Abstract

Background

The adult population in Sri Lanka is having high level of susceptibility for Varicella Zoster Virus (VZV) infection. Among medical undergraduates, 47% are VZV seronegative. The purpose of the present study was to determine the incidence of VZV infection in medical undergraduates in Sri Lanka, and to describe the effects of VZV infection on their academic activities.

Methods

A retrospective cohort of medical undergraduates' susceptible for VZV infection was selected from the University of Peradeniya, Sri Lanka. Data on the incidence of VZV infection (Chickenpox) during their undergraduate period was collected using a self-administered structured questionnaire. A second questionnaire was administered to collect data on the details of VZV infection and the impact of it on their academic activities. VZV incidence rate was calculated as the number of infections per 1,000 person years of exposure. Descriptive statistics were used to describe the impact of VZV infection on academic activities.

Results

Out of the 172 susceptible cohort, 153 medical undergraduates were followed up. 47 students reported VZV infection during the follow up period and 43 of them participated in the study. The cumulative incidence of VZV infection during the period of five and half years of medical training was 30.7%. Incidence density of VZV infection among medical undergraduates in this cohort was 65.1 per 1,000 person years of follow-up. A total of 377 working days were lost by 43 students due to the VZV infection, averaging 8.8 days per undergraduate. Total academic losses for the study cohort were; 205 lectures, 17 practicals, 13 dissection sessions, 11 tutorials, 124 days of clinical training and 107 days of professorial clinical appointments. According to their perception they lost 1,927 study hours due to the illness (Median 50 hours per undergraduate).

Conclusions

The incidence of VZV infection among Sri Lankan medical undergraduates is very high and the impact of this infection on academic activities causes severe disruption of their undergraduate life. VZV immunization for susceptible new entrant medical undergraduates is recommended.