

# Knowledge Attitude and Practice towards Malaria in Tribal Community of Baigachak Area, Dindori District (M.P.)

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## Abstract

A study on Knowledge, attitude and practice (KAP) towards malaria has been conducted in tribal population of Baiga chak area in Dindori district (M.P.). A total of 239 respondent including 102 females were interviewed, using structured and open ended questionnaire. 59% respondents were found to be illiterate. Only 37.6% of respondents knew that malaria is transmitted by mosquito. Majority of the population (94.2%) were not aware that it is a fatal disease and responded that any person can have malaria. Only 27.2% of respondents suspect malaria on the occurrence of fever. Knowledge about the malarial drug was poor and only 14.6% knew about the drug chloroquine. Smoke is the major preventive measure taken up by the respondents to avoid mosquito bite. Only 5% of the respondents were using mosquito net. Most of the respondent knew about the importance of the insecticide spray and prefer to get only cattle sheds sprayed.

## Introduction

Malaria is one of the major disease burdens among tribal. Besides mosquitogenic condition in tribal areas, poor knowledge and attitudes towards the disease is also one of the reasons for maintaining high endemicity in some areas. According to 2001 census, the tribal population in India was 74.6 million, and it accounts for 8% of the total population, but contributes 30% of total malaria cases. Sharma (1996) reported that 60% of total Plasmodium falciparum cases and 50% deaths occur due to malaria in India.

Baigachak area of Dindori district is mostly dominated by tribal population. The area is highly malaria endemic as this part of the Bajag block of the district is maintaining very high API (>30 per thousand) since last several years. The area is a hilly terrain & inaccessible during rainy season with poor communication facilities, so control of malaria is logistically difficult in the area. Livelihood of the local inhabitants mainly depends on forest produce, agriculture and other casual and poverty alleviation programmes run by Government agencies. People mostly believe in traditional practices of healing and their myths and superstitious beliefs forbid them to utilize the modern treatment facilities/ services. Similar finding have been reported by Panda et. al. (2000), Singh, et. al.(1998) & Tiwari (1984). With this background, a study on knowledge attitude and practices of malaria was carried out in Baiga tribe of Baiga chak, Dindori district (M.P.) to understand the knowledge about malaria.

## Material and Methods

The study was carried out in the five villages in Baigachak area of Dindori district (M.P.). A Total of 239 respondents including 102 females were randomly interviewed using structured and open ended questionnaire. The study focuses on the perception of the malaria, its causes, transmission, treatment behavior, and mosquito control in the community. Average age of the male and female respondents was  $38.5 \pm 13.0$ . About 59% of the respondents were illiterate in the study area. Most of them were involved in

occupations such as agriculture & other casual labours, collection of forest produce etc. The entire data was analyzed by counting the male & female samples as there was no difference in their knowledge for disease and percentages were calculated to estimate the knowledge about causes, transmission, treatment, prevention against malaria.

### Results and Discussion

Majority of respondents of the present study did not know the causes of occurrence of malaria. About 37.6 % of respondents knew that the mosquitoes transmit malaria and 11.3 % respondent believes that it is caused by the curse of nature. Occurrence of malaria was also reported due to unknown infection (1.25%), dirty water (3.8%), bad sanitation (1.7%) & bacteria (0.4%) (Table 1). Singh et. al. (1998) and Panda et. al. (2000) reported the findings that knowledge of cause of malaria is poor in the tribal community of Mandla district of M.P. and Bastar district of Chhattishgarh. Malaria was generally treated by various traditional practices including herbal remedies.

Better knowledge regarding the transmission of malaria in the Baigachak area seems to be due to the control programme run by National Malaria Control Programme aimed to reduce vector population through indoor residual spray in the study area. Majority of respondents (94.2%) were not aware that malaria is a fatal disease. Similarly 67% respondents told that any person can suffer from malaria and 13.8% respondents reported that males are more susceptible than females. About 27.2% of respondents considered that occurrence of malaria is found along with fever while 82.5% respondents opined that chills and rigors are experienced along with fever as malarial symptoms.

Table 1: Responses regarding cause of malaria (%)

Cause of Malaria	Male (n=137)	Female (n=102)	Total (n=239)
Not known	51.8	65.7	57.7
Bacteria	0.7	-	0.4
Infection	0.7	2.0	1.2
Malnutrition	1.4	2.0	1.7
Mosquito bites	43.0	30.4	37.6
Dirty water	5.8	0.9	3.8
Bad sanitation	2.9	-	1.7
Curse of Nature	11.7	10.8	11.3
Other	0.7	0.9	0.8

Knowledge about the malarial drug was poor in the community and around 14.6 % respondents had heard about the Chloroquine tablet, and 28.5% respondents knew it

as antimalarial tablet and 23.5% responded the same as 'hospital ki goli/ Bukhar ki goli'. Only 2.1% respondents use traditional medicine local herbs, while 11.3% respondents believed in traditional practices of healing i.e. witchcraft (Table 2).

Table 2: Treatment seeking behaviour for malaria

Treatment seeking behaviour	Percentage(n=239)
Hospital	87.4
Witchcraft	11.3
Local herbs (Jaributi)	2.1
nothing	4.6
other	2.5

Though majority of the respondents (87.4%) resort to PHC services when they fall sick, still there is quite a good proportion of population which believes in myths and superstitions which forbid them to utilize the Govt. health facilities/services. Perhaps because of people's habit of not taking the medicines, complete radical cure is not seen, parasite reservoir survives in their community and vicious cycle continues to occur thus making the study area endemic for malaria. Tyagi et.al. (2005) studied the health seeking behaviour about malaria in rural & semi rural folk around the periphery of east Delhi and found that Government hospitals were most commonly used for the treatment of malaria.

In the present study 84.5% respondents were using preventive measures and most of the respondents (69%) used smoke, made by burning of leaves/ wood to avoid mosquito bites. Only 7.9% respondents told that they used any kind of oil on skin which is available with them and 15.5% respondents do not use any kind of preventive measures (Table 3).

Table 3: Preventive measures practiced by tribal against mosquito bite

Preventive measures	% (n=239)
Oil	7.9
Fan	0.8
Smoke	69.0
Curtain	9.2
Clean sanitation	9.6
Mosquito nets	5.9
No Preventive measures	15.5

Practices of using bed nets in the community were only observed to be 5.9% of the studied population. Datta et.al. (1999) revealed that absence of preventive measures of mosquito net may lead to high incidence of malaria in the area compared to the area where these measures are being practiced. Most of the respondent (72.8%) knew about the importance of the insecticide spray but preferred to spray only to their cattle sheds. This is because of odor of insecticide and the presence of eatable items in the house. Further Klein et. al. (1995) reported in their study that prevention of the disease through better knowledge and awareness is the appropriate way to keep the disease away. They further vouched that proper health seeking behaviour may also enhance or interfere with the effectiveness of control measures.

#### Conclusion

The study shows that knowledge & attitude about malaria, its prevention and treatment is very poor in the Baiga tribe. It is urgently desired to make the community aware about the malaria, its treatment and prevention through information education & communication (IEC) for better utilization of the existing control programme.

#### Acknowledgement

We would like to express our sincere thanks to Dr. Neeru Singh, Officer in Charge, Dr. K.B. Saha, Senior Research Officer and Dr.S. R. Qamra Assistant Director RMRCT (ICMR) Jabalpur for their valuable suggestions while preparation of this manuscript from time to time.

#### References

- Datta P, Khan AM, Mahanta J. 1999. Problem of malaria in relation to sociocultural diversity in some ethnic communities of Assam and Arunachal Pradesh . J. Para. Dis.Vol. 23.pp101-104.
- Klein RE., Weller SC, Zessing R, Richards FO, Ruebush TK. 1995. Knowledge, belief and practices in relation to malaria transmission and vector control in Guatemala. A.m. J.Trop Med Hyg. Vol.52.pp383-8.
- Panda R, Kanhekar LJ, Jain DC. 2000. Knowledge, attitude and practice towards malaria in rural tribal communities of south Bastar district of Madhya Pradesh. J. Commu. Dis. Vol.32.pp222,
- Sharma VP. 1996. Re-emergence of malaria in India. Indian J. Med. Res. Vol.103.pp26.
- Singh. N, Singh MP, Saxena A, Sharma VP, Kalara NL.1998. Knowledge, attitude, beliefs and practices (KABP) study related to malaria and intervention strategies in ethnic tribals of Mandla (Madhya Pradesh). Curr Sci. Vol.75.pp1386.
- Tiwary DN. 1984. Primitive Tribes of Madhya Pradesh. Strategy for development Government of India, Ministry of Home Affairs. Tribal development division. New Delhi.
- Tyagi P, Roy A, & Malhotra MS. 2005. Knowledge, awareness and practices towards malaria in communities of rural, semi rural and bordering area of east Delhi (India). J. Vect. Borne Dis. Vol. 42.pp30-35.