

## Psychometric Properties of Sinhala Version of Burden Scale for Family Caregivers' Short Form (BSFC-s); A Validation Study in Sri Lanka

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Caregivers' subjective burden is the cognitive appraisal of stressful aspects of caregiving. Family caregivers who are informal caregivers of older people experience high level of subjective caregiver burden which severely affect both caregiver and care-receiver. The 10-item short version of the Burden Scale for Family Caregivers (BSFC-s) has been developed to provide a quick measure of this variable. This study was done aiming cross-cultural adaptation and evaluation of the psychometric properties of Sinhala version of BSFC-s using family caregivers of older people aged >65years with multi-morbidity. BSFC-s was cross-culturally adapted following standard guidelines and the finalized Sinhala version of the BSFC-s was administered among 81 family caregivers who were involved in long-term care of randomly selected older patients (>65yrs) who were regular attendees of medical and neurology clinics of Teaching Hospital, Karapitiya. Validated Sinhala version of short form-36 questionnaire (SF-36) was also administered at the same time. After 2 weeks, BSFC-s was re-administered among 24 of them. Psychometric properties (reliability and validity) were evaluated. Internal consistency measured with Cronbach's alpha was 0.89 while the item-total correlation ranged from 0.38 to 0.81. The test re-test reliability evaluated with intra-class correlation coefficient (ICC) (95% CI) was 0.99 (0.99-1.00) ( $p < 0.001$ ). The Factor Analysis with Principal Component Analysis revealed presence of three factors with Eigen value exceeding one, explaining 75.3% of cumulative variance. BSFC-s score showed a strong correlation with the overall score of SF-36 (Spearman's Rho; -0.78,  $p < 0.001$ ) and moderate to strong correlations with each domain score of SF-36 (Spearman's Rho; -0.21 to -0.66,  $p < 0.01$ ) indicating the strong concurrent validity. The Sinhala version of BSFC-s adapted cross-culturally showed satisfactory reliability and validity, which indicates that it can be used to assess the subjective burden of informal caregivers of older adults in Sri Lanka.

**Keywords:** *caregiver burden, BSFC-s, psychometric properties*