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## **A Cross Sectional Study on Knowledge, Attitude and Practices Regarding Dengue Infection among People Attending at the Outpatient Department in Sher-E-Bangla Medical College Hospital, Barishal, Bangladesh**

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### **Abstract**

Dengue fever is a rapidly re-emerging mosquito-borne viral disease and a major public health concern globally and in Bangladesh. Prevention largely depends on community knowledge, attitudes, and practices (KAP) toward dengue control. This study aimed to assess KAP levels regarding dengue infection among individuals attending the Outpatient Department (OPD) of a tertiary hospital in Barishal, Bangladesh. A descriptive cross-sectional study was conducted among 203 OPD attendees at Sher-E-Bangla Medical College Hospital, Barishal. Data were collected using a structured, pre-tested, Bangla-translated questionnaire (54 items) covering socio-demographic details, knowledge (26 items), attitude (9 items), and practice (10 items). Data were analyzed using SPSS version 27 after obtaining ethical approval and informed consent. Participants were mostly young (mean age  $29.5 \pm 9.02$  years), male (55.7%), Muslim (79.8%), and from lower-income families. The mean knowledge, attitude, and practice scores were  $14.98 \pm 6.39$ ,  $5.68 \pm 2.21$ , and  $6.07 \pm 2.20$ , respectively. Overall, 39.4% had poor knowledge, 31.0% average, and 29.6% good knowledge. Attitudes were mostly positive (44.8% good), while practices were moderate (40.9% average). Despite favorable attitudes, knowledge gaps and inconsistent preventive practices persist, strengthening community-focused education on dengue symptoms, transmission, and sustainable vector control is vital for effective prevention in Bangladesh.

### **Keywords:**

*Attitude; Dengue Infection; Knowledge; Practice; Vector Control.*

### **INTRODUCTION**

Dengue fever stands as a re-emerging arboviral illness with profound public health implications, having established its presence across all tropical and sub-tropical regions of the

world (Bhatia et al., 2013). Caused by a flavivirus transmitted primarily by *Aedes* mosquitoes, dengue is endemic throughout Asia, the Pacific, Africa, and the Americas, with approximately 400 million infections and 100 million clinically apparent cases occurring annually, cementing its status as the most rapidly spreading mosquito-borne viral illness (Pierson & Diamond, 2020). The dengue virus (DENV) is historically known for its four antigenically distinct serotypes, though a fifth serotype (DENV-5) was recently identified, adding complexity to the epidemiological landscape (Barua et al., 2024). The clinical presentation of the disease is highly variable, ranging from a mild, self-limiting febrile illness to severe and potentially fatal complications, including shock, bleeding, and organ damage, a spectrum formally classified by the World Health Organization into categories such as severe dengue, dengue with warning signs, and dengue without warning signs. This wide clinical range, combined with the virus's complex pathophysiology involving antibody-dependent enhancement where a secondary infection with a different serotype increases the risk of severe disease, makes dengue a persistent and challenging global health threat.

The global and regional prevalence of dengue has escalated dramatically in recent decades. Before 1970, only nine countries had experienced severe dengue outbreaks, whereas today the disease is endemic in more than 100 countries, putting an estimated 3.9 billion people at risk annually (Bhatt et al., 2013). The South-East Asia Region, in particular, has borne a significant burden, with countries like India, Indonesia, Myanmar, and Sri Lanka witnessing a more than threefold increase in cases over the last decade. For instance, Sri Lanka faced its most significant outbreak in 2017 with 186,101 reported cases and 440 deaths, while India reported 289,237 cases and 485 deaths in 2023 alone (Tissera et al., 2020). Within this regional context, Bangladesh presents a concerning case study. After the first identified case in 1964, the country has experienced sporadic outbreaks, with the situation intensifying in the 21st century. A devastating turn occurred in 2019, with reported cases skyrocketing to 101,354, a trend that has established dengue as a formidable and recurring public health crisis within the nation, placing an immense strain on its healthcare system and populace (Sharmin et al., 2015).

The impact of dengue infection extends far beyond the immediate health consequences, creating significant socio-economic ripples that affect individuals, families, and the broader healthcare infrastructure. On an individual level, the infection can progress from mild symptoms to severe, life-threatening complications, with some patients experiencing lingering effects like extreme fatigue and cognitive impairment long after the acute phase has passed (Ali et al., 2024). For families, the economic burden is substantial, encompassing the direct costs of hospitalization and diagnostic testing, as well as the indirect costs from loss of income when earning members fall ill or must care for sick relatives (Haque et al., 2021; Salmon-Mulanovich et al., 2015). This financial strain is compounded by emotional and psychological distress, including anxiety and social isolation, which can disrupt daily routines and overall family well-being (Salamanca-Ramos et al., 2025). At a national level, these individual and familial burdens aggregate into a significant economic impact, reducing workforce productivity and diverting precious resources within the healthcare system (Marczell et al., 2024).

Given the absence of a widely accessible specific antiviral treatment or vaccine, the cornerstone of dengue control remains the prevention of mosquito bites and the reduction of

vector breeding sites. Key risk factors, such as unplanned urbanization, population density, and water storage practices, highlight that community exposure is closely related to human behavior (World Health Organization, n.d.). Consequently, the most efficient strategy to curb the spread of dengue focuses on reducing human-vector interaction through integrated vector management and, crucially, by fostering informed community participation (Elsinga et al., 2018). This underscores the pivotal role of a population's Knowledge, Attitude, and Practices (KAP) regarding dengue. Understanding community awareness and behavioral patterns is essential for designing effective public health interventions. It is within this critical framework that the present study is situated, aiming to assess the knowledge, attitudes, and practices regarding dengue infection among people attending the Outpatient Department (OPD) of a tertiary-level hospital in Bangladesh. The findings from this research are intended to identify existing gaps and strengths in public understanding, which can ultimately inform targeted health education campaigns and strengthen national dengue prevention and control efforts.

## METHOD

This study employed a descriptive cross-sectional design to assess the knowledge, attitude, and practices regarding dengue infection among its participants. The research conducted at the Outpatient Department (OPD) of Sher-E-Bangla Medical College Hospital in Barishal, Bangladesh, focusing on individuals attending various OPDs such as Medicine, Surgery, Gynaecology, ENT, Dental, and Skin. The sample size was calculated as 203 using the World Health Organization (WHO) formula, with a 95% confidence level ( $Z=1.96$ ), an assumed prevalence of knowledge or practice ( $p$ ) of 0.843 derived from a similar study (Prue, et al., 2024), and a margin of error ( $d$ ) of 0.05. A non-probability, convenient sampling technique used to recruit participants who meet the inclusion criteria, which include being 18 to 50 years old, not currently affected by dengue, willing to participate, fluent in Bangla, physically and mentally stable, and available at the time of data collection.

The data collection instrument was a structured questionnaire, adapted from existing similar studies (Prue et al., 2024), and translated into Bangla to ensure comprehension. This 54-item questionnaire was divided into four sections: socio-demographic characteristics (9 items), knowledge (26 items), attitude (9 items), and practices (10 items) regarding dengue infection. Responses for the knowledge, attitude, and practice sections were scored dichotomously, with 1 for a correct/positive response and 0 for an incorrect/negative response. The total scores for each section was categorized into 'poor,' 'average,' and 'good' levels. Following approval from the hospital authority, data was collected through face-to-face interviews. The researcher was introduced themselves, explain the study's purpose, benefits, and the participants' rights, and obtain written informed consent before commencing the interview, ensuring that participation was voluntary and confidentiality was maintained.

After collection, the data was checked, verified, coded, and entered into the Statistical Package for the Social Sciences (SPSS) version 27 for analysis. Descriptive statistics, including frequencies and percentages, was used to summarize the sample characteristics and the levels of knowledge, attitude, and practices, with results presented using tables, graphs, and charts. Ethical considerations were paramount throughout the study design. This included obtaining informed

consent in the local language, treating all participants fairly and without discrimination, conducting interviews privately to ensure confidentiality, and clarifying any queries from the participants to ensure their full understanding and comfort throughout the research process.

## RESULT

The present study assessed the knowledge, attitude, and practices (KAP) regarding dengue infection among individuals attending at the outpatient department (OPD) in Sher-E-Bangla Medical College Hospital, Barishal, Bangladesh. A total of 203 participants were included in this descriptive cross-sectional study. This section highlights the analysis and interpretation of the collected data in detail.

Based on the provided data situating in Table 1, the participant group (N=203) can be characterized as a predominantly young, male, Muslim, and single cohort with a moderate level of education and a lower-income profile. The sample is youthful, with a mean age of 29.5 years and over half (60.1%) falling between 18 and 28 years old. A majority of participants were male (55.7%) and identified as Muslim (79.8%), with a significant proportion being single (70.4%). Education levels were varied, with the largest group having a secondary education (32%), followed closely by those with a graduate degree or higher (29.6%). The most common occupations were homemaker (37.4%) and student (26.1%), which aligns with the young age distribution. Socioeconomically, the majority lived in nuclear families (53.2%) and most participants' families (58.1%) had a relatively low monthly income, falling between 10,000 and 20,000 Bangladeshi Taka. Housing type was mixed, but "semi-building" was the most frequent (41.4%).

**Table 1. Distribution of sociodemographic characteristics among the participants (N=203)**

Variable	Category	Frequency	Percentage
Age (in years)	18–28	122	60.1
	29–39	40	19.7
	40–50	41	20.2
	Mean age ± SD = 29.52 ± 9.022 ; Range = 18-50 years		
Gender	Male	113	55.7
	Female	90	44.3
Religion	Muslim	162	79.8
	Hindu	41	20.2
Marital Status	Single	143	70.4
	Married	56	27.6
	Divorced	2	1.0
	Widowed	2	1.0
Education level	Primary	41	20.2
	Secondary	65	32
	Higher Secondary	37	18.2
	Graduate and above	60	29.6
Occupation	Homemaker	76	37.4
	Student	53	26.1
	Businessman	19	9.4

	Day laborer	17	8.4
	Others	38	18.7
Type of family	Nuclear	108	53.2
	Joint	95	46.8
Type of Residence	Kaccha	50	24.6
	Semi-building	84	41.4
	Building	69	34.0
Monthly family income (in Bangladeshi Taka)	10,000-20,000	119	58.1
	21,000-30,000	46	22.7
	31,000-40,000	18	8.9
	41,000-50,000	11	5.4
	51,000-60,000	10	4.9

Based on the data presented in Table 2, the participants demonstrated a moderate overall knowledge of dengue infection, with a mean total knowledge score of 14.98 out of a possible 26 (SD=6.398), equivalent to approximately 57.6%. Their understanding was strong in fundamental areas: an overwhelming majority knew that mosquitoes cause dengue (92.1%), and nearly all correctly identified fever as a key symptom (95.1%). Knowledge was also reasonably high regarding the primary vector (*Aedes* mosquito, 69.5%), its breeding site (stagnant water, 70.0%), and several preventive measures like using bed nets (76.4%) and proper garbage disposal (75.9%). However, significant and critical knowledge gaps were evident. Specifically, there was considerable confusion about the mosquito's feeding time, with only 40.9% providing the correct answer, and a dangerous misconception that dengue transmits through direct contact was held by 71.4% of participants. Symptom recognition was highly variable; while common symptoms like headache were well-known (77.8%), severe warning signs like bleeding (37.9%) and skin rashes (37.4%) were poorly recognized.

**Table 2: Distribution of participant’s responses for knowledge items regarding dengue infection (N = 203)**

<b>I= General knowledge about dengue infection</b>				
	<b>Items</b>	<b>Correct Response n(%)</b>	<b>Incorrect Response n(%)</b>	<b>M±SD</b>
01.	Knows about dengue infection.	149(73.4%)	54(26.6%)	.73±.443
02.	Mosquito causes dengue infection.	187(92.1%)	16(7.9%)	.92±.270
03.	<i>Aedes</i> as the mosquito causes dengue.	141(69.5%)	62(30.5%)	.69±.462
04.	Breeding place of mosquito (stagnant water).	142(70.0%)	61(30.0%)	.70±.460
05.	Feeding time of mosquito (Morning and afternoon).	83(40.9%)	120(59.1%)	.41±.493
06.	Dengue fever affects all age.	140(69.0%)	63(31.0%)	.69±.464
07.	Dengue sometimes show flu like illness.	92(45.3%)	111(54.7%)	.45±.499.
08.	Dengue fever transmits by direct contact.	58(28.6%)	145(71.4%)	.29±.453

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09.	Dengue is different from malaria.	101(49.8%)	102(50.2%)	.50±.501
10.	Dengue infection causes death.	127(62.6%)	76(37.4%)	.63±.485
11.	Preventive measures (Mosquito coil).	148(72.9%)	55(27.1%)	.73±.446
12.	Preventive measures (Using bed nets and window screens).	155(76.4%)	48(23.6%)	.76±.426
13.	Preventive measures (Spraying insecticides).	81(39.9%)	122(60.1%)	.40±.491
14.	Preventive measures (Eliminating stagnant water sources).	146(71.9%)	57(28.1%)	.72±.450
15.	Preventive measures (proper garbage dumping).	154(75.9%)	49(24.1%)	.76±.429
16.	Preventive measures (Using mosquito repellants).	75(36.9%)	128(63.1%)	.37±.484

**II= Symptoms related knowledge about dengue infection**

17.	Bleeding	77(37.9%)	126(62.1%)	.38±.486
18.	Hypertension	66(32.5%)	137(67.5%)	.33±.470
19.	Skin rashes	76(37.4%)	127(62.6%)	.37±.485
20.	Diarrhea	69(34.0%)	134(66.0%)	.43±.475
21.	Headache	158(77.8%)	45(22.2%)	.78±.416
22.	Joints pain	133(65.5%)	70(34.5%)	.66±.476
23.	Nausea and vomiting	121(59.6%)	82(40.4%)	.60±.492
24.	Fatigue	113(55.7%)	90(44.3%)	.56±.498
25.	Fever	193(95.1%)	10(4.9%)	.95±.217
26.	Itching	55(27.1%)	148(72.9%)	.27±.446

**Mean ± SD of Total Knowledge (14.98 ± 6.398)**

The findings presented in Table 3 reveal a generally positive but somewhat dependent attitude among participants towards dengue infection, with a mean total attitude score of 5.68 out of 9 (SD=2.211). A strong majority held the constructive belief that dengue is preventable (75.4%) and that the government should bear the primary responsibility for its control (88.7%). However, this high expectation of governmental action appears to contrast with a more moderate sense of personal agency, as only 67.5% believed they could individually contribute to prevention, and even fewer (62.1%) thought the public could play a crucial role. While most participants recognized dengue as a serious illness (63.1%) and feared contracting it (59.6%), critical gaps in urgency and understanding were evident. Notably, less than half (47.8%) were concerned about its potential for future spread, and only about half understood the necessity of immediate treatment (52.7%) or the absolute requirement of eliminating larvae at breeding sites (51.7%).

**Table 3. Distribution of participant’s responses for attitude items regarding dengue infection (N = 203)**

Variables	Correct Response n(%)	Incorrect Response n(%)	M±SD
01. Fear of contracting dengue.	121(59.6%)	82(40.4%)	.60±.492
02. Dengue infection is serious illness.	128(63.1%)	75(36.9%)	.63±.484
03. Dengue infection is preventable.	153(75.4%)	50(24.6%)	.75±.432
04. The government should be responsible for controlling dengue.	180(88.7%)	23(11.3%)	.89±.318
05. Individually contribute to prevent dengue.	137(67.5%)	66(32.5%)	.67±.470
06. Dengue requires immediate treatment because there is no cure.	107(52.7%)	96(47.3%)	.53±.500
07. The public can play a crucial role in dengue control.	126(62.1%)	77(37.9%)	.62±.486
08. Elimination of larvae at the breeding site is absolutely required.	105(51.7%)	98(48.3%)	.52±.501
09. Dengue has a high potential to spread in the future if an outbreak occurs.	97(47.8%)	106(52.2%)	.48±.501
<b>Mean ± SD of Total Attitude (5.68±2.211)</b>			

Table 4 shows that the participants reported engaging in dengue prevention practices with moderate consistency, achieving a mean total practice score of 6.07 out of 10 (SD=2.20). The adoption of preventive measures was high for several key actions: the vast majority used mosquito nets (87.2%) and regularly cleaned garbage (82.8%), while a substantial proportion also disposed of water-holding containers (70.4%) and swept their yards daily (69.0%). However, the practices reveal significant gaps in critical areas of source reduction and comprehensive personal protection. For instance, only about two-thirds consistently covered water containers at home (64.0%), a crucial step in eliminating mosquito breeding sites. Furthermore, less effective or less consistently applied methods were common, such as covering the body with clothes (46.3%) and using window screens (55.2%). The reliance on less desirable methods like using smoke was low (36.5%).

**Table 4. Distribution of participant’s responses for practices items regarding dengue infection (N = 203)**

Variables	Correct Response n(%)	Incorrect Response n(%)	M±SD
01. Pattern of practices for sweeping yard (Once daily).	140(69.0%)	63(31.0%)	.69±.464
02. Pattern of practices for sweeping yard (Once in alternative day).	55(27.1%)	148(72.9%)	.27±.446
03. Measures taken to prevent DI (Used of mosquito nets).	177(87.2%)	26(12.8%)	.87±.335

04.	Measures taken to prevent DI (Cleaned garbage).	168(82.8%)	35(17.2%)	.83±.379
05.	Measures taken to prevent DI (Covered water container at home).	130(64.0%)	73(36.0%)	.64±.481
06.	Measures taken to prevent DI (Utilized mosquito repellent products).	140(69.0%)	63(31.0%)	.69±.464
07.	Measures taken to prevent DI (Disposed of water-holding containers).	143(70.4%)	60(29.6%)	.70±.457
08.	Measures taken to prevent DI (Covered the body with clothes).	94(46.3%)	109(53.7%)	.46±.500
09.	Measures taken to prevent DI (Used smoke to repel mosquitoes).	74(36.5%)	129(63.5%)	.36±.482
10.	Measures taken to prevent DI (Used window screens).	112(55.2%)	91(44.8%)	.55±.499
<b>Mean ± SD of Total Practice (6.07±2.20)</b>				

In the Table 5, the overall assessment of the participants' Knowledge, Attitude, and Practice (KAP) regarding dengue infection reveals a critical disconnect. While a plurality of participants (44.8%) demonstrated a "Good" attitude and a moderate level of practice was most common (40.9% in the "Average" category), knowledge emerged as the most significant weakness. Notably, the largest single group for knowledge was "Poor" (39.4%), indicating a substantial deficit in fundamental understanding.

**Table 5: Distribution of overall scores and level of knowledge, attitude & practice regarding dengue infection (n=203)**

Levels		Frequency (n)	Percent(%)
Knowledge	Poor	80	39.4
	Average	63	31.0
	Good	60	29.6
	<b>Mean ± SD</b>	<b>14.98±6.398</b>	
Attitude	Poor	48	23.6
	Average	64	31.5
	Good	91	44.8
	<b>Mean ± SD</b>	<b>5.68±2.211</b>	
Practice	Poor	51	25.1
	Average	83	40.9
	Good	69	34.0
	<b>Mean ± SD</b>	<b>6.07±2.20</b>	

## DISCUSSION

In this present study, a total of 203 participants were included in this descriptive cross-sectional study, with an overall mean age of 29.52 years (SD = 9.022). The age distribution in this study is consistent with previous research conducted in Multan, Pakistan and Bangladesh, where the majority of respondents belonged to the 18–28-year age group (Hossain et al., 2021; Sajjad et al., 2023). This pattern reflects that younger individuals, often being more mobile and socially active, are both more exposed to dengue vectors and more likely to seek outpatient services for health-related issues. Moreover, this age group typically has higher literacy and awareness levels, allowing them to engage effectively in preventive health programs if properly guided.

In terms of educational background, the present study found that 29.6% of participants had completed graduation and above, 18.2% had higher secondary, 32% had secondary level education, and 20.2% had only primary education. These findings are similar to a study conducted in Pakhtunkhwa Province, Pakistan, where the educational distribution of participants followed a comparable pattern (Khan et al., 2022). Education plays a crucial role in shaping individuals' health-seeking behaviors and understanding of disease prevention strategies. Participants with higher education levels are generally more likely to possess accurate information about dengue transmission and preventive measures. However, despite a considerable proportion of educated respondents in the present study, knowledge gaps regarding dengue infection were still observed, indicating that educational attainment alone may not ensure adequate awareness without sustained public health communication and behavior change interventions.

Family structure also emerged as a notable factor in the present study, where 53.2% of respondents belonged to nuclear families while 46.8% were from joint families. This distribution aligns with earlier studies which reported that family structure can influence the flow of health-related information and collective preventive behavior (Ali et al., 2024; Sharma et al., 2022). Individuals living in joint families may benefit from shared responsibility in maintaining household hygiene and mosquito control practices, whereas nuclear families may face challenges due to limited manpower and shared awareness. Thus, public health interventions should take family structure into account when designing community-based prevention strategies.

The type of residence is another determinant that may influence exposure to mosquito breeding sites. In this study, 34% of respondents lived in concrete buildings, 41.4% in semi-buildings, and 24.6% in kaccha (non-permanent) structures. These results are consistent with findings from (Pandey & Costello, 2019), who reported that dengue infection risk is often higher in households with poor structural integrity and inadequate water drainage systems. Semi-permanent and kaccha houses often lack proper sanitation facilities, and water storage practices in such dwellings can provide ideal breeding sites for *Aedes aegypti* mosquitoes. Therefore, public health programs must emphasize environmental sanitation and community participation to address these risk factors effectively.

In terms of socioeconomic status, the average monthly family income in this study was found to be BDT 24,339, which is slightly below the national average of BDT 32,422 reported by the Bangladesh Bureau of Statistics (BBS, 2024). Although the income gap is not substantial, it

indicates that the study population represents a lower-middle to middle-income group. Income disparities have significant implications for dengue prevention since low-income families may have limited access to mosquito repellents, nets, and healthcare services. Additionally, the lower-income population often resides in densely populated urban or semi-urban settings with poor waste management, increasing the likelihood of mosquito breeding and disease transmission.

Regarding knowledge on dengue infection, the present study revealed that 39.4% of the participants exhibited poor knowledge. This finding is comparable to a study conducted in India by (Vyas et al., 2021), who reported similarly low levels of knowledge. However, this contrasts with research findings from Nepal, where participants demonstrated higher awareness levels about dengue transmission and prevention (Bhandari et al., 2024). The disparity could be due to differences in public health education initiatives, community engagement, and access to health information between these regions. The observed knowledge gap in this study highlights the need for intensified information, education, and communication (IEC) activities, particularly targeting lower-educated and low-income populations.

When assessing specific aspects of dengue knowledge, the majority of respondents correctly identified fever (99%) and headache (94.7%) as the most common symptoms of dengue infection. These findings are consistent with studies conducted in Jamaica (Shuaib et al., 2010), Bangladesh (Rahman et al., 2022), and Sri Lanka (Jeelani et al., 2015), where fever and headache were also widely recognized. Nevertheless, awareness of other warning signs such as abdominal pain, vomiting, or bleeding manifestations was relatively limited, suggesting that the public's understanding remains focused on the most obvious symptoms. This limited awareness may delay timely medical consultation and increase the risk of severe dengue complications.

Concerning attitudes toward dengue prevention, 77.3% of participants in the current study demonstrated a positive attitude, with a mean attitude score of 7.30 (SD = 1.252). This is comparable to findings from Vietnam, where a majority of respondents also exhibited favorable attitudes toward dengue control measures (Nguyen et al., 2019). A positive attitude is a critical precursor to effective behavioral change; however, it must be reinforced through consistent education and community engagement. The high proportion of positive attitudes in the present study suggests that people are generally aware of dengue as a serious health threat but may lack practical knowledge on implementing preventive measures effectively.

In terms of preventive practices, 64% of respondents demonstrated an average level of practice, with a mean score of 7.79 (SD = 1.156). This aligns with a study conducted among slum dwellers in Dhaka City, where the majority of participants also exhibited moderate preventive behavior (Rahman et al., 2023). Common preventive practices such as using mosquito nets, covering water containers, and cleaning surroundings were reported by participants; however, the frequency and consistency of these actions varied. This indicates a gap between knowledge and practice, which is a recurrent theme in dengue KAP studies across South Asia. The gap suggests that while awareness campaigns may have improved knowledge, translating that knowledge into sustained preventive behavior remains a major challenge.

The findings of this study underscore that despite moderate awareness and positive attitudes, a substantial knowledge gap persists regarding dengue transmission and prevention,

directly influencing preventive practices. This gap likely contributes to the continued high morbidity and mortality associated with dengue infection in Bangladesh. Public health strategies should therefore focus on integrated community-based interventions that promote behavioral change rather than simply disseminating information. Educational campaigns using mass media, community mobilization through local leaders, and school-based programs could be effective in enhancing public participation in dengue control efforts.

According to the Centers for Disease Control and Prevention (CDC, n.d.), dengue prevention should primarily focus on eliminating mosquito breeding sites by cleaning and covering water containers, properly disposing of garbage, using repellents, and ensuring window and door screens are intact. Incorporating these recommendations into national and local awareness campaigns could greatly reduce the incidence of dengue infection. Furthermore, regular monitoring and evaluation of KAP levels are essential to assess the effectiveness of existing health promotion programs and identify areas requiring reinforcement.

## **CONCLUSION**

The study highlights that while people attending OPD in a tertiary hospital in Barishal possess generally positive attitudes toward dengue prevention, their knowledge and practices remain suboptimal. There is a clear need for targeted educational interventions emphasizing early detection, environmental management, and community participation. Strengthening health literacy, improving socio-environmental conditions, and enhancing public engagement through continuous awareness programs can collectively mitigate the dengue burden in Bangladesh.

## **ACKNOWLEDGEMENT**

The authors are very grateful to the authority and employees of the Barishal Nursing College and Sher-E-Bangla Medical College Hospital, Barishal, for their unwavering support in completing this study on time.

## **CONFLICT OF INTEREST**

None

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