

A Study to Assess the Effectiveness of Planned Health Teaching on Knowledge Regarding Prevention of Dengue Fever among Adults (18 to Below 60 Years) Residing in Morvadi Nagar Ambad Nashik

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Abstract: A quantitative study was conducted at Morvadi Nagar, Ambad, Nashik. The purpose of the study was to assess the knowledge of people about prevention of dengue fever. The research approach adopted for this study is an evaluated approach. The research design selected for this present study was Quasi-experimental one group pretest post-test design. The sample size consists of 30 people; convenient sampling technique was used to select the samples. A structured knowledge questionnaire was administered to assess knowledge of people regarding prevention of dengue fever on the first day; then planned health teaching was administered on the same day of pretest of participants. After 7 days post-test conducted to assess the post-test knowledge. Data analysis is done by descriptive and inferential statistics. Total knowledge scores of subjects regarding prevention of dengue fever revealed that in pre-test majority 18 (60%) patients had average knowledge, 5 (16.66%) had good knowledge, and 7 (23.33%) had poor knowledge in total knowledge score where as in post-test majority of 15 (50%) had average knowledge, and 15 (50%) had a good knowledge in total knowledge score of the study. The pretests mean knowledge score 11 and standard deviation was 2.607 respectively, knowledge regarding prevention of dengue fever which was increased in post-test to 16.03 and S D 2.332. Obtained 't' value is 04.887 'p' value is <0.0001 which is considered significant improvement in the range of total knowledge regarding prevention of dengue fever. The study concluded that the planned health teaching on prevention of dengue fever was an effective method for providing adequate knowledge and help urban community people enhances their knowledge to prevent dengue fever.

Keywords: people suffering with dengue fever, prevention, planned teaching programme

1. Introduction

Dengue virus is considered most important arbo-virus in terms of morbidity mortality and economic cost with an estimated 100 million cases of dengue fever occurring throughout the world annually and some of 2.5 million people live in the areas where dengue virus can be transmitted. The incident of this fever is variable and depends on geographical regions and the destiny of mosquitoes in a region. Dengue hemorrhagic fever is more serious and fatality rate is about 5%. Dengue can affect both adult and children. Poor surveillance system in India makes it difficult to know the exact incidence of the epidemic in the country. This arthropod borne disease cause more death than any other communicable disease in India. This disease is considered as one of them deadliest disease especially in children, however this rates are higher in rural areas than urban people due to lack of knowledge regarding disease and its treatment.

2. Literature

The cross sectional study was design by Soodsada Nalong sackl. Yoshida. To assess the knowledge, attitude and practice of people regarding dengue disease in 9 villages of the Pakes district from July to September 2006. Purposive sampling was done to collect data from 230 subjects they had a fair knowledge about the vector 163(70.9%). For 101(43.9%) respondents, their main source of information

about dengue was their friends and relatives. It is encouraging that 217(94.3%) respondent had a positive attitude that DF can be treated, and that (96.5%) knew they should visit a doctor when they suffer from it. About 196(85.5%) people stored water at home but infrequently changes it. They should indicated that the community was quite familiar with dengue, but that there was some conclusion about vaccination and water storage for domestic use dengue awareness activity should be included at the school and college level.

A cross sectional study on Shuaib F Tood D, Campbell-Stennett D, Ehhiri J, Jolly PE, March 2010 questionnaires survey of 192 parent attending child health clinics in the Paris of west Moreland was conducted. More than half of the parents (45%) had good knowledge about sign and symptom and mode of transmission of dengue. Approximately 47% considered dengue to be serious but preventable disease to which they are vulnerable, never the less, majority (77%) did not used effective dengue prevention method such as screening of homes and 51% did not used bed nets. Educational attainment was positively associated with knowledge of dengue. There was no correlation between knowledge about dengue and preventive practices.

A study conducted by Llyod LS, Winch P, Orteja- Canto J, Kendall C on the design of a community based health education, intervention for the control of aedes aegypti. These reports describe the process used to develop locally

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appropriate educational material to implement the education component of the community based aedesaegypti control program in Merido, Yucatan, Mexio, the process is broken in to five stages: formative research developing recommendation for behavioral changes, development of educational message, development and production of educational material and distribution of the material. A larval survey of house lots was carried out to identify the AE. Aegypti larval production sites found on individual houses lots. These unable the program to target the most important larval habitats Community group were organized to work on the development of message and production on education material to be used. The education intervention was successful in stimulating changes in both knowledge and behavior, which were measured in the evaluation of intervention. To be successful community based strategies must be flexible and adapted to the local setting because of ecologic, cultural, and social differences between localities.

3. Problem Statement

A study to assess the effectiveness of planned health teaching on knowledge regarding prevention of dengue fever among adults (20 to below 60 years) residing in the Morvadi Nagar, Ambad, Nashik.

4. Objectives

- To assess the knowledge of group regarding prevention of dengue fever.
- To assess the effectiveness of health teaching regarding prevention of dengue fever.
- To find association between knowledge score and demographic variable.

5. Method / Approach

The present study aims at the effectiveness of planned health teaching program on knowledge regarding prevention of dengue fever among the people of (20-below 60) age group in urban. The researcher has adopted experimental research design.one group preset, post-test research design (0₁X 0₂). An evaluative method is used to assess the knowledge regarding prevention of dengue fever Convenient sampling technique was adopted for data collection.The sample size selected for this study was 30 samples.

6. Result

This section deals with analysis and interpretation of the data collected in order to determine effectiveness of planned teaching on knowledge regarding prevention of dengue fever. The data was analyzed according of study which were- Presentation of data was organized in this sections.

Section 1- Description of sample characteristics

Section 2- this section deals with analysis of data related to knowledge score of adult & effect of planned teaching related to prevention of dengue

Section 3- relationship between knowledge and selected demographic variables of the adult (20 to below 60 years)

Table 1: Description of sample according to demographic data distribution of frequency and percentage of subjects according to socio- demographic variables

Sr. No	Characteristics	Category	Respondents	
			Frequency (N) N=30	Percentage (%)
1.	Age	20-30	13	43.33
		31-40	9	30
		41-50	4	13.33
		51-60	4	13.33
2.	Sex	Male	10	33.33
		Female	20	66.66
3.	Marital status	Married	27	90
		Unmarried	3	10
4.	Religion	Hindu	28	93.33
		Other	2	6.66
5	Education	Primary	6	20.00
		secondary	13	43.33
		Higher secondary	5	16.66
		Graduate	5	16.66
		Post graduate	1	3.33
6	Occupation	Employed	9	30
		Self employed	3	10
		Housewife	17	56.66
		unemployed	1	3.33
7.	Monthly income	Rs.5000 & below	15	50
		5001-10000	3	10
		10001-20000	3	10
		20001 & above	9	30
8.	Type of family	Joint	15	50
		Nuclear	10	33.33
		Extended	5	16.66
9.	Type of house	Pakka build	22	73.33
		Kaccha build	8	26.66
10.	Drainage system	Open	20	66.66
		Closed	10	33.33
11.	Previous knowledge about dengue	Yes	17	56.66
		No	13	43.33

The data presented in table 1-A reveals classification of respondents by age, sex, marital status, religion, educational status and occupation. Maximum number of 13 (43.33%) subjects belong to the age group of 20-30 years and minimum 4 (13.33%) were between 41-50 and 51-60 years of age group respectively.

Majority of the respondents 20 (66.66%) were females and 10 (33.33%) were males and maximum number of respondents 27 (90%) were married and minimum only 3 (10%) respondent were unmarried.

Majority of the respondent 28 (93.33%) were Hindu and only 2 (6.66%) were other religion. Maximum number of respondents 13 (43.33%) had taken secondary education and maximum 1(3.33%) respondent was post graduate.

Majority of the respondents 17(56.66%) were housewives, while minimum 1(3.33%) respondent was unemployed; rest of 3(10%) were self-employed and 9 (30%) were employed.

The data presented in table 1-B indicates that majority of respondents 15 (50%) had their family monthly income Rs.5000 & below and minimum 3(10%) respondent there was having family monthly income 5001-10000 and 10001-20000 rupees respectively and rest 9(30%) respondents had their family monthly income 20001 and above rupees.

Maximum 15(50%) of respondents belong to joint family, 10(33.33%) belong to nuclear family and minimum 5(16%) of respondents belong to the extended type of family.

Maximum 22(73.33%) of subjects lives in pakka build house and minimum 8(26.66%) of subjects lives in kaccha build house.

Majority 20(66.66%) of represents have open draining system in their area and minimum 10(33.33%) of subjects have closed drainage system in their community area.

Among all respondents 17(56.66%) respondents had some amount of knowledge and minimum 13(43.33%) respondents were not having knowledge regarding prevention of dengue fever. Majority of the respondents 9(30%) received information about dengue fever from newspaper, 4(13.33%) received from radio, and TV respectively. 3(10%) of them had knowledge about dengue fever and minimum 1(3.33%) of subjects had knowledge about dengue fever from health personnel.

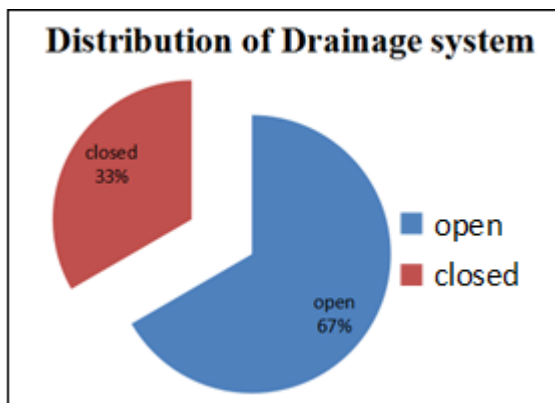


Figure 1: 3 A explored pie diagram showing distribution based on drainage system 3A exploded pie chart showing distribution based on drainage system the respondent who were exposed to an open drainage system were then those who were living in area with closed drainage .

Section 2

This section deals with analysis of the data relates to knowledge score of adults and effects of planned health teaching program regarding prevention of dengue fever.

Table 2: Distribution of knowledge level on prevention of dengue fever

Knowledge level	Category	Classification of respondents			
		Pretest		Post-test	
		Mean	Mean %	Mean	Mean %
Poor	1-10	10	33.33%	0	0
Satisfactory	11-20	14	46.66%	17	56.66%
Good	21-30	6	20%	13	43.33%
Total			100%		99.99%

Table no 2: describe the mean knowledge score about prevention of dengue fever obtained from adults in pretest is divided in to poor (33.33%), satisfactory (46.66%), good (20%), in post-test it is divided in to satisfactory (56.66%), good (43.33%).

Section 3

This section deals with the analysis of the data related to knowledge score of the adult and effect of planned teaching regarding prevention of dengue fever.

Table 3: Shows pretest and post-test knowledge score on prevention of dengue fever

Knowledge test	Mean	Mean difference	SD	't' value	Remark
Pre-test	11	-5.43	2.607	4.887	Significant
Post-test	16.03		2.332		

Table no. 3 shows that the main knowledge scores about prevention of dengue fever obtain from adult in present was 11 and post-test was 16.03.

The above data include that adult who receive planned teaching on prevention of dengue fever and higher mean knowledge score in post-test then in pretest. Thus we reject null hypothesis and accept research hypothesis. It can be concluded that the planned teaching on prevention of dengue fever is to be effective in delivering knowledge and awareness.

7. Discussion and Summary

The major finding of study was discussed under the objectives and hypothesis.

Section C: association between pretest knowledge scores of subjects on prevention of dengue fever with selected socio-demographic variables.

Objectives

- To find out in association between pretest knowledge score on prevention of dengue fever with selected socio-demographic variables.
- Statistical analysis between pretest knowledge score on prevention of dengue fever with selected socio-demographic variables revealed that the variable age, sex, marital status, religion, educational status, occupation, family monthly income, type of family, type of house, drainage system, information about dengue fever, and various sources of information and relation with the pretest knowledge of subjects are independent of each other and was not significant at 0.05 level of significance so, there is no any significant association in between the pretest knowledge score on prevention of dengue fever with selected socio-demographic variables.
- There is no any significant association in between the pretest knowledge score on prevention of dengue fever with selected socio-demographic variables. At 0.05 level of significance hence H2 is rejected.

8. Future Scope

Nursing Education

Health education for prevention of dengue fever can be organized by nurse educator in hospital setting. Use of advanced technology like LCD, power point presentation is effective to improve the knowledge about treatment of dengue fever among the nurse. The SIM can be used for large group to provide knowledge about regarding dengue fever. Community visit to the endemic area can be avenge for the people to find out problems and needs of people who are affecting due to dengue. Training of health workers those are work in endemic area is effective to improve the health status of people those who are affecting because of dengue.

Nursing administration

The present study has proven effectiveness of planned health teaching of prevention of dengue fever so the nurse administrates provide facilities to conduct education programme in the community. The nurse administrator of various level of health care delivery system should focus their attention to create awareness of the people about prevention of dengue fever. Administrator should organize staff development programme though continuing educate in service education, workshop for community nurses & encourage them to participate in these activity.

Nursing research

The aim of nurse researcher is to improve the knowledge of nurse, to expand the scope of nursing this is possible to when take active participation to conduct the research. To do research study, knowledge is accumulated from many researches this material adopt methodology will be useful guide to nursing to find the right information.

9. Recommendations

Similar study may be replicated by taking sample to generalize the finding.

A similar study may be conducted with different teaching method such as SIM module, video teaching, role play and demonstrations

A study can be conducted to find out practice observation control and prevention of dengue fever.

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