

Developing and Pilot- Testing A Post - Stroke Dysphagia Screening Protocol for Speech and Language Therapists in the Sri Lankan Context

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Background-Accurate and timely evaluation of swallowing is necessary to determine how to safely administer medications, maintain adequate nutrition and hydration in a person with dysphagia. Unfortunately, dysphagia is a life threatening medical condition and the leading cause of death due to aspiration pneumonia and airway obstruction. Therefore, this population requires timely completion and documentation of the initial swallow screen by a speech and language therapist. Notwithstanding its value, there are limitations and challenges to implementing a dysphagia screening tool from a developed country context to a developing country context. The requirement for a reliable, clinically applicable and valid screening tool for dysphagia is essential which considers the context, system rule regulation and resources of the current settings. This study sought to develop and test a dysphagia screening tool to be used by speech and language therapists who are undertaking dysphagia management in different settings in the local context. **Methodology-**The post – stroke dysphagia screening tool was developed based on the Massey Bedside Swallowing screen (Massey, 2002) with the help of an experts’ panel on dysphagia. The study was a quantitative, non – experimental, descriptive cross – sectional design with a prospective component. Convenient sampling was used to recruit 35 post – stroke patients within 7 days of onset, from selected government hospitals in Sri Lanka. The post – stroke dysphagia screening tool consists of 6 sections and was administered by speech and language therapists. The current study established inter – rater, test – retest reliability and content validity of the swallowing screen. The content validity was established by a panel of expert speech and language therapists from the local and international context via 5-point Likert scale. Pearson correlation coefficient was used to determine reliability agreement. **Results-**The post – stroke dysphagia screening tool was shown to be reliable in detecting dysphagia amongst stroke patients. The expert panel of speech and language therapists who assessed content validity, strongly agreed with every statement in the questionnaire, strongly agreed that the content was accurate and consistent with current research, swallowing screen was formatted in an organized manner and also the information obtained from the swallowing screen would be useful in determining swallowing function. Thirty - five post-stroke patients were tested on and 10 SLTs participated in this study. Due to lack of availability of the instrumental evaluation, Cervical auscultation was used as a goal standard test. The procedure will only take 7-10 minutes. The inter-rater and test- retest reliability of the dysphagia swallowing screen, as calculated in this study, was relatively high. In both tests the *p*-value was <0.001. The Pearson correlation coefficient was 1.000. The *p*-value less than .05 shows that there was a strong correlation between the test – retest and inter – rater reliability agreement of the developed post – stroke dysphagia screening tool. **Discussion and Conclusion-** This was a first step in developing and establishing a contextually appropriate dysphagia screening tool that is reliable and helpful to speech and language therapists to identifying post – stroke patients at risk of dysphagia within government hospitals in Sri Lanka. The developed post—stroke dysphagia screen was found to be accurate and easy to administer to post – stroke clients in the hospital setting. It would help speech and language therapists, especially those newly qualified to identify the difficulty early and for follow – up.

Keywords: Post –Stroke, Dysphagia, Speech and Language Therapists, Screening, Developing

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