

KAP Study regarding Dengue Fever among general population attending Ibn-e-Siena Hospital Multan

SYED MUHAMMAD RAZA SHAH, MUSTANSAR BILLAH

ABSTRACT

Aim: To determine and evaluate the level of information about the knowledge of dengue fever among general population attending Ibn-e Siena Hospital, Southern, bypass Multan.

Study design: Descriptive

Place & duration: The study was conducted at Ibn-e-Siena Hospital, Southern bypass Multan from February 2017 to April 2017.

Methods: 100 People (43 males and 57 females) above 18 Years of age, permanent residents of Multan and those living in surrounding areas of Ibn-e-Siena hospital were included in this study and were questioned about the causation, transmission, sign & symptoms and the ways to prevent this infection, according to the pre designed set of questions.

Results: About 87% of the persons included in the study had already heard about this type of fever. 72% of them considered mosquito bite as cause / mode of spread of this disease. We found that literate people had more and correct information than un-educated people among the participants of the study. As regards the prevention of this disease, 83% of study population was in favor of preventing mosquito bites and by the use of anti mosquito spray while 39% were of the opinion to reduce the mosquito population by attacking the breeding sites.

Conclusions: Although most of the individuals in our sample population were aware of various aspects of dengue fever but detailed knowledge and awareness was lacking. People need more understanding of the disease particularly its vector characteristics.

Keywords: knowledge, attitude, practice, rural/urban area, dengue fever.

INTRODUCTION

Dengue fever, an arbovirus infection, is one of the world wide spreading disease. WHO has declared its two types i.e classical dengue fever and dengue hemorrhagic fever prevalent in South Asia. It is one of the tropical diseases and is transmitted by one kind of mosquito called *Aedes aegypti* which primarily bites during day time but may bite at night. The clinical features include sudden onset of fever, headache, rash and musculoskeletal and joints pain. In recent years the number of dengue fever cases have increased and is found in about 100 countries of the world. Dengue fever epidemics have occurred in some countries such as China, Sri Lanka, Bangladesh, and Pakistan in last decade. Today this viral infection has spread throughout the country of Pakistan and cases of un-differentiated fever, classical dengue fever, dengue hemorrhagic syndrome and expanded dengue syndrome have been reported in Karachi as well as in Lahore. In developing countries this viral infection can cause sufficient number of casualties. Despite the fact that disease is prevalent in Pakistan but there is no

documented evidence that may show the awareness of this viral infection among general population. So that the aim of this study was to assess and judge the level of knowledge of general population about the dengue fever.

MATERIAL AND METHODS

This study was conducted over a period of three months from February to April 2017 at Ibn-e-Siena Hospital Multan. One hundred people comprising of 43 males and 57 females above the age of 18 Years were included in this study and they all were permanent residents of the Multan city and from surrounding areas of Ibn-e-Siena Hospital alongside of Southern bypass. Personal informative data was recorded on predesigned questionnaire containing multiple questions about the dengue fever particularly about its knowledge, attitude and prevention. Data was analyzed by SPSS -21.

RESULTS

Eighty seven percent of these 100 people included in the study have already heard about the dengue fever. 72% were of opinion that this disease spreads by mosquito bite while 61% believed that the disease

Department of Community Medicine, Multan Medical & Dental College Multan

Correspondence to Dr. Syed Muhammad Raza Shah, Assistant Professor Email: razashahgardezi@gmail.com Cell: 0302-7367505

cannot be transferred from person to person. 91% were saying that fever is the most common presentation of this disease whereas headache was described by 57% as shown in Table 1. Majority of the respondents (47%) were of ages between 24 and 40 years and most of these were un-educated people (33%) as shown in Table 2. 76% of the interviewed persons described that mosquito causing dengue fever develops in clean water while 82% of them were of the opinion that it develops on dirty water. 87% of the study population described night as the most common mosquito biting time whereas 42% described evening as biting time as shown in Table 3. Regarding preventive measures against Aedes aegypti mosquito, popular preventive measures described by the respondents were mosquito spray (83%) and mosquito mats / coils (79%) (Table 4).

Table 1:

Variable	Frequency (n)	%age
Aware of dengue		
Yes	87	87
No	13	13
Cause/mode of spread		
Mosquito bite	72	72
House flies	5	5
Dirty drinking water	10	10
Unhygienic food	8	8
Don't know	5	5
Human to human spread		
Yes	17	17
No	61	61
Don't know	22	22
Knowledge about symptoms		
Fever	91	91
Nausea/Vomiting	17	17
Bleeding	4	4
Muscular Pain	36	36
Headache	57	57
Don't Know	3	3

Table 2:

Age (years)	Frequency	%age
18-25	27	27
25-40	47	47
41-60	23	23
>60	3	3
Education		
Illiterate	33	33
Primary	29	29
Matric	22	22
Graduate	16	16

Table 3:

Variable	Frequency	%age
Mosquito Spray	83	83
Mosquito mat/coil	79	79
Mosquito net	67	67
Gauze Windows/Doors	56	56
Cleaning of houses	73	73
Cleaning of garbage	64	64
Use of smoke	28	28
Prevention of water stagnation	39	39
Don't know	4	4

Table 4

VARIABLE	FREQUENCY	%age
Common breeding sites		
Water storage jars/ container	76	76
Coolers, Tyres pots	69	69
Dirty Water	82	82
Garbage/Trash	73	73
Plant Vegetation	56	56
Don't know	5	5
Most frequent mosquito bite time		
Morning	13	13
Day Time	9	9
Evening	42	42
Night	87	87
Don't Know	3	3

DISCUSSION

During this study it was noted that the persons who were not familiar with the word “dengue” have no education at all. However most persons were saying that the disease spreads from person to person by mosquito biting but simultaneously various misconception stories of spread were also heard. Significant numbers said that this disease spreads via direct contact but some were not sure about this contagious mode of spread. Fever, Hemorrhage and shock are three well known features of dengue but most common presenting feature is fever. Over study revealed that people had sufficient information about this disease. Popular preventive measures described by the persons were anti mosquito spray and coils. Cleaning houses and use of gauze doors and windows were also observed to be common. Correlating the demographic factors to the knowledge of dengue fever it was seen that people with some education had better knowledge and also as the income increased it lead to decrease in poor knowledge. Study also revealed that high socio economic status correlates well with better concept.

RECOMMENDATIONS

The paper attempts to present assimilated available information on awareness of dengue in Pakistan. From the literature review it is concluded that there is need for more public awareness and understanding of the disease. Public awareness for prevention and control of dengue fever can be enhanced by involving both private and govt. sectors. This goal can be achieved by constituting teams of women to be sent to different homes for education of house wives and also through various health education programs for self awareness. Technical Knowledge of the women teams after adequate training should be developed so that they are able to impart relevant training to house wives. In health education programs, people should be educated about self protection and about the strategies to control adult and larval forms of mosquito. The people should be educated to destroy the possible mosquito breeding sites such as water tanks, irrigation ditches etc. in order to break the mosquito life cycle. Sprays should not be directed against only adult mosquito but also against larval forms of aedes egypti. Very effective and intensive health education programs can be carried out by announcements and advertisements on radio and TV in order to increase the public awareness for the vector control as well as for the maintenance of hygiene in homes. International anti dengue day should be observed every year like other parts of the world and this should be enforced by Pakistan medical & dental council. For success we must enhance the public awareness, mobilize resources and demonstrate public commitment for the prevention and control of dengue fever.

CONCLUSIONS

Dengue fever remains a public health problem in this area. We have founded insufficient and poor information about dengue fever among sample population. Our findings highlight the need for more understanding of the disease particularly its vector

characteristics. However if the public have sufficient knowledge of disease sign & symptoms and have awareness about dengue prevention and control, it can be considered adequate. Various preventive strategies used are the only means of controlling dengue.

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