



“ASSESSMENT THE KNOWLEDGE & PRACTICES REGARDING
DENGUE FEVER & ITS PRACTICES AMONG ADULTS RESIDING IN SELECTED
RURAL AREAS IN THE PUNE DISTRICT.”

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ABSTRACT

Dengue 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*. These mosquitoes are also vectors of chikungunya, yellow fever and Zika viruses. Dengue is widespread throughout the tropics, with local variations in risk influenced by climate parameters as well as social and environmental factors. **The present study title:** “A study to assess the knowledge & practices regarding dengue fever & its practices among adults residing in selected rural areas in the Pune district.” The objective was to assess knowledge and practice regarding dengue fever and associate with demographic variables. **Material and Methods:** Researcher adopted non experimental descriptive research design. It was carried out on 200 samples. The Non-probability convenient sampling technique was used to data was collected using self-structured questionnaire Data analysis was done mainly using descriptive statistics. **Result: Conclusion: Recommendation:** Similar comparative study may be conducted using urban and rural population.

Keyword: Assess, knowledge, practice, Adults, Dengue fever

INTRODUCTION

Dengue is a vector-borne viral disease caused by the flavivirus dengue virus (DENV). Approximately 400 million cases and 22 000 deaths occur due to dengue worldwide each year. It has been reported in more than 100 countries in tropical and subtropical regions.²

The incidence of dengue has grown dramatically around the world in recent decades. A vast majority of cases are asymptomatic or mild and self-managed, and hence the actual numbers of dengue cases are under-reported. Many cases are also misdiagnosed as other febrile illnesses.

The number of dengue cases reported to WHO increased over 8 fold over the last two decades, from 505,430 cases in 2000, to over 2.4 million in 2010, and 5.2 million in 2019. Reported deaths between the year 2000 and 2015 increased from 960 to 4032, affecting mostly younger age group. The total number of cases seemingly decreased during years 2020 and 2021, as well as for reported deaths. However, the data is not yet complete and COVID-19 pandemic might have also hampered case reporting in several countries. Before 1970, only 9 countries had

experienced severe dengue epidemics. The disease is now endemic in more than 100 countries in the WHO regions of Africa, the Americas, the Eastern Mediterranean, South-East Asia and the Western Pacific. The Americas, South-East Asia and Western Pacific regions are the most seriously affected, with Asia representing ~70% of the global burden of disease. In 2020, dengue affected several countries, with reports of increases in the numbers of cases in Bangladesh, Brazil, Cook Islands, Ecuador, India, Indonesia, Maldives, Mauritania, Mayotte (Fr), Nepal, Singapore, Sri Lanka, Sudan, Thailand, Timor-Leste and Yemen. Dengue continues to affect Brazil, India, Vietnam, the Philippines, Cook Islands, Colombia, Fiji, Kenya, Paraguay, Peru and, Reunion islands, in 2021 ¹

Need of the Study

The rapid increase in human population, lack of awareness among people, environmental changes, social changes and increased breeding of vector mosquitoes resulted in increased dengue transmission. Water storage drums, criterns, flower vases, cement tanks, plastic and metal drums, tyres, bottles, tin cans, coconut shells and other such discarded containers which can hold rainwater, overhead tanks, ground water storage tank, etc. are the source of breeding of aedes mosquitoes. ³

The COVID-19 pandemic is placing immense pressure on health care and management systems worldwide. WHO has emphasized the importance of sustaining efforts to prevent, detect and treat vector-borne diseases during this pandemic such as dengue and other arboviral diseases, as case numbers increase in several countries and place urban populations at highest risk for both diseases. The combined impact of the COVID-19 and dengue epidemics could have devastating consequences on the populations at risk⁴

Dengue is considered an urban- and semi-urban disease, in recent years, due to water storage practices and large-scale development activities in rural areas, dengue has become endemic in rural areas of India as well, increasing the scale of the dengue challenge in the country so researcher wants to study on “assessment the knowledge & practices regarding dengue fever & its practices among adults residing in selected rural areas in the Pune district.”

Aim of the Study

A study to assess the knowledge & practices regarding dengue fever & its practices among adults.

Methodology

Researcher adopted non experimental descriptive research design. It was carried out on 200 samples. The Non-probability convenient sampling technique was used to data was collected using self-structured questionnaire Data analysis was done mainly using descriptive statistics.

Result

SECTION I: DESCRIPTION OF DEMOGRAPHIC PROFILE:

The majority of the adult age between 30-40 70% and majority of the individuals were 65% males than female 35%.majority of 42.5% people are uneducated.45% of adult are former,65%

of adult are married ,45% are living in joint family ,62% are belongs to Hindu religions, 40% monthly income, below 5000.

SECTION II: LEVEL OF KNOWLEDGE SCORE OF THE ADULTS REGARDING DENGUE FEVER & ITS PRACTICES

TABLE NO: 1

KNOWLEDGE	FREQUENCY	PRCENTAGE
Poor Knowledge	65	32.5%
Average Knowledge	90	45%
Good Knowledge	45	22.5 %
Mean	13.2	
SD	3.1	

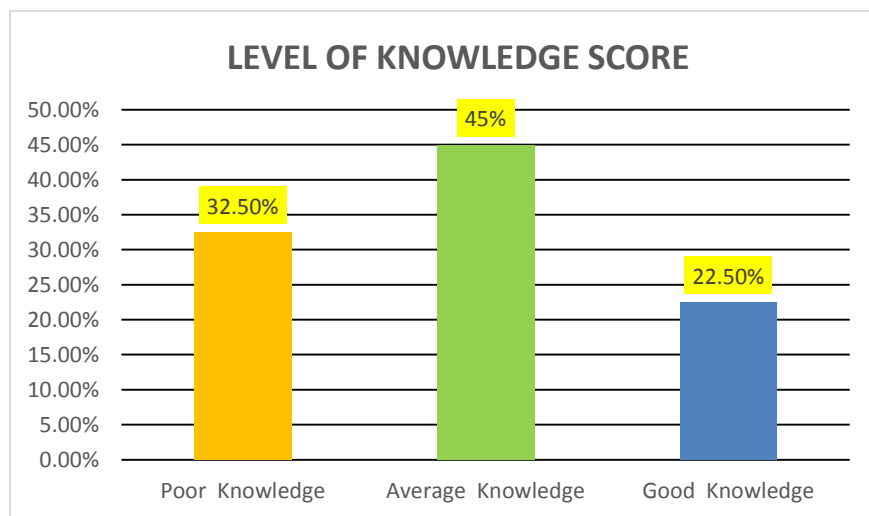


Figure 1: level of knowledge score of the adults regarding dengue fever & its practices

Above data showed level of knowledge score of the adult regarding dengue fever & its practices .in that majority of adult 90(45%) having average knowledge regarding dengue fever & its practices ,65(32.5%) having poor knowledge regarding dengue fever & its practices and 45(22.5%) having good knowledge regarding dengue fever & its practices. The mean knowledge score of the adult are regarding dengue fever & its practices 13.2 ± 3.1 .

SECTION III: LEVEL OF PRACTICE SCORE OF THE ADULTS REGARDING DENGUE FEVER & ITS PRACTICES

TABLE NO 2

Practice score	FREQUENCY	PRCENTAGE
Always	55	27.5%
sometimes	100	50%
Never	45	22.5 %
Mean	12	
SD	3.1	

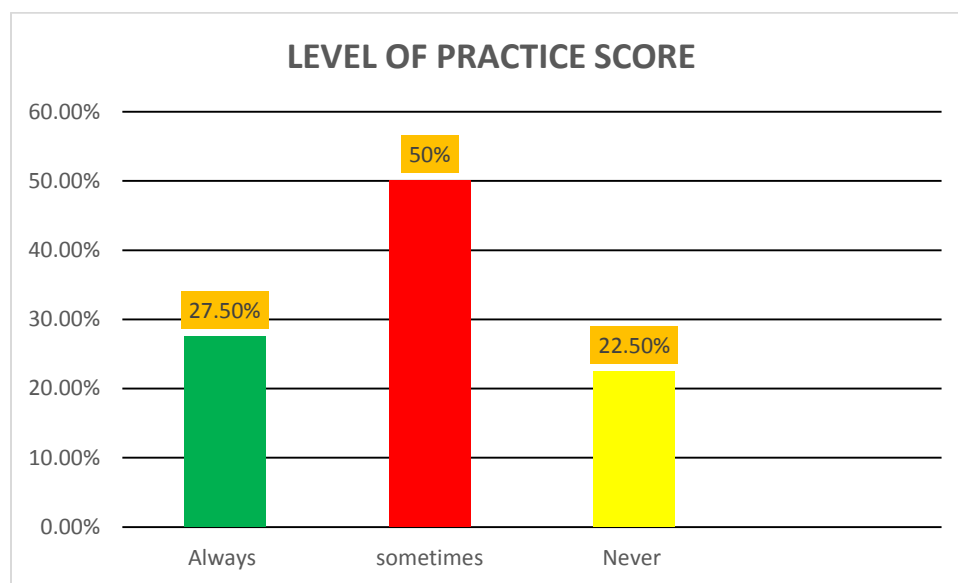


Figure 2: level of practice score of the adults regarding dengue fever & its practices

Above data showed level of practice score of the adult regarding dengue fever & its practices .in that majority of adult 100(50%) follow practice sometime regarding dengue fever & its practices ,55(27.5%) follow always practice regarding dengue fever & its practices and 45(22.5%) follow never practice regarding dengue fever & its practices. The mean practice score of the adult are regarding dengue fever & its practices 12 ± 3.1 .

SECTION IV: A. ASSOCIATION OF LEVEL OF KNOWLEDGE SCORE WITH SELECTED PERSONAL DEMOGRAPHIC VARIABLES.

There was no significant association between age, educations, occupation, type of family with level of knowledge on dengue fever & its practices.

B. ASSOCIATION OF LEVEL OF PRACTICE SCORE WITH SELECTED PERSONAL DEMOGRAPHIC VARIABLES.

There was no significant association between age, educations, occupation, type of family with level of practice on dengue fever & its practices.

DISCUSSION

The findings of the study was discussed with the objectives and hypothesis stated. The present study was undertaken to assess the knowledge regarding acute respiratory infection in children among mothers in selected area of Pune city.

Present study findings are supported by study done in urban settlement area of south Delhi, 90% of the respondents were reportedly aware of dengue, 78% subjects knew dengue as a study done in Brazil[20] whereas in Thailand knowledge about dengue was 67%³³³. The possible explanation for the less awareness among the residents could be due to scarce health education messages widely available through mass media like television and newspapers which was found to be less only 32% found in the study.⁵

In present study majority of adult age between 30-40 70% and majority of the individuals were 65% males than female 35%.majority of 42.5% people are uneducated.45% of adult are former,65% of adult are married ,45% are living in joint family ,62% are belongs to Hindu religions, 40% monthly income, below 5000. Majority of adult 90(45%) having average knowledge regarding dengue fever & its practices ,65(32.5%) having poor knowledge regarding dengue fever & its practices and 45(22.5%) having good knowledge regarding dengue fever & its practices. The mean knowledge score of the adult are regarding dengue fever & its practices 13.2±3.1. majority of adult 100(50%) follow practice sometime regarding dengue fever & its practices ,55(27.5%) follow always practice regarding dengue fever & its practices and 45(22.5%) follow never practice regarding dengue fever & its practices. The mean practice score of the adult are regarding dengue fever & its practices 12±3.1.

CONCLUSION

The current study showed that majority of the adult having average knowledge regarding the dengue fever & its practice and the for the practice they sometime followed the preventive major regarding dengue fever. There was no significant association between age, gender educations, occupation, type of family with level of knowledge and practice on dengue fever & its practices.

Recommendation

Similar Study can be done in larger population and comparative in urban and rural.

Conflict of Interest

The authors certify that they have no involvement in any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in this paper.

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REFERANCES

1. Dengue and severe dengue. <https://www.who.int/news-room/fact-sheets/detail/dengue-and-severe-dengue>. Accessed January 23, 2022.
2. Roy SK, Bhattacharjee S. Dengue virus: Epidemiology, biology, and disease aetiology. *Can J Microbiol.* 2021;67(10):687-702. doi:10.1139/CJM-2020-0572/ASSET/IMAGES/LARGE/CJM-2020-0572F8.JPEG
3. The rapid increase in human population, lack of awareness among people, environmental changes, social changes and increased breeding of vector mosquitoes resulted in increased dengue transmission. 9i57.595j0j7&sourceid=chrome&ie=UTF-8. Accessed January 23, 2022.
4. Wilder-Smith A, Tissera H, Ooi EE, Coloma J, Scott TW, Gubler DJ. Preventing Dengue Epidemics during the COVID-19 Pandemic. *Am J Trop Med Hyg.* 2020;103(2):570. doi:10.4269/AJTMH.20-0480
5. Knowledge, attitude and practices related to dengue in rural and slum areas of Delhi after the dengue epidemic of 1996 - PubMed. <https://pubmed.ncbi.nlm.nih.gov/9914677/>. Accessed January 23, 2022.
6. Jaya Deshmukh, et. al. Effectiveness of application of hot water with Epsom salt v/s plain hot water on knee joint pain amonggeriatric women., *The Pharma Innovation Journal* 2019; 8(6): 434-441
7. Gandhar Shivcharan (2016) Effectiveness of cartoon movies as distracter on pain among children undergoing venipuncture.10.21275/v5i6.Nov164843
8. Gandhar, Shivcharan (2020). A study to assess the knowledge regarding care of low birth weight baby among mothers in selected hospitals of Pune city. 10.13140/RG.2.2.17802.90568.
9. Deshmukh, Jaya, Assess the effectiveness of planned teaching programme on knowledge regarding organ donation among the adults, *International Journal of Advanced Education and Research* ISSN: 2455-5746, Impact Factor: RJIF 5.34 www.alleducationjournal.com Volume 2; Issue 4; July 2017; Page No. 52-54
10. S G Jalindre, A Nawale, A study to explore the selected functional health problems among the senior citizens residing in elder homes of Pune city. *International journal of Applied Research*, Jan 2020, Vol. 6, Issue-1, 15-18

11. M Suji, AY Nawale, Quality of Life in Children with Type 1 Diabetic – A Systematic Review. *Indian Journal of Forensic Medicine & Toxicology*, October-December 2020, Vol. 14, No. 4, 4011-4017
12. AY Nawale, P Jadhav, S Hirve, M Butla, S Boinwad et al A study to assess the knowledge regarding Pradhan Mantri Matru Vandana Yojna among antenatal mothers of selected area of Pune city. *European journal of Molecular & Clinical Medicine*, Feb 2021, Vol. 7 Issue 11, 6132-6140
13. Geeta Shiroor, Anita Nawale, Music therapy: An effective intervention in conjunction with routine rehabilitation programme in stroke patients. *Comprehensive Review. International Journal of Multidisciplinary Research and Development*, May 2021, Volume : 8 Issue : 5, 31-34
14. Dr. Anita Nawale Stephi, Shiny, Thokchom B., Ranaware P., Shivam, A study to assess the knowledge regarding selected waterborne diseases among selected urban areas of Pune city. *International Journal of Applied Research*, 2019, Vol. 5, Issue 6, 347-349
15. Venkata Sai, P. M., B. Dev, and R. Krishnan. "Role of ultrasound in dengue fever." *The British journal of radiology* 78.929 (2005): 416-418.
16. Ratageri, Vinod H., et al. "Clinical profile and outcome of dengue fever cases." *The Indian Journal of Pediatrics* 72 (2005): 705-706.
17. Clark, Danielle V., et al. "Economic impact of dengue fever/dengue hemorrhagic fever in Thailand at the family and population levels." *The American journal of tropical medicine and hygiene* 72.6 (2005): 786-791.
18. Ramos, Celso, et al. "Dengue virus in the brain of a fatal case of hemorrhagic dengue fever: case report." *Journal of neurovirology* 4.4 (1998): 465-468.
19. Kunte, A., et al. "HIV seroprevalence & awareness about AIDS among pregnant women in rural areas of Pune district, Maharashtra, India." *Indian Journal of Medical Research* 110 (1999): 115-122.
20. Tetali, P., et al. "Ethnobotanical survey of antidiarrhoeal plants of Parinche valley, Pune district, Maharashtra, India." *Journal of ethnopharmacology* 123.2 (2009): 229-236.