Epidemiological investigation of a jaundice outbreak in Kishangarh, Rajasthan, India, 2014

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Epidemiological investigation of a jaundice outbreak in Kishangarh, Rajasthan, India, 2014

Rajan Kumar Pandey, Priyanka Prajapati,Tanu Sharma, Chandi C. Mandal, Vijay Kumar Prajapati* * Department of Biochemistry School of Life Sciences Central University of Rajasthan NH-8, Bandarsindri Ajmer, Rajasthan, India, 305817.

Abstract

Aim: To study the distribution of jaundice cases among university students and clinical profile of positive cases to initiate the control measure inside university premises.

Subject and methods: An epidemiological survey was conducted to collect the information regarding a jaundice outbreak among the students residing in hostels at the Central University of Rajasthan, Kishangarh, and Ajmer, India in October and November 2014. Fifteen hundred twenty-six students were screened for this epidemiological investigation by door-to-door survey throughout all of the student hostels and their physical and clinical data were collected from hospital records.

Results: The distribution of this outbreak of jaundice disease was 71.5 % male and 28.6 % female among the detected cases, whereas only 4.5 and 2.5 % of the total male and female students respectively, were affected by jaundice while living in the university premises. This indicates that male students had a higher risk of infection than female students. Students from the age group 20 to <24 years were more susceptible for jaundice infection as compared to other, confirmed by elevated levels of serum bilirubin, aspartate transaminase and alanine aminotransferase reported at the time of diagnosis. Moreover, out of total 56 jaundice cases, 30 were from Rajasthan state, and remainders were from other states.

Conclusions: Elevation in serum bilirubin, aspartate transaminase and alanine aminotransferase and physical symptoms indicates jaundice outbreak at the university. This study warrants the time needed to check water sources and water sanitation to avoid drinking-water contamination.

Keywords: Epidemiology Hepatitis Serum bilirubin Aspartate transaminase Jaundice outbreak studies

Reference

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