

Original Research Article

Awareness Regarding Dengue Fever among Patients Visiting a Medical OPD in Gujarat state, India

ABSTRACT

Background: Dengue, the mosquito borne disease has become global public health problem. During 2021, a total number of 1,64,103 dengue cases were reported against 2,05,243 cases in 2019. The present study was conducted to assess the knowledge, awareness and preventive practices regarding dengue fever among patients visiting medical OPD and Ward at civil hospital, Nadiad City.

Method: A cross-sectional study was conducted with 100 randomly selected patients from Civil Hospital, Nadiad between during September - to November, 2021. A structured questionnaire was used covering socio-demographic characteristics of the participants, including their knowledge, awareness, treatment and preventive practices among patient regarding dengue fever. Data were analyzed using descriptive, inferential.

Results: Complete questionnaires were 100, of which 47 (47%) were females and 53 (53%) were males. A majority of patients 63 (63%) were age between 15 - to 45 years of age bracket, and 80 (80%) were Hindu (80%), studied up to primary level (68%), resided in urban area (64%) and majority of patient 68 (68%) had primary education, 64% from urban area, 22% had past dengue exposure, 66% were vegetarian. Although, all the patients had heard of dengue, the overall percentage mean score of knowledge, awareness and preventive practices regarding dengue fever was 16.51 ± 1.473. Among them with shows 23%, 68% and 9% participants having good knowledge, 68% participant had average knowledge and 9% had a poor knowledge respectively regarding dengue. Although about 100% of the participants had heard of dengue.

Conclusion

Comment [DP1]: Where? In Nadiad? In Gujarat or India? Please mention. Also please check whether this figure pertains to 2021 or 2020 because still 2021 is running and the figure of 1,64,103 can not reflect for the entire year 2021

~~This study report that~~ It was evident that the patients ~~have the~~had sufficient knowledge regarding dengue fever and its prevention, but translation of this knowledge in putting the dengue preventive measures to ~~there is a lack in practice to follow~~practice preventive measures was poor. There is a need to create awareness for hygiene and cleanliness ~~with to~~prevention of mosquito bites.

Key Words: ~~Dengue Fever~~, **Knowledge**, Awareness, Dengue Fever, Dengue Knowledge, Dengue Preventive Measures, Patients

Introduction:

Dengue fever, also called as break-bone fever, ~~is a~~and mosquito-borne viral infection that causes a severe flu-like illness and is a major public health problem in India. Dengue disease can vary from mild to severe and severe forms include dengue shock syndrome and dengue hemorrhagic fever (DHF).[1] There are four types ~~strains~~ of viruses ~~dengue virus that can cause dengue fever,~~ all of which are transmitted in the community through the bites of ~~spread by a certain type of~~ Aedes aegypti and Aedes albopictus mosquitoes. ~~Dengue can vary from mild to severe and severe forms include dengue shock syndrome and dengue hemorrhagic fever (DHF).[1]~~ During 2021, a total number of 1,64,103 dengue cases were reported against 2,05,243 cases in 2019. Through the efforts of the Government of India and states, the Case Fatality Rate (deaths per 100 cases) has been sustained at less than 1 per cent since 2008. On whether the government has assessed the "frightening" dengue situation in the country, he said multidisciplinary Central teams were deputed to Gujarat, Haryana, Punjab, Kerala and other states this year.[2]. In order to assess the community knowledge, awareness and preventive practices related to dengue fever and its association, if any, with demographic variables a study was undertaken among the subjects attending outdoor patient department (OPD) and indoor admitted patients in Civil Hospital, Nadiad in the state of Gujarat, India.

Problem Statement

~~A study to assess the knowledge, awareness and preventive practices regarding dengue fever among patients visiting medical OPD and Ward at civil hospital, Nadiad City.~~

Objectives

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- To measure the knowledge, awareness and preventive practices regarding dengue fever
- To find out association of knowledge, awareness and preventive practice with demographic variables

Material and Methods:

A cross-sectional study was conducted with 100 randomly selected patients, who are willing to participate in the study from Civil Hospital, Nadiad, between September to November 2021. A structured questionnaire was used covering socio-demographic characteristics of the participants including their knowledge, awareness, treatment and Preventive practices questions regarding dengue fever. Incomplete questionnaires were dropped out. Participants who are not willing to participate were excluded. The data has been collected by interview technique. This study was approved by the Institutional Research Committee of the Dinsha Patel College of Nursing, Gujarat. Participants were assured about the confidentiality of their information, as no identifiers or personal information were collected.

Comment [DP4]: Please mention how the sample size of 100 was arrived at?

The data collection tool comprised of two sections, namely the participants' demographic details, structured questionnaire (20 items) which includes questions regarding knowledge, awareness, treatment and Preventive practices among patient regarding dengue fever. The concurrent validity and internal reliability were obtained by (Cronbach's alpha: 0.7) Data were analyzed using descriptive, inferential.

Comment [DP5]: Please mention the statistical methods used for analysis in the study.

RESULT

Among 100, (47%) 47 were females and (53%) 53 were males. Majority of patients 63(63%) were age between 15 to 45 years and 80(80%) were hindu. Majority of patient 68(68%) had primary education, 64% from urban area, 22% had past dengue exposure, 66% were vegetarian.(Table 1)

TABLE: 1 ANALYSIS AND INTERPRETATION OF THE DEMOGRAPHIC DATA
Demographic details of the study participants (n=100).

[N=100]

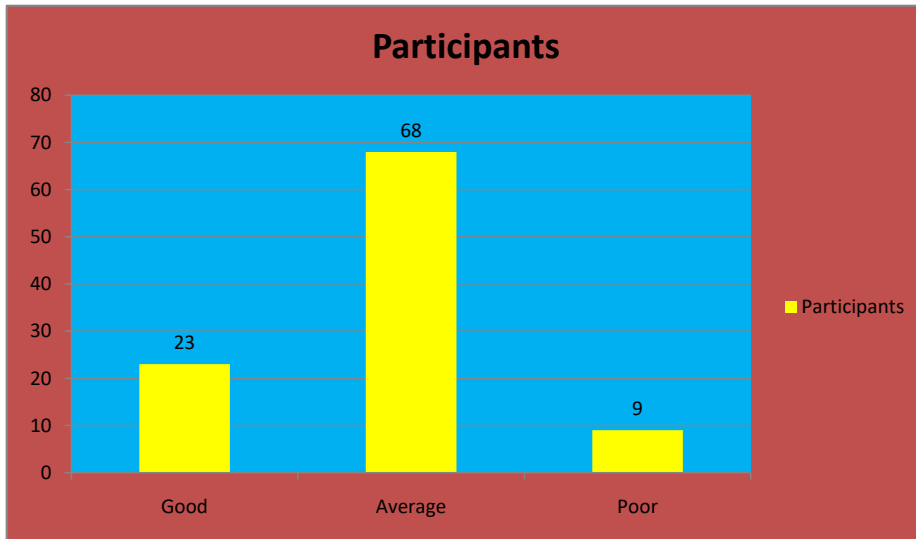
Demographic Data	Frequency (%)	
Age	15-45	63 (63)
	45-60	20 (20)
	60-80	17 (20)
Sex	Male	53 (53)
	Female	47 (47)

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Religion	Hindu	80 (80)
	Muslim	14 (14)
	Christain	6 (6)
Education	Illiterate	8 (8)
	Primary	68 (68)
	Higher	24 (24)
Occupation	Business / Job	63 (63)
	Housewife	33 (33)
	Retied	4 (4)
Marital Status	Married	85 (85)
	Unmarried	10 (10)
	Widow	5 (5)
Monthly Income	Less than 5000	47 (47)
	5000-15000	39 (39)
	15000 Or above	14 (14)
Economic Status	Below Poverty line	30 (30)
	Middle Class	70 (70)
Eating Habits	Vegetarian	66 (66)
	Non-Vegetarian	11 (11)
	Omnivore	23 (23)
Hygiene	Personal	5 (5)
	Environmental	10 (10)
	A & B Both	85 (85)
Emotional Response	Poor	13 (13)
	Average	24 (24)
	Good	63 (63)
Place of Seeking Medical Care	PHC	28 (28)
	CHC	10 (10)
	District Hospital	55 (55)
	Other	7 (7)
Past Degue Exposure	Yes	31 (31)
	No	69 (69)
Type of Residence	Rural	36 (36)
	Urban	64 (64)

The overall percentage mean score of knowledge, awareness and preventive practices regarding dengue fever was 16.51 ± 1.473 . Among them shows 23% participants had good knowledge, 68% participant had average knowledge and 9% had a poor knowledge.

Figure 1 Level of Knowledge, Awareness and preventive practice regarding dengue fever.



Comment [DP6]: Please provide details in Material and Methods section as to how the level of knowledge, awareness and preventive practices were assessed / scored as Good, Average and Poor. Was it done qualitatively or quantitatively?

ASSOCIATION OF LEVEL OF KNOWLEDGE, AWARENESS AND PREVENTIVE PRACTICE REGARDING DENGUE FEVER WITH SELECTED DEMOGRAPHIC VARIABLES

The study represent there was statistical significance eating habits and emotional response of the patients. There was no statistical significance between level of knowledge, awareness and preventive practice regarding dengue fever and demographic variables of patients such as age, gender, religion, education, occupation, marital status, monthly income, economic status, eating habits

TABLE 2: ~~FIND OUT~~ THE ASSOCIATION OF LEVEL OF KNOWLEDGE, AWARENESS AND PREVENTIVE PRACTICE REGARDING DENGUE FEVER WITH SELECTED DEMOGRAPHIC VARIABLES.

Demographic Details		Scores			Total	Chi Square	P Value	Sig/Non-Sig
		Good	Average	Poor				
Age	15-45	16	41	6	63	1.7648	0.77892	NS

	45-60	3	16	1	20			
	60-80	4	11	2	17			
Sex	Male	10	40	3	53	3.1603	0.205941	NS
	Female	13	28	6	47			
Religion	Hindu	21	54	5	80	7.268	0.122386	NS
	Muslim	2	8	4	14			
	Christain	1	4	1	6			
Education	Illiterate	3	4	1	8	2.3495	0.671769	NS
	Primary	13	49	6	68			
	Higher	7	15	2	24			
Occupation	Business / Job	14	46	3	63	6.526	0.16316	NS
	Housewife	7	21	5	33			
	Retied	2	1	1	4			
Marital Status	Married	17	62	6	85	8.3701	0.078925	NS
	Unmarried	5	3	2	10			
	Widow	1	3	1	5			
Monthly Income	Less than 5000	12	29	6	47	2.8339	0.586002	NS
	5000-15000	7	29	3	39			
	15000 Or above	5	8	1	14			
Economic Status	Below Poverty line	8	17	5	30	3.859	0.145222	NS
	Middle Class	15	51	4	70			
Eating Habits	Vegetarian	19	44	3	66	10.2965	0.035719*	S
	Non-Vegetarian	3	7	1	11			
	Omnivore	1	17	5	23			
Hygiene	Personal	1	3	1	5	2.6766	0.0613308	NS
	Environmental	1	7	2	10			
	A & B Both	21	57	7	85			
Emotional Response	Poor	3	7	3	13	10.8056	0.028838*	S
	Average	10	12	2	24			
	Good	10	49	4	63			
Place of Seeking Medical Care	PHC	9	16	3	28	9.2208	0.161537	NS
	CHC	5	4	1	10			
	District Hospital	7	42	6	55			
	Other	2	4	1	7			
Past Degue Exposure	Yes	6	22	3	31	0.3406	0.843392	NS
	No	17	46	6	69			
Type of Residence	Rural	4	28	4	36	4.5262	0.104026	NS
	Urban	19	40	5	64			

* statistically significant

Discussion

The finding suggests patients had average knowledge regarding dengue fever. The study represent there was no statistical significance between level of knowledge, awareness and preventive practice regarding dengue fever and demographic variables of patients such as age, gender, religion, education, occupation, marital status, monthly income, economic status, except eating habits and emotional response.

Conclusion

This study report that the patients have the sufficient knowledge regarding dengue fever and its prevention, but there is a lack in practice to follow preventive measures. There is a need to create awareness for hygiene and cleanliness with prevention of mosquito bites.

Comment [DP7]: Please expand the discussion and rewrite it in discussion authors should compare their results with earlier studies. Strengths and weaknesses of the present study should also be discussed

Ethics declarations

Dinsha Patel College of Nursing, Institute Ethics Committee reviewed this study and granted ethical approval. Consents has been obtained from participants.

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Comment [DP8]: Of the 13 references only 2 references (Ref. no. 1 and 2) have been cited in the text . What about reference nos. 3 to 13 ??

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