Introduction: Health issues often differ from one population to another. Assessing different aspects of the health condition is a vital step toward developing and designing appropriate prevention and treatment programs to reduce health problems in any group or population. This study aimed to assess both the prevalence of stress and the coping mechanisms as well as identify the predictors of stress levels among adolescents in Malaysian orphanages. Methods: Overall, 307 male and female adolescents (aged 13-18 y old) living in 9 private orphanages located in Klang Valley, Malaysia, participated in this cross-sectional study. Brief COPE scale and Depression, Anxiety and Stress Scale-21 were used as the main instruments in the current study. Results: The results of the current study showed female adolescents and participants with a higher level of education were more likely to experience stress. The results also showed significant differences between boys and girls in using of coping mechanisms in self-distraction ($t = −2.39, P = .01$), substance use ($t = 2.12, P = .03$), use of emotional support ($t = −2.70, P = .001$), humor ($t = 2.28, P = .02$), and religion ($t = −2.19, P = .02$). Denial, venting, religion, humor, planning, and active coping were identified as predictors of stress among participants. Discussion: The results showed a high prevalence of stress and a negative coping pattern among participants. The finding of the current study also showed the urgency of taking immediate action to reduce stress and improve coping methods among Malaysian institutional adolescents.

Keyword: Malaysian adolescents; Malaysian orphanage; Coping mechanism; Stress