

Assess The Awareness Regarding Malaria Among House Inmates At Selected Urban Slum Tirupati.

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Abstract: Malaria is a disease of global importance that results in 300-600 million cases annually and an estimated 2.2 billion people are at risk of infection. Malaria parasites are micro-organisms that belong to the genus *Plasmodium*. The infection is transmitted by the bite of an infected female anopheles mosquito. Malaria typically produces a string of recurrent attacks, or paroxysms, each of which has three stages-chills, followed by fever and then sweating. Along with chills, the person is likely to have headache, malaise, fatigue, muscular pains, occasional nausea, vomiting and diarrhea. The aim of the study was to assess the awareness regarding malaria among house inmates and the objectives was to assess the level of awareness regarding malaria among house inmates and identify the association between awareness regarding malaria among house inmates with their selected socio demographic variables. Non-experimental quantitative research approach was used, cross sectional descriptive research design was adopted a total of 100 samples were selected by using convenience sampling technique. Results show that 55 % of house inmates have moderate knowledge, 24% of house inmates have inadequate knowledge and 21% of house inmates have adequate knowledge regarding malaria and the study concludes that there is moderate knowledge regarding malaria among the respondents. So, there is need to improve the awareness regarding malaria for mosquito control measures.

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I. Introduction

The parasites in the blood were first seen in 1880 by French army surgeon Alphonse Laveran, who was looking for a bacterial cause of malaria. He immediately realized that parasites rather than bacteria were responsible for the disease. Malaria parasites are micro-organisms that belong to the genus *Plasmodium*. There are more than 100 species of *Plasmodium*, which can infect many animal species such as reptiles, birds and various mammals. Four species of *Plasmodium* have long been recognized to infect humans in nature. That is *P. falciparum*, *P. vivax*, *P. ovale*, *P. malariae*. The infection is transmitted by the bite of an infected female anopheles mosquito. The mosquito most frequently bites at dawn and at dusk, as this is the most active feeding times for mosquitoes. The clinical symptoms of malaria are primarily due to schizont rupture and destruction of erythrocytes. Malaria typically produces a string of recurrent attacks, or paroxysms, each of which has three stages-chills, followed by fever and then sweating. Along with chills, the person is likely to have headache, malaise, fatigue, muscular pains, occasional nausea, vomiting and diarrhea. The symptoms first appear some 10 to 16 days after the infectious mosquito bite. Microscopy and antigen based rapid diagnostic test are routinely used to diagnose malaria. Microscopy of both thick and thin blood smears remains the golden standard for diagnosing malaria, since it is accurate and reliable under operational conditions. Most drugs used in treatment are active against the parasite forms in the blood and include: chloroquine, atovaquone-proguanil, artemether-lumefantrine, mefloquine, quinine, quinidine, doxycycline, artesunate. In addition primaquine should not be taken by pregnant women or by people who are deficient in glucose-6-phosphate dehydrogenase. Control and prevention of the both vector (*Anopheles*) and *Plasmodium* are vital strategies against malaria infection. In this section, the most important control and prevention, which include insecticide treated nets indoor residual spraying, vaccination, adaptive immunity and education.

OBJECTIVES OF THE STUDY:

1. To assess the level of awareness regarding malaria among house inmates.
2. To identify the association between awareness regarding malaria among house inmates with their selected socio-demographic variables.

HYPOTHESES:-

H₀₁: There will be no significant association between awareness of house inmates regarding malaria with their selected socio-demographic variables.

A wide range of literature led to the development of the structured interview schedule by questionnaire for data collection. Theoretical framework for the study was adopted from General system theory.

METHODOLOGY:

A Descriptive design was adopted. One hundred house inmates were selected by using convenient sampling technique on the basis of inclusive criteria to assess the awareness regarding malaria.

II. Results:

1. Level of awareness regarding malaria shows, out of 100 house inmates 55(55%) had moderate knowledge, 24(24%) had inadequate knowledge and 21(21%) had adequate knowledge.
2. The mean and standard deviation scores of awareness were 17.660 and 4.036.
3. There was a significant association between some of the variables like age, marital status, educational status, occupational status, monthly income source of information, source of water supply level of awareness regarding malaria at $p < 0.01$ level.
4. There was a significant association between some variable like family type level of awareness regarding malaria at $p < 0.05$ level.
5. There was no significant association between some of the socio demographic variables like Gender, religion, type of diet, type of house, drainage system, garbage cleaning level awareness regarding malaria.

III. Conclusion:

In this study, most 55 (55%) of the house inmates had moderate knowledge, 24(24%) had inadequate knowledge, and only few i.e. 21(21%) had adequate knowledge regarding awareness of malaria. There was a significant association between some of demographic variables like age, marital status and the level of awareness regarding malaria at $p < 0.01$ level. Some of the variable like family type level of awareness regarding malaria at $p < 0.05$ level.

These findings suggested extensive health education program were needed to bring awareness among house inmates. So nurses need to encourage lifestyle modification by organizing health education programs on malaria to bring down morbidity, mortality and to bring fruitful community.

Recommendations:

- A similar study can be conducted to compare house inmates in urban and rural areas.
- A comparative study can be conducted to assess awareness regarding malaria among male and female.
- A large scale survey can be conducted to assess the incidence of malaria.
- A similar study can be conducted to assess knowledge regarding malaria among health personnel in the community.
- Field trials can be conducted to improve the knowledge on transmission and prevention of malaria among all category of people in the community.
- A similar study can be conducted on large sample for better generalization.

IV. Discussion

Malaria has been one of the major health problems since 1907. It is estimated that more than 216 million people are affected worldwide. The WHO estimates that 4,45,000 people expired in the year of 2016. It also sets out to eliminate the mosquito borne disease completely from at least 35 countries. Since India is the largest malaria endemic country in the world, the prospects of global elimination of malaria will depend on mass drug administration and awareness programme.

Supportive study was Khumbulani W Hlongwana, et.al; (2009) Community knowledge, attitudes and practices (KAP) on malaria in Swaziland. A descriptive cross-sectional survey was undertaken in four Lubombo Spatial Development Initiative (LSDI) sentinel sites in Swaziland. Ravindra K Sharma, et.al; (2015) Conducted a study on Socio-economic & household risk factors of malaria in tribal areas of Madhya Pradesh, central India. This study was undertaken in all 62 villages of Bargi Primary Health Centre from May 2005 to June 2008. These villages comprised 7117 households with an average family size of five members. Fortnightly fever surveys were conducted in all villages to assess prevalence of malaria infection in the community.

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