

Risk behaviour associated with dengue fever among rural population in Malaysia

ABSTRACT

Background: Dengue fever is a serious public health problem globally and also in Malaysia. Recent epidemic of dengue fever in Malaysia showed cases of dengue fever were rising in rural area. Several behaviours of population are associated with transmission of the dengue fever by *Aedes* mosquitoes. Objective: The objective of the study was to determine risk behaviour associated with dengue fever among rural population in Negeri Sembilan, Malaysia. Materials and Methods: A cross-sectional study was conducted in one of the rural area indentified as 'hot-spot' during recent dengue epidemic. A total numbers of 141 respondents were recruited into the study, in which 39 of respondents were confirmed cases of dengue fever and 123 respondents were normal in the locality. All respondents were interviewed face to face using questionnaire developed for the study. Data were analysed using Statistical Package for Social Science version 21. Result: Prevalence of dengue fever in study area was 10.8 per thousand populations. The prevalence of dengue fever was higher in respondents who practiced high risk behaviour (38.8%) as compared to respondents who practiced low risk behaviour (27.0%). The risk behaviours which showed statistically significant association with cases of dengue fever were; practiced of not covering water container ($\chi^2 = 4.99$, $P = 0.025$), practiced of notturn-over empty water container ($\chi^2 = 5.12$, $P = 0.024$), practiced of not using bed-net at night ($\chi^2 = 5.97$, $P = 0.015$), practiced of not using window mesh or screening ($\chi^2 = 5.97$, $P = 0.015$) and practiced of travelling in and out of locality of epidemic area ($\chi^2 = 15.43$, $P = 0.001$). Age and type of occupation of respondents are also showed significant association with dengue fever with $\chi^2 = 4.81$, $P = 0.028$ and ($\chi^2 = 9.99$, $P = 0.007$ respectively. Conclusion: The outbreak of dengue in rural area studied was contributed by their risk behaviours which need to be addressed in control and prevention of dengue programme.

Keyword: Risk behaviour; Dengue fever; Rural area