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Knowledge regarding Dengue Fever in Community

Ayesha Naveed Chaudhary[1], Nighat Fatima[2], Nida Nadeem[3], Moanam[4], Ajmal Iqbal[5], Yasir Nawab[6]

[1,2,3,4] BSN, RN Saida Waheed FMH College of Nursing, Pakistan

[5]BSN, RN, CIC, PhD Scholar Saida Waheed FMH College of Nursing, Pakistan

[6]BSN, RN York and Scarborough Teaching Hospitals NHS Foundation Trust, UK

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Abstract: **Dengue is an infectious disease that is primarily communicated through female mosquitoes; Aedes Aegypt. It leads to disastrous hemorrhagic illness. (Pérez et al., 2018). Dengue is prevalent in humid climate and manifest flu-like symptoms, hyperthermia, respiratory symptoms, and often lead to hemorrhage, and organ impairment in severe conditions. Rapidly changing weather, dense population, and negligence towards Dengue Fever could deteriorate the present situation and result in serious problems like hemorrhage, extreme fatigue and abrupt fall in platelet count. The study was aimed to determine the level of knowledge regarding dengue fever among the study population. A descriptive cross-sectional study was conducted in the Gajjumatta community of Lahore. Overall, a fair percentage 525 of participants were found to possess good knowledge regarding dengue fever; its symptoms, transmission between individuals, and how it can be prevented. To conclude these findings more educational drives must be incorporated into different communities to keep their knowledge up to date. Prospective studies should target the other aspects of this prevailing problem as well.**

Keywords: **Dengue Fever, vector-borne, knowledge, attitude, practice.**

I. INTRODUCTION

Dengue is an infectious disease that is primarily communicated through female mosquitoes; Aedes Aegypt. It leads to disastrous hemorrhagic illness. (Pérez et al., 2018). Dengue is prevalent in humid climate and manifest flu-like symptoms, hyperthermia, respiratory symptoms, and often lead to hemorrhage, and organ impairment in severe conditions (Nguyen et al., 2019). Rapidly changing weather, dense population, and negligence towards Dengue Fever could deteriorate the present situation and result in serious problems like hemorrhage, extreme fatigue and abrupt fall in platelet count. (Mutsuddy et al., 2019). In 2010, around 390 million people were diseased with dengue virus across the globe, 14 % of which originate in America. Research studies stressing on knowledge, attitude, and practice regarding mosquito breeding sites, and probable linkages between these elements were not plentiful in America before 2010. (Elsinga et al., 2018).). In 2011, Pakistan experienced an extraordinary epidemic of dengue in Lahore which is the most densely populated city of Punjab (Coudeville, Baurin, & Shepard, 2020). Bangladesh witnessed a sheer increase in cases of dengue in 2019 due to unsanitary practices and unawareness among people. (Hossain et al, 2020

A positive attitude of the public and support from the government regarding dengue fever can help reduce the frequency of dengue cases in Dhaka and, eventually across the country (Abir, T., et al 2021). There had been a few studies focusing on public awareness of dengue prevention, but there is very little literature about public awareness on their function in dengue

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prevention and control. Hence, it is very significant to take aggressive actions to minimize the occurrence and disasters of dengue, for which the obligation lies not only with healthcare personnel but also with the general communities (Jayawickreme et al., 2021).

The study was aimed to determine the level of knowledge regarding dengue fever among the study population.

II. METHODOLOGY

A descriptive cross-sectional study was conducted in the Gajjumatta community of Lahore. A total of 60 residents of Gajjumatta were selected as subjects through a non-probability convenient sampling technique. Individuals aged 20 to 70 years who had been living in this community for the last 12 months were interviewed. The research instrument was discussed with the 2 consultants of Internal medicine to evaluate its validity. After taking written consent from each participant, they were interviewed using a questionnaire. Descriptive analysis was used to calculate the frequencies and percentages.

III. RESULTS

The participants' responses were recorded through a questionnaire and analyzed to determine the knowledge and attitude of people regarding dengue fever. The questionnaire was composed of two components; part I was about demographic variables and part II had questions to assess knowledge and attitude regarding dengue fever. The majority 92% of the subjects were females, 43% were aged 20-29 years with the same ratio of married to unmarried i.e. 48% and 85% of them were working as laborers. Table I below illustrates the frequency and percentage of participants according to their demographic variables.

TABLE I: Demographic characteristics of study participants

Characteristics		Frequency (n)	Percentage (%)
Sex	Male	5	8
	Female	55	92
Age	20-29	26	43
	30-39	11	18
	40-49	16	27
	50-59	5	8
	60-70	2	4
Marital Status	Married	29	48
	Unmarried	29	48
	Widow	2	4
Occupation	Government job	2	3.3
	Factory worker	2	3.3
	Small-scale business	5	8.3
	Laborer	51	85.0

A fair number of participants were able to correctly identify typical symptoms of dengue such as fever (53% of the participants), headache (51% of the participants), fatigue (42% of the participants), rashes on the body (30% of the participants), abdominal pain (37% of the participants), treatment (58% of the participants), and blood transfusion (43% of the participants). They were also asked about the transmission of dengue virus and its preventive measures and a vast number of participants were able to respond well to these questions. Table II below shows the participants' responses to the questionnaire.

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TABLE II: Participants' responses (percentages) to the questionnaire

Questions	Strongly disagree%	Disagree %	Neutral %	Agree %	Strongly agree%
Can dengue fever be transmitted by a blood transfusion?	8.3	1.7	28.3	18.3	43.3
Covering water containers reduce mosquitoes?	3.3	5.0	6.7	28.3	56.7
Dengue is a serious illness?	1.7	1.7	5.0	18.3	73.3
Do all type of mosquitoes transmit dengue fever?	30.0	15.0	8.3	8.3	38.3
Do ticks transmit dengue fever?	36.7	26.7	20.0	10.0	6.7
Does mosquito breed in standing water?	3.3	3.3	11.5	28.3	53.3
Does the dengue mosquitoes likely to feed /bite in the sunshine?	3.3	1.7	13.3	36.7	45.0
Does window screen and bed nets reduce mosquitoes?	8.3	10.0	3.3	33.3	45.0
Have you heard about the dengue fever?	8.3	3.3	1.7	18.3	68.3
Insecticides sprays reduce mosquitoes?	5.0	1.7	3.3	15.0	75.0
Is abdominal pain a symptom of dengue fever?	16.7	10.0	36.7	11.7	25.0
Is fever a symptom of dengue?	15	1.7	10.0	20.0	53.3
Is headache a symptom of dengue fever?	10.0	1.7	30.0	6.7	51.7
Is muscles pain a symptom of dengue fever?	11.7		21.7	25.0	41.7
Is rash a symptom of dengue fever?	10.0	13.0	20.0	26.7	30.0
Is there a treatment for dengue fever?	6.7	1.7	11.7	21.7	58.3
Mosquito's repellents prevent mosquitoes?	1.0	1.7	5.0	19.0	73.0
Pouring chemicals in standing water can kill mosquito's larvae?	2.0	5.0	13.0	20.0	60.0
Removal of standing water can prevent mosquitoes breeding?	1.7	1.7	3.3	18.3	75.0
Would you consult a physician for a dengue fever?	5.0	1.7	5.0	26.7	61.7
You are risk of getting dengue?	8.3	5.0	6.7	20.0	60.0

Overall, a fair percentage of participants were found to possess good knowledge regarding dengue fever; its symptoms, transmission between individuals, and how it can be prevented. Figure I demonstrates the participants' knowledge regarding dengue fever in general.

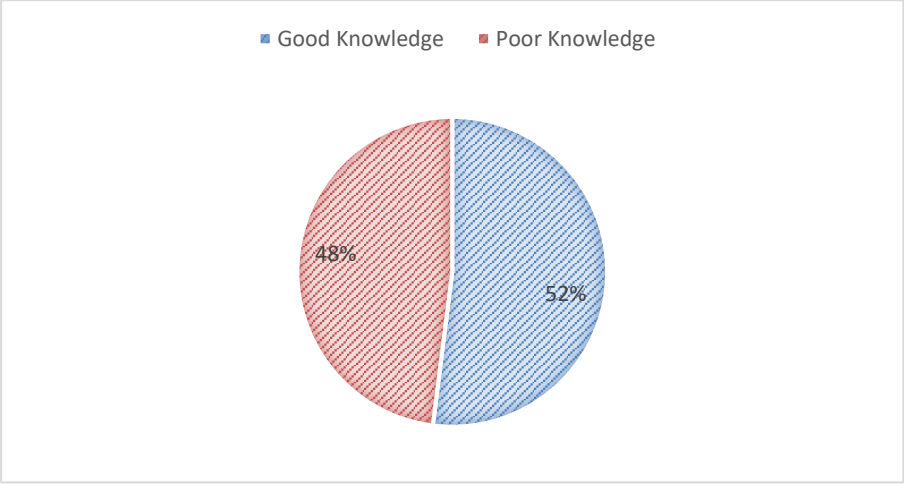

Fig I: Overall knowledge of participants regarding dengue fever; its symptoms, transmission between individuals, and preventive measures

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IV. CONCLUSION

The findings of this study showed that quite a handful of the participants possess good knowledge regarding dengue fever, when enquired further they informed that there are few educational campaigns ongoing in the community for making them aware of symptoms, transmission, and prevention of dengue fever. To conclude these findings more educational drives must be incorporated into different communities to keep their knowledge up to date. Prospective studies should target the other aspects of this prevailing problem as well. The government should fund such studies so that more and more evidence could be produced to develop effective means to deal with this prevalent concern.

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