

To Study The Knowledge, Attitude And Behaviour Of Patients Of Malaria In District Amritsar, India

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ABSTRACT

Introduction: The rapid emergence and resurgence of malaria has become a menace to our society and are increasing both in intensity and severity.

Aims and Objectives: To study the knowledge, attitude and behaviour of patients regarding Malaria.

Material and Methods: All the diagnosed cases of Malaria reported from 1st January to 31st December 2009 in the erstwhile District of Amritsar were collected from District Epidemiologist of Amritsar and Taran Taran and studied. A total of 314 malaria patients were studied. Data

was assessed, systematically compiled and statistically analysed.

Results and Conclusion: Majority of malaria patients (88.5%) had the knowledge that malaria is spread by mosquito but 65.3% of the patients could name the breeding places of mosquito. Out of the total, 57.3% patients had knowledge regarding the preventive measures for Malaria, out of these majority of these had knowledge that avoiding water collection is a preventive measure.

Key Words: Knowledge, Attitude, Behavior, Malaria

INTRODUCTION

Vector borne disease is a type of disease where the pathogenic microorganism is transmitted from an infected individual to another individual by an arthropod or other agent, sometimes with other animal serving as an intermediate host [1].

Vector borne diseases are today one of the major causes of human suffering, both in terms of increasing morbidity/mortality and stunting intellectual/ economic growth. No country, whether tropic or temperate and developed or underdeveloped, is spared from their devastating impact [2].

The two most important factors related to a vector's transmission of disease are the geographic range (both in distance and in amount of time during the year that the vector is present) and the vector's rate of infectivity by any parasite [3].

Out of the Vector Borne diseases, one of the important disease is Malaria, which has been a scourge of the mankind for centuries.

Socio-economic conditions of the community have direct bearing on the problem of these diseases. Ignorance and impoverished conditions of people contribute in creating source and spread of these vector borne diseases and hinder disease control strategy [4,5,6,7]. Prevention of these diseases

through better knowledge and awareness is the appropriate way to keep these diseases away. Ignorant behavior may interfere with the effectiveness of control measures [4,8]. Knowledge, Attitude and Practices (KAP) about the disease can play an important role in circumventing these problems. [4,7,9].

People can be made aware about these diseases through various methods such as television, print media, radio, internet, health departments etc and all these ways are delivering their goal accordingly.

There is an effort to study the knowledge, attitude and behavior of people regarding the Malaria. This will help in identifying the gaps in the measures adopted and the knowledge, attitude and of the population.

MATERIAL AND METHODS

This study was carried out in Amritsar District (Including Tarn Taran as it was a part of erstwhile District Amritsar) from the month of January 2009 to December 2009. All the diagnosed cases of Malaria reported from 1st January to 31st December 2009 in the erstwhile District of Amritsar which also included Tarn Taran were studied.

The subjects were informed about the nature and purpose of this study and an informed consent was obtained. The information regarding general biodata i.e., name, age, sex, complete address, income, education, knowledge, attitude and behavior of the patients regarding the disease as per proforma was obtained by the author personally by interviewing patients by home visit. The information so collected was compiled, analyzed statistically and valid conclusions were drawn.

Criteria used in the study:

Registered Medical Practitioner: A person having no professional qualification, but taken some training from some qualified doctor and opened up his clinic.

Qualified Private Practitioner: A person having basic professional qualification and registered with Punjab Medical Council or Medical Council of India or any such regulatory authority.

OBSERVATIONS AND DISCUSSION

Present study regarding knowledge, attitude and behavior of patients of Malaria was carried out in District Amritsar (District Tarn Taran was also included as it was previously a part of District Amritsar). In total 314 patients were enrolled. These were the patients who were reported by health workers to the District Health authorities. The following observations were made.

[Table/Fig-1] shows that only 41(13.1%) of patients were using any type of repellents. 45(14.3%) of patients were using mosquito nets at night and only 23(7.3%) had wire gauze doors in their home. Thus majority of patients were not using any protective measures against mosquito bites.

Type of protection	No. of patients	Percentage	No. of patients not using	Percentage
Any type of repellent used	41	13.1%	273	86.9%
Mosquito nets	45	14.3%	269	85.7%
Wire gauze doors	23	7.3%	291	92.7%

[Table/Fig-1]: Distribution of patients according to use of different measures to avoid mosquito contact

[Table/Fig-2] shows that majority 231(86.2%) out of 268 patients who were sleeping outside were not using mosquito nets.

Similarly majority of patients i.e., 266 (99%), who were sleep-

ing outside, were not using mosquito repellent creams. Patients who were sleeping outside and not using mosquito repellent creams might be having more chances of mosquito bite and hence more chances of developing Malaria.

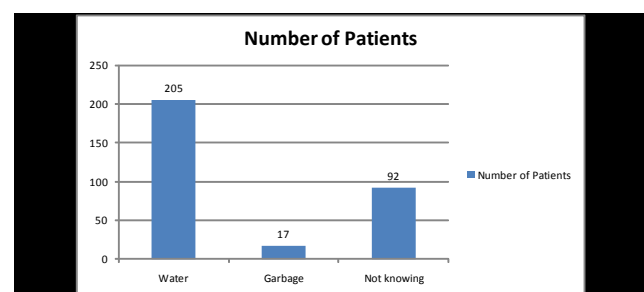
Preventive measures	Sleeping habit of Malaria patient				Chi square	P value
	Indoor		Outdoor			
	Used	Not used	Used	Not used		
Mosquito net used	8	38	37	231	0.411	>0.05
Mosquito repellent Cream used	2	44	2	266	1.69 (Yates)	>0.05
Liquid repellent	7	39	18	250	3.87	<0.05
Coil	2	44	10	258	0.04 (Yates)	>0.05
Wire gauze doors	6	40				

[Table/Fig-2]: Distribution of Malaria patients showing relationship between sleeping habits and use of preventive measures

[Table/Fig-3] shows that majority 278 (88.5%) of patients had knowledge regarding spread of Malaria from mosquito, while 205 (65.3%) patients had knowledge of exact breeding places of mosquito and only 17(5.4%) patients told that breeding of mosquito was on garbage (heaps of household/ cattle shed waste popularly known as Rudi in villages). Hence indicating that information, education and communication regarding prevention of Malaria should be strengthened in these areas.

S.No	Having knowledge regarding	No. of Patients	Percentage	
1	Spread of Malaria by mosquito	278	88.5%	
2	Breeding of mosquito	Water	205	65.3%
		Garbage	17	5.4%
		Not knowing	92	29.3%

[Table/Fig-3 (i)]: Distribution of Malaria patients according to knowledge about spread of Malaria



[Table/Fig-3 (ii)]: Malaria patients according to knowledge about spread of Malaria

tween January to September 1999, it was observed that 66% of patients knew that the mode of transmission of malaria was from the bite of infective mosquito. Among them 71% knew that mosquito breeds in water [10].

[Table/Fig-4] shows that 134 (42.7%) patients did not know about any of the preventive measures for Malaria.

S.No	Knowledge regarding preventive measure	Number of Patients	Percentage
1	Knowledge regarding preventive measures	180	57.3%
2	Malaria can be prevented by preventing water collection	150*	47.8%
3	Protective clothing using full sleeves	15*	4.8%
4	Protection from mosquitoes using mosquito nets	8*	2.5%
5	Protection from mosquitoes using repellents	10*	5.5%
6	Any other	2*	1.1%
7	No Knowledge	134	42.7%

[Table/Fig-4]: Distribution of Malaria patients according to level of knowledge regarding preventive measures for Malaria

Out of 180 (57.3%) patients who knew about preventive measures of Malaria, majority 150(47.8%) of patients stated that avoiding water collection is a preventive measure. 15(4.8%) of patients knew about wearing full sleeves clothes as a preventive measure and only 18(8%) of patients knew about the use of mosquito nets and repellents.

SUMMARY AND CONCLUSION

- Majority (85.4%) of patients were sleeping outdoors.
- Majority (98.1%) patients were wearing either halve sleeves or sleeveless clothes.
- Out of the total population, only 14.3% used mosquito nets, 13.1% used repellents, and 7.3% had wire gauze doors in their homes
- Majority (88.5%) of patients had the knowledge that Malaria is spread by mosquito, and 65.3% of the patients could name the breeding places of mosquito.
- Out of the total, 57.3% patients had knowledge regarding the preventive measures for Malaria, majority (83%) of these had knowledge that avoiding water collection is a preventive measure. 8.3% patients knew that wearing full sleeves and only 10% stated that mosquito nets and repellent can prevent the disease.

RECOMMENDATIONS

Conclusion from the study regarding epidemiology of Malaria and Knowledge, attitude and behavior of patients and health workers reveals that the knowledge regarding the disease related to the patients is not upto the requirement, in spite of education and health exhibitions being arranged by mass education and information wing of the district. There is a need for in depth and multicentric study in a larger sample to have comprehensive knowledge of KAP of these diseases. A consistent effort is required for advocacy of opinion leaders and campaigns for educating the people regarding prevention and control of these diseases through mass media (television, print media, and radio) especially during the rainy season i.e. transmission period.

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