# Original Article - 2

Assessment of Knowledge Regarding Dengue Fever Among Adults of Selected Village, Ahmednagar, With a View to Develop Health Education Pamphlet.

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**ABSTRACT** 

A study was conducted to assess the knowledge regarding dengue fever among adults of selected village, Ahmednagar, with a view to develop health education pamphlet. The objectives of the study were 1) To assess the knowledge regarding dengue fever among adults. 2) To find out association between knowledge regarding dengue fever and selected demographic variables & 3) To develop health education pamphlet regarding dengue fever.

The conceptual framework of the study was based on Nola. J. Pender's health promotion model. The study was conducted on a sample of 100 adults of Wadagaon Gupta village of Ahmednagar, using purposive sampling technique. In the present study descriptive survey design was adopted. Data were collected by using structured knowledge questionnaire. The obtained data were analyzed by using descriptive and inferential statistics like frequency, percentage, mean, standard deviation and chi square. The knowledge scores of adults revealed that 75% had average knowledge, 19% had good knowledge and remaining 6% had poor knowledge regarding dengue fever.

The study concluded that the knowledge in the respective field is inadequate among the adults and so it is important to initiate actions to enhance the awareness of the people in the community so that they can take necessary measures to prevent diseases.

**Key words :** Dengue fever, adults, health education pamphlet.

### INTRODUCTION

There are many diseases arising because of environmental changes that may be caused by human activities and geographical conditions. One example of these is the disease what we call Dengue fever<sup>[1]</sup>.

It has been studied that dengue is derived from the Swahili phrase "Ka-dingapepo", which describes the disease as being caused by an evil spirit. The Swahili word "dinga" may possibly have its origin in the Spanish word "dengue" meaning fastidious or careful, which would describe the gait of a person suffering the bone pain of dengue fever. Alternatively, the use of the Spanish word may have derived from the similar-sounding Swahili. Slaves in the West Indies who contracted dengue were said to have the posture and gait of a dandy, and the disease was known as "Dandy Fever." [2]

Dengue fever is an acute infectious life threatening mosquito born disease, transmitted through Aedes aegypti mosquito, characterized by episodes of 'saddle back' fever, muscle and joint pain accompanied by an initial erythema and terminal rash of varying morphology. <sup>[2]</sup> It is also called as 'Break bone fever' or 'Dandy fever, occurs more frequently during rainy seasons i.e. in the months of June to September. <sup>[3]</sup>

Over the past 10 to15 years next to diarrheal disease and acute respiratory disease dengue fever has become a leading cause of hospitalization and deaths among children in South East Asia region. The estimated number of annual dengue fever cases is between 20 to 30 million. The main factors for breeding of the mosquitoes is due to unhygienic practices and poor environmental sanitation. Mosquito mainly breeds in open drainages, stagnant water around houses and uncleaned water reservoirs. [4]

The first evidence of dengue fever was reported at Vellore district in Tamilnadu in 1956. The first dengue hemorrhagic fever outbreak was found in Calcutta (West Bengal) in 1963. Without proper treatment, dengue hemorrhagic fever case fatality rate can exceed 20%. With modern intensive supportive therapy; the rate can be reduced to less than 1%. [5]

By using mosquito net, repellent, cream and covering whole body parts can prevent from mosquito bite. By cleaning or removing breeding places like utensils, periodical cleaning or drying of water containers, aerosol spray etc. can prevent breeding of mosquitoes.<sup>[4]</sup>

Even though dengue fever has become one of the growing global health problem, no proper preventive and control measures have been taken effectively. In the absence of specific treatment and vaccine for dengue fever, only a vector control is an important measure to control dengue infection. And also there is a need to develop a vaccination in comparison with

other communicable diseases, which has become challenge for researchers, and there is a need to educate the community in regard to prevention and control with a view to reduce the burden on society and Health Care Delivery System (HCDS).

MATERIALS AND METHODS: A descriptive research approach was considered to carry out the study. The main focus of the study was to assess the knowledge regarding the dengue fever in order to develop and administer health education pamphlet. The samples were adults between the age group 20-60 years residing at Wadgaon Gupta of Ahmednagar. Purposive samples of 100 subjects were taken from the study population for data collection. The data collection instrument was structured knowledge questionnaire. The collected data were analyzed by using descriptive (mean, Standard Deviation) and inferential statistics (Chi square test).

**RESULTS:** Findings Related to Demographic characteristics of samples

Majority of adults i.e.43% were in the age group of 20-30 years, 26% were in the age group of 30-40 years, 19% were in the age group of 40-50 years and 12% were in the age group of 50-60 years. 68% were males and 32% were females.34% had completed secondary education, 30% had their primary education, 29% had their higher education and 7% had completed graduation and above. Majority of adults i.e. 52% were workers, 22% were students, 18% were business - men and 8% were government servants. 49% had monthly income of less than 5,000, 34% had 5,000 to 10,000, 9% had 10,000 to 15,000 and only 8% had monthly income of more than 15,000. 73% were hindus, 10% were others. 9% were muslims and 8% were Christians. 59% were from nuclear family, 31% from joint family and 10% were from extended family. Majority i.e.54% were residing in semi pakka house, 29% were in pakka and 17% were in kaccha house. 91% were not having history of Dengue fever in the last 2 years where as remaining 9% had history of Dengue fever. 51% were never exposed to information regarding Dengue fever where as 49% had information regarding dengue fever. Among 49%, 23% had got information by health worker, 13% by family and friends, 10% by mass media and only 3% had got information by the books and journals.

Findings related to assessment of knowledge regarding dengue fever among adults.

75% of adults had average knowledge, 19% had good

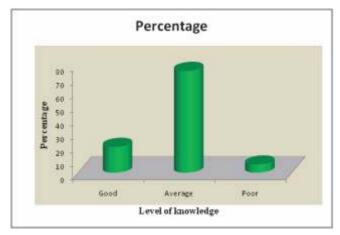
knowledge and 6% had poor knowledge.

Findings related to association between knowledge of adults regarding the dengue fever and selected demographic variables.

The demographic variables age, sex, education, occupation, monthly income, religion, type of family, type of house, previous information regarding dengue fever, source of information were independent of each other. The other demographic variable i.e. history of dengue fever in last 2 years ( $\chi$ 2=6.23) showed an association with knowledge scores at 0.05 level of significance.

Sr. no	Demographic variables	Frequency	Percentage
1.	Age 20 - 30 year 30 - 40 year 40 - 50 year 50 - 60 year	43 26 19 12	43 26 19 12
2.	Sex Male Female	68 32	68 32
3.	Education Primary Secondary Higher secondary Graduation & above	30 34 29 07	30 34 29 07
5.	Monthly income Less than 5,000 5,000 - 10,000 10,000 - 15,000 More than 15,000	49 34 09 08	49 34 09 08
6.	Religion Hindu Christian Muslim Other	73 08 09 10	73 08 09 10
7.	Type of family Nuclear Joint	59 31	59 31
8.	Type of house Kaccha Semi pakka Pakka	17 54 29	17 54 29
9.	History of dengue fever in last 2 years Yes	09	09

Sr.	Demographic variables	Frequency	Percentage
10.	Previous information regarding dengue fever		
	Yes	49	49
	No	51	51
11.	Source of information		
	Family members & friends	13	13
	Health worker	23	23
	Mass media	10	10
	Books and journals	03	03



Graph - 1 DISTRIBUTION OF SAMPLES
BY LEVEL OF KNOWLEDGE

## CONCLUSION

The findings of study revealed that majority of adults had average knowledge and only few had good knowledge. Thus it was found to be important to develop health education pamphlet regarding dengue fever to increase their knowledge.

The sample characteristics of adults with regard to source of health information showed that only 23% of the adults got the health information from health personnel. So this emphasizes need to disseminate more information on health related aspects through health personnel. Hence, the health personnel should take initiative to provide necessary information on dengue fever so as to help them to prevent dengue fever and thereby improving the quality of life.

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