



EVALUATION OF CONTENT VALIDITY AND RELIABILITY OF SINHALA VERSION OF END STAGE RENAL DISEASE-ADHERENCE QUESTIONNAIRE (SINESRD-AQ) FOR USE AMONG PATIENTS RECEIVING IN-CENTRE HAEMODIALYSIS IN SRI LANKA

Lasanthika T.L.C.1,4*, Wanigasuriya J.K.P.2, Hettiaratchi U.P.K.3,
Amarasekara A.A.T.D.4 and Goonewardena C.S.E.4

¹Faculty of Graduate Studies, University of Sri Jayewardenepura

²Center for Kidney Research, University of Sri Jayewardenepura

³Department of Biochemistry, University of Sri Jayewardenepura

⁴Department of Nursing and Midwifery, University of Sri Jayewardenepura

⁵Department of Community Medicine, University of Sri Jayewardenepura

c.nimna@sjp.ac.lk

Abstract

Haemodialysis is a lifesaving therapeutic procedure used in managing patients with End Stage Renal Disease (ESRD). Reported adherence to recommended treatment regimen among patients receiving haemodialysis varies due to lack of a valid and reliable instrument. Thus, the current study aimed to evaluate the validity and reliability of End Stage Renal Disease-Adherence Questionnaire -Sinhala version (SINESRD-AQ) for use among patients receiving in-centre haemodialysis in Sri Lanka using methodological approach. Content validity of the SINESRD-AQ was evaluated using modified Delphi method with an expert panel (n=6). The content relevance of the instrument was assessed by the indices of Item-level content validity index (I-CVI), Average content validity index for the whole scale (S-CVI), Item-level content validity ratio (I-CVR) and Modified kappa statistic coefficient (k). SINESRD-AQ was administered to ten patients receiving haemodialysis in Teaching Hospital, Kurunegala with a retest interval of one week in order to assess test-retest reliability. Internal consistency reliability for two subscales measuring treatment adherence in SINESRD-AQ was assessed with Cronbach's alpha coefficient. SPSS version 25.0 software and Microsoft office excel were used to analyse data. Ethical approval for the study was obtained from the Ethics Review Committee, Faculty of Medical Sciences, University of Sri Jayewardenepura and Teaching Hospital, Kurunegala. The expert panel evaluated all forty-six items of the SINESRD-AQ as excellent for content validity with I-CVI ranging from 0.83 – 1.00 (I-CVI>0.8), S-CVI = 0.93, I-CVR ranging from 0.67 – 1.00 (I-CVR>0.6) and modified kappa statistics coefficient ranging from 0.81-1.0 (k>0.74). Strong test-retest reliability existed across all the items measuring adherence in SINESRD-AQ with an average Intra Class Correlation coefficient of 0.861 (p<0.01). Cronbach's Alpha of 0.649 for whole two subscales showed acceptable internal consistency. SINESRD-AQ is a valid and reliable instrument to assess treatment adherence behaviours among patients receiving haemodialysis in Sri Lankan hospital setting.

Keywords: *Content validity, Treatment adherence, End Stage Renal Disease, Reliability, Haemodialysis*