

Development of the Sinhalese Version of General Rehabilitation Adherence Scale (GRAS-Sin)

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The success of physiotherapy treatment is partly based on the patient's adherence to the programme. Non-adherence may result in increased healthcare costs and poor recovery. Therefore, measuring adherence to remove barriers and facilitate adherence is important. No validated tool exists to measure adherence to physiotherapy treatment among Sinhala-speaking patients in Sri Lanka. This study aimed to develop a Sinhalese version of the General Rehabilitation Adherence Scale (GRAS-Sin). In the first phase, the original version was translated and culturally adapted to the Sinhala language. During the second phase, a cross-sectional survey was conducted among 200 patients. We evaluated psychometric properties in patients seeking physiotherapy for musculoskeletal problems at the National Hospital, Kandy, Sri Lanka, and Teaching Hospital, Peradeniya, Sri Lanka. The present study comprised 143 female (71.5%) and 57 male (28.5%) participants. The majority of the patients (54.5%) adhered to physiotherapy treatments with high levels (20-24 of total score out of 24) of compliance. The relationship between treatment adherence and gender was significant ($X^2 = 17.46$, $p = 0.001$), whereas age, employment status, educational level, and economic status were not significant. The content validity index of the scale was 0.89. There was an acceptable level of internal consistency (Cronbach's alpha = 0.82) and test-retest reliability (intraclass correlation coefficient = 0.907, $p = 0.000$). Sampling adequacy was satisfactory (KMO = 0.755, Bartlett's test p -value < 0.05). Construct validity was measured using exploratory factor analysis that revealed a 3-factor model with a 73.4% variance. Incremental fit indices; normed fit index, comparative fit index and Tucker Lewis index, were reported > 0.95 while an absolute fit index of root mean square of error of approximation was 0.065. These values indicated a good model fit. No floor and 27% ceiling effects were found. GRAS-Sin is a valid and reliable tool to assess physiotherapy treatment adherence among Sinhala-speaking patients following physiotherapy management in Sri Lanka.

Keywords: Sri Lanka, Physiotherapy Treatment Adherence, Rehabilitation

Acknowledgement: Dr. Atta Naqvi permitted the cross-cultural adaptation of the GRAS questionnaire.