A Descriptive Study to Assess the Knowledge regarding Dengue Fever among Community People residing at Dashauli, Lucknow

Anjali Pandey¹, Sarita Singh², Pragati Pandey³, Yogesh Kumar Singh⁴

¹Department of Community Health Nursing, SIPS College of Nursing & Paramedical Sciences Lucknow, Uttar Pradesh, India Corresponding Author E-mail: *anjalipandey3310[at]gmail.com*

²Department of Community Health Nursing, KGMU College of Nursing Lucknow, Uttar Pradesh, India

³Nursing Students of MS Institute of Nursing, 421 Bhakamau, Basha, Kursi Road, Lucknow, Uttar Pradesh, India

Abstract: <u>Background</u>: Dengue is a mosquito-borne viral disease and it is an acute infectious, common, and arboviral disease that is caused by four dengue viruses (DENV-1, DENV-2, DENV-3, and DENV-4) and transmitted from person to person by the bite of an infected female Aedes mosquito. The aim of the present study was to assess the knowledge regarding dengue fever among community people residing at Dashauli, Lucknow. <u>Methods</u>: In this study, a descriptive research design and non-probability purposive sampling technique was used. Total 100 samples were selected. Knowledge was assessed by structured questionnaire. <u>Results</u>: The result revealed that among all 100 participants 39% were having poor level of knowledge, 47% were scored moderate level of knowledge and only 14% have an adequate level of knowledge. The mean score of participants was 11.54 and the SD was 2.77. There was significant association found only with occupation. <u>Conclusions</u>: The study concluded that there was a moderate level of knowledge that's why there is a need for an awareness campaign regarding dengue fever among community participants.

Keywords: Descriptive Study, Knowledge, Dengue Fever, Community people.

1. Introduction

Dengue fever is pronounced as den'gee. It is an acute infectious, common and arboviral disease which is caused by four dengue virus (DENV-1, DENV-2, DENV-3, and DENV-4) and transmitted from person to person by bite of infectious female aedes mosquito. Symptoms of dengue are high fever, headache and severe muscular and joint pains. It can cause hemorrhage and profound shock which may become fatal. It is a self-limiting disease & it is the most common cause of fever in India¹. One modeling estimate indicates 390 million dengue virus infections per year (95% credible interval 284-528 million), of which 96 million (67-136 million) manifest clinically (with any severity of disease). Another study on the prevalence of dengue estimates that 3.9 billion people are at risk of infection with dengue viruses. It is an infection caused by a virus. It does not spread from person to person. Outbreak occurs in the rainy seasons.4

The overall alarming increase in case numbers over the last two decades in partly explained by a change in national practices to record and report dengue to the Ministries of Health, and to the WHO. But it also represents government recognition of the burden, and therefore the pertinence to report dengue disease burden.3

It is a mosquito-borne viral disease that has rapidly spread to all regions of WHO in recent years. Dengue virus is transmitted by female mosquitoes mainly of the species Aedes aegypti and, to a lesser extent, Ae. Albopictus. It is widespread throughout the tropics; with local variations in risk influenced by climate parameters as well as social and environmental factors.1 In India the risk of dengue has shown an increase in recent year due to rapid

2. Methods

Study design

A descriptive research design was carried out in village Dashauli, Lucknow.

Study population

Adults age 15-50 year residing at Dashauli, Lucknow, who met the inclusion criteria and agreed to participate in this study, were recruited as subjects.

Sample size

The total sample size was calculated 100.

Sampling Method-

Non Probability Purposive sampling technique was used

Data collection tool

Urbanization, life style changes and deficient water management including improper water storage practices in urban, peri urban and rural areas.5

Dengue fever is a dread disease and is an emerged public health problem. In recent years an urgent need has been appreciated for a vaccine to prevent the morbidity and mortality from this disease in a cost-effective way. Since there is no vaccine available. Vector control is the ideal way to control dengue fever. But vector control methods can be successful with community participation. Several studies recommend that better knowledge of dengue fever leads to better prevention techniques adopted by people to prevent dengue fever. Hence it becomes important to assess the

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community's knowledge regarding the disease to improve integrated control measures but also help to create awareness and prevention about dengue disease

Tool 1: Socio demographic variable Section A: Sociodemographic variables:

Demographic questionnaire for adults consists of 9 items such as age in years, gender, marital status, occupation status, religion, type of family, Education, , monthly income of family in rupees and source of information.

Tool 2: Knowledge questionnaire regarding dengue fever-

Total consists of 20 Questions. Each correct response carries "1" marks and wrong answer carries "0" mark. The total maximum score is 20 and minimum score is "0"

Score	Level of knowledge					
\geq 75%	Adequate knowledge					
50-75%	Moderate knowledge					
\leq 50%	Poor knowledge					

Inclusion criteria:

Age 15-50

- Who can understand Hindi and English
- Those who are willing to participate in research study.
- Who are available at the time of study or Data collection

Exclusion criteria:

- Who are not available at the time of study or data collection
- Mental illness history.
- Having established diagnosis of Dengue fever.

Knowledge and Demographic Association

Statistical Analysis-Data entered in Microsoft

3. Results

Level of knowledge among community people regarding dengue fever

It depicts that in 39% of the respondents excel and analysis was carried out. The association between the knowledge score with their selected socio-demographic variable was done by chi square test

Ethical considerations-

Ethical approval was obtained from the institutional ethical committee of the college and permission is obtained from the principal of MS Institute of Nursing Lucknow. After the written permission was obtained from CHC Medical Officer, Community health center, Gudamba, Lucknow to conduct the study and informed consent were taken from the participants in the study. Confidentiality and anonymity of the information was maintained were having poor level of knowledge, 47 % were having moderate level of knowledge and 14% having adequate knowledge (**Table 1**).

Level of knowledge	F	%
Adequate knowledge	14	14%
Moderate knowledge	47	47%
Poor knowledge	39	39%

Table 2: The mean and standard deviation for level of knowledge regarding dengue fever

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Level of knowledge	Ν	Mean	SD		
	100	11.54	2.77		

Table 4.4:	Association between the knowledge score with their socio-demographic variables.

Age	Adequate Knowledge	Moderate Knowledge	Poor Knowledge	Percentage	P Value	Chi Square Value
15-25	5	26	13	44	0.7375	7.72 df=6
26-35	9	16	6	31		
36-45	5	11	2	18		
46-Below 50		5	2	7		
Gender						0.56
Male	7	34	18	59	0.9896	0.56 df=2
Female	7	22	12	41		
Marital Status						
Married	12	31	9	52	0.4743	7.58 df=4
Unmarried	5	24	17	46	0.4745	
Widowed	1	1		2		
Occupation						
Government Job	2	3	1	6		13.99*
Private/ Business	5	20	3	28		df=6
Student	2	19	7	28		
Housewife	11	13	14	38		
Religion						0.49 df=2
Hindu	21	51	26	98	0.9750	
Muslim		1	1	2		
Type of Family	Type of Family					8.58
Joint Family	10	36	15	61	0.3776	8.58 df=4
Nuclear Family	4	10	11	25		ui-4
Single Parent Family						
Extended	5	8	1	14		
Education					0.5462	9.81

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					-	
Primary Education	5	8	6	19		df = 6
Secondary Education	3	36	12	51		
Higher Education	5	10	5	20		
No formal Education	1	5	4	10		
Net Income						
Upto 5000	7	17	9	33		6.69 df= 6
5001-10000	9	12	6	27	0.8230	
10001-15000	1	12	8	21		
Above 15000	3	11	5	19		
Source of information						
Internet	9	25	5	39	0.4022	11.49 df= 6
TV radio	6	20	16	42		
Newspaper	4	7	2	13		u = 0
Health Worker	2	1	3	6		

4. Discussion

The present study was conducted was to assess the knowledge regarding dengue fever among community people residing at Dashauli village, Lucknow. Among all 100 participants 39% were having poor level of knowledge, 47% were scored moderate level of knowledge and only 14% have adequate level of knowledge. The mean score of participants was 11.54. A similar study was conducted to assess the level of knowledge and awareness regarding prevention of dengue fever among people residing at rural area. Non probability convenient sampling technique was used to select 100 participants. The study revealed that out of 100 participants 20 had adequate level of knowledge, 49 had moderate level of knowledge and 31 had inadequate level of knowledge. There is a significant association in knowledge score regarding dengue fever among the community participants with occupation. There is no significant association in knowledge scores regarding dengue fever among community participants with age, gender, marital status, religion, type of family, education, source of information, family income.

5. Limitations

Study is limited to community participation who are willing to understand and speak Hindi & English and study is limited to community participants who are present during data collection and small no of purposive sampling limits the generalization of study. The sample size was limited to 100 community participants.

6. Conclusion

A descriptive study to assess the knowledge regarding dengue fever among community people at Dashauli, Lucknow. Based on the present study finding it was concluded that there was a moderate level of knowledge that's why there is a need of awareness campaign regarding dengue fever among community participants.

7. Recommendation

Similar studies can be replicated on larger samples for wider generalization mainly in the community. Similar studies can be conducted as a comparative study in rural and urban settings.

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