KAP study on dengue epidemiology among paramedical students

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Abstract

Early symptoms of dengue fever mimic other diseases. Hence, for proper management, rapid differential diagnosis is very crucial. This cross sectional study was designed to assess the knowledge, attitude and practice on dengue epidemiology. Medical Laboratory Technician students were selected for this study and pre-coded questionnaire was developed for the interview. Out of 60 respondents interviewed, 83.3% knew the dengue cases reported in Madurai, 80%, 43.3%, 38.3%, 11.6% and 6.6% were recorded for the questions of the affected age group in dengue, mode of transmission, serological examination, breeding places, dengue testing centers in government institution respectively. The result suggested that in spite of good attitude on dengue fever, it did not correlate with good knowledge and practice in dengue epidemiology. The paramedical personals should have complete knowledge about the epidemiology of communicable diseases to strengthen the health programmes.

Keywords: Knowledge, Attitude, Practice, Medical Laboratory Technician, Dengue epidemiology

1. Introduction

Dengue is a neglected tropical disease that has become the fastest growing mosquito-borne disease. The viral etiology of dengue was established by the 1940s and major changes in the epidemiology of dengue virus infections began after World War II. Currently estimated that 50 to 100 million infections worldwide each year and over 2.5 billion individuals at risk for infection of dengue viruses and now it is the most important arthropod-borne disease from a medical and public health perspective. Japan reported dengue cases in 2014 after a long period. Dengue is an acute febrile illness caused by Flavi virus, which exist in four different serotypes, namely DEN-1, DEN-2, DEN-3 and DEN-4 Dengue transmission is effected through female mosquitoes, i.e., Aedes aegypti, Aedes albopictus [1]. Dengue Fever/Dengue Hemorrhagic Fever continues to be a major public health problem in India. In Tamil Nadu the dengue morbidity and mortality reported in thousands and hundreds respectively, during 2012 and 2013 [2]. Tamil Nadu reported 561 dengue cases up to May-2014 and also second place in India. This cross sectional study was designed to assess the knowledge, attitude and practice of Medical Laboratory Technician students on dengue epidemiology.

2. Materials and Methods

Medical Laboratory Technician students in Madurai medical college, Tamil Nadu, India were selected for this study and pre-coded questionnaire was developed for the interview [3]. 20 questions asked to the respondents and important 6 questions have been taken for accountability. These students were completed two years medical Laboratory Technician course on December 2014. Accountable variables have been given in Figure 1 and 2.

2.1 Statistical analysis

Data was entered using the statistical Software Package for Social Science version 12.0 (SPSS Inc., Chicago, IL, USA). Each question was analyzed individually. Knowledge, attitude and Practice were assessed using a scoring system. Knowledge was assessed as good, moderate and poor based on arbitrary cut off point. Respondents who achieved more than 75% score for the knowledge will be considered good while others were moderate and poor. The same principle was applied to the sections on attitude and practice.

3. Results

Out of 60 respondents interviewed 43.3% were able to reply correct answer for mode of transmission of dengue, 11.6% correctly identified breeding places of dengue vector, 38.3%...
respondents given correct answer to the question of the serological examination for dengue, 6.6% respondents answered types of serological investigation available in government health centers for dengue fever, 80% identified affected age groups in dengue fever and 83.3% knew the dengue cases reported in Madurai.

4. Discussion
Our study revealed that almost all respondents to the questionnaires were familiar with dengue disease [4]. Since dengue incidence recorded in recent years at Madurai, 83.3% respondents had an attitude about dengue infection in Madurai. The respondents are authorized professional to carry out serological investigation. But poor knowledge and practice reported in serological examination for dengue fever. The Medical Laboratory Technicians should know where the serological tests available at government health centers for dengue fever. But 6.6% having knowledge and attitude of testing places for dengue in government health centres. Overall, knowledge was categorized as poor, attitude as moderate and practice also poor on dengue epidemiology. Our findings highlight the need of proper training, education and communication to the medical students in communicable diseases [5]. It was also evident that most of the students do not have a clear conception regarding dengue epidemiology [6, 7]. The paramedical personals should have complete knowledge about the epidemiology of communicable diseases to strengthen the health programmes.

Fig 1: Graphical representation shows no. of respondent given correct answer.

Fig 2: Graphical representation of KAP study outcome among the paramedical students.
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6. Conflicts of interest
All authors declare no conflicts of interest.

7. References