

Assessment of indigenous knowledge of medicinal plants from Vidarbha region of Maharashtra

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Ethnobotany is the study of how people of a particular region use different indigenous plants for treatment of various diseases. The indigenous knowledge system of medicine, which exists as a superstructure, effectively serves as a remedy for the people of a particular region for curing different ailments; further, the indigenous practices are easy to administer and are economical. The benefits of indigenous knowledge can be offered to the vast majority of population by establishing its appropriate medicinal usage for specific diseases, thus confirming the validity of such knowledge and integrating it with various development programmes. For ethnobotanical survey, two districts of Vidarbha region of Maharashtra were selected and survey was conducted in the month of March-April 2006. The data reported was compiled through a fusion of interview and non-participant observation method. Various plants were found to have medicinal value and the tribal people largely depend on them for treating various types of diseases. Our country is a rich source of flora and traditional heritage of herbal wealth. India's share in herbal world market is just less than 1.5%. To overcome this present scenario, there is an urge to develop trust and faith among the people towards the safer indigenous system by organizing different programmes at a various levels. In the present survey, a defined attempt has been made to document the indigenous knowledge of some medicinal plants of Vidarbha region of Maharashtra.

Key words: Ethnobotany, herbal drugs, indigenous, medicinal plants, survey

INTRODUCTION

Ethnobotany has its roots in botany, the study of plants. In fact, medicine and botany always had close ties. Many of the drugs found today have been derived from plant sources.^[1] Pharmacognosy is the study of medicinal and toxic products from natural plant sources. However, many chemically synthesized drugs have replaced plants as the source of most medicinal agents in industrialized countries.^[2] Although vast majority of Indian population depends on modern medicine, for different ailments, but due to their undesirable effects, attention has been drawn towards herbal medicines, which are derived from the medicinal plants owing to its therapeutic potential, safety and efficacy. Ethnobotany serves to collect the information about the various medicinal uses of the plants, which are used by tribal people.

The objective of the present survey was to collect information of native plant for their medicinal use, establish their therapeutic potential, thereby developing trust and faith among the people for their safe and effective use. Thus by exploring the hidden green wealth, India can boost their economy by substantially increasing their exports of herbal

medicines at the trade front and can corner the larger slice from the herbal world market share.

FIELD SURVEY

Ethnobotanical survey was carried out, by visiting such tribal area where local people mostly used medicinal plants for healing various diseases. Chikhaldara (Melghat) from Amravati district and Mukutban from Yavatmal district were two such tribal regions, which were selected for the collection of data. The data were compiled through a combination of interview with 85 local people of that tribal regions and non-participant observation method.

DISCUSSION

Our country is a gold mine of natural wealth, which encompasses various medicinal plants that serves as medicine. Since ancient times people were solely dependent on such herbal medicine as a remedy for curing various ailments. But nowadays due to the development of modern medicine, use of herbal medicine declined. However, the modern medicine exhibited many undesirable effects, which could be harmful to human being. This again inclined people towards the traditional system of medicines, which were safe and effective in treating various diseases. In Bhutan, China and other countries across the globe,

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Pharmacognostic profile of some ethnobotanical herbs found in Vidarbha region^[3]

Botanical name	Family	Vernacular name	Diseases	Part/s used	Dosage form	Duration in days	Dose
<i>Premna obtusifolia</i>	Verbenaceae	Hindi: Arni; Sanskrit: Agnimantha	Hepatitis	Root	Powder	10-15	1 glass of water
			Cough and rhinitis	Leaves	Solution	08-10	1 cup of tea twice a day
			T.B.	Roots	Powder	Depend on severity	1-2 g daily
<i>Clerodendrum</i>	Verbenaceae	Marathi: Pandhari Takli	Hepatitis	Roots, bark	Powder	10-15	1-2 g. daily
<i>Phlomis uraria picta</i>	Loganiaceae	Marathi: Pithvan; Sanskrit: Chitraparh	Hepatitis	Root	Powder	10-15	1 glass of water
			Hepatitis	Bark	Powder	10-15	1-2 g. daily
			Hypertension	Fruit	Paste	25-30	4-5 g. daily
			Diabetes	Root	Powder	Depend on severity	1-2 g twice a day
<i>Desmodium gengeticum</i>	Loganiaceae	Marathi: Salvan	Hepatitis	Root	Powder	10-15	1 glass of water
			Pregnancy	Leaf	Solution	3-5	1-2 g daily
<i>Cratach vanurvala</i>	Gentianaceae	Marathi: Cratach	Hepatitis	Bark	Powder	10-15	1-2 g daily
			Diabetes	Leaf	Solution	Depend on severity	1 cup of tea twice a day
<i>Asteracantha longifolia</i>	Acanthaceae	Marathi: Talimkhana	Hepatitis	Bark	Powder	10-15	1-2 g daily
<i>Trichosanthes kirilowii</i>	Cucurbitaceae	Marathi: Kadu-padval	Hepatitis	Root, bark.	Powder	10-15	1-2 g daily
<i>Amorphophallus campanulatus</i>	Araceae	Marathi: Suran	Hepatitis	Rhizome	Paste	10-15	2-3 g daily
			Cough	Rhizome	Paste	5-8	1-2 g daily

investment allocated for the research and development in herbal medicines has been increased by 50% of their total financial budget, but presently India has just mere 5% of the total financial budget.^[4]

In the ethnobotanical survey, the various plants were found to treat different types of diseased conditions such as inflammation, fever, hepatic disorder, hypertension, wounds, leprosy, tuberculosis, etc. Data were gathered and comprehended by conducting personal interview with the tribal people using those medicinal plants as a remedy for treatment of diseases and observing tribal patients who were on those herbal medications. Forty-seven plants revealed in the survey possessed healing properties against various types of diseases in both districts, viz. Yavatmal and Amravati of Maharashtra state, out of which, eight plants were botanically identified, which were found to have high therapeutic potential in treating hepatic disorders.

CONCLUSION

Ethnobotany is an ever-growing field and forms the mainstay in establishing the therapeutic potential and medicinal use of herbs growing in the interior areas of India, where tribal people use plants of that region as medicines. The undesirable effect of the modern medicine has already diverted the attention of the people towards herbal medicines. To increase the acceptability and awareness among the people, there is an urgent need to develop trust and faith towards the safer indigenous

system by establishing its validity in treatment for various diseases. Government of India should encourage the field of ethnobotany, which in turn will help in elevating and growing the 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 the entire nation.

RECOMMENDATIONS

For exploring traditional knowledge of medicinal plants and for boosting India's economy by the way of herbal trade, Government of India should focus on:

1. The government and non-government organization through various media should publish the merits of indigenous system of medicine to increase awareness and acceptability among the major population of the country.
2. The indigenous medicines should be appropriately priced affordable to the major population of the country.
3. Regular supply of the indigenous medicines should be monitored on continuous basis.
4. In every state of the country, there should be quality control laboratories and research centres equipped with necessary infrastructure and facilities for carrying out chemical and biological testing of crude herbal drugs along with their finished products.
5. Farmers should be encouraged to participate in training programme, which will facilitate them in implementing

modern techniques of cultivation, collection, processing, storage, and packaging of crude drugs, usage of suitable fertilizers and manures for maintaining soil fertility and adopting various pest control measures.

6. The government organization and research centres should maintain complete documentation and record of such crude drugs, which will help in conserving and preserving indigenous knowledge of the medicinal flora of our country.
7. In education institutions, awareness should be increased among the students regarding significance of medicinal plants in safe guarding and restoring overall health of the people of the nation.
8. Government of India should encourage research in the field of medicinal plants by appreciating appropriate funds so as to nurture and foster country's economy at

the international level.

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