

Mental Health Factors Influencing Physical Activity among Secondary School Students in Malaysia

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ABSTRACT

Introduction: Higher physical activity has been associated with better mental health among children and adolescents. Findings from a series of national surveys showed that physical inactivity and mental health disorders are more prevalent among ethnic minority students than the ethnic majority in Malaysia. This study explores the influence of mental health factors on physical activity among students of ethnic minority secondary school in Malaysia. **Methods:** Data on 8794 secondary school students were extracted from the National Health and Morbidity Survey 2017. The respondents consisted of Chinese (46.7%), Indian (16.3%), Sabahan (20.3%), Sarawakian (10.5%) and other ethnic groups (6.3%). Four mental health components were assessed: distress, anxiety, depression and suicidal ideation. Probit regression analysis was applied to examine the associations between each mental health component with physical activity, stratified by ethnicity. **Results:** Distress was positively associated with physical activity among Indian students, whereas it was negatively related to physical activity among students from other ethnic groups. Being depressed reduced the probability of being physically active among Sabahan students. However, anxiety and suicidal ideation did not have significant influences on physical activity in any of the ethnic minority groups. **Conclusion:** Mental health plays an important role in determining the level of physical activity among ethnic minority students. Ethnic minority students could benefit from targeted intervention measures that take mental health factors into consideration.

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Seroprevalence of Zika Virus in Malaysia

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ABSTRACT

Introduction: Zika disease is an emerging vector-borne disease in many parts of the world. First isolated in Malaysia in 1966, the seroprevalence and risk factors of ZIKV in Malaysia are unknown. **Methods:** We conducted a population-based serosurvey in three states in Malaysia, namely Kedah, Sabah and Johor, between April to July 2017. Blood samples were taken from 1,261 respondents in Johor (n=388), Sabah (n=409) and Kedah (n=464) were tested for the presence of antibodies against Zika virus (ZIKV) by anti-ZIKV IgM and IgG ELISA. Seroprevalence of ZIKV was estimated based on seropositivity of either anti-ZIKV IgM or IgG or both. Respondents were interviewed using a structured questionnaire and multiple logistic regression analysis was used to identify risk factors for ZIKV seropositivity. **Results:** Kedah had the highest ZIKV seroprevalence (33.9%), followed by Sabah (23.6%) and Johor (12.7%). Overall seroprevalence of ZIKV was estimated at 24.1%. Age (higher likelihood of seropositivity among age 18 years and above) and ethnicity (higher among 'Others' ethnic group) were significantly associated with ZIKV seropositivity, whereas self-reported history of dengue fever, wearing long trousers or sleeves and having screened windows at home were associated with less risk of ZIKV seropositivity. **Conclusion:** Our findings suggest that ZIKV is endemic and co-circulating with other arboviruses in Malaysia.