Study on Knowledge, Attitudes and Practices Regarding Dengue Fever in a Cohort of Advanced Level Students in Sri Lanka

Lakmini Inoka Wijesooriya[1],Dilshani G Hitige[2], Yanushka B Herath[1] ,R A I Sugandhi[1],Shirom Rajeev Siriwardana[3]

Introduction: Dengue is a leading healthcare challenge in Sri Lanka. In 2015, 29,777 dengue cases were reported and this increased by 85.2% (55150 cases) in 2016. Last 10 months of year 2017 reported 158854 suspected dengue cases. Of them, about 30% were children of 5-19 years. Schoolchildren of advanced level (A/L) (Grade-12&13) are influential and useful on dengue control activities in schools.

Objective: To determine knowledge, attitudes and practices regarding dengue in A/L students in Sri Lanka.

Method: A cross sectional study was conducted with 258 randomly selected A/L students who attended medical exhibition, Faculty of Medicine, Ragama, Sri Lanka-2016. Data were collected before students visited the exhibition, using questionnaires and analyzed.

Result: Study group consisted of 53.1% (137/258), 21.7% (56/258), 7% (18/258) & 18.2% (47/258) students (16-19years) belonging to biology, mathematics, commerce and art streams respectively with 53.9% (139/258) females. According to districts; 29.8% (77/258) from Gampaha, 26% (67/258) Kurunegala, 24.4% (63/258) Anuradhapura, 7.0% (18/258) Kaluthara, 3.1% (8/258) Ampara, 2.3% (6/258) Puttalam, 1.9% (5/258) Ratnapura and Colombo and 0.8% (2/258) Polonnaruwa and Monaragala.

Aedes mosquito as the vector was known by 89.5% (231/258) and 69.4% (179/258) could identify the mosquito correctly. Dengue mosquito bite as during daytime was known by 78.3% (202/258) and 90.7%(234/258) knew correct breeding sites. One measure to prevent mosquito spread or bites was known by 98.4%(254/258) of students. Mosquito nets were identified as a preventive measure by 86.4%(223/258).

With regarding symptoms of dengue, fever was identified by 93% (240/258). Two or more other initial symptoms of dengue were known by 67.1%(173/258); nausea (20.9%(54/258)), vomiting (41.1%(106/258)), muscle pain (50.8% (131/258)), severe headache & retro-orbital pain (46.1%(119/258)), rash (57%(147/258)) and joint pain (25.6%(66/258)).

Awareness on consulting a doctor, if fever continuous beyond three days was 83.3%(215/258) whereas 13.9%(36/258) had inappropriate perceptions (obtaining aspirin - 5%(13/258), jeewani-8.9 %(23/258)).

Conclusion: In the study group, knowledge of dengue vector was satisfactory. However, awareness of main symptoms of dengue was poor except high fever. Measures to follow suspected dengue were satisfactory but 5%-9% had wrong perceptions. Dengue control programs in schools would need to focus on improving awareness of dengue symptoms.

[1]Department of Medical Microbiology, Faculty of Medicine, University of Kelaniya, Sri Lanka
lakmini.w@kln.ac.lk
[2]Faculty of Medicine, University of Kelaniya, Sri Lanka
[3]Department of Anatomy, Faculty of Medicine, University of Kelaniya, Sri Lanka