



**Research Article**

## **KNOWLEDGE AND AWARENESS OF ASSESSMENT AND MANAGEMENT OF DYSPHAGIA AND THE ROLE OF SPEECH LANGUAGE PATHOLOGISTS AMONG NURSES IN KUWAIT**

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### **ABSTRACT**

Dysphagia is a swallowing disorder that affects one or more of the three swallowing stages: oral, pharyngeal and esophageal. It can result in aspiration, pneumonia, chest infections, malnutrition, and dehydration which raise the risk of death. Early detection and treatment are crucial for recovery during the rehabilitation phase. Nurses are healthcare professionals who work with patients all day. Therefore an interdisciplinary teamwork between nurses and speech language pathologists (SLP) are essential for assessment and management of dysphagia. The present study aims at understanding the knowledge and awareness of the various assessment and rehabilitation techniques of dysphagia and the role of SLPs among the nurses in Kuwait. The results revealed that nurses had a moderate level of awareness and knowledge regarding dysphagia, its assessment and management methods and the importance of a SLP in the same.

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### **INTRODUCTION**

“Abnormal delay in the passage of a liquid or solid bolus is dysphagia, which is defined as an objective impairment or difficulty in swallowing.” (Azer and Kshirsagar 2022). The delay may occur during the oro-pharyngeal or esophageal phases of swallowing. The second component of the subjective definition of dysphagia is the patient's experience of a delay in the passage of a liquid or solid bolus during swallowing. Both definitions are relevant because, despite having dysphagia as determined by objective tests, some patients may stop feeling as though they are swallowing slowly.

Dysphagia is a swallowing disorder that affects one or more of the three swallowing stages: oral, pharyngeal and esophageal. Experts also use the term dysphagia to allude to problems with the stomach or lower gastrointestinal tract since problems with these structures can affect other areas of the gastrointestinal tract, including the oesophagus which is usually referred to as a clinical characteristic of an underlying condition and is not a primary medical diagnosis having the potential for secondarily precipitate mortality and morbidity.

Spieker (2000) found that dysphagia concerns are frequent, particularly in older people. It affects 7 to 10% of people over the age of 50, even though this percentage may be unusually low because many patients with this condition may never seek medical attention. Up to 25% of hospitalised patients and 30% to 40% of nursing care residents have difficulty in swallowing.

Dysphagic conditions can be due to ageing naturally as well as by other disorders like stroke, neoplasms, trauma, neurologic degenerative diseases, autoimmune diseases, and other infections. Dysphagia can also result from medical

interventions such surgery, radiation therapy, and medication. It may not be possible to determine a particular incidence within any one category of disorder because of these diverse and frequently complicated etiologies. Patients with dysphagia may complain of a variety of issues, they typically describe coughing, choking, or the strange sensation that food is sticking in their throat or upper chest when they are trying to swallow.

Members of the medical community may be involved in patients who have swallowing problems, including a Neurologist, Otolaryngologist, Speech Language Pathologist (SLPs), Radiologist, Gastroenterologist, Pulmonologist, Respiratory Therapist, Occupational Therapist, Dietician, and Nurse. An integrated team strategy and effective teamwork are essential for managing dysphagia successfully.

SLPs play a major role as team member in the evaluation and rehabilitation of persons with dysphagia. Nurses are accessible around the clock therefore are in the best position to recognise patients with swallowing issues (before any food or drink is eaten) and with the right training can manage patients with small transitory swallowing issues. In order to improve cross-disciplinary collaboration between SLP, doctors, dietitians, and caregivers, the nurse is the only member who is available to all members of the team to provide guidance on a patient's swallowing status. Also the nurses are frequently required to explain to the patient and/or caretaker why no food or liquid is being administered orally. Therefore, it is beneficial if the nurse can describe the patient's present swallowing condition and the rationale for any dietary restrictions, if any.

Bhimte & Rangasayee (2015) reported that training programs or workshops on managing dysphagia for nurses should be held and run by an SLP, Neurologist, or Otolaryngologist. Kiyani, Ijaz, and Bibi (2022) stated that 19 nurses after attending the webinar at Railway Hospital Rawalpindi hospital from January 2021 to August 2021, nurses' knowledge of paediatric dysphagia had significantly improved.

Rhoda (2015) says that nurses have poor awareness of the management of dysphagia and a modest understanding of its indications, symptoms, and consequences. As a result, post-basic dysphagia training would better prepare nurses to care for stroke patients during the acute period.

Bhimte & Rangasayee (2015) revealed that nurses are unaware of dysphagia and its symptoms. The role of SLPs in the diagnosis and treatment of dysphagia is not well known by them. Moreover, it suggests that hospitals should make nurses active members and establish their position in a multidisciplinary team.

Dondorf, Fabus & Ghassemiet (2016) explained that nurses and SLPs should interact to provide collaborative treatment to patients with dysphagia and enhance both swallow function and general quality of life.

Hines, Sonia, Kynoch, Kate & Munday (2016) systematically reviewed and found that nurse-initiated dysphagia screening for patients with acute neurological dysfunction is useful for a variety of significant patient outcomes. The availability of official guidelines for the diagnosis and treatment of dysphagia may greatly reduce the grave negative consequences including chest infections and death. Patient outcomes will improve if nurses are trained to screen for dysphagia.

Tan, Laurence, Gan, Grace, Hum, Allyn, Lee & Angel (2018) reported that a brief training can help nurses overcome their knowledge gap when providing care for patients with dysphagia.

Knight, Pillay, Linde & Krüger's (2020) found that nurses at all levels of healthcare have only moderate awareness of how to recognise and treat stroke-related OPD. In lower middle-income countries like South Africa. Interdisciplinary teamwork between nurses and SLPs may increase nurses' understanding of the detection and treatment of stroke-related OPD.

Registered nurses's understanding of medications that affect oral care and medical disorders linked to poor oral hygiene was found to be low in dysphagic patients, according to Durgude and Cocks' (2013) investigation. Additionally, the connection between dysphagia, oral care, and pneumonia, as well as the possibility that some of the present oral care procedures may increase the risk of pneumonia in those with dysphagia.

Blackwell, Zara, Littlejohns & Penelope (2010) determined the prevalence, diagnosis, and treatment of dysphagia at three private rehabilitation clinics in South Africa. In the care and management of patients with dysphagia, it was reported that all three clinics showed strong evidence of a multidisciplinary approach. This highlighted the need for increased education of collaboration between speech-language pathologists and nursing staff and supported the need for further research in the area of poststroke dysphagia.

Dysphagia and feeding of nursing home residents are areas that Certified Nurse Assistants (CNA) are unaware about. Interestingly, there was a dearth of precise, thorough information about dysphagia and managing difficult feeding behaviours in CNA textbooks and lectures. SLPs have specialised training that enables them to help CNAs communicate more effectively and give accurate information to their nursing counterparts. (Pelletier, 2004)

Nurses should be trained to conduct an immediate screening procedure on the relevant patients in order to lessen the negative impacts. If the patient fails the screening, they should be directed to a speech-language pathologist for a thorough examination. Therefore, a thorough dysphagia screening and management have to be incorporated in the nursing care plan.

### *Need for the Study*

Evaluating how well-informed nurses in Kuwait were on dysphagia, how to assess for it, and how important speech-language pathologists were in the diagnosis and treatment of the condition. This understanding and knowledge is important because the early referral of patients to the SLP for diagnosis and rehabilitation helps in better outcome and reduces risks.

## **METHODOLOGY**

### *Aim*

The study aims at understanding the knowledge and awareness of the various assessment and rehabilitation techniques of dysphagia and the role of SLPs among the nurses in Kuwait. The study was carried out in two phases.

### *Phase I: Preparation of Questionnaire*

A self-administerable 13 closed-ended questions (yes/no) were developed that address their awareness and knowledge on dysphagia and examination and management of swallowing performed by an SLP. Demographic information and a self-administerable questionnaire are the metrics used. The developed questionnaire was validated by ten SLPs with more than five years of experience in the field. The corrections and suggestions advised by the SLPs were incorporated and the final questionnaire was ready which is as below.

### *Appendix I*

1. Are you aware about the term 'Dysphagia'?  
o Yes o No
2. Do you know about the four stages of swallowing?  
o Yes o No
3. Have you undergone any formal training on dysphagia assessment and management?  
o Yes o No
4. How often do you encounter dysphagia problems in patients?  
o Always o Rarely
5. What are the most common complications of dysphagia observed in patients?
6. Are you aware about the various assessment tools of dysphagia?  
o Yes o No
7. Within how many hours of admission, will you screen the patient for dysphagic problems?  
o 12 hours o 24 hours
8. Are you aware about hygiene, specific care related to nutrition and medications in dysphagic cases?

- o Yes o No
- 9.Are you aware that Speech Language Pathologists (SLP) provide a major contribution in the dysphagia assessment and management team?
- o Yes o No
- 10.Are you aware about the various dysphagia intervention strategies provided by the SLP?
- o Yes o No
- 11.Are you aware about the hygiene tips and complications seen during tube feeding?
- o Yes o No
- 12.Do you find these intervention strategies provided by the SLP yielding improvement in patients?
- o Yes o No
- 13.Do you feel that nurses being primary care takers should accompany a SLP during the assessment and intervention of dysphagia?
- o Yes o No

Question 9	14	35.0%	26	65.0%	40	100.0%
Question 10	34	85.0%	6	15.0%	40	100.0%
Question 11	1	2.5%	39	97.5%	40	100.0%
Question 12	8	20.0%	32	80.0%	40	100.0%
Question 13	0	0.0%	40	100.0%	40	100.0%

All nurses were aware of the term ‘dysphagia’. Question 2 was concerned about the stages of dysphagia. 37.5 percent of nurses were aware of the stages while 62.5 percent were unaware of them. Question 3 was about whether nurses had undergone any formal training on assessment and management of persons with dysphagia. 95 percent of people lacked formal training in dysphagia assessment and management compared to just 5 percent who had received formal training.

Question 4 was about the incidence of dysphagic patients in their routine.75% of the nurses saw dysphagic patients on a daily basis, whereas 25% of them saw rarely. Question 5 asked about the most common challenges that dysphagic patients encountered. Aspiration and choking or coughing while eating were the most often seen complications among dysphagic patients. While other complications including pneumonia, weight loss, and excessive salivation received the least seen as mentioned in order. Question 6 inquired about their familiarity with various dysphagia screening instruments. The different screening evaluation techniques were only known to 22.5 percent of nurses. for individuals with dysphagia.

Question 7 was about the time (in hours) within which a screening for dysphagic patients is done.85% of nurses said they would assess patients for dysphagia within 12 hours of admission if required. In questions 8 and 11, respectively, it was asked if they were aware of hygiene, specific care, and medication in dysphagic cases and during tube feeding. It was revealed that 85% of nurses were knowledgeable about nutrition-related care, hygiene, and medications for patients with dysphagia whereas 97.5% were aware about the hygiene tips and complications seen during tube feeding. Question 9 was whether or not the nurses felt that SLPs' contribution to evaluation and management was inevitable. However, only 65% of nursing professionals thought that SLPs were crucial to the dysphagia assessment and management team. Their knowledge of the various rehabilitation procedures employed by the SLP was the focus of Question 10. Only 15% of them claimed to be aware of the several dysphagia intervention strategies recommended by the SLP.

In response to Question 12, respondents were asked if they believed that the SLP's intervention techniques have helped patients with dysphagia. 80 percent of nursing professionals thought the SLP's intervention techniques had improved patients' conditions. Regarding question 13, the nurses were asked if they thought that, as the patient's primary caregivers, they ought to accompany an SLP throughout the assessment and treatment of their dysphagia. Because they are the patients' primary caregivers, they all agreed that they should be involved while an SLP assesses and treats dysphagia.

**Phase II**

**Participants with Inclusive and Exclusive Criteria**

Participants included randomly chosen 40 nurses with professional experience ranging more than 15 years and also provided care for patients with different neurological and stroke conditions in the ICU, neurological, and medical wards. The participants chosen were working in private hospitals in Kuwait.

**Stimulus Used**

The 13 closed-ended questions were used for the collection of the data.

**Procedure**

The validated online questionnaire was explained and mailed to the participants in December 2020. The participant’s task was to read and understand the questions carefully and choose the response.

**Analysis**

The questionnaire which was administered on nurses with their responses were collected and a score of 1 was given for the response ‘yes’ and 0 for the response ‘no’.The data was then subjected for statistical analysis and the results are discussed below..

**RESULTS AND DISCUSSION**

The aim of the study was to understand the knowledge and awareness of the various assessment and rehabilitation techniques of dysphagia and the role of SLPs among the nurses in Kuwait and the results obtained from the study are discussed below.

**Table 1** showing the responses of the nurses regarding their awareness and knowledge of dysphagia in kuwait. (in %).

	0		1		Total	
	Count	Row N %	Count	Row N %	Count	Row N %
Question 1	0	0.0%	40	100.0%	40	100.0%
Question 2	15	37.5%	25	62.5%	40	100.0%
Question 3	38	95.0%	2	5.0%	40	100.0%
Question 4	10	25.0%	30	75.0%	40	100.0%
Question 5	0	0.0%	40	100.0%	40	100.0%
Question 6	31	77.5%	9	22.5%	40	100.0%
Question 7	6	15.0%	34	85.0%	40	100.0%
Question 8	6	15.0%	34	85.0%	40	100.0%

**Table 2** showing the overall knowledge of nurses about dysphagia

over all know		
	Frequency	Percent
High	2	5.0
Low	15	37.5
Moderate	23	57.5
Total	40	100.0



Fig 1 showing the diagrammatic representation of the level of knowledge of dysphagia among nurses.

Table 3 showing the level of awareness of the nurses about dysphagia related assessment and rehabilitation and the role of SLPs.

Awareness	Frequency	Percent
High	19	47.5
Moderate	21	52.5
Low	0	0
Total	40	100.0

It can be concluded that nursing personnel had a moderate level of awareness and knowledge regarding dysphagia, its assessment and management methods, and the importance of an SLP in the same.

### DISCUSSION

Dysphagia, or disorders of deglutition, is a serious issue that has an impact on the health and quality of life of patients. The World Health Organisation has classified dysphagia as a disability and linked it to higher rates of morbidity and mortality as well as higher healthcare expenses. Most neurological diseases, such as stroke (40–58 percent in acute settings), dementia, Parkinson's disease (three out of five people have subjective dysphagia in formal assessments), chronic obstructive pulmonary disease (COPD) (around 27 percent), usually at the time of exacerbations, motor neuron disease, multiple sclerosis, head and neck cancer, thermal burn injury, and acquired brain injury, are associated with dysphagia.

Nurses are the most crucial professionals involved in a patient's care. Nurses are the ones who attend to the patients' daily requirements. Therefore, it is important that they are aware of the most widely utilised screening evaluation methods to reduce the likelihood of complications for the patient. The present study revealed that there is only a moderate understanding of dysphagic assessment and management as well as the role of the SLP among the team. Nurses therefore should be involved in the treatment of persons with dysphagia to lessen the adverse effects, this needs to be raised.

Abu-Snieneh and Saleh (2018), nurses must improve their evidence-based competences in dysphagia screening. As per the literature review, studies have discussed the advantages of instructing nurses to check for dysphagia among stroke patients.

Bhimte and Rangasayee (2015), nurses should be made more knowledgeable about dysphagia and how to treat it. Similar findings were made by Abdalwahab, Elsanous, Ibrahim, El-Saida, El-Rufai, and Elabdeen (2018) study, which indicated that nurses' clinical performance and general knowledge were both moderate among nurses in Saudi Arabia.

The nursing curriculum needs to include a formal training of dysphagic assessment and management approaches. During their clinical placements, they should also be exposed to the SLP team that works with dysphagic patients. To keep nursing practitioners up to date on the newest methods, awareness campaigns, updated dysphagia training programmes, and certification should be provided.

### SUMMARY AND CONCLUSION

The findings of the present study highlight the value of including a nursing professional with a SLP on the dysphagia assessment and management team. Being the primary caregivers who accompany the patients around the clock a day, their knowledge of the fundamental screening and referrals to the SLP is crucial.

Nursing students should receive thorough professional training throughout their programme. And should be hands-on training with the dysphagia team in hospital settings. A SLP-led training programme would improve one's understanding of dysphagia. Nursing personnel should participate in awareness campaigns, dysphagia education programmes on the most recent approaches, and be certified. All these would help in early identification and intervention would help the patients to overcome the adverse effects.

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