Plant part used: fruit

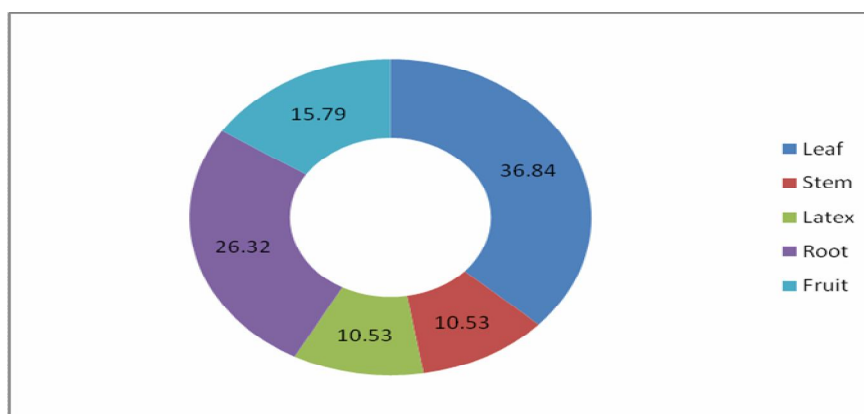
Use: *Consumption of pericarp from two-three semi-ripen fruits followed by intake of a cupful luke warm cow's milk once daily in early morning for 3-4 weeks maintains teeth health and its strength.

DISCUSSION

The present paper illustrated a brief account of 19 plant species belonging to 17 genera from 14 families used for the treatment of specific kind of oral healthcare practices in Pathardi tahasil from Ahmednagar district (M.S.) India. Almost all of the preparation/formulations are administered orally either in the form of extract or juice.

From above study (Table:2), it is found that leaves in seven plants (36.84%) which is followed with roots in five plants each (26.32%), fruits in three plants (15.79%) and stem and latex in two plants each (15.79 %).found to have unique role in oral healthcare practices..

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| S.N | Part | Name of plant species | No of species | % age plant part used |
|-----|-------|--|---------------|-----------------------|
| 1. | Leaf | <i>Abrus precatorius, Mimosa pudica, Eucalyptus globules, Barleria prionitis, Mentha spicata, Occimum americanum, Occimum basilicum.</i> | 07 | 36.84 |
| 2. | Stem | <i>Ceiba pentandra, Capparis deciduas.</i> | 02 | 10.53 |
| 3. | Latex | <i>Jatropha gossypifolia, Ficus benghalensis.</i> | 02 | 10.53 |
| 4. | Root | <i>Tephrosia perpurea, Spilanthus oleracea, Phoenix sylvestris, Clematis goururiana, Caesalpinia pulcherrima.</i> | 05 | 26.32 |
| 5. | Fruit | <i>Terminalia chebula, Terminalia arjuna, Solanum surattense.</i> | 03 | 15.79 |

Table: 1 Plant part used against name and number of plant species studied

CONCLUSION

The study area is bestowed by nature with a great ethno-floristic diversity. It denotes the wisdom of the local people including the traditional healers and medicine men in regards to traditional ethno-medicinal knowledge. The study enlightens immense scope and wide potential for researches in the area. To document, conserve and evaluate the information, collective efforts are needed from the ethno-botanists and ethno-pharmacologists. As an ethno-botanist, it's our prime duty to protect, document and spread the indigenous traditional knowledge through various media before it disappeared. Due to biotic and abiotic interference and deforestation, vast amount of ethno-flora is under the threat of extinction. To conserve it, urgent need of collaborative work regarding urgent protection and preservation by villagers, semi-government and government authorities is essential. Participation activities of the rural, tribal and non-tribal populace can be increased by creating general awareness among them about the usefulness of the native ethno-flora. The central and the state government authorities should encouraged the ethno-botanists and ethno-pharmacologists in exploration of the hidden ethnobotanical wealth in these areas that in turn will help in elevating the export of herbal medicine and growing the trade and economy of the country by increasing herbal trade with the major countries around the world. This will also improve the health and quality of life of this entire nation.

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