



A STUDY TO ASSESS THE KNOWLEDGE AND PRACTICE REGARDING DENGUE FEVER AMONG HOUSEWIVES OF SELECTED URBAN AREAS UNDER GANDHI NAGAR CHC, BHOPAL, MP AND TO PREPARE A HEALTH EDUCATION PACKAGE

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Abstract

A study was undertaken regarding Dengue fever to prepare a health education package for housewives of Gandhi Nagar. The study was a descriptive study conducted among 50 housewives in the urban areas under Gandhi Nagar CHC and attending Anganwadi in Gandhi Nagar. The study result showed that the housewives were having very less knowledge regarding Dengue fever and the socio demographic variables have good impact on their level of knowledge such as age, educational status, occupation of husband, income, type of house. Further the findings revealed that there is no association with knowledge regarding Dengue fever and type of family.

Keywords - Assess, knowledge, housewives, urban areas, health education package.

Introduction

Dengue fever is an acute viral infection and occurs in epidemic or endemic form in India. Dengue is transmitted to humans by two species of mosquitoes namely *Aedes Aegypti*, principal vector and *Aedes Albopictus* in low level, the same mosquitoes that transmit yellow fever, Chikungunya and Zika infection. Dengue Fever is caused by a mosquito-borne human viral pathogen that belongs to the genus *Flavi virus* of the family *Flavi viridae* (single-strand, non-segmental RNA virus). It is spherical in shape and 17 to 25 microns in diameter. Serologically there are four distinct, but closely related virus causes Dengue, that is DEN-1, DEN-2, DEN-3 and DEN-4. Studies suggest that immunity to a specific Dengue serotype may persist for a few months to several years. It is important that subsequent infections with different serotype can lead to more severe forms of disease, such as Dengue hemorrhagic fever or Dengue shock syndrome. As per WHO it is possible for an individual to be infected with Dengue fever several times during his lifetime.

In the absence of a vaccine or specific antiviral treatment for Dengue fever, vector control or personal protective measures are the only preventive measures in combating Dengue. Mosquito control measures are anti-larval measures, anti-adult measures, personal protection measures, use of repellents and community participation.

Need for the study

Dengue is prevalent in tropical and sub-tropical climates worldwide, mostly in urban and semi urban areas. The incidence of Dengue has grown dramatically around the world in recent decades. The overall prevalence of Dengue Fever in India was 48.7% (<https://www.thelancet.com>).

Dengue is a mosquito borne disease caused by Dengue virus. Symptoms of Dengue fever typically start 3 to 4 days after infection. Incubation period of Dengue fever is 3-10 days .Improvement generally takes less than 2-7 days. It is a self-limited disease. In a small quantity of cases, the disease develops life threatening Dengue hemorrhagic fever or Dengue shock syndrome, where blood pressure dangerously reduces. Hence the knowledge regarding Dengue Fever is important to prevent the occurrence of the disease and early detection of life threatening conditions.

Objectives:

- Assess the level of knowledge and practice regarding Dengue fever among housewives of Gandhi Nagar CHC.
- Associate the level of knowledge on Dengue fever with their selected demographic variables.
- Prepare a health education package for the housewives.

Materials and methods:

Hypothesis

The knowledge level of house wives regarding Dengue Fever and its preventive measures were very low. Certain demographic variables will have significant association with the knowledge level of house wives.

Methodology:

Research Approach

Quantitative research

Research design: The research design selected for the study was Non experimental one group pretest only research design.

The research design can be represented as

S – Study group

O1 – Pre-test knowledge score

X – Intervention (health education)

Sampling technique

In this study the sample consisted of 50 housewives of selected rural areas under Gandhi Nagar CHC, Bhopal selected by Non probability convenient sampling technique.

Development and description of the tools.

Description of the tool - Self structured tool.

Section I - It describes the demographic variables. It comprises 5 items for obtaining information regarding age, educational status, monthly income, type of family and source of information of the subjects.

Section II - It consists of 30 structured knowledge items under the following broad areas: causes, mode of transmission, sign and symptoms complications, management and prevention of Dengue Fever.

The test items were objective types consisting of multiple choice questions with one correct answer. Every correct answer was awarded a score of one point and every wrong answer was assigned a zero (0) score. The maximum total score of the knowledge questionnaire was 30 .The score was graded based on the following criteria:

Grade	Score
Adequate	21 – 30
Moderate	11 – 20
Inadequate	0 - 10

Methods of data collection

1. The CHC gave their written consent.
2. Based on the sampling requirements a convenient sampling procedure was used to choose the sample.
3. Housewives 50 were selected and knowledge regarding Dengue fever was assessed by using a self-structured knowledge questionnaire.

Results and discussion

The collected data were tabulated and analyzed by using descriptive and inferential statistics and results were interpreted.

Interpretation of knowledge and practice on Dengue fever

Table 1 shows knowledge and practice on Dengue fever among housewives. In that 72 % of house wives have inadequate knowledge, 26 % have moderate knowledge and 2 % have adequate knowledge.

Table 1 Frequency and Percentage distribution of knowledge and practice among housewives about Dengue fever. (N=50)

Inadequate Knowledge		Moderate knowledge		Adequate knowledge
0-10 (0-33%)		11-20(34-66%)		21-30 (67-100%)
Frequency	%	Frequency	%	Frequency
36	72%	13	26%	1

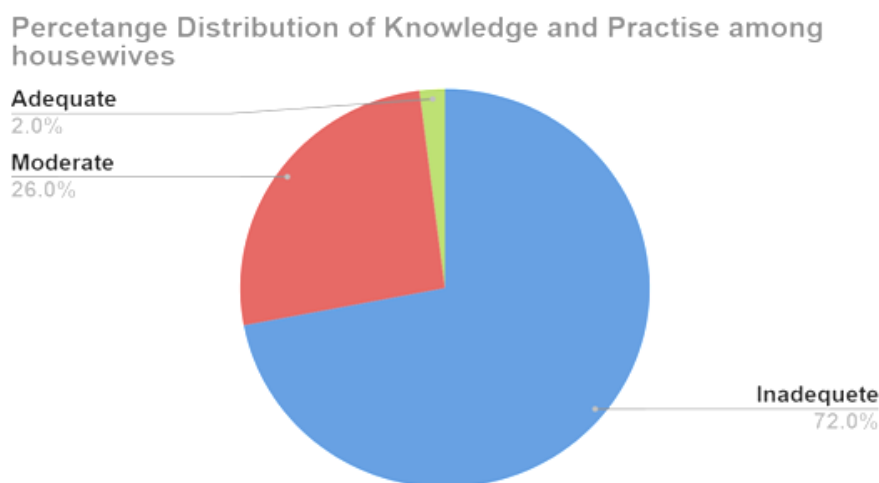


Figure 1: Pie diagram depicts percentage distribution of knowledge and practice among housewives regarding Dengue fever.

Table 2 Overview of association between knowledge levels with selected demographic variable

Table 2 presents the results of association between knowledge and demographic variables of house wives like age, educational status, source of information, income and type of family regarding Dengue fever.

In order to ascertain the relationship between knowledge and practice with demographic characteristics, the chi square analysis was used. The association between knowledge and practice with age, educational status, source of information, income and type of family were significantly associated at $P < 0.005$ level.

S.No	Demographic variables	Category	Frequency	Knowledge score of housewives			Mean	SD	Chi square/df	P value
				In-adequate	Moderate	Adequate				
1.	Age	25-40	29	24	5	0	9.6	10.3	1.45/2	5.99
		41-55	21	16	4	1	7	6.4		
2.	Educational status	Illiterate	15	12	3	0	5.00	5.00	21.76/2	5.99
		Primary	35	28	6	1	11.6	11.7		
3.	Source of information	Friends/relatives	3	3	0	0	1	1.41	1.63/4	9.49
		Health personnel	33	25	7	1	11	10.19		
		Mass media	14	12	2	0	4.6	5.24		
4.	Income	Below Rs. 4000/-	2	2	0	0	0.66	0.94	10.31/8	15.5
		Rs.4001-6000/-	11	9	2	0	3.6	3.8		
		Rs.6001-8000/-	10	10	0	0	3.3	4.71		
		Rs.8001-10,000/-	9	7	1	1	3	2.8		
		Above 10,000/-	18	12	6	0	6.0	4.8		
5.	Type of Family	Nuclear	28	24	3	1	9.33	10.4	4.01/4	9.49
		Joint	19	14	5	0	6.33	5.79		
		Extended	3	2	1	0	1	0.81		

It was evident from the result that house wives were influenced by their age, source of information, income and type of family .Hence the research hypothesis (H2) was accepted for association of knowledge with age, source of information, income and type of family .Since significant association was not established for demographic variables, educational status research hypothesis (H2) was rejected for this variable.

Discussions

Only 2 % of the 50 participants demonstrated adequate knowledge, 26 % depicted moderately adequate knowledge and 72% showed inadequate knowledge regarding Dengue fever. Preparation of a health education package and its distribution to the general public will enhance their knowledge and practice regarding Dengue fever to control the disease.

Nursing implication

The findings of the study have implications for nursing practice, nursing administration and nursing research.

Nursing practices

The students can be initiated to conduct this study for improving knowledge regarding Dengue fever and practice among health care professionals.

Nursing administration

Nurse Managers should conduct the same study on staff nurses, health care professionals and supportive staff to enhance their knowledge.

Nursing research

As there is no specific treatment or no licensed vaccine to prevent Dengue fever, there is a need to implement this study.

Limitations of the study

- The study is restricted to selected urban areas of CHC, Gandhi Nagar.
- Time limitation.

Suggestions

- Same study can be conducted on a large sample size.
- Same study can be conducted on hospital staff to enhance their knowledge.
- Same study can be conducted in schools and colleges.

Conclusion

Through various reviews of literature and present study it was found that knowledge and practice regarding Dengue fever among housewives are necessary for preventing and managing Dengue fever.

Acknowledgement

Author would like to thank all the participants for their valuable participation in this study, in charge of CHC, Gandhi Nagar and Anganwadi workers of concerned CHC, Gandhi Nagar, Bhopal, (M.P).

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