



International Journal of Midwifery and Nursing Practice

E-ISSN: 2663-0435
P-ISSN: 2663-0427
IJMNP 2018; 1(1): 12-15
Received: 25-05-2018
Accepted: 28-06-2018

Mahadik Pratik
Bharati Vidyapeeth College of
Nursing, Pune, Maharashtra,
India

Nangare Deepali
Bharati Vidyapeeth College of
Nursing, Pune, Maharashtra,
India

Patahade Shrikawarv
Bharati Vidyapeeth College of
Nursing, Pune, Maharashtra,
India

Sharmila Waghmode
Bharati Vidyapeeth College of
Nursing, Pune, Maharashtra,
India

Correspondence
Larry Wagh
Bharati Vidyapeeth College of
Nursing, Pune, Maharashtra,
India

A study to assess the knowledge regarding home care about dengue fever among adults residing in selected area of Pune city

Mahadik Pratik, Nangare Deepali, Patahade Shrikawarv and Sharmila Waghmode

Abstract

Introduction: Dengue is the most important mosquito-borne, human viral disease in many tropical and sub-tropical areas. In India the disease has been essentially described in the form of case series. We reviewed the epidemiology of dengue in India to improve understanding of its evolution in the last 50 years and support the development of effective local prevention and control measures. Early outbreak reports showed a classic epidemic pattern of transmission with sporadic outbreaks, with low to moderate numbers of cases, usually localized to urban centres and neighbouring regions, but occasionally spreading and causing larger epidemics. Trends in recent decades include: larger and more frequent outbreaks; geographic expansion of endemic transmission; spread of the disease from urban to peri-urban and rural areas; an increasing proportion of severe cases and deaths; and progression to hyperendemicity, particularly in large urban areas. The global picture of dengue in India is currently that of a largely endemic country. Understanding demographic differences in infection rates and severity of dengue has important implications for the planning and implementation of effective public health prevention and control measures and targeting of future vaccination campaigns.

Purpose: To assess the knowledge of adults regarding home care of dengue fever. To associate the findings with selected demographic variables.

Methods: This was a Non experimental exploratory research design and quantitative research approach. 100 adults were selected from urban areas of Pune City by non-probability technique. Self-structured questionnaire was used to assess knowledge.

Results: Mean score of knowledge regarding home care about dengue fever was 18.135 with 0.97858 standard deviation that show average knowledge and the 'p' value was more than level of significance 0.05 so there is association between age with knowledge. There is no any association between gender, education, occupation with knowledge.

Conclusion: Knowledge regarding home care of dengue fever was average.

Keywords: Dengue fever, adults residing

1. Introduction

A descriptive study was conducted to assess the knowledge, a, and practice survey and an extensive entomologic survey were conducted in two sub-districts of Kamphaeng Phet province, Thailand, to test the hypothesis that correct dengue knowledge and practice reduce dengue vector populations. A negative association was found between respondents' knowledge of preventive measures and the number of unprotected containers in and around their houses. Knowledge of development sites was positively associated with unprotected containers. No relationships existed between knowledge of dengue and adult mosquito reduction practices.

2. Methodology

Quantitative research approach with non-experimental research design was adopted the study was conducted on 100 adults in selected urban areas of Pune city by using non probability purposive sampling technique. The data was collected by using self-administered questionnaire and checklist. Content validity of the tool was established by suggestion of five experts. Tool was found reliable, which is calculated by test re-test method. (R=0.8)

2.1 Ethical consideration: formal administrative approval was obtained from Bharati Vidyapeeth college of nursing and obtained written inform consent from the participants.

3. Findings

Section I: Analysis of data related to demographic variables. Below table shows that in age group majority 34% were 35-40 years of age. In Gender majority 56% was female. In Family income majority 45% was 5000- 15000rs per month. In weight majority 35% was 50-59 Kg. In occupation

majority 36% doing job. In majority 82% had no previous history of myocardial infarction. In majority 74% had no family history of myocardial infarction. In majority dietary pattern 80% was vegetarian. In majority 43% adults had no habits. In majority 71% adults did exercise sometimes.

Table 1: Frequency and percentage distribution of the adults according to the demographic variables.

S. No	Demographic variables	frequency	Percentage%
1	Age		
	a) 19 to 24	29	29%
	b) 25 to 31	34	34%
	c) 32to 38	23	23%
	d) 39 to 45	14	14%
2	Education		
	a) Primary education	14	14%
	b) Secondary education	59	59%
	c) graduation	18	18%
	d) No formal education	09	09%
3	Occupation		
	a) Housewife	45	45%
	b) Working women	30	30%
	c) Laborer	25	25%
4	Gender		
	a) Female	58	58%
	b) Male	42	42%

Section II A

Analysis of the data related to the level of knowledge of early signs of myocardial infarction according to their score.

Table 2: Frequency percentage of knowledge score. n=100

S. No.	Knowledge score	Frequency	Percentage
1.	Good knowledge	49	49%
2.	Average knowledge	31	31%
3.	Poor knowledge	20	20%

Table No.2- The above table shows that out of samples, 10% of the people are showing the poor 00% knowledge about selected regarding home care about dengue fever knowledge, 51.66% are showing knowledge and 48.33%

people are showing excellent knowledge about selected regarding home care about dengue fever.

Section II B

Table 3: Mean and standard deviation of knowledge assessed.

S. No.	Mean	Standard deviation
1	18.135	0.97858

Table No.3- Mean is 18.28 and standard deviation is 0.97858.

Section III

Table 4: Association of the research findings with selected demographic variables.

Demographic data	Degree of Freedom	Table value	P- value
Age	4	11.9849	0.025
Gender	6	0.0752	0.99
Education	2	2.3461	0.9
Occupation	6	3.1144	0.9

Table No.4- The p value was more than level of significance 0.05 so there is association between age with knowledge. There is no any association between genders, education occupation with knowledge.

4. Discussion of the research findings

The findings of present study have been discussed with reference to the objective framed. A finding of the study shows that the purpose of the present study was to assess the knowledge regarding regarding home care of dengue among adults. The 100 sample were selected from selected area of A study to assess the knowledge regarding home care about dengue fever among adults residing in selected area of Pune city and other selected areas. Descriptive research design was used for the study. The content validity and reliability of the tool was done, which suggested that the tool was

reliable. The pilot study was conducted on 10 samples and the feasibility of the study was established. It was found that the tool had no major flaws and was used for the final study with the changes as per the experts and Guide.

Based on the objectives, the collected data was analyzed by using descriptive statistics.

In this majority of the samples i.e 49 % of samples having good knowledge regarding, home care about dengue fever 31% having average knowledge and 20% poor knowledge.

5. Conclusion

On the basis of findings of the present study, it can be concluded that adults are having good knowledge regarding home care of dengue fever knowledge by providing more information.

6. Recommendation

Keeping in view the finding of the present study the following recommendation made.

- A similar study can be replicated in different setting to strengthen the findings.
- The same study could be replicated on a large sample. This would provide invaluable evidence in the area of practice.
- A comparative study can be conducted of the pre and post test knowledge of the dengue after a teaching programme on prevention and control of dengue to adult
- A comparative study can be conducted on knowledge regarding dengue fever after a teaching programme on prevention and control of dengue fever to adults.
- The study can be done on association between various demographic variables, which were significant, on larger samples.
- A follow up study can be conducted to evaluate effectiveness of planned teaching programme on dengue fever among adults.

7. Acknowledgement

We express our appreciation to the respected officials of the Bharati Vidyapeeth deemed university, college of nursing, Pune for cooperation with us for executing the research. The author would like to thank Mrs.khurshid Jamadar (principal) and Mr. Shivcharan Singh Gandhar (guide) for their constant encouragement. The authors also thank to all participants.

8. References

1. Chakravarti A, Arora R, Luxemburger C. Fifty years of dengue in India. Maulana Azad Medical College, Bahadur Shah Zafar Marg, New Delhi, Delhi, 10002, India.
2. Gubler DJ. Dengue/dengue haemorrhagic fever: history and current status. Asia-Pacific Institute of Tropical Medicine and Infectious Diseases, John A. Burns School of Medicine, University of Hawaii, USA.
3. Whitehorn J, Farrar J. Dengue. *Br Med Bull*. 2010; 95:161-73. Epub 2010 Jul 8.
4. Walsh RK, Bradley C, Apperson CS, Gould F. An Experimental Field Study of Delayed Density Dependence in Natural Populations of *Aedes albopictus*. Department of Entomology, North Carolina State University, Raleigh, North Carolina, United States of America.
5. Sharma SN, Raina VK, Kumar A. Dengue/DHF: an emerging disease in India. *J Commun Dis*. 2000; 32(3):175-9.
6. Dellamonica P. Dengue fever: clinical features. *Arch Pediatr*. 2009; 16(2):S80-4.
7. Teyssou R. Dengue fever: from disease to vaccination. *Med Trop (Mars)*. 2009; 69(4):333-4.
8. Scott TW, Morrison AC. Vector dynamics and transmission of dengue virus: implications for dengue surveillance and prevention strategies: vector dynamics and dengue prevention. *Curr Top Microbiol Immunol*. 2010; 338:115-28.
9. Singhasivanon P, Jacobson J. Dengue is a major global health problem. Foreword. *J Clin Virol*. 2009; 46(2):S1-2.
10. Luz PM, Vanni T, Medlock J, Paltiel AD, Galvani AP. Dengue vector control strategies in an urban setting: an economic modeling assessment. *Lancet*. 2011; 14;377(9778):1673-80. Epub 2011 May 3.
11. Gubler DJ, Clark GG. Community involvement in the control of *Aedes aegypti*. Division of Vector-Borne Infectious Diseases, Centers for Disease Control and Prevention, Fort Collins, CO 80522, USA.
12. Girimont TM. Dengue disease. *AAOHN J*. 2010; 58(10):448. doi: 10.3928/08910162-20100928-03.
13. Stark K, Niedrig M, Biederbick W, Merkert H, Hacker J. Climate changes and emerging diseases. What new infectious diseases and health problem can be expected? *Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz*. 2009; 52(7):699-714.
14. Wiwanitkit V. Dengue vaccines: a new hope? *Hum Vaccin*. 2009; 5(8):566-7. Epub 2009 Aug 18.
15. Kyle JL, Harris E. Global spread and persistence of dengue. *Annu Rev Microbiol*. 2008; 62:71-92.
16. Rigau-Perez JG. Severe dengue: the need for new case definitions. *Lancet Infect Dis*. 2006; 6(5):297-302.
17. Polit DF, Hungler BP. *Nursing Research. Principles and methods*. 5th Ed. Philadelphia. J B. Lippincot Co, 1999.
18. Ashok Kumar V, Rajendran R, Manavalan R, Tewari SC, Arunachalam N, Ayanar K *et al*. Studies on community knowledge and behavior following a dengue epidemic in Chennai city, Tamil Nadu, India. *Trop Biomed*. 2010; 27(2):330-6.
19. Hati AK. Dengue serosurveillance in Kolkata, facing an epidemic in West Bengal, India. *J Vector Borne Dis*. 2009; 46(3):197-204.
20. Vong S, Khieu V, Glass O, Ly S, Duong V, Huy R *et al*. Dengue incidence in urban and rural Cambodia: results from population-based active fever surveillance, 2006-2008. *PLoS Negl Trop Dis*. 2010; 30;4(11):e903.
21. Kholedi AA, Balubaid O, Milaat W, Kabbash IA, Ibrahim A. Factors associated with the spread of dengue fever in Jeddah Governorate, Saudi Arabia. *East Mediterr Health J*. 2012; 18(1):15-23.
22. Naing C, Ren WY, Man CY, Fern KP, Qiqi C, Ning CN *et al*. Awareness of dengue and practice of dengue control among the semi-urban community: a cross sectional survey. *J Community Health*. 2011; 36(6):1044-9.
23. Pacheco-Coral Adel P, Quiñones-Pinzón ML, Serrato-Pomar IM, Rivas-Muñoz FA. Evaluating an Information, Education and Communication (IEC) strategy which was adopted for *Aedes aegypti* control in La Dorada, Colombia *Rev Salud Publica (Bogota)*. 2010; 12(3):380-90.
24. Sales FM. Health education actions for the prevention and control of dengue fever: a study at Icarai, Caucaia, Ceara State, Brazil. *Cien Saude Colet*. 2008; 13(1):175-84.
25. Sánchez L, Pérez D, Alfonso L, Castro M, Sánchez LM, Van der Stuyft P *et al*. A community education strategy to promote participation in dengue prevention in Cuba. *Rev Panam Salud Publica*. 2008; 24(1):61-9.
26. Lenzi Mde F, Coura LC. Dengue prevention: focus on information. *Rev Soc Bras Med Trop*. 2004; 37(4):343-50. Epub 2004 Aug 20.
27. Espinoza-Gómez F, Hernández-Suárez CM, Coll-Cárdenas R. Educational campaign versus malathion spraying for the control of *Aedes aegypti* in Colima,

- Mexico. *J Epidemiol Community Health*. 2002; 56(2):148-52.
28. Lloyd LS, Winch P, Ortega-Canto J, Kendall C. The design of a community-based health education intervention for the control of *Aedes aegypti*. *Am J Trop Med Hyg*. 1994; 50(4):401-11.
 29. Castañeda O, Segura O, Ramírez AN. Knowledge, attitudes and community practice during an outbreak of dengue in a town in Colombia, 2010. *Rev Salud Publica (Bogota)*. 2011; 13(3):514-27.
 30. Schmidt WP, Suzuki M, Thiem VD, White RG, Tsuzuki A, Yoshida LM *et al*. Population density, water supply, and the risk of dengue fever in Vietnam: cohort study and spatial analysis. *PLoS Med*. 2011; 8(8):e1001082. Epub 2011 Aug 30.
 31. Lai LW. Influence of environmental conditions on asynchronous outbreaks of dengue disease and increasing vector population in Kaohsiung, Taiwan. *Int J Environ Health Res*. 2011; 21(2):133-46.
 32. Shuaib F, Todd D, Campbell-Stennett D, Ehiri J, Jolly PE. Knowledge, attitudes and practices regarding dengue infection in Westmoreland, Jamaica. *West Indian Med J*. 2010; 59(2):139-46.
 33. Ang KT, Rohani I, Look CH. Role of primary care providers in dengue prevention and control in the community. *Med J Malaysia*. 2010; 65(1):58-62.
 34. Thai KT, Nagelkerke N, Phuong HL, Nga TT, Giao PT, Hung LQ *et al*. Geographical heterogeneity of dengue transmission in two villages in southern Vietnam. *Epidemiol Infect*. 2010; 138(4):585-91. Epub 2009 Aug 5.
 35. Sales FM. Health education actions for the prevention and control of dengue fever: a study at Icarai, Caucaia, Ceará State, Brazil. *Cien Saude Colet*. 2008; 13(1):175-84.
 36. Arunachalam N, Murty US, Kabilan L, Balasubramanian A, Thenmozhi V, Narahari D *et al*. Studies on dengue in rural areas of Kurnool District, Andhra Pradesh, India. *J Am Mosq Control Assoc*. 2004; 20(1):87-90.