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Traditional Phytotherapy used in the Treatment of Malaria by Rural People of Bhopal, District of Madhya Pradesh, India

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Abstract

Malaria is caused by *Plasmodium* and transmitted through female *Anopheles* mosquito. The disease is common in rural areas. Although a number of synthetic medicines have been used for the treatment of malaria, but they have adverse effects and their high cost is beyond the reach of common people. It is, therefore, worthwhile to look towards antimalarial herbal drugs. Herbal drugs are cheaper, easily available and with no fear of any side effects. The present paper enumerates the herbs used in malaria by the rural people of Bhopal district of Madhya Pradesh, India.

Keywords: Malarial, herbs, Bhopal, rural people.

Introduction

Malaria is one of the major health problems. WHO estimates there are 300- 500 millions cases globally and 1.5- 2.7 millions death occur due to malaria each year, 90% of which are in Africa. In India the National Malaria Eradication Programme (NMEP) was started in 1950, achieving near complete disappearance of the disease in 1960s (from 75 millions in 1950 to 0.1 million in 1960).[1] However, due to development of insecticide resistance mosquitoes and other factors, it stages a comeback in the mid 1970s (96.47 millions in 1976) and continues to prevail in endemic/ sub endemic proportions in different areas, conceding that eradication of malaria is not possible. NMEP has been renamed National Antimalarial Programme (NAMP). In 2001 NAMP has reported 72 millions malaria cases, out of which

48% were due to *P. falciparum*. WHO estimates that actual number of malaria cases in India is 6 times more, i.e. 12-15 millions. The present work was conceived by us to explore the medicinal plants of Bhopal district of Madhya Pradesh, India in the treatment of malaria by the rural villagers of the study site.

Methodology

Following methods were adopted by the author during the course of present investigation.

1. The plants used by the rural people in the treatment of malaria were collected by the investigator from the different study sites during Jan-2008 to Sep-2008.
2. Field and survey work was made after carefully planned field trips. During the field trip personal interview was made between the author and informants. [2,3]
4. Voucher specimen were collected from different study sites and preserved. [4]
5. The plants were identified by Prof. Dr. S. N. DWIVEDI, Dept. of Botany, Janata PG College, A.P.S. University, Rewa, M.P. and are deposited in our institute.
6. Confirmation of the specimen was made with the help of floristic literature. [5,6,7]

Study Area

During the course of present investigation, the following study sites of Bhopal district of Madhya Pradesh were selected (Henotia, Hataikheda, Bhandbada, Badwai, Jhagonia, Kokta, Semra, Bagroda, Jamina and Chana). These study sites were selected depending upon the density of flora and population in order to make the effective discussion with the informants for revealing the information regarding the usage of herbs in the treatment of malaria.

Observations

S/N.	Botanical Name	Local Name	Family	Preparation
1.	*Andrographis paniculata* (Brum. f.) Wall. ex Nees.	Kalmegh	Acanthaceae	Decoction of whole plant (10ml BD X 5days)
2.	*Bacopa monnieri* Linn. (Penn.)	Brahmi	Scrophulariaceae	Juice of whole plant (5TSF TDS X 5days)

3.	*Caesalpinia boducella* Fleming.	Gatayan	Caesalpiniaceae	Roasted and powdered seeds with sugar (2gm : 10gm BD X 3days)
4.	*Diplocyclos palmatus* (L.) Jeffery.	Shivalingi	Cucurbitaceae	Ripe or unripe fruits fried with purified butter
5.	*Eclipta prostata* Roxb.	Bhringraj	Asteraceae	Juice of whole plant (5ml TDS X 5days)
6.	*Fumaria indica* (Haussk.) Pugsely	Pitpapar	Fumariaceae	Extract of leaves and shoot (5ml TDS X 5days)
7.	*Leucas aspera* (Willd.) Linn.	Gumma	Lamiaceae	Decoction of whole plant with equal amount of leaves of tulsi (*Ocimum sanctum*) as a dose of 10ml TDS X 5days
8.	*Mimosa pudica* Linn.	Lajawanti	Mimosaceae	Powder of shade-dried plant (10gm BD X 5days)
9.	*Nyctanthes arbor-tristis* Linn.	Harsingar	Oleaceae	Expressed juice of leaves (10ml BD X 5days)
10.	*Ocimum sanctum* Linn.	Tulsi	Lamiaceae)	Extract of fresh leaves
11.	*Plumbago zeylanica* Linn.	Chitrak	Plumbaginaceae	Extract of leaves and stem (2TSF BD X 5days
12.	*Tinospora cordifolia* (Willd.) Miers.	Giloya	Menispermaceae	Fine powder of dried stem prescribed (10gm BD X 5days)

13.	*Zingiber officinale* Rosc.	Adarakh	Zingiberaceae	Extract of fresh rhizome (2TSF TDS X 5days) with honey

Abbr. OD= Once daily, BD= Twice daily, TDS=Thrice daily, TSF=Teaspoonful

Conclusion

Modern allopathic medicines used for the treatment of malaria have grave side effects and seldom damage the vital organs viz. spleen, liver, kidney etc. Obviously, the complete eradication of parasites from the human body is not possible by these drugs. The herbal treatment for malaria is cheaper with no fear of any side effects. Moreover, herbal drugs are more compatible to human body constitution and suits to the local and cultural need of people. The indigenous method of preparation maintains the purity of the drug. The essence of substance is never destroyed and is always present in balance amount, as nature might have prescribed it. It has been also observed that the herbs employed in malarial fever are bitter tonic, antipyretic, febrifuge and stimulate liver and spleen. However, more detailed clinical studies are required for the plants showing antimalarial actions, so the malaria can be treated effectively by use of plant based formulations and offered by the other people of our society. Therefore, the present work focuses the usage of herbs in curing the malaria fever.

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