



ISSN: 0975-833X

Available online at <http://www.journalcra.com>

International Journal of Current Research  
Vol. 10, Issue, 12, pp.76569-76572, December, 2018

DOI: <https://doi.org/10.24941/ijcr.33576.12.2018>

INTERNATIONAL JOURNAL  
OF CURRENT RESEARCH

## RESEARCH ARTICLE

# LEVEL OF KNOWLEDGE AND PRACTICE ABOUT DENGUE FEVER AMONG PEOPLE

\*Kavipriya, G.

Lecturer in Medical Surgical Nursing, Vinayaka Missions College of Nursing, Puducherry

### ARTICLE INFO

#### Article History:

Received 16<sup>th</sup> September, 2018  
Received in revised form  
11<sup>th</sup> October, 2018  
Accepted 19<sup>th</sup> November, 2018  
Published online 31<sup>st</sup> December, 2018

#### Key Words:

Knowledge,  
Practice,  
Dengue Fever.

### ABSTRACT

**Background and purpose:** Dengue virus is the fastest growing vector-borne disease today. According to the Centres for Disease Control and Prevention (CDC), there are an estimated 400 million dengue infections each year in over 125 countries. The purpose of the present study is to assess the level of Knowledge and Practice about Dengue Fever among people. **Materials and Method:** A Quantitative descriptive design was adopted for the study. Health centres were selected randomly and a total of 60 samples were selected using convenience sampling technique. Structured questionnaire with interview schedule and 5 point rating scale was used to collect the data. For analyzing the data, descriptive statistics (frequency, percentage, mean and standard deviation) were used. **Results:** *The result revealed that 33(55%) samples had fair knowledge, 27(45%) had good knowledge on dengue fever, 57(95%) samples had good practice and only 3(5%) had very good practice on Dengue Fever.* **Conclusion:** The present study revealed that the level of Knowledge was fair but their Practice was good among people to control and prevent Dengue fever.

*Copyright©2018, Kavipriya. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.*

**Citation:** Kavipriya, G. 2018. "Level of knowledge and practice about dengue fever among people", *International Journal of Current Research*, 10, (12), 76569-76572.

## INTRODUCTION

Dengue fever is one of the most important emerging disease of the tropical and sub tropical regions such as Central and South America, parts of Africa, parts of Asia, the Caribbean, and the Pacific affecting urban and periurban areas. The geographical distribution of the disease has greatly expanded and the number of cases has increased dramatically in the past 40 years. Dengue virus are arboviruses capable of infecting human and causing diseases. A Prevalence of *Aedes aegypti* and *Aedes albopictus* together with the circulation of dengue virus of more than one type in a particular area tends to be associated with outbreak of dengue hemorrhagic fever and dengue shock syndrome. There is no vaccine available against dengue, and there are no specific medications to treat a dengue infection. This makes prevention the most important step, and prevention means avoiding mosquito bites. The best way to reduce mosquitoes is to eliminate the places where the mosquito lays her eggs, like artificial containers that hold water in and around the home. Outdoors, clean water containers like pet and animal watering containers, flower planter dishes or cover water storage barrels. Look for standing water indoors such as in vases with fresh flowers and clean at least once a week. In India, the risk of dengue has shown an increase in recent years due to rapid urbanization, lifestyle

changes and deficient water management including improper water storage practices in urban, peri urban and rural areas leading to proliferation of mosquito breeding sites.

**Statement of the problem:** A descriptive study to assess the level of Knowledge and Practice about Dengue Fever among people visiting selected Health Centers, Puducherry.

### Objectives

- To assess the level of Knowledge and Practice about Dengue Fever among people visiting selected Health Centers.

## MATERIALS AND METHODS

**Research approach:** Quantitative Research Approach.

**Research Design:** Descriptive research design

**Population:** All people visiting the selected Health Centres in Puducherry.

**Sample:** People visiting the selected Health Centers, who fulfill the inclusion criteria and also available during the period of study.

\*Corresponding author: Kavipriya, G. M.,

Lecturer in Medical Surgical Nursing, Vinayaka Missions College of Nursing, Puducherry.

**Sample Size:** 60 People

### Sample Selection Criteria

#### Inclusion criteria

#### People

- Of both sexes
- Of age 15 - 65 years
- Who were able to understand Tamil or English
- Who were willing to participate in this study

#### Exclusion criteria

#### People

- Who were affected with dengue fever
- Who were healthcare professionals
- Who were not a resident of Puducherry

**Description of tool:** Structured questionnaire with interview schedule and five point rating scale was used. It consisted of three sections

**Section I:** Demographic variables such as Age, Gender, Religion, Education, Occupation, Type of family, Type of house, Drainage system and Source of information.

**Section II:** It consisted of 37 items of multiple choice questions on various aspects of Dengue Fever to assess the level of Knowledge about Dengue Fever among people. Each correct answer was given 1 and wrong answer was given 0.

Very Good Knowledge	28 – 37	(>75%)
Good Knowledge	19 – 27	(51 – 75%)
Fair Knowledge	9 – 18	(26 – 50%)
Poor Knowledge	≤8	(≤25%)

**Section III:** It consisted of 12 items related to preventive practices of Dengue Fever to assess the level of Practice about Dengue Fever among people. Each item was scored with a maximum score of 5 and a minimum score of 1. (5-Always, 4-Often, 3-Sometimes, 2-Rarely and 1-Never).

Very Good Practice	46 – 60	(>75%)
Good Practice	31 – 45	(51 – 75%)
Fair Practice	16 – 30	(26 – 50%)
Poor Practice	≤ 15	(< 25%)

#### Ethical considerations

Approval and ethical clearance from the dissertation committee of the institution prior to conducting pilot study and main study was obtained. Formal written permission was obtained from the concerned authorities of Director Health and Family Welfare Department and Health Centres, Puducherry. The researcher gave a brief introduction about the procedure and purpose of the study. Oral and written consent was obtained from each subjects.

**Data Collection Procedure:** The data collection was carried out on 5 days in a week in each of the Health Centers. A total of 60 samples were selected from 3 Health Centers.

During 1<sup>st</sup> week, data was collected for 20 samples in the first Health Center selecting 4 sample each day. Subsequently during 2<sup>nd</sup> and 3<sup>rd</sup> week in the similar manner data was collected in the second and third Health Centers. 20 minutes of time was taken to complete the questionnaire for each sample.

**Data analysis and interpretation:** Data obtained was organised and summarized with descriptive statistics

**Section A:** Distribution of demographic variables of people (Table 1)

**Section B:** Distribution of level of knowledge and practice on Dengue fever among people( Table 2 and 3: Figure 1 and 2)

## DISCUSSION

Considering the distribution of samples based on their demographic variable, Out of 60 samples, majority of samples 35 (58.33%) were female and 25 (41.67%) were male. With respect to age, the majority of samples 21 (35.00%) were in the age group of 36 – 45 years, 11 (18.33%) samples belonged to the age group of 15 – 25 years, 11 (18.33%) samples belonged to the age group 26 – 35 years, 10 (16.67%) belonged to 56 – 65 years of age and 7 (11.67%) belonged to 46 – 55 years of age. In relation to religion, majority 56 (93.33%) were Hindu, and only 2 (3.33%) were Muslims and Christians respectively. The above finding is consistent with the study conducted by Sandeep K R (2014), which revealed that majority 77% of the study participants were Hindus, 12% were Christians and Muslims respectively. With respect to education, majority 23 (38.33) of the samples had completed primary education (upto 8<sup>th</sup>std), 23 (38.33%) of them had completed secondary education (9<sup>th</sup> – 12<sup>th</sup> std) and 10 (16.67%) had completed higher education (Diploma/ Degree) and only 4 (10%) of them were illiterate. This finding is consistent with the study by Sandeep K R (2014), which revealed that 77% of them had primary education, 7% had secondary education, 8% had pre-university education and post graduates respectively.

In specific to occupation, majority 32 (53.33%) of the samples were unemployed, 23 (38.33%) of them were employed and only 5 (8.33%) of them were students. This finding is consistent with the study conducted by Valentine B (2017) on knowledge, attitude and practice regarding dengue among adult population visiting tertiary care hospital in Puducherry, India which revealed that majority (58.5%) of the respondents were non-skilled workers and 2% were unemployed. With respect to type of family, majority 40 (66.67%) were from nuclear family and 20 (33.33%) were from joint family. This finding is consistent with the study by Sandeep K R (2014) which showed that 70% belong to nuclear family and 30% of children were belonging to joint family. In relation to type of house, majority 30 (50.00%) were living in terraced house, 20 (33.33%) were living in tiled house and 10 (16.67%) were living in thatched house. This finding is consistent with the study by Sandeep K R (2014) which revealed that 57% of houses were kaccha houses, 32% pacca houses, and 12% semi pacca houses. Regarding drainage system, majority 32 (53.33%) had closed drainage system and 28 (46.67%) had open drainage system. This finding is consistent with the study conducted by Valentine B (2017) which showed that 40.5% had underground drainage while 25% had open drainage system in their residential area. Majority 42 (70.00%) had water stagnation near their home where as only 18 (30.00%) had no water stagnation near their home.

**Table 1. Frequency and percentage distribution of demographic variables of people N = 60**

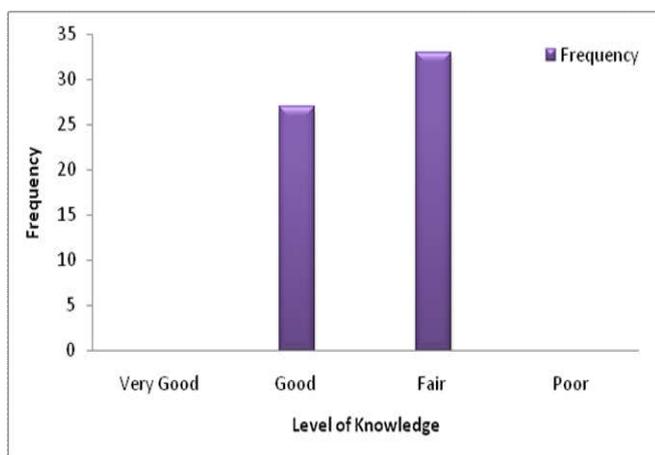
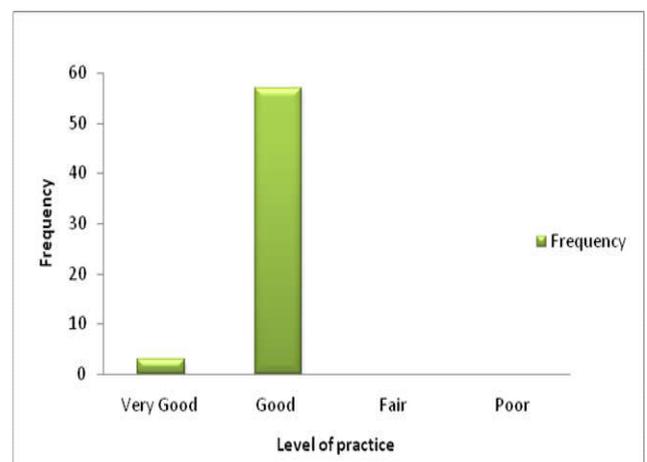
Demographic Variables	Sub variables	Frequency (f)	Percentage (%)
Sex	Male	25	41.67
	Female	35	58.33
Age	15 - 25 years	11	18.33
	26 - 35 years	11	18.33
	36 - 45 years	21	35.00
	46 - 55 years	7	11.67
	56 - 65 years	10	16.67
Religion	Hindu	56	93.33
	Muslim	2	3.33
	Christian	2	3.33
	Others	0	0.00
Education	Illiterate	4	6.67
	Primary education (Upto 8th std)	23	38.33
	Secondary education (9th - 12th)	23	38.33
	Higher education (Diploma/Degree)	10	16.67
Occupation	Student	5	8.33
	Unemployed	32	53.33
	Employed	23	38.33
Type of family	Nuclear family	40	66.67
	Joint family	20	33.33
Type of house	Tiled	20	33.33
	Thatched	10	16.67
Drainage system	Terraced	30	50.00
	Open drainage system	28	46.67
Is there any stagnation of water near your home?	Closed drainage system	32	53.33
	Yes	18	30.00
Is there any person affected with dengue fever in your family?	No	42	70.00
	Yes	5	8.33
Source of information	No	55	91.67
	Television/Radio	45	75.00
	Newspaper/Magazines	2	3.33
	Health care professional	11	18.33
	Neighbours	2	3.33
	Children	0	0.00

**Table 2. Level of Knowledge on Dengue fever among people**

level Of Knowledge	Frequency	%
Very Good	0	0
Good	27	45.0
Fair	33	55.0
Poor	0	0

**Table 3. Level of Practice on Dengue fever among people**

Level of Practice	Frequency	%
Very Good	3	5.0
Good	57	95.0
Fair	0	0
Poor	0	0

**Figure 1. Level of Knowledge on Dengue Fever among people****Figure 2. Level of Practice on Dengue Fever among people**

Majority 55 (91.67%) had no person affected with dengue fever in their family where as only 5 (8.33%) had person affected with dengue fever in their family. With respect to source of information, majority 45 (75.00%) told Television/Radio, 11 (18.33%) told Health care professional, minority 2 (3.33%) told newspaper/ magazines and 2 (3.33%) told neighbours and none of them told children as the source of information. This finding is consistent with the study by Sandeep K R (2014) which revealed that 60% had information from health workers, 22% from Television or radio, 8% from neighbours/friends and 10% from news paper. The study findings revealed that 33(55%) samples had fair knowledge, 27(45%) had good knowledge on dengue fever, 57(95%) samples had good practice and only 3(5%) had very good practice on Dengue Fever. These finding were consistent with the study conducted by Marry Vennila P (2016) where the result showed that 66.6% and 33.4% of the study participants had moderate knowledge and adequate knowledge respectively and another similar study conducted by Balsam Mahdi Nasir Al – Zurfi *et al* (2015) which showed that 74.0% of the participants had poor preventive practices.

### Conclusion

The present study revealed that the level of Knowledge was fair but their Practice was good among people to control and prevent Dengue fever. Since the incidence and outbreak of Dengue Fever increases due to rapid urbanization, life style changes and deficient water management. It is necessary to improve the level of knowledge and practice regarding dengue fever among people through regular awareness creating and teaching programme to prevent epidemics of Dengue Fever.

### REFERENCES

- Adorama Candido Alves. *et al.*, 2016. Knowledge and practices related to dengue and its vector: a community-based study from Southeast Brazil. *Revista da Sociedade Brasileira de Medicina Tropical*. Mar-Apr. Vol 49(2), Pp: 222-226.
- Alyousefi *et al.*, 2016. A household-based survey of knowledge, attitudes and practices towards dengue fever among local urban communities in Taiz Governorate, Yemen. *BMC Infectious Diseases*. Pp: 543
- Burns, S. 1993. *The Practice of Nursing Research*. 4th Ed. Philadelphia W.B. Saunders Company. Pp: 210-211.
- Castañeda O. 2010. Knowledge, attitudes and community practice during an outbreak of dengue in a town in Colombia. *Rev Salud Publica (Bogota)*. June. Vol 13(3). Pp: 514-27.
- Dr G Gnanamani *et al.*, 2013. An Insight Investigation of Dengue Fever Outbreak in Pondicherry. *International Journal of Scientific and Research Publications*. November .Vol 3.Issue 11.
- <http://nvbdcp.gov.in/den-cd.html>
- <http://www.denguevirusnet.com/epidemiology.html>
- <https://www.cdc.gov/dengue/prevention/index.html>
- <https://www.medicalnewstoday.com/articles>
- Miki Uematsu 2016. Knowledge, Attitudes, and Practices Regarding Dengue among the General Population in Honduras. *American Journal of Public Health Research*. Vol. 4 No. 5.Pp: 181-187.
- Narayan Gyawali. *et al.*, 2016. Knowledge, attitude and recommendations for practice regarding dengue among the resident population of Queensland, Australia. *Australia Asian Pac J Trop Biomed*. Vol 6(4). Pp: 360–366.
- Niyati Khetarpal, 2016. Dengue Fever: Causes, Complications, and Vaccine Strategies. *J Immunol Res*. *Published online* 2016 Jul 20.
- Park, K. 2011. *Preventive and Social medicine*. 21th Ed. Ms Banarsidas Bhanot: Jabalpur; 2011. Pp:224
- Saied KG. *et al.*, 2015. Knowledge, attitude and preventive practices regarding dengue fever in rural areas of Yemen. *Int Health*. Nov 7 (6) Pp: 420-5.
- Shamimul Hasan 2016. Dengue virus: A global human threat: Review of literature. *J Int Soc Prev Community Dent.*, Jan-Feb; 6(1).Pp: 1–6.
- Valantine, B. 2017. Cross sectional study on knowledge, attitude and practice regarding dengue among adult population visiting a tertiary care hospital in Puducherry, India. *Int J Community Med Public Health.*, Vol 4.Pp: 623-7.

\*\*\*\*\*