

Acquired immunodeficiency syndrome among patients with human immunodeficiency virus in northern Kelantan district

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ABSTRACT

Introduction: Acquired Immunodeficiency Syndrome (AIDS) is one of the world's most fatal conditions which leave a massive impact on health, economic and social outcome. Malaysia and several other countries reported decreasing trends of Human Immunodeficiency Virus (HIV) infection and AIDS but the notification rate as well as mortality for AIDS has been plateaued since 2007. HIV prevalence in Kelantan state is above the national level. In addition, Tumpat district was known to have the highest HIV incidence in Kelantan with 8.78 cases per 100,000 population. Thus, the situation possessed a higher risk of AIDS if no focus action was taken. The aim of this study was to determine the occurrence of HIV infection and AIDS patients, to describe the characteristics of HIV and AIDS patients and to determine factors associated with AIDS among HIV patients in Tumpat district from 2013 to 2022. **Materials and Methods:** A cross-sectional study was conducted among HIV patients in Tumpat district who were registered in the National AIDS Registry from 2013 to 2022. This study was conducted from April to July 2023. All HIV patients in the time frame were included in this study. Variables of sociodemographic characteristics and risk factor were analysed descriptively and for association, multiple logistic regression was utilised. **Results:** A total of 287 patients fulfilled the study criteria and were used as the sample. Majority (31.7%) of them were diagnosed with HIV at the age of 30-39 years old, male (83.6%), Malay (90.9%), single (60.6%), received secondary education (67.6%) and work in the non-government sector (54.4%). Intravenous drug use was identified as the most common risk behaviour (41.4%) compared to heterosexual (36.2%), homosexual or bisexual (20.9%) and vertical infection (1.7%). The HIV incidence for each year from 2013-2022 ranged between 5.0 to 17.0 cases per 100,000 population while AIDS was 4.9 to 13.2 cases per 100,000 population. Both have plateaued trends. Overall, 183 (63.8%) among HIV patients were having AIDS and significantly associated with the age group of diagnosis at 30 to 39 years old (Adjusted Odds Ratio (AOR): 4.70; 95%CI: 1.11, 20.00, $p < 0.005$) and risk behaviour of heterosexual (AOR: 0.34; 95%CI: 0.21, 0.411, $p < 0.001$) and homosexual or bisexual (AOR: 0.20; 95%CI: 0.08, 0.49, $p < 0.001$) compared to IVDU. **Conclusion:** Stakeholders should adopt a targeted approach to tackle the problem among HIV patients in the district from progressing into AIDS. Early screening programs for HIV need to be enhanced to prevent late diagnosis and initiation of early treatment. Empowerment on health-seeking behaviour and treatment adherence should be focused especially among the age of 30 to 39 years old and IVDU groups. Active collaboration between agencies and society is warranted in accelerating the effort of ending the AIDS epidemic by 2030.