

Awareness About Malaria And its Prevention Amongst Rural Population of western Uttar Pradesh

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Abstract

Objective: To assess the awareness about malaria and its prevention in and around a tertiary care hospital in western Uttar Pradesh, India.

Methods: This was a cross-sectional study. The subject age >18 years were interviewed for the awareness about malaria and its prevention. A set of questions were framed in the form of questionnaire. A face to face interview was conducted who came to the OPD of RHTC. All subjects residing for a period of minimum 6 months in field practice area. Subjects not residing for a period of minimum 6 months in field practice area were excluded from the study.

Results: Majority of the subjects were aware about the severity (74.7%) of malaria. More than half of subjects were aware about its curability (76.7%). About one fifth of the study subjects were aware that malaria being a contagious disease. Majority of the subjects were aware the mosquito bite was the major source of mode of transmission. Friends-relative (85.3%) were the main source of awareness about malaria.

Conclusion: Results revealed that awareness among respondents were reasonably good and key socio-cultural, and related indicators need to be identified as a part of malaria elimination strategy.

Keywords: Malaria, Awareness, Prevention

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I. Introduction

India contributes 70% of malaria cases and 69% of malaria deaths in the South-East Asia Region. However, a WHO projection showed an impact in terms of a decrease of 50–75% in the number of malaria cases by 2015 in India (relative to 2000 baseline), which showed that the country has been on track to decrease case incidence 2000–2015. According to WHO malaria report 2015, it clearly states that to be able to eliminate Malaria efforts are on throughout the world for a long time. Year 2015 was not only the end of the era of Millennium Development Goals (MDGs) but also was the target year set by World Health Assembly for attaining malaria goals. World Malaria Report 2015 shows dramatic decline in malaria. Fifty-Seven countries have been able to reduce their malaria burden by 75%. Also, World Health Organization (WHO) European region has reported zero indigenous malaria cases. World Health Assembly has approved Global Technical strategy for Malaria 2016-2030. The target of this is to reduce global malaria incidence and mortality by 90% by the year 2030 (WHO, 2015).

Approximately 80% of India's population lives in malaria risk areas (WHO, 2011). In India, malaria control activities happen at both the national and local levels. The National Vector Borne Disease Control Programme (NVBDCP) is a programme Government of India runs for the prevention and control of all vector-borne diseases.

A study was conducted in China in 2010 to find out the malaria awareness in elementary and high school students before the start of national malaria elimination Program. The study found that the students did not have adequate awareness about malaria, its symptoms, spread and pathogenicity. Hence, it was felt that school health campaigns should help increase awareness on malaria among students (Yin et al, 2013). Another study was done in and around Mumbai at 4 places to check the knowledge of people about malaria and preventive measures taken by them. As the four areas of Mumbai differed in knowledge, prevention practices, and primary sources of information, so the strategy adopted in each area for malaria should be tailored according to environment, knowledge gaps and preferences (Dhawan et al, 2013). The present study was conducted to assess the awareness about malaria and its prevention in and around a tertiary care hospital in western Uttar Pradesh, India

II. Matrial And Methods

A was a cross- sectional study conducted in the rural field practice areas of RHTC of Department of Community Medicine, Rohilkhand Medical College and Hospital, Bareilly, Uttar Pradesh. All subjects residing for a period of minimum 6 months in field practice area. Subjects not residing for a period of minimum 6 months in field practice area were excluded from the study.

The subject age>18 years were interviewed for the awareness about malaria and its prevention. A set of questions were framed in the form of questionnaire. A face to face interview was conducted who came to the OPD of RHTC.

The data so collected was analyses using SPSS and the results are presented in the frequencies and percentages.

III. Results

Majority of the subjects were aware about the severity (74.7%) of malaria. More than half of subjects were aware about its curability (76.7%). About one fifth of the study subjects were aware that malaria being a contagious disease. Majority of the subjects were aware the mosquito bite was the major source of mode of transmission. Friends-relative (85.3%) were the main source of awareness about malaria followed by Television (45%) (Table-1). Table-2 presents the distribution of subjects according to awareness about prevention of malaria. About one third (30%) of the study subjects were aware about program running to control of malaria in their area. Malaria control activities were carried by Govt. & public operation (28.3%). More than one third (40%) of the subjects opined that community had the responsibility to prevent the malaria.

IV. Discussion

Assessment of KAP is a good initial step for planning public health intervention. This is of greater value in diseases such as malaria, wherein awareness about the cause and spread is a major stakeholder for prevention. Malaria is an entirely preventable and treatable mosquito-borne illness accounting for nearly 85% of infectious disease burden across the world. About 36% of the world population is exposed to the risk of contracting malaria. As per reports in the year 2007, India contributed 77% of the total malaria in Southeast Asia. In 2013, 97 countries had ongoing malaria transmission. Among South-East Asia region, India shares two-thirds of the burden (66%) followed by Myanmar (18%) and Indonesia (10%) (Sivasangeetha et al, 2015).

The results have shown reasonably good awareness of malaria among the study population. This is in agreement with findings of some studies (Adedotun et al, 2010; Iriemenam et al, 2011; Abate et al, 2013). Sood and Sharma (2016) in rural Punjab have also reported the similar finding. However, this is in contrast to other studies (Adongo et al, 2005; Mazigo et al, 2010). All the study population had heard about malaria. The findings are similar to that as reported by Abate et al (2013). This finding assumes importance in view of the fact that the study participants belong to a low incidence state and, therefore, have a lower exposure to cases of malaria. This may be because the main source of information in the current study population was mass media (friends/neighbors). followed by (TV/newspaper). This finding is in contrast to the findings reported by Singh et al (2014) where an individual's experience with malaria was the main source. Here in, lies the strength of from this study. Creation of awareness through mass media is an excellent model of intervention in the prevention of malaria. Hlongwan et al (2011) reported health facility (29%) as the main source of information among the respondents. Knowledge regarding causation of disease, its cure and prevention were very high in this study. This again may be because of less number of personal interactions with patients of malaria. India, being endemic for malaria and deferring voluntary blood donors based on their treatment to malaria for a period of three years would considerably reduce the blood stock available in the blood bank. As most of the blood banks in India depend on community for voluntary blood donations, it is imperative for the community to know the deferral criteria for blood donation after malaria attack.

V. Conclusion

Results revealed that awareness among respondents were reasonably good and key socio-cultural, and related indicators need to be identified as a part of malaria elimination strategy. Malaria prevention campaigns should be tailored according to knowledge gaps, practices, environment, resources, and preferences. Promoting active community participation by improving current intervention strategies through information, education and communication regarding malaria and other mosquito-borne diseases may yield better results.

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Table-1: Distribution Of Subjects According To Awareness About Malaria

Awareness about	No. (n=300)	%
Severity of disease		
Mild	76	25.3
Severe	224	74.7
Curability		
Curable	230	76.7
Non-curable	70	23.3
Contagious disease		
Yes	65	21.7
No	235	78.3
Mode of transmission*		
Mosquito bites	245	81.7
Housefly	67	22.3
Drinking of dirty water	9	3.0
Due to sins	12	4.0
Do not know	15	5.0
Source of knowledge*		
Television	135	45.0
Newspaper-magazine	67	22.3
Radio	32	10.7
Friends-relative	256	85.3
Hoarding-banners	23	7.7
Health worker	67	22.3
Doctor	78	26.0

*Multiple response

Table-2: Distribution of subjects according to awareness about prevention of malaria

Awareness about	No.	%
Program running to control of malaria		
Yes	90	30.0
No	210	70.0
Malaria control activities are carried out by*		
Govt only	46	15.3
Private agency	44	14.7
By public	37	12.3
Govt. & public operation	85	28.3
No idea	88	29.3
Influential person in the community who help to control malaria		
Health personnel	76	25.3
Community leaders	56	18.7
Community resides	120	40.0
All the above	48	16.0
Responsibility of the doctor / health personnel to prevent malaria		
Strongly agree	23	7.7
Agree	103	34.3

Disagree	87	29.0
Strongly disagree	51	17.0
No idea	36	12.0

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