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A Study to Evaluate the Effectiveness of Structured Teaching Programme on Knowledge Regarding Stress and Coping Strategies of Patients with Dengue Fever Among Staff Nurses in Selected Hospitals, Udupi District

Mrs. Nermin Luis[1], Mr Ananda Kudari[2]

[1]Canara College of Nursing, Kundapur
[2]HOD, Medical Surgical Nursing, Canara College of Nursing, Kundapur

Abstract

Aims and objectives of the study: Assess the pre-test knowledge scores regarding stress and coping strategies of patients with dengue fever among staff nurses in selected hospitals, Udupi district. Evaluate the effectiveness of structured teaching programme on knowledge regarding stress and coping strategies of patients with dengue fever among staff nurses in selected hospitals, Udupi district. Find out an association between pre-test knowledge score on stress and coping strategies of patients with dengue fever and selected demographic variables.

Material And Methods

A pre experimental study was conducted among 50 staff nurses who were selected by non-probability purposive sampling technique. The study was conducted in Vinaya, Chinmayi, Adarsha hospitals, Kundapur. Data was collected through demographic proforma, and structured knowledge questionnaire. The data collected was analysed and interpreted based on descriptive and inferential statistics.

Conclusion:

Findings of the present study showed that the staff nurses are not had adequate knowledge, so the researcher administered the structured teaching programme regarding stress and coping strategies in dengue fever which enhanced the knowledge of the staff nurses. The study concluded that the staff nurses are in need of awareness about stress and coping strategies in dengue fever and health professionals must give attention on this aspect of health during dengue fever patient visit to hospital and in community setting.

Keywords: Dengue Fever, Structured Teaching Programme, Knowledge, Stress, Coping Strategies

INTRODUCTION:

The terms ―dengue‖ is a Spanish attempt at the Swahilli phrase ―Ki denga pepo‖ meaning ―cramp-like seizure caused by an evil spirit‖1 . Dengue is an acute, febrile viral illness caused by an arbovirus of the genus flavivirus with four serotypes dengue virus1 DEN-1, dengue virus2 DEN-2, dengue virus3 DEN-3 and dengue virus 4 DEN-4 2 . Dengue is spread by the bite of an infected mosquito Aedes aegypti. The

mosquito gets the virus by biting the infected persons. The first symptoms the diseases occur about 5-7 days often an infected bite. There is no way to tell if a mosquito is carrying the dengue virus. Therefore, people must protect themselves from all mosquito bites. 3 . Physical condition of individuals greatly affects their psychological health. Patients suffering from different diseases also start suffering from emotional problems like depression, anxiety, stress and other psychiatric conditions like phobias and post-traumatic stress disorder. They see huge death toll around them and develop the fear of death.4

REVIEW OF LITERATURE

A similar study conducted on psychiatric symptomatology in dengue patients shown that out of 3289 patients 126 cases were referred for psychiatry consultation and out of them 110 patients were diagnosed with identifiable psychiatric symptoms. During the acute phase, nearly 90.3% of patients exhibited thanatophobia. Over 80% of the patients exhibited clinically significant anxiety and stress. Around one fifth of the patients had panic attacks and only less than 15% of these needed short course of anxiolytics. During the recovery phase, all the observed psychiatric symptoms decreased both in terms of frequency as well as severity.5

In a cross sectional study conducted on anxiety and depression in patients of dengue fever shows that total enrolled patients were 97 with mean age 35.8 years, out of this 35 (36%) were males and 62 (64%) females. Results showed that out of 97 patients 26(26.8%) had mild anxiety, 38(39.2%) had severe anxiety while 33(34%) were normal. However, out of 97 patients 34(35.1%) had mild depression, 45(46.4%) had severe depression and 18(18.6%) had no depression. The study concluded that more than half of the patients (66%) in this study were suffering from anxiety and more than three fourth (81.5%) of the patients were suffering from depression. The quality of life can be improved in such patients with treatment by psychiatrist.6

RESULT:

PART – I: Description of demographic variables of the staff nurses

Percentage distribution of staff nurses according to their age in years shows that 44% of staff nurses were between 26-30 years of age group, 20% were in between 20-25 years of age, another 20% were between 31-35 years of age group, 12% were between 36-40 years of age, and 04% were 41 years and above. Percentage distribution of staff nurses according to gender shows that 80% staff nurses were female and 20% were male. Percentage distribution of staff nurses according to their professional qualification reveals that 38% of them were GNM, 32% were P.B.B.Sc (N), 26% were B.Sc (N), and 04% of the nurses were completed M.Sc (N). Percentage distribution according to their years of experience shows that 30% of the staff nurses were having 4 years and above experience, 28% were having 1-2 years of experience, 24% were having 2-3 years of experience, and 18% were having 1 month to 1 year of experience. Percentage distribution of staff nurses according to the source of information reveals that 40% of the staff nurses had no exposure to the stress and coping strategies of patients with dengue fever, 26% had information through family and friends, 20% had through self learning /experiences, 14% had by mass media. Percentage distribution of staff nurses according to their care of dengue patient shows that 60% of the staff nurses never cared a patient with dengue, 40% of the staff nurses cared a patient with dengue.

PART – II: Assessment of knowledge level of staff nurses on stress and coping strategies of patients with dengue fever

Section A: Pre-test knowledge level of staff nurses

Table 1: Pre-test knowledge level of staff nurses

Level of knowledge	**Numbers of respondents**	**Percentage (%)**
Inadequate	24	48%
Moderate	26	52%
Adequate	00	00%
Total	**50**	**100**

n=50

Section B: Post-test knowledge level of staff nurses

Table 2: Post-test knowledge level of staff nurses

Level of knowledge	**Numbers of respondents**	**Percentage (%)**
Adequate	31	62%
Moderate	19	38%
Inadequate	00	00%
Total	**50**	**100**

PART – III: Effectiveness of structured teaching programme on stress and coping strategies of patients with dengue fever

Section A: Comparison of pre test and post test knowledge scores of the staff nurses

Table 3: Comparison of pre test & post-test knowledge scores of the staff nurses

n=50

Test	**Maximum Score**	**Min Score obtained**	**Max Score obtained**	**Respondents knowledge**		
				Mean	**SD**	**Mean %**
Pre test	30	5	19	11.46	4.34	38.2
Post test	30	11	28	21.30	4.85	71

Section B: Comparison of area wise pre test and post test knowledge scores of the staff nurses

Table 4: Comparison of area wise pres test & post-test knowledge scores of the staff nurses

n=50

Sl. No	Area	Knowledge scores							_t' value
		Pre test (X)			Post test (Y)			Enhancement	
		Mean	SD	Mean%	Mean	SD	Mean%		
1	Causes	1.92	0.94	32	4.12	1.56	68.67	36.67	10.78
2	Signs & Symptoms	1.94	0.96	38.8	3.66	0.96	73.2	34.4	10.31
3	Management	2.54	1.47	42.34	4.18	1.45	69.67	27.33	6.19
4	Stress & Coping strategies	5.06	2.59	38.92	9.34	2.11	71.84	32.92	10.38

„t" (tab49=1.6766) $p<0.05$ **S- significant.**

Table 4 depicts the comparison of area wise mean percentage, SD and mean knowledge scores of the pre-test and post-test.

PART – IV: Association between the post test knowledge scores and the selected demographic variables.

Table 5: Association between post test knowledge scores with selected demographic variables

Demographic variables		≤M 23	>M 23	Chi-square value (X^2)	Remarks
Age in years	20 – 25	6	4	0.96 df =4	**NS**
	26 – 30	12	10		
	31 – 35	5	5		
	36 – 40	4	2		
	41 and above	1	1		
Gender	Male	7	3	0.41 df =1	**NS**
	Female	21	19		
Professional Qualification	GNM	11	8	1.49 df =3	**NS**
	B.Sc (N)	6	7		
	P.B.B.Sc (N)	10	6		
	M.Sc (N)	1	1		
Years of experience	1 month to 1 year	4	5	1.44 df =3	**NS**
	1 – 2 years	9	5		
	2 – 3 years	6	6		
	4 years and above	9	6		
Ward	**Medical ward**	12	11	3.86 df =3	**NS**
	Surgical ward	8	2		
	Intensive care units	4	3		
	Other ward	4	6		
Source of information	**Mass media**	3	4	1.29 df =3	**NS**
	Self learning /experience	6	4		
	Family/friends	8	5		
	No exposure	11	9		
Have you cared a patient with dengue	**Yes**	13	7	1.09 df =3	**NS**
	No	15	15		

„x^{2}“ (df1=3.84), „x^{2}“ (df3=7.82), „x^{2}“ (df4=9.49)NS- Not significant.

Chi-square test was done to analyze the association between the post test knowledge scores and the selected demographic variables. The study findings show that, there is no association between the post test knowledge score and selected demographic variables.

DISCUSSION:

The findings of the present study is supported by the study conducted on knowledge of nurses towards dengue fever in a tertiary care teaching hospital in Nepal, in which they found that Of the study members 89% were from Proficiency Certificate level (PCL) background and the mean (IQR) age of the respondents was 21 years (20-22.75). Overall score of the nurses was 11 (9-13) with a maximum possible score of 17. The study concludes that the findings report a low knowledge among the nursing practitioners on dengue fever and its complications.[7]

The findings of the study is supported by the study conducted on knowledge regarding management of dengue fever among staff nurses shows that with regard to level of knowledge out of 100 samples, 22(22%) have inadequate knowledge and 58(58%) have moderate knowledge and 20(20%) staff nurses had adequate knowledge regarding management of dengue fever. The mean score was 14.58 with the standard deviation of 5.1for the knowledge regarding management of fever among staff nurses. The knowledge on management of fever had significant association with selected socio demographic variables like age, professional qualifications, working area and experience and there is no significant association with sex and family income.[8]

CONCLUSION:

Majority of the staff nurses i.e., 52% had moderately adequate knowledge, 48% of the staff nurses had inadequate knowledge and none of the staff nurses had adequate knowledge regarding stress and coping strategies of patients with dengue fever in pre test, where as in post test 60% had adequate knowledge, 40% of the staff nurses had moderately adequate knowledge and none of the staff nurses had inadequate knowledge after administration of structured teaching programme regarding stress and coping strategies of patients with dengue fever.

SUMMARY:

This chapter deals with implication for nursing education, nursing administration, community health practice and nursing research, suggestions, major recommendations, and limitations. The overall experience of conducting this study was a satisfying one as there was good cooperation by the participants. This study was a new learning experience for the researcher. The result of the present study shows that there is a great need of awareness regarding stress and coping strategies of patients with dengue fever for staff nurses.

RECOMMENDATIONS:

Keeping in view the findings of the present study, the following recommendations were made. Since this study was carried out on a small convenient sample, the results can be used only as a guide for further studies.

1. A similar study on a large sample may help to draw more definite conclusions and make generalization.
2. A similar study can be conducted by experimental approach, often serves to generate hypothesis for future research.
3. A study can be conducted using various methods of teaching to determine the most effective method of teaching example–self-instructional module, video assisted, simulation, role play etc.
4. Comparative study can be conducted among dengue fever patients in rural and urban area.
5. A similar study can be conducted with two groups.

6. Epidemiological studies may be conducted in defined geographical areas to assess the morbidity, trigger factors for stress during dengue fever thereby reducing the socio- economic burden.

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