

Study to Assess the Knowledge of People About Dengue Fever in Selected Rural Area of Mangalore

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Abstract

Health is the precious possession of all human beings as it is an asset for an individual and community as well. Like health, disease is a dynamic process and it is just the opposite of health. Effective control of communicable diseases is necessary for national development and economic self dependence. **The aim of the study** is to assess the knowledge of people about dengue fever in selected rural area of Mangalore. **Methodology** : A quantitative, non-experimental research approach was used for the present study. Research design survey design. 150 subjects between the age 20-60 yrs were collected by using purposive sampling method. The study was conducted in Kalkatta area, under Natekal PHC. **Results**: The majority of in rural people 88(59%) were in the age group of 20-30 years. In rural area 79(53%) people were aware about dengue fever. Source of information showed that majority 59(75%) in rural people got information from paper, TV and media. The present study depict that 64(43%) of rural people have poor knowledge, 85(56%) of rural were having average knowledge and 1(1%) of rural people had good knowledge about dengue fever.

Present study revealed that there is association between level of knowledge and selected demographic variable like age and religion.

Conclusion: The present study depict that 64(43%) of rural people have poor knowledge, 85(56%) of rural were having average knowledge and 1(1%) of rural people had good knowledge about dengue fever.

Key words: dengue fever, knowledge, rural.

Introduction

Mosquito-Borne Diseases or mosquito-borne illness is disease caused by bacterial, viruses, parasites transmitted by Mosquitoes. This can transmit disease without being affected themselves.¹ Dengue is a main leading problem to human kind. Some mosquitoes are vectors for some of the diseases. Typically the diseases are caused by viruses or tiny parasites.²

Dengue fever is a serious public health problem in terms of its morbidity and mortality. It reports from almost all countries and it is endemic in the tropical countries. Dengue fever is an infectious mosquito-borne disease caused by dengue virus. Its symptoms include fever, head ache, muscle and joint pains and rash resembles measles. The presence of muscle and joint paints gives an alternative name to the dengue fever as $\langle \text{break bone fever} \rangle$. ³

Dengue is transmitted to humans by the *Aedes aegypti* or more rarely the *Aedes albopictus* mosquito. The mosquitoes that spread dengue usually bite at dusk and dawn but may bite at any time during the day, especially indoors, in shady areas, or when the weather is cloudy.⁴

India is one of the seven identified countries by reporting incidence of Dengue Fever/Dengue Haemorrhagic Fever outbreaks and may soon transform into a major niche for dengue infection in the near future. The first confirmed report of dengue infection in India dates back to 1940s, and since then more and more new states have been reporting the disease which mostly strikes in epidemic proportions often inflicting heavy morbidity and mortality, in both urban and rural environments.⁵

Background

Dengue fever usually starts suddenly with a rapidly climbing high fever, that's why the temperature in dengue fever is called a 'saddleback' type temperature, severe headaches, retro-orbital pain behind the eye, nausea & vomiting, loss of appetite, rashes develop on the feet or legs 3 to 4 days after the beginning of the fever, swelling and pain in muscles and joints. The joint pain in the body has given dengue fever the name that is "break bone fever". The common symptoms of dengue fever may go in around 10 days, but complete recovery from dengue fever can take more than a month.⁶

Dengue is currently the most common arboviral infection worldwide. It is endemic in almost all tropical and sub-tropical regions of the world; approximately 40% of the world population is at risk of acquiring a dengue infection.⁶

Dengue is a tropical disease affecting 110 countries throughout the world and placing over 3 billion people at risk of infection. According the World Health Organization 70 to 500 million persons are infected every year including 2 million who develop hemorrhagic form and 20,000 who die. Children are at highest risk for death.⁷ The community health nursing experience and the increased incidences of dengue in India, made researcher to assess the awareness among people in rural and urban area about dengue fever so as to prevent dengue in future by administering the self information module.

Methodology

A quantitative, non-experimental research approach was used for the present study with survey design. Total 150 subjects between the age 20-60 yrs including both male and female were enrolled by using purposive sampling method. The study was conducted in Kalkatta area, under Natekal PHC. The institutional ethical permission was obtained. Permission from the medical officer was obtained in order to carry out the study. Demographic performance and structured knowledge questionnaire to assess the knowledge regarding dengue fever and its control measures was administered. It was on the basis of arbitrary classification. The structured knowledge questionnaire were consist of 20 items and score was classified as good (score 14-20), Average (score 7-13) and poor (score 0-6) . The tool validity and reliability was assessed. Informed consent was obtained from the subjects; demographic performance and structured

knowledge questionnaire were administered.

Results

The present study revealed that out of 150 subjects in rural area majority 88(59%) of them were in the age group of 20-30 years.. Distribution of subjects according to the religion showed that among rural area 33(22%) were Hindu, 117(78%) were Muslims. Percentage distribution of rural people according to the education showed that in the rural area 14(9%) were illiterate, 38(25%) were primary education, 81(54%) were gone up to high school, 17(12%) were graduates. In rural area 79(53%) were aware about dengue. Percentage distribution of samples according to the source of information showed that majority 59(75%) in rural got information from paper, TV.

Table 1: The knowledge of People about Dengue Fever in selected rural area of Mangalore.

n = 150

Level of knowledge	Frequency	Percentage
Poor (0-6)	64	43
Average (7-13)	85	56
Good (14-20)	1	1
Total	150	100

The Present study shows that 64(43%) of rural people have poor knowledge, 85(56%) were having average knowledge and 1(1%) had good knowledge about dengue fever.

Present study revealed that there is association between level of knowledge and selected demographic variable like age and religion. And there is no association between level of knowledge and selected demographic variable like sex, education, occupation, and source of information.

Discussion

The present study revealed that out of 150 samples in rural area 88(59%) of them were in the age group of

20-30 years and mean age group is 29 yrs, this finding is supported by the study conducted in Malaysia the result showed that Mean age of respondents was 34.4 (± 5.7) years, and the age ranged from 18 to 65 years.⁸The study Javed N et al shows that the mean age group is 14.72 \pm 1.09.⁹ Percentage distribution of rural people according to the education showed that in the rural area 14(9%) were illiterate, 38(25%) were primary education, 81(54%) were gone up to high school, 17(12%) were graduates and In rural area 79(53%) were aware about dengue. Similar finding was found in the study by Deepika T, Sharma G, Gupta M, they concluded in the study, 98.6% were literate and majority (99.4%) had heard about dengue fever.¹⁰

Percentage distribution of samples according to the source of information showed that majority 59(75%) in rural got information from paper, TV this finding was supported by the study by Javid N et al shows that in their study majority 72.9% received knowledge on Dengue through TV and radio.⁹

The Present study shows that 64(43%) of rural people have poor knowledge, 85(56%) were having average knowledge and 1(1%) had good knowledge about dengue fever. The findings of the study was contradictory to the study by Yboa BC, Leodoro J, the result shows that more than half of the respondents had good knowledge (61.45%) on dengue symptoms and preventive measure.¹¹The result of study by Yusuf MA, Ibrahim AN supports the present findings it shows that total 148/49.3% of the participants demonstrated a moderate level of knowledge, 140 (46.7%) a neutral level of attitude and 156 (52%) a low level of practice towards dengue fever prevention. 23A study conducted in Thailand, also showed that out Of the 1650 persons, 67% had good knowledge of dengue.¹²

Present study revealed that there is association between level of knowledge and selected demographic variable like age and religion. This finding was contradictory with study by Haraphan H et al shows that level of education, occupation, marital status, monthly income, socioeconomic status (SES) and living in the city were associated with the knowledge level.¹³

Conclusion

The present study concludes that the majority of the rural people i.e 56% of them had average knowledge on dengue fever and its control measures. Has the study is limited to only rural area and it would have been better

to assess the practice of vector control measure.

Ethical Clearance- Obtained from Institutional Ethical committee

Source of Funding-Self

Conflict of Interest –NIL

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