CROSS-CULTURAL ADAPTATION AND VALIDATION OF COMMUNICATION OUTCOME AFTER STROKE (Ca-COAST) SCALE INTO BANGLA FOR ASSESSING THE PATIENTS WITH POST STROKE

By

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Title: "cross-cultural adaptation and validation of communication outcome after stroke (ca-coast) scale into bangla for assessing the patients with post stroke"

Aim of the study: Linguistic validation and Cross cultural adaptation of "Caregiver perceived -Communication Outcome After Stroke" (Ca-COAST) scale into Bangladeshi context.

Methodology: This is a cross-sectional types of adaptation study where 2 forward translators, 2 back translators, 3 expert committee members and 37 patients caregiver were assigned purposively from Centre for the Rehabilitation of the Paralysed, CRP-Savar and CRP-Mirpur. This tool was applied to post stroke patients with aphasia and dysarthria. Data was analyzed by using descriptive statistical analysis (SPSS= Statistical Package for the Social Sciences) method.

Result: Ca-COAST showed excellent reliability by Chronbach's alpha ($\alpha = 0.92$) score within two times for 1 to 2 week interval. Pearson's Correlation Coefficient (r) and ICC (Interclass Correlation Coefficient) were applied to analyze the correlation between the items and found significant correlation ($r = 0.94$ and ICC = 0.97) scores. Ca-COAST was well acceptable and understandable to all the participant of this study.

Conclusion: Carer-COAST is a widely used scale to assess communication status of post-stroke patients. This study provides Bangla translated version of Carer-COAST scale for assessing patients who are Bengali. This study showed a brief overview of Ca-COAST-BD which is suitable for the patients with post-stroke in Bangladeshi context. The investigator of this study applied IOC Index scoring system for measuring the content validity of this tool. Not only that but also applied Cronbach's alpha, Pearson's correlation coefficient and ICC test for this scale, and found excellent internal consistency and good test-retest reliability scores for this tool. These scores proved that this tool is scientifically proved and culturally appropriate.

Limitation

Ca-COAST scale is not yet been adapted and linguistically validate in Bangladesh which can be used by Speech & Language Therapist. So, there were some situational limitations and barriers while considering the results of the study in different aspects. Those are as follows:

- COAST Scale has two parts, one part is for patient's rating scale (as: COAST) and another part is for patient's career rating scale (Ca-COAST). In this study, investigator only translate Ca-COAST scale due to limited time for research conduction but tried to make it comparatively standard like other established tools in Bangladesh.

- It was difficult for the investigator to find all the stroke patients within this limited period of time and resources were limited that have a great deal of impact of the study.

- This is a new adaptation study for this tools in Bangladeshi context. So literatures were found in limited number.

- The adaptation procedure took longer period of time, as the experts were not always available and it needs longer time for better study. For this study, time period was limited.

Recommendation

- This is highly recommended for item number twenty, clinician can use short interpretation/ synonymous word for (Quality of life – his/her personal satisfaction in which he/ she is living within this cultural condition).

- Further study can be possible to measure the effectiveness of this scale in the context of Bangladesh.

- Another study can be done on Patients COAST adaptation and validation in the context of Bangladesh.

- Another study can be done by covering all the sub-branches of CRP, as this will help to cover whole Bangladesh not an individual city.

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