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RESEARCH ARTICLE

KNOWLEDGE AND PRACTICES REGARDING PREVENTIVE MEASURES OF DENGUE INFECTION

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ABSTRACT

A cross sectional study was conducted to assess the knowledge and preventive practices regarding Dengue infection among the women attending selected OPD services of A tertiary hospital. The sample consisted of 50 women and the tool was a structured questionnaire to assess the knowledge and preventive practices Study findings revealed that 96.3% had heard about dengue. 89% of them considered Dengue as a serious problem.86% of the subjects were aware of spread of Dengue mosquitoes. Mosquito nets, liquidators were used by 61% of respondents, coils by 56% and repellants by 22%.Majority (46%) were from the age group of 20-30 years and were residing in the cantonment area. Among all the samples 16% or their family members were infected with Dengue fever. 18% of the samples were having good knowledge level, Majority, 54% were having average and 28% were having poor knowledge. A High majority (92) were having satisfactory level of preventive practices. Though the preventive practice among the subjects were good but more emphasis is required for the improvement of knowledge level of the subjects.

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INTRODUCTION

Dengue virus infection is increasingly recognized as one of the world's emerging infectious disease. Statistics reveals that about 50 to100 million cases of dengue fever and 500000 dengue hemorrhagic fever (DHF) resulting in around 24000 deaths reported annually. n India Dengue fever was first reported in 1946 .There after a gap of 18 years the first confirmed epidemic was reported from the eastern coast of India in 1963 & 1964. The disease was spread northward and reached Delhi and Uttar Pradesh during 1967 & 1968 (Sharma, 2000). Dengue is a virus serotypes DEN-1, DEN-2, DEN-3, and DEN-4, causes dengue and dengue hemorrhagic fever. Dengue fever can occur epidemically and endemically. The reservoir of infection is both man and mosquito. The transmission cycle is "man-mosquito-man". *Ades aegypti* is the main vector. Dengue fever can be manifested as classical dengue fever and dengue hemorrhagic fever. The disease has a seasonal pattern, the cases peak after monsoon and is not uniformly distributed throughout the year. India has been endemic for DF/DHF and this is mainly attributed to the high influx of international tourists and also due to the presence of suitable conditions for breeding of *Aedes aegypti*.

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Rapid and unplanned urbanization is among one of the factors that is making cities more receptive to dengue epidemics. Poor living conditions in the low socioeconomic areas and slums not only contribute to the spread of the disease but also make it difficult to curb the vector population effectively in these areas. The only measure to for the prevention of dengue is effective vector control. Government of India has taken initiative and launched National Vector Borne Disease Control Program (NVBDCP) which incorporates prevention and control of various vector borne diseases. The prevention and control of vector borne disease is complex as their transmission depends on interaction of numerous ecological, biological, social and economic factors including migration. So it is very essential that the common people should possess knowledge regarding the prevention of dengue infection and should incorporates it in daily practice (Parkm, 2013). Now a days about 2.5 billion people, or 40% of the world's population, live in areas where there is a risk of dengue transmission. Dengue spreads to more than 100 countries in Asia, the Pacific, the Americas, Africa, and the Carribbean (World health report, 2013). Unplanned urbanization is believed to have had the largest impact on disease amplification in individual countries, where travel is a Even though people are familiar with Dengue being a communicable disease which spreads via mosquito vector, yet several misconceptions are present. Despite the fact that majority of

the people had heard about dengue somewhere but their knowledge about prevention of dengue varies. The practices of preventive measures are also variable. This study was conducted to assess the knowledge and preventive practices regarding dengue infection among the women attending OPD services in a tertiary care hospital. Women were taken as the subjects in this study as they are the one who looks after a family and can improve the knowledge of whole family members. Research in western countries has revealed that as the knowledge increases the practices also improves.

Literature Review

A study conducted by Upadhyay RP *et al* (2012) among the persons visiting a tertiary care hospital in New Delhi. A total of 215 individuals were interviewed, majority of respondents (96.3%) had heard about dengue. The important sources of information were television (54.9%) and newspaper/ magazine (51.7%). Around 89% of study participants considered dengue as a serious problem. Nearly 86% participants were aware of spread of mosquito while 73% were aware of one of the correct breeding sites of Aedes mosquito. Mosquito mats/liquidators were used by 61% of respondents, coils by 56% and repellant creams by 22% (Upadhyay, ?). Another study was conducted in OPD of Safdarjang Hospital, New Delhi by Matta S *et al*. in 2003. General OPD patients were interviewed with a predesigned questionnaire. Overall 500 interviews were taken in 28 days. It was found that 82.4% respondents knew that dengue fever was transmitted through mosquito and 54% associated dengue with flies/person to person transmission 309 (61.8 %) persons could enumerate one symptom (fever), 103(20.6%) persons could enumerate 2 symptoms (fever, bleeding) and 56(11.2%) persons could enumerate 3 symptoms of Dengue (fever, headache & bleeding). Regarding personal protection against mosquito bite 386 (77.2 %) respondents were relying upon Mats/coils and 101 (20.2 %) were using bed nets.l3 respondents did not give any comments. Regarding the source of information on Dengue fever, out of 500 respondents, 286 (57.2%) came to know about Dengue fever through television and/or radio followed, by 24.2%, to newspapers and banners (Matta, 2014).

Objectives

- To assess knowledge regarding dengue infection in women.
- To assess the preventive practices of dengue infection among women.

MATERIALS AND METHODS

A cross sectional study design with survey approach was used in this study. The sample size was 50 .The population comprised of all women attending selected OPD services like Medical, Surgical, Paediatric, and OBG of Command Hospital Lucknow. Convenient sampling method was selected .The researcher explained the purpose of the study and written consent was obtained .Questionnaire consisted of three parts section covered the socio demographic data, section 2 about the knowledge regarding Dengue infection and section 3 on preventive practice measures of Dengue infection. To ensure content validity of the tool,it was given to seven experts in the field of Nursing, Medicine and community medicine. Ethical clearance for conducting the study was taken from Research Ethical committee of Command Hospital, (CC) Lucknow. Permission was also obtained from concerned administrative authorities. Knowledge level was divided as score of above9-12 as good,5-8 as average and 0-4 as poor. Practice level score above 8-10 as satisfactory and 0-7 as Non satisfactory.

RESULTS

Out of total 50 samples ,majority (46%) were from age group of 20-30 years and were residing in the cantonment area.94%(47) subjects were aware of mosquito as a cause of dengue. 40% (20) of samples were able to answer correctly regarding the time of mosquito bite i.e. early morning. More than half i.e. 52%(26) of the samples were aware of breeding of dengue spreading mosquito in clean stagnant water. 50% (25) of the samples were able to answer the most common breeding place of the mosquito in the house i.e. overhead water tank without cover. Only 26%(13) of the samples answered correctly that dark colored trousers will not prevent mosquito bites. About 52% (26) of the samples consider fever with headache, muscle and joint pain, and pain behind the eye as the common symptoms of Dengue. Only 24%(12) of the samples were able to answer personal protective measures as the best method of prevention from mosquito bite. Maximum number of sample i.e. 66%(33) agreed that Dengue is not a communicable. Only 48 % (24) of samples were aware that there is no vaccine for dengue. Regarding the preventive practical measure72% (36) of samples knew that during Dengue out break medical attention should be taken while 18% (9) of samples prefers self-administration of medicines.98 %(49) use water containers with lid. 78 %(39) of the samples were using mesh screen in windows and doors. 94% (47) of the samples were using some protective measures against mosquito bite.

Table 1. Sociodemographic DATA

S.N.	ATTRIBUTES	NO	%
1.	Age		
	20-30	23	46%
	31-40	17	34%
	41-50	09	18%
	51-60	01	2%
2.	Relation		
	Self	-	
	Wife	48	96%
	Mother	2	4%
3.	Education		
	Illiterate	3	6%
	High school/intermediate/diploma	20	40%
	Graduate	19	38%
	Post graduate	8	16%
4.	Occupation		
	Housewife	47	94%
	Private	1	2%
	Government	1	2%
	Others	1	2%
5.	Family monthly income		
	Rs.10,000 and below	1	2%
	Rs.10,000-20,000	5	10%
	Rs.20,000-30,000	15	30%
	Rs.30,000 and above	29	58%

94 %(47) of samples wears long sleeves or fully covered clothes as a preventive measure from mosquito bite. 96% (48) of the samples were practicing regular removal of water from base of flower pot/dessert coolers/defrosting and cleaning refrigerator. 96% (48) of the samples were disposing used plastic/paper cups/coconut shells properly. 92 %(46) of the samples were changing stored water once a week. 28%(14) of

the samples were getting regular fogging while there was no regular fogging done in locality of 72%(36) of samples. 94 %(47) of the samples were taking regular care of waste water from RO plant/purifiers/ac/coolers. Among all the samples 16% or their family members were infected with dengue fever.

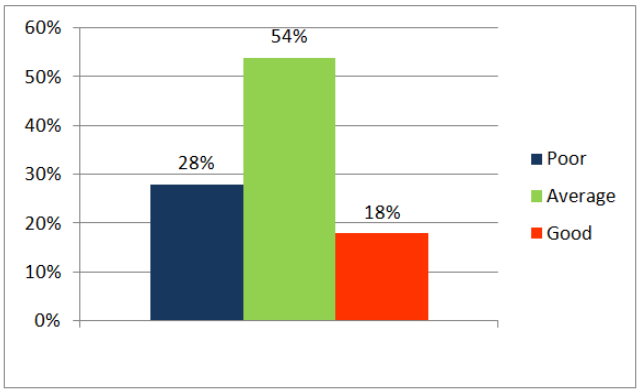

Fig. 1. Knowledge Level of the subjects regarding Dengue infection

only 18% of the samples were having good knowledge level 54% were having average and 28% were having poor knowledge. A High majority (92%) were having satisfactory level of preventive practices Though the preventive practice among the subjects were good but more emphasis is required for the improvement of knowledge level of the subjects

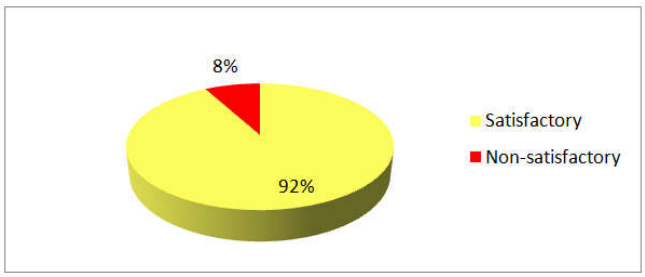

Fig. 2. Preventive practices of the subjects against Dengue infection

Conclusion

Since last few decades the incidence and prevalence of Dengue infection is continuously increasing due to rapid industrialization and urbanization Dengue infection continues to involve newer areas and newer population. Every aspect of dengue viral infection continues to be a challenge; the pathogenesis of severe dengue disease is not known, no vaccine is yet available for protection and the vector control measures are inadequate. Scientific studies addressing various problems of dengue disease have been carried out at a limited number of centers.

Though clinical studies have reported on dengue disease in India, but these are largely based on diagnosis made by kits of doubtful specificity and sensitivity. A lot more is required for creating an impact.

REFERENCES

Acharya Anita, Goswami K, *et al*. 2005. Awareness about dengue syndrome and related preventive practices amongst residents of an urban resettlement colony of south Delhi. september; 190(06). http://www.najms.org

Chinnakali Palanivel, Gurnani Nishant *et al*. 2012. High Level of Awareness but Poor Practices Regarding Dengue Fever Control: A Cross-sectional Study from North India. *North American Journal of Medical Sciences.* June 2012; Vol.(4): p 400. http://www.najms.org.

Dengue in Kerala: A critical review. ICMR Bulletin. 2006; 36:13–22.

Dengue outbreak in Delhi. In: Sharma PL, Sood OP editors. Round table conference series. Gurgaon : Ranbaxy Science Foundation 1996; 1: 3.

Dr. Mohan D Kashinkunti*et al*.A Study of Clinical Profile of Dengue Fever in a Tertiary Care Teaching Hospital.Scholars Journal of Applied Medical Sciences (SJAMS). May 2012 to April 2013; vol.(4): p 280-282.www.saspublisher.com.

Huang, M.C., Wang, S.M., Ho, T. S., Hsu, H.C., Liu, C.C. 2013. "Knowledge attitude and practice of dengue among health care professionals in southern Taiwan", *Journal of the Formosan Medical Association*, Jan 112(1) DOI 10.1016

Matta, S. *et al*. 2014. A study of knowledge and preventive practices among the patients attending OPD services in Safdarjang hospitals. *Journal of evolution of medical and dental sciences.,* Vol 3,Issue 06, Feb10; p148121488, DOI:10.14260/ JEMDS/2014/2011

Nishad Hussain Ahmed *et al*. 2015. A clinic-epidemiological study on dengue in New Delhi: some epidemiological observations. *Indian J Med Res*. 651-9

Park J E. 2013. Preventive and social medicine. 23rd edition. New Delhi: Bhanot publications, P.442-456

Sharma SN, Raina VK, Kumar A. Dengue/DHF: An emerging disease in India. J Com. Dis. 2000; 32(3):175-9.

Swati Jain *et al*. a study to assess knowledge, practice and attitude about the prevention from dengue infection among nursing students.Nursing times journals.june2012;p34

Upadhyay R P *et al*. Level of awareness but poor practices regarding dengue fever control: A cross sectional study from north India.

World health report, Communicable Disease Surveillance & Response (CSR), Dengue fever in India - update, 12 November, 2013 Web site: (http://www.who.int/csr/don/2013_11_12/en/).

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