Validation of the Subjective Global Assessment nutritional screening tool among surgical patients in black lion specialized hospital Addis Ababa, Ethiopia

Dr. Serge Batcho MD, MPH Nutrition
Prof. JEMAL HAIDAR (MD, MSc, CRM, CME)
Ms. YALEMWORK GETNET (BSc, MPH)
Mr. DEMEWOZ HAILE (BSc, MSc)

Abstract

Background: Malnutrition is common in hospital and occurs in more than 50% of hospitalized patients. It is one of the most important factors which determine the clinical outcomes of patients. Therefore, most of the developed countries has made tremendous progress in screening for malnutrition at admission and giving nutritional support for those that required. Medical awareness is insufficient and in Ethiopia as well as in several countries, screening hospitalized patients for malnutrition is not a routine part of treatment. First step of treating is screening and screened required a validated screening tool which has not been properly addressed.

Objective: To validate subjective global assessment (SGA) against full nutritional assessment (FNA) and to assess its reliability among adult surgical patients for effective integration in daily surgical wards practice in Black Lion Specialized Hospital.

Methods: The study design was a facility based, cross-sectional concurrent validation design. Concurrent validity was assessed through sensitivity, specificity, positive predictive value and negative predictive value of the SGA comparing to FNA considered as gold standard. Its reliability assessed by cronbach's alpha. SPSS version 21 was used for analysis.

Results: Considering FNA as the gold standard, the sensitivity and specificity of SGA were 98.3% and 73.2% respectively. The Kappa agreement coefficient between SGA and FNA was $k = 0.742$, $p > 0.05$. The internal consistency of SGA questionnaire measured using Cronbach's α coefficient value was $\alpha = 0.805$.

Conclusion and Recommendation: In this study, SGA showed a high level of sensitivity with a specificity >70%. The reliability of the SGA questionnaire is acceptable and showed a substantial agreement with FNA. Therefore SGA is applicable in Ethiopian settings. However, to overcome self-weight report issue, further research on modification of the SGA regarding weight change item might be needed for cultural adaptation.



Biography

Serge Batcho is a Medical Doctor majoring in Public Health Nutrition. This research has been conducted as part of his MPH thesis. Findings could benefit health care systems to have validated and appropriate screening tool for surgical patients and in a long term may represent a channel for MoH to establish standards for nutritional assessment with the ambition of putting Ethiopia on track to build a foundation of nutritional support to assure better outcome among hospitalized patients.

Email:batchoserge@gmail.com