ORIGINAL ARTICLE

INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACEUTICAL SCIENCES

Published by JK Welfare & Pharmascope Foundation Journal Home Page: https://ijrps.com

A survey on awareness of dengue among public

Sai Sandhya T[1], Geetha RV*[1], Lakshmi Thangavelu[2]

[1]Department of Microbiology, Saveetha Dental College & Hospitals, SIMATS, Saveetha University, Chennai, Tamil Nadu, India
[2]Department of Pharmacology, Saveetha Dental College & Hospitals, SIMATS, Saveetha University, Chennai, Tamil Nadu, India

Article History:

Received on: 06.09.2018
Revised on: 12.02.2019
Accepted on: 15.02.2019

Keywords:

Dengue,
Dengue fever,
viral disease,
Ades mosquito

ABSTRACT

Dengue fever is endemic in tropical and subtropical areas. It is a non-contagious disease. It is a mosquito-borne viral disease which is spread by the female Ades mosquito. The mosquito breeds in the stagnant water. The symptoms of dengue include a headache, high fever, rashes, severe joint pain and muscle pain. Dengue fever lasts about 3-10 days. There is no vaccinationfor dengue fever. Only preventive measures can be taken to avoid the disease.An online survey was conducted. The participants were asked to take the survey, and the responses were collected. The results are statistically analysed. From the survey, the results are obtained. 66% of them said that dengue is transmissible. 33% of them are unaware of the common symptoms of dengue. 79% of them say that there are no specific vaccinations for dengue.71% of the participants say that mosquito breeds in stagnant water. Inconclusion, although the awareness regarding dengue and mosquito control measures was quite high, more emphases should be laid on putting this knowledge into practice.

* Corresponding Author

Name: Dr. R.V Geetha
Email: rvgeetha2015@gmail.com

ISSN: 0975-7538

DOI: https://doi.org/10.26452/ijrps.v10i2.410

Production and Hosted by

IJRPS | https://ijrps.com

INTRODUCTION

Dengue fever is endemic in tropical and subtropical areas (Pinheiro FP, Corber SJ 1997). It is a non-contagious disease. It is a mosquito-borne viral disease which is spread by the female Ades mosquito (WHO SEARO 1999). The mosquito breeds in the stagnant water (Halstead SB.1999). Many people, especially children and teens, may experience no signs or symptoms during a mild case of dengue fever (Balaya S, Paul SD, *et al.,* 1967). Dengue fever causes a high fever 104 F degrees and at least two of the following symptoms: Headache Muscle, bone and joint pain, Nausea, Vomiting, Pain behind the eyes, Swollen glands,.Rash (Diesh P, Pattanayak S. *et al.,* 1970). Most people recover within a week or so. In some cases, symptoms worsen and can become life-threatening. Blood vessels often become damaged and leaky (Rao CVRM, Bagchi SK *et al.,* 1982) and the number of clot-forming cells (platelets) in your bloodstream drops. (Ranbaxy Science Foundation 1996). Signs and symptoms of dengue haemorrhagic fever or severe dengue a severe abdominal pain, Persistent vomiting, Bleeding from your gums or nose, Blood in your urine, stools or vomit, Bleeding under the skin, which might look like bruising.

The more dangerous form of the disease is the dengue haemorrhagic fever which may cause death due to excessive internal bleeding. When a mosquito conveying dengue infection nibbles a man, the infection enters the skin together with the mosquito's salvation. It tries to and enters white platelets and recreates inside the cells while they move all through the body. (Gupta P, Kumar P, Aggarwal OP.1997). The white platelets react by delivering various flagging proteins, for example, cytokines and interferons which are in charge of a

large number of the side effects, for example, the fever, this season's cold virus-like side effects, and the serious torments. (Gibbons RV, Vaughn DW. 2002) In serious contamination, the infection generation inside the body is enormously expanded, and numerous more organs, (for example, the liver and the bone marrow can be influenced. Liquid from the circulatory system spills through the mass of little veins into body pits because of slender porousness (Paul RE, Patel AY, Mirza S *et al.,* 1998) (Rai MA, Khan H. 2007). Accordingly, less blood flows in the veins, and the pulse turns out to be low to the point that it can't supply adequate blood to fundamental organs. Moreover, the brokenness of the bone marrow because of contamination of the stromatolites cells prompt lessened quantities of platelets, which are essential for compelling blood thickening; this builds the danger of dying, the other real inconvenience of dengue fever (Jamil B, Hasan RS *et al.,* 2005). The number of dengue casesis on the rise in Tamil Nadu.

MATERIALS AND METHODS

An online survey was conducted. The questionnaire contained few questions which were mostly knowledge and awareness based. The participants were asked to take the survey, and the responses were collected from them. The survey link was sent through survey planet. 100 participants took part in the survey. The participants of all age group are asked to take the survey. The results are statistically analysed.

RESULTS AND DISCUSSION

From the survey, the results are obtained.66% of them said that dengue is transmissible.33% of them are unaware of the common symptoms of dengue. 79% of them say that there are no specific vaccinations for dengue.71%of the participants say that mosquito breeds in stagnant water. 71%of the participants say that dengue spreads from human to human. 55% of them say that dengue spreads by mosquito bite. 32% of them say dengue spreads by fly bite and 32%of them say that dengue spreads by unhygienic food. 62% of them say Cleaning home is the best way to prevent dengue. 23% of them say that the best way to prevent dengue is by preventing water stagnation and 15% of the participants say that usage of mosquito spray is the best method to prevent dengue (Khan E, Siddiqui J *et al.,* 2007).

Dengue is spread by several species of a mosquito of the *Ades type*, principally *A.Aegypti.* A number of tests are available to confirm the diagnosis including detecting antibodies to the virus or its RNA. The number of deaths is increasing day by day.

Figure 1: Dengue is transmissible

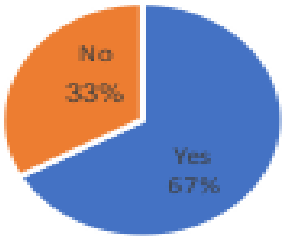

Figure 2: Aware of common symptoms

The prevention methods against the disease are very important (Pakistan Integrated HealthSurvey 2001). Further researches may be required about the preventive measures against the disease.From the survey conducted, it is analysed that the participants have a good knowledge of the disease. Dengue fever is more common nowadays. The preventive measures are really important (Acharya A, Goswami K, Srinath S, Goswami A 2005). From the survey conducted, it is analysed that the majority of the participants have limited knowledge about the bite time of mosquito. In the present study, television is the most important source of information about the disease.

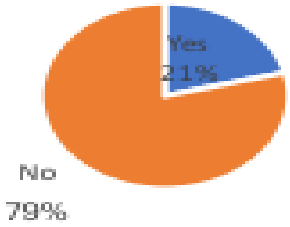

Figure 3: Specific vaccinations are available

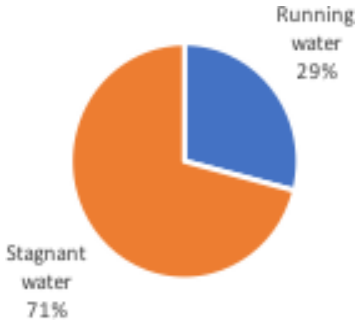

Figure 4: Common breeding sites

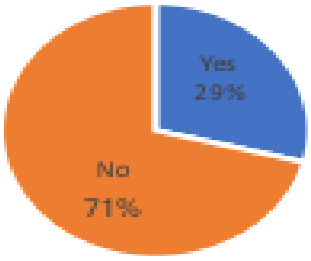

Figure 5: Dengue spreads from human to human

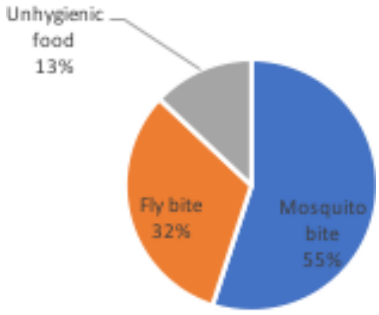

Figure 6: Mode of spread

80% of the participants were aware of the disease by television news, and 12% of participants knew about dengue through their family members and their relatives, whereas the rest of 8% of the participants were aware through newspapers and internet (Hairi F, Ong CH, Suhaimi A 2003). Dengue fever is common for all ages. This disease is more common in the unclean environment. The main cause is because of stagnant water and the garbage. It is necessary to know about the common symptoms and the preventive measures against this disease (Wilder-Smith A, Schwartz E 2005). Recent researches said that television plays a very important source of information to the public and the control measures are quite high among the public.

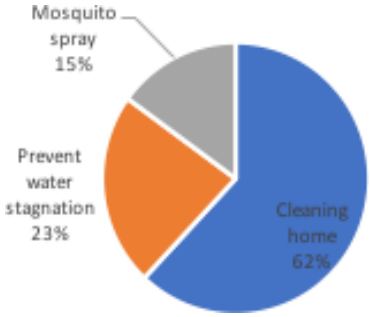

Figure 7: Various preventive measures were taken against the disease

In this survey, it is analysed that only 24% of the participants have attended dengue awareness programmes and the rest of 76% of participants haven't attended those type of awareness programmes (Degallier N, Vilarinhos PT *et al.,* 2005). This shows that the participants are less interested in attending awareness programmes. So, more awareness programmes should be conducted by schools and colleges. School students play an important role in spreading awareness to the public. Even the colleges also can organise some awareness programmes about the cause and preventive measures of disease.

CONCLUSION

In conclusion, although the awareness regarding dengue and mosquito control measures was quite high, more emphases should be laid on putting this knowledge into practice. This can be achieved by more aggressive health education campaigns in the community through the health workers, and also involving the schools in the community. In addition, community level activities like proper water drainage are required for controlling the disease.

REFERENCES

Acharya A, Goswami K, Srinath S, Goswami A (2005) Awareness about dengue syndrome and related preventive practices amongst residents of an urban resettlement colony of south Delhi. J Vector Borne Dis 42: 122–127.A.

AcharyaK. Goswami S. Srinath A. Goswami2005Awareness about dengue syndrome and related preventive practices amongst residents of an urban resettlement colony of south Delhi.J Vector Borne Dis42122127.

Annual Report 2004–05. New Delhi: Ministry of Health & Family Welfare (Govt. of India) 2005; p. 2 & 38.

Balaya S, Paul SD, D'Lima LV, Pavri KM. Investigations on an outbreak of dengue in Delhi in 1967. Indian J Med Res 1969; 57: 767–74.

Degallier N, Vilarinhos PT, de Carvalho MS, Knox MB, Caetano J Jr (2000) People's knowledge and practice about dengue, its vectors, and control means in Brasilia (DF), Brazil: its relevance with entomological factors. J Am Mosq Control Assoc 16: 114–123.

Dengue outbreak in Delhi. In: Sharma PL, Sood OP editors. Round table conference series. Gurgaon: Ranbaxy Science Foundation 1996; 1:

Dinesh P, Pattanayak S, Singha P, Arora DD, Mathur PS, Ghosh TK, Mondal MM, Raghavan NGS. An outbreak of dengue fever in Delhi —1970. J Com Dis 1972; 4 (1): 13–8.

Gibbons RV, Vaughn DW (2002) Dengue: an escalating problem. BMJ 324: 1563–1566.RV GibbonsDW Vaughn2002Dengue: an escalating problem.Bmj32415631566

Gupta P, Kumar P, Aggarwal OP. Knowledge, attitudes and practices related to dengue in rural and slum areas of Delhi**.** World Health O (1997) Dengue Haemorrhagic Fever: Diagnosis, Treatment, Prevention and Control: World Health Organization. World Health O1997Dengue Haemorrhagic Fever: Diagnosis, Treatment, Prevention and Control: World Health Organization.

Hairi F, Ong CH, Suhaimi A, Tsung TW, bin Anis Ahmad MA, *et al.,* (2003) A knowledge, attitude and practices (KAP) study on dengue among selected rural communities in the Kuala Kangsar district. Asia Pac J Public Health 15: 37–43.

HairiCH OngA. SuhaimiTW TsungMA bin Anis Ahmad2003A knowledge, attitude and practices (KAP) study on dengue among selected rural communities in the Kuala Kangsar district. Asia Pac J Public Health153743

Halstead SB. Is there an inapparent dengue explosion? Lancet 1999; 353: 1100–1.

Jamil B, Hasan RS, Sarwari AR, Burton J, Hewson R, *et al.,* (2005) Crimean-Congo hemorrhagic fever: experience at a tertiary care hospital in Karachi, Pakistan. 99: 577–584.

JamilRS HasanAR SarwariJ. Burton R. Hewson2005Crimean-Congo hemorrhagic fever: experience at a tertiary care hospital in Karachi, Pakistan.99577584

Khan E, Siddiqui J, Shakoor S, Mehraj V, Jamil B, *et al.,* (2007) Dengue outbreak in Karachi, Pakistan, 2006: experience at a tertiary care centre. 101: 1114–1119.

KhanJ. Siddique. Shakoor V. Mehraj B. Jamil 2007 Dengue outbreak in Karachi, Pakistan, 2006: experience at a tertiary care centre.10111141119

Pakistan Integrated Health Survey (2001). Federal Bureau of Statistics, Government of Pakistan.2001Pakistan Integrated Health Survey. Federal Bureau of Statistics, Government of Pakistan.

Paul RE, Patel AY, Mirza S, Fisher-Hoch SP, Luby SP (1998) Expansion of epidemic dengue viral infections to Pakistan. Int J Infect Dis 2: 197–201.

RE Paul, AY Patel S. Mirza SP Fisher-HochSP Luby1998Expansion of epidemic dengue viral infections to Pakistan.Int J Infect Dis2197201

Pinheiro FP, Corber SJ. Global situation of dengue and dengue haemorrhagic fever and its emergence in the Americas. World Health Stat Q 1997; 50: 161–8.

Population Census Organization (2003). The government of Pakistan.2003Population Census Organization. Government of Pakistan.

Prevention and control of dengue and dengue haemorrhagic fever: comprehensive guidelines. New Delhi: WHO SEARO 1999; Regional Publication No. 29.

Rai MA, Khan H (2007) Dengue: Indian subcontinent in the line of fire. J Clin Virol 38: 269–270.MA RaiH. Khan2007Dengue: Indian subcontinent in the line of fire.J Clin Virol38269270

Rao CVRM, Bagchi SK, Pinto BD, Ilkal MA, Bharadwaj M, Shaikh BH, Dhanda V, Dutta Mahendra, Pavri KM. The 1982 epidemic of dengue fever in Delhi. Indian J Med Res 1985; 82: 271–5.

Wilder-Smith A, Schwartz E (2005) Dengue in travellers. N Engl J Med 353: 924–932.