Psychometric properties of the Malay-translated general practice physical activity questionnaire among shipyard workers

ABSTRACT

Background: The General Practice Physical Activity Questionnaire (GPPAQ) is a validated and reliable screening tool to measure the level of physical activity in adults. However, it has never been translated and validated in Malaysian population. This study aimed to translate the GPPAQ into Malay language and to evaluate the psychometric properties of the Malaytranslated GPPAQ among shipyard workers.

Methods: The original English version of GPPAQ was translated forward and backward into Malay version by experts. The final version of the Malay-translated GPPAQ was then tested for validity and reliability. A cross-sectional study design was performed and systematic random sampling was used to select respondents. Construct validity and internal consistency of the Malay-translated version were tested using exploratory factor analysis and Cronbach's alpha respectively.

Results: Sixty-two male shipyard workers participated in this study. The GPPAQ showed good factor loading values for all items (0.608-0.834). The exploratory principal component factor analysis delineates all seven items into two factors with variance of 41.65%. The Cronbach's alpha value was good with 0.81, 0.84 and 0.76 for total scale, factor 1 and factor 2 respectively.

Conclusion: The Malay-translated version of GPPAQ has high psychometric properties. Therefore, it is a valid instrument to assess physical activity among Malaysian working population, particularly in male shipyard workers.

Keyword: Physical activity questionnaire; Validity; Internal consistency; Malay-translated GPPAQ; Shipyard workers; Malay language