ABSTRACT

This was the first study conducted in Batkhela Malakand Agency, Khyber Pakhtunkhwa Pakistan during September 2013. The current outbreak of dengue fever was occurred in Swat during August 2013 and many cases were also reported in the adjacent districts. The aim of this study was to find out the traveling of dengue fever from Swat to Batkhela Malakand Agency. A descriptive epidemiological study was design and the data were collected through a design questionnaire. Mean age of the study population was 30.85±18.60 SD. The positive dengue patients have platelets counts 173500±31342.2 SD and Hb level was recorded 13.65±1.78 SD. The result shows that out of positive dengue patients the 3 patients shows traveling history to Swat. This may be the cause of new dengue cases in Batkhela Malakand Agency.

Keywords: Outbreak, Dengue fever, Questionnaire, Traveling history.
INTRODUCTION

Recently the dengue is re-emerged and one of the most challenging disease for the global health. In recent decade in the Americans, western Pacific and south-east Asia the prevalence of dengue infection has increased dramatically. Every year 50-100 million peoples infected with dengue worldwide, especially in the tropical and subtropical region (1,2,3). The dengue is caused by dengue virus (DENV) belong to family Flaviviridae. The DENV have four serotypes include the dengue virus 1 (DENV-1), dengue virus 2 (DENV-2), dengue virus 3 (DENV-3) and dengue virus 4 (DENV-4). The disease is transmitted by the Aedes aegypti and Aedes albaticus. The symptom of the infection varies from age to age. The joints pain, muscle ache, prolonged fever, headache, skin rash, thrombocytopenia and leucopenia are the common symptom of the disease (4,5,6). In the last two decade the 7 epidemics are occurred in Pakistan. In 1994, the first epidemic of dengue was reported in Pakistan (7,8). In Pakistan the major dengue outbreak occurred in the Lahore, Punjab province Pakistan affected more than 20,000 cases of dengue were reported along with 300 deaths (9). Recently the dengue outbreak occurred during August 2013 in the Khyber Pakhtunkhwa province, Pakistan. The high number of dengue cases was recorded in the district Swat Khyber Pakhtunkhwa Pakistan. More than 7000 peoples were infected from dengue along with 26 deaths (10,11,12,13). The Batkhela is adjacent with Swat. The Provincial and local authority declares the dengue emergency in swat.

MATERIALS AND METHOD

This was the first study conducted on dengue in Batkhela. The aim of the present study was to aware the peoples about the disease and update the epidemiology of dengue. In Pakistan no sufficient data is available for dengue. The present study was approved the ethical authority of the respective hospital.

Study area and duration
The present study was conducted in Ward No 1 District Head Quarter Hospital Batkhela Malakand Agency during September 2013.

Study Design
A descriptive epidemiological study was design.

Data collection
For the collection of data a standard design questionnaire were used including sex, age, date of entry, traveling history to swat, area name, platelets counts, temperature etc. The patient was interviewed orally and also the information was collected from the treatment chart sheet of the patient. The descriptive analysis of the data was done.

RESULTS AND DISCUSSION

The ethical authority of the hospital approved this study. The total 7 admitted patients were interviewed in the Ward No 1 District Head Quarter Hospital Batkhela, Malakand Agency during September 2013. The result shows that the 4 patients were positive for the dengue fever and 3 were negative. That patient in whom the NSI is detected is considering positive. In the positive cases the three patients have traveling history to Swat. The mean age of the patients was 30.85±18.60 SD. The average monthly income of the patients was 20000±11789.83 SD.
The temperature of the positive patients was recorded twice times during the data collection. The average temperature was 99.08±1.22 SD. The platelets count of the positive patients was 173500±31342.2 SD. The Total Leukocyte count (TLC) of the positive patients was also checked shows that the average is 6800±1154.70 SD. The Hemoglobin (Hb) level of the patients was also considered. The average Hb level of the positive patients was 13.65±1.78 SD.

CONCLUSION

From the present study it was concluded that most of the patients shows traveling history to endemic area Swat, Pakistan. For the control of the disease the awareness, preventive measurement and treatment on time is very much necessary. The vector control is the key in the prevention of the dengue. We recommended comprehensive study in this regards to identify the endemic area of Swat, Pakistan.

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Competing interest
None

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Declare none

REFERENCES


2. Guha-sapir D, Schimmer B. Dengue fever: new paradigms for a changing epidemiology. Emerging themes in Epidemiology. 2005; Open access journal http://www.ete-online.com/content/2/1/1


