

## Abstract

**Background:** Dysphagia is a common cause of aspiration and subsequently a common cause of morbidity and mortality. Early detection and intervention of dysphagia is essential to reduce length of hospitalisation, degree of morbidity, hospital costs and the risk of pneumonia. It is estimated that 12% to 13% of patients in acute hospitals present with dysphagia. The emergency department (ED) being the first entry point for any patient into the hospital, on paper, this could be the most opportune time and space to triage a patient for dysphagia. Triage of patients enables identification of patients at-risk for dysphagia.

**Rationale:** Early detection of dysphagia improves health outcomes. Triage for dysphagia in the medical emergency unit (MEU) could facilitate identification of patients at risk for dysphagia, this in turn may enable early and appropriate referral to a speech-language therapist. It was important to explore these possibilities within the South African hospital context due to the limited number of speech-language therapists practicing in the public sector, the working hours of speech-language therapists in hospital settings as well as the high patient to therapist ratio.

**Methodology:** The aim of the study was to establish the reliability and validity of a self-developed dysphagia triage checklist and to determine its' feasibility in a medical emergency unit in a public hospital in Gauteng, South Africa. The following research aims were explored: 1) to establish the reliability of the dysphagia triage checklist, 2) to establish the validity of the dysphagia triage checklist, 3) to explore the feasibility of triaging for dysphagia within a medical emergency unit in South Africa, and 4) to document the perceptions of dysphagia triaging by the medical personnel involved in the implementation thereof. An exploratory sequential mixed method design was used. An initial ethnography of the ED informed the implementation of the dysphagia triage checklist. Dysphagia screening was completed as a measure of reliability and validity of the triage, and this was followed by a diagnostic assessment for participants who failed both the triage and screening. The diagnostic dysphagia assessments were completed by the resident speech-language therapist of the hospital. The study was conducted at Chris Hani Baragwanath Academic Hospital (CHBAH). All participating doctors were required to complete a questionnaire (electronically) at the final phase of the data collection. 16 doctors working in the MEU participated in the study and were recruited using purposeful sampling.

**Data Analysis:** Cohen's Kappa was used to determine the agreement between the dysphagia triage checklist and the dysphagia screening. Findings from the ethnography and the responses from the self-developed questionnaire were analysed using thematic analysis as well as descriptive statistics, specifically, measures of frequency.

**Results:** The dysphagia triage checklist was not reliable, valid or feasible in the South African context. It was however sensitive in the identification of patients at risk of dysphagia.

**Implications of the study:** The use of a dysphagia triage checklist may have implications for the safe implementation of oral diets, development of aspiration pneumonia, malnutrition, administration of oral medication and patient prognosis. Notwithstanding this, the current study confirmed that the MEU in a South African hospital is not a conducive environment for dysphagia triaging due the pace of work and high patient numbers in the ED, staff attitude and the consequent additional administration that accompanied the introduction of an additional procedure.

**Key words:** dysphagia, emergency unit, assessment, triage, speech therapy, evidence-based practice, dysphagia triage, dysphagia screening