

**FACTORS INFLUENCING DENGUE PREVENTION AND
TREATMENT SEEKING BEHAVIOURS
OF MOTHERS ATTENDING CLINICS IN PILIYANDALA
MEDICAL OFFICER OF HEALTH AREA**

By

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Factors Influencing Dengue Prevention and Treatment Seeking Behaviours of Mothers Attending Clinics in Piliyandala Medical Officer of Health Area

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Dengue is identified as one of the major public health diseases in Sri Lanka, with average annual incidence of more than 100 cases per 100000 population. It is considered to be endemic in the country with perennial transmission. In recent years, dengue cases have risen exponentially with outbreaks of increasing magnitude and frequency. In 2022, the country recorded a case incidence of 345.7 cases per 100000 population with a Case Fatality Rate (CFR) of 0.09%. As of mid-June 2023, there are nearly 46000 dengue cases reported throughout the country.

The age cohort comprising of economically productive individuals between 20-49 years bears the brunt of the disease with nearly 43% of the total reported cases and 49% deaths reported in 2022, while 25% of cases reported from the school going age cohort of 5-19 years. Therefore, burden of dengue is thought to be multifaceted with cost of lost man hours added to the expense of treatment and prevention activities. Further, given the proportion of school aged cohort impacted by the disease, mothers play a major role in identification, early treatment seeking, and prevention of the disease at the household level.

A descriptive cross-sectional study was conducted to explore the factors that could influence prevention and treatment seeking behaviours in dengue among mothers in Piliyandala Medical Officer of Health (MOH) area which is considered a dengue high risk locality.

From the sample of 427, 387 mothers responded with a response rate of 90.6%. The majority were Sinhalese (n=346, 89.4%) and Buddhists by religion (n=287, 74.2%). Nearly 41% (n=157) of respondents have completed education up to GCE A/L and 48.8% (n=189) of mothers earned between Rs.25001-50,000. Further, majority were housewives (n=246, 63.6%). Out of all respondents, 284 (73.4%) mothers have come to an antenatal clinic. Only 23% (n=89) reported co-morbidities, with Diabetes identified as the highest among those mothers (n=44, 49.4%). Moreover, 59 mothers (15.2%) revealed about past history of dengue, while 56 (14.5%) mothers claimed family history of dengue within last month.

The majority of the mothers failed to identify the correct causative agent of dengue, citing it as of parasitic origin (n=214, 55.3%). Nearly half of the mothers (n=193, 49.9%) had no idea on the frequency of dengue infection during a human life cycle. Only 22.4% (n=87) were able to state the correct time to refer to a doctor, if they suffer from fever. Nevertheless, 335 (86.5%) mothers were able to correctly identify the symptoms of dengue and warning symptoms of dengue (n=224, 57.9%).

At the household level, nearly 50% of the mothers (n=188) said they could not dedicate a specific time for dengue prevention at home. Additionally, more than half of the mothers (n=227, 58.7%) said they had priorities to attend than dengue prevention at home. Furthermore, for 46.5% (n=180) mothers, cost of treatment has deterred them from accessing a doctor. Nevertheless, 225 (58.1%) mothers said availability of a doctor, close to home has facilitated prompt medical advice, while 351 (90.7%) of mothers stated availability of drugs (e.g., paracetamol) at home helped them in fever control.

At community level, lack of awareness of neighbours on dengue prevention was identified as a barrier by more than half of mothers (n=204, 53%). Out of all mothers 62.3% (n=241) thought that municipal councils and local government bodies were not contributing enough for dengue prevention. Nevertheless, nearly 75% (n=287) of respondents agreed that the MOH office was conducting an adequate number of dengue prevention programmes. Closer to 49% (n=187) mothers said finding funds for a private medical consultation was a barrier.

At the national level, nearly half of the mothers (n=181, 46.8%) stated that the government has not given due priority for dengue prevention. Lack of collaboration between health and non-health sectors for dengue prevention was highlighted as a barrier by 246 (63.5%) mothers. However, more than 75% (n=296) of mothers thought adopting more stringent laws would facilitate prevention of dengue in the country.

Therefore, rethinking about the way health authorities coordinate with non-health actors, communicate dengue prevention messages to households and communities and advocacy for stringent laws against repeated offenders would be game changers in dengue prevention in future.

Key Words: dengue prevention, treatment seeking in dengue, barriers for dengue prevention