

Ethno Botany in Relation to Traditional Herbal Home Remedies for Diabetes in Tribals of Bastar Chhattisgarh

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Abstract

Traditional home remedies and herbal medicine constitute prominent dimensions of local health tradition and unique heritage of district Bastar, Chhattisgarh. In Chhattisgarh, traditional home remedies and herbal medicines are administered both in remote rural areas as well as in urban areas where allopathic medicine is easily available. The health of the people of the state is determined by medical pluralism. Chhattisgarh, the premier herbal state of India upholds unique local health tradition interlinked with a large number of sacred grooves and rich traditional knowledge base of thousands of folk healers, Baidyas, Guniyas and local knowledgeable person in tribal area of Bastar. The Traditional Folk Healers of Bastar, Chhattisgarh have sustained a wide range of folk healing practices since generations together. In recent years, there has been renewed interest in the treatment of different diseases using herbal medicine. Present study is carried out in various localities in district Bastar of Chhattisgarh State. Fifteen antidiabetic plants and plant formulations were documented in this field survey during the year 2006 to 2008. Most of formulation found as Decoction Paste and Juice extract.

Keywords: Diabetes, Traditional herbal remedies, Tribals, Bastar.

Introduction

The traditional and primitive folk healing practices among tribals of Bastar normally involve medicine derived from plants and animals available within local agro climatic zones. Different studies have been conducted by scientists on folk healing practices in different districts of Chhattisgarh. It is evident that folk-logic including cultural, biological, historical, religious, and environmental factors that significantly influence the folk therapy. The concepts of illness and healing are not universal. They vary from culture to culture. One third population of Chhattisgarh is tribal. They have their own value system and cultural interpretation of disease and treatment. They have a very different understanding of why people get sick, and how they can be treated. The traditional healers of Bastar have been treating and rendering miraculous cure to thousands of patients annually.

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World Health Organization (WHO) has recommended the effectiveness of plants in condition where we lack safe modern drugs. Due to the modernization of life-style, Non-Insulin Dependent Diabetes is becoming a major health problem in developing countries. A number of plants have shown varying degree of hypoglycemic and antihyperglycemic activity. Medicinal plants used to treat hypoglycemic or hyperglycemic conditions are of considerable interest for ethnobotanical community as they are recognized to contain valuable medicinal properties in different parts of the plant. Plant derivatives with hypoglycemic properties have been used in folk medicine and traditional healing systems around the world from very ancient time. Despite the introduction of hypoglycaemic agents from natural and synthetic sources, diabetes and its secondary complications continue to be a major medical problem to people.

Materials and Methods

The present research work entitled Ethno Botany in Relation to Traditional Herbal Home Remedies for Diabetes in Tribals of Bastar, Chhattisgarh has been conducted in tribal dominated villages of district Bastar, Chattisgarh. In this study involves various steps like field study in which questionnaire was filled by the tribals and personal interview was organized, collection of plant specimen, preparation of herbarium and identification of plants with the help of flora. The study was conducted in the year 2006-2008. The methodology of the present work was adopted from some of the earlier workers like Jain (1987, 1988), Masih (1990) and Jain & Singh (1997). The methods of Ethnobiological studies have been summarized by Roy (1989), was also consulted in the present study. The Ethnobiological information was obtained from Baidyas, Sirhas, Gunias, knowledgeable person, experienced people, medicine men, and heads and local inhabitants of the village, who have knowledge of plants for health and livelihood security.

Result and Discussion

The extensive field survey has been observed that Bastar district has very rich flora about the medicinal plants. Details of antidiabetic plants in alphabetical order as per scientific name, followed by family, common name, vernacular name, part used, mode of administration and recommended dosage is listed in Table. During this study, 15 antidiabetic plant species were documented, belonging to 13 families. The drug preparation methods were very old and traditional. Most of the drugs were found to be prepared either by making fine powder in pastel and mortal or paste or decoction or extract from plants were noted to be used directly. Most of the formulations were either decoctions, pastes or extracted juices from crushed or macerated whole plant or plant part(s), depending on the extent administered. The bitter constituents of *Andrographis paniculata* decreases the blood glucose level due to its antioxidant properties and also increases glucose metabolism (Kavishankar *et al.*, 2011).

Table: List of the Plants Documented for Diabetes during the Study

S.N.	Botanical Name	Vernacular Name	Family Name	Plant Part Used	Mode of Drug Preparation and Administration
1	<i>Aeglemarmelos</i> (L.) Corre.	Bel	Rutaceae	Unripe fruit	The unripe fruit pulp of the fruit is eaten with one glass of water
2	<i>Anogeissus latifolia</i> , Wall.	Dhawra	Combrataceae	Bark	The pest of bark boiled with the water filter it take two spoon in empty stomach
3	<i>Azadirachta indica</i> A. Juss.	Leem	Meliaceae	Fruit	Leaves are boiled with two glasses of water. One glass of decoction is taken in the morning on empty stomach
4	<i>Andrographi spaniculata</i> (Burm.f.) Wall.	Bhuileem	Acanthaceae	Wholeplant	The entire plant is boiled in water. The decoction prepared and one glass is taken on an empty stomach in the morning
5	<i>Annona squamosa</i> (L)	Chhita	Annonaceae	Leaf	Leaf powder is taken with water daily in empty stomach
6	<i>Cassia tora</i> (L)	Charota	Fabaceae	Root & leaf	Root and leaf boiled with the water half cup taken in morning
7	<i>Costus speciosus</i> , Retz.	Keo-kanda	Costaceae	Herb	Boil the Rhizomes eat directly for diabetes
8	<i>Emblica officinalis</i> Gaertn	Amla	Euphorbiaceae	Fruit	The powder of the fruit taken with water twice in day

9	<i>Ficus glomerata</i> , Linn.	Dumarchhali	Moraceae	Fruit, Leaves, Bark	Dried powder of leaves and bark taken with water. Fruits are eaten directly for diabetes
10	<i>Gymnema sylvestre</i> (Retz).	Gudmar	Asclepiadaceae	Whole plant	The dried powder of whole plant taken with one cup of cow milk twice in a day
11	<i>Paspalum scrobiculatum</i> L.	Kodochaur	Poaceae	Seeds	Cooked seeds are used as rice. It the best food for diabetic patients
12	<i>Pterocarpus marsupium</i> , Roxb.	Beeja	Fabaceae	Leaf & Bark	Dried powder of equal quantity leaf and bark deep in one glass of water over night early morning filter it and take in empty stomach for one week
13	<i>Punica granatum</i> L.	Darmi Anar	Punicaceae	Fruit	The peel of the fruit is removed and dried under the sun. The dry peel is powdered and preserved in a clean glass container. One tea spoon powder is mixed with a glass full of warm water and taken on empty stomach in the morning.

14	<i>Syzygium cumini</i> , Linn.	Chiraijaam	Myrtaceae	Seed, Bark Fruit	<p>1. Chiraijam seeds are dried in the sun and then crushed and made into fine powder.</p> <p>1-2 tea spoon of this powder is added to one glass of water.</p> <p>2. 4-5 pieces of dried bark is boiled in 2 glasses of water and reduced to half. One glass of decoction is taken daily in empty stomach in the morning.</p>
15	<i>Terminalia chebula</i> Retz.	Harra	Combre- taceae	Fruit	The powder of fruit directly taken with the water for cure of diabetes

Conclusion

The present research work entitled Ethno Botany in Relation to Traditional Herbal Home Remedies for Diabetes in Tribals of Bastar. Chhattisgarh indicates that the tribals have deep faith on the traditional home herbal remedies for curing the health ailment. The 15 plants belongs to 13 family viz., Rutaceae, one plant, Combretaceae, two plants, Meliaceae, one, Acanthaceae, one, Annonaceae, one, Costaceae, one, Fabaceae, two, Euphorbiaceae, one, Moraceae, one, Asclepiadaceae, one, Poaceae, one, Punicaceae, one and Myrtaceae, one plant in the study.

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