## Dysphagia; Awareness & Knowledge of Medical Practitioners and Understanding of Role of SLP in its Assessment & Management

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# ABSTRACT

**Background:** Dysphagia is a disorder of swallowing and/or feeding. It is associated with malnutrition, dehydration, pulmonary pneumonia and increased mortality. Timely assessment and management of dysphagia carried out by speech and language pathologist is necessary. SLPs evaluates and treats patients with dysphagia by using dysphagia therapy, postural changes, swallowing maneuvers and recommends texture modified dysphagia diet.

**Objective:** The aim of the present study was to explore the level of awareness medical practitioner have regarding dysphagia and speech and language pathologist's role in dysphagia.

**Methodology:** A non experimental, descriptive survey was conducted for the purpose of this research. Information was gathered by mean of a self designed questionnaire. The data was collected from Railway Hospital, Fauji Foundation Hospital and Pakistan Institute of Medical Sciences (PIMS) by using purposive convenient sampling technique. The sample of the study consists of 52 medical practitioners (27 males and 25 females) working in different hospitals, in which speech and language services were available and speech and language pathologists were accessible fulltime.

**Results:** The data analysis was carried out with SPSS version 17.0 for windows. The score obtained by the participants was 46.4%. The result shows that medical practitioners do not have adequate knowledge regarding the assessment and management of patients who suffer from eating and drinking difficulties.

**Conclusion:** On the basis of the present research, it was concluded that medical practitioners lack in their knowledge and understanding of basic dysphagia assessment and management practices. Their lack of awareness of SLP role results in decrease SLP referrals.

Key Words: Dysphagia, Speech and Language Pathologist, Medical Practitioners, Swallowing Disorder

# INTRODUCTION

The present study explores the level of awareness and knowledge medical practitioners have regarding dysphagia. General medical practitioners do not have adequate knowledge regarding dysphagia assessment and management. "Medical practitioners and caregivers lack the expertise to assess and manage the feeding difficulties<sup>,11]</sup>. Dysphagia screening, evaluation and management come under the domain of speech and language pathologists. The speech and language pathologist should be the primary professional involved in both the assessment and management of swallowing disorder<sup>[2]</sup>. Speech and language pathologist provides services in hospitals but medical practitioners usually do not refer patients with dysphagia to the speech and language pathologist. "The limited number of referral to speech and language pathologists implies that caregivers are not always aware of the physiological and anatomical disorder that causes the swallowing difficulties [1]. Dysphagia can be life threatening, hence, it is important for appropriate treatment and management to take place.

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Dysphagia is usually defined as "a difficulty in swallowing or in the process of transporting food and liquid from the oral cavity to the stomach" [3]. Dysphagia results in difficulty in eating and swallowing, watering of the eyes, choking and coughing during meals, sensation of food lodged in the throat etc.

There are two types of dysphagia, oropharyngeal and esophageal dysphagia, which are usually the result of either structural or motility disorders.

Swallowing disorder has a wide range of underlying causes; such as stroke, Parkinson's disease, Huntington's disease, Alzheimer's disease, and other neurological problems. Trauma-induced head injuries and cancers of the throat and mouth are also common causes <sup>[4]</sup>. Dysphagia is not always the result of disease or injury; swallowing difficulties can also occur in otherwise healthy elderly people simply as a result of the aging process.

Dysphagia has many adverse affects on the life of patients with dysphagia. If dysphagia is misdiagnosed or goes untreated, this may lead to the death of dysphagic patients. Dysphagia may cause upper respiratory infections, dehydration, malnutrition etc. "Serious complications commonly occur in individuals with dysphagia including malnutrition, weight loss, dehydration, aspiration pneumonia and death"<sup>[5].</sup>

A speech and language pathologist usually performs the clinical evaluation for dysphagia. The evaluation typically includes a bedside assessment of oral-motor functioning and signs and symptoms of dysphagia. An occupational therapist (OT) and physiotherapist (PT) who are qualified may perform the clinical evaluation along with the speech language pathologist.

Speech and language pathologist have knowledge and skills in assessment and management of dysphagia. They recommended compensatory techniques used to manage dysphagia <sup>[6]</sup>. Therefore, physician in different hospitals refer patients of swallowing disorders to speech and language pathologists for detail assessment and treatment. Postural changes are recommended for various types of dysphagic patients. "A speech and language pathologist would therefore have to first identify the physiological and anatomical disorder in the swallow and then determine the posture that will facilitate the best swallow"<sup>[1]</sup>.

determine the posture that will facilitate the best swallow  $\mathbb{C}^2$ .

Therefore this research was carried out to highlight the role of speech and language pathologists for dysphagia assessment and management. According to ASHA <sup>[7],</sup> 2004 speech and language pathologist (SLP) usually performs the clinical evaluation.

The purpose of conducting this research was, no research has been carried out in Pakistan to know the level of awareness medical practitioner do have regarding evaluation and management of patients with dysphagia. There is also lack of knowledge regarding the speech and language pathologist/therapist role in dysphagia assessment and treatment. Previous researches proved that SLPs plays a central role in evaluation and management of dysphagia. The present research will draw attention towards the role of SLPs in dysphagia and also investigate the level of awareness and knowledge regarding dysphagia.

#### **MATERIALS and METHODS:**

A non experimental, descriptive survey design was selected for the purpose of this research. Research was conducted in 3 government and non-government hospitals of Rawalpindi and Islamabad. These hospitals were selected due to their availability of in house SLP services. Purposive convenient sampling technique was used to collect the data. The sample was consisted of 52 qualified medical practitioners. The inclusion criteria of the current study were any medical practitioners who are working in different hospitals, in which speech and language pathologists provide fulltime services.

The protocol of study consists of demographic sheet and a self- report questionnaire. Demographic information was collected through demographic data sheet which was developed by the researcher according to the required information and need of research. It provided information in terms of name, age, qualification and years of working.

The questionnaire was developed by the researcher to measure the level of awareness and knowledge regarding dysphagia. The questionnaire is consisted of 15 self-report items. Each correct answer scored "1" and incorrect answer scored "0". The scores are ranging from low score of "0" to high score of "15". The questionnaire is keyed in such a way that the higher the score, the higher the level of awareness medical practitioner has regarding dysphagia.

### **RESULTS:**

The study investigated the awareness and understanding medical practitioners have regarding dysphagia. The present study also revealed the level of awareness medical practitioners has regarding the role of SLP in dysphagia. The data collected was descriptively analyzed, tables and graphs were used to summarized and display the frequency distribution.

#### Table 1:

Frequencies (f) and percentage values (%) for the demographic variables (N=52)

Variables	Categories	Frequencies	Percentage
Gender	Male	27	51.9%
	Female	25	48.1%
Age	20-30	34	65.4%
	31-40	12	23.1%
	41-50	1	1.9%
	51-60	5	9.6%

Table shows that majority of the participants (51.9 %) are male and (48.1 %) are female. Majority of the participants (65.4 %) falls in the age range of 20-30 years. Majority (65.4%) have working experience of ranging from 0-4 years.



Figure no.1 shows years of working of medical practitioners. Table 2:

Frequencies (f) and percentage values (%) for the total score of the participants (N=52)

Score	Frequency	Percentage	
3.00	3	5.8%	
4.00	7	13.5%	
5.00	3	5.8%	
6.00	4	7.7%	
7.00	6	11.5%	
8.00	19	36.5%	
9.00	8	15.4%	
10.00	2	3.8%	

Total score: 780 (15\*52=780), Cutoff score: 390, Score obtained: 362

Table shows that 36.5% of the participants scored 8 points. The total score achieved by the participants is 362 (46.4%). The score obtained by the participants is less than the cutoff score; this shows that the participants do not have adequate knowledge regarding it.



Figure no.2 shows the total score of the participants.

# DISCUSSION

Demographic information was taken in terms of age, gender and years of working. Table no.1 shows the frequency and percentage for the demographic variables. It demonstrates that majority (51.9%) of the participants are male (see table no.1). There are 27 males and 25 females medical practitioner who took part in the present research. The majority of the participants fall in the age range of 20-30 years and majority of the participants have working experience of 0-4 years (see figure no.1).

The frequency and percentage of total points scored by the participants is illustrated by table no.2. The table indicates that the majority (36.5 %) of the participants scored 8 points (see figure no. 2). The overall score obtained by the participants is less. There are 15 questions in the questionnaire and 52 participants, the total score is 780. The cutoff score is 390 that is (50%). If participants score 50% or above, then they have awareness regarding dysphagia, score less than 50% shows lack of awareness. The result shows that the total score obtained by the participants is 362 (46.4%), which is less than the cutoff score. This shows that the participants are unaware and do not have adequate knowledge regarding dysphagia. They also lack knowledge regarding the role of speech and language pathologists in dysphagia. "The medical practitioners have limited interactions with speech and language pathologists and they are unaware of the role of SLPs in management of dysphagia" <sup>[1]</sup>.

The finding of the present research indicate that the medical practitioners with less working experience have more knowledge as compare to those who have more working experience. Table no.3 shows that the majority of medical practitioners scored 8 points who have working experience of up to 4 years. Medical practitioners at the early career point with limited experience shows better result. This may aim to increased evidence that new medical practitioners use internet and they got new information from it. The medical practitioners having working experience of more than 4 years do not have adequate knowledge regarding dysphagia and role of SLP in dysphagia. This may be as the MS Speech & Language pathology started in 2010 and is a relatively new profession in Pakistan. "SLP is still a relatively new discipline and there remains a considerable need to create awareness regarding the role of speech and language

pathologists in dysphagia" <sup>[1]</sup>. There is possibility that older medical practitioners did not have dysphagia management in their curriculum, that's why they are unaware of the dysphagia assessment, and management and role of speech and language pathologists in dysphagia. The trends in the dysphagia assessment and management have changed substantially for the last few years <sup>[1]</sup>. The result shows that knowledge and understanding of dysphagia is not dependent on the working experience of the medical practitioners.

The present study reveals that medical practitioners do not have knowledge regarding which health professional deals with dysphagia. Majority of the participants (94.2%) replied, ENT (Ear Nose Throat) specialists deal with dysphagia. They are unaware of the fact that assessment, management and treatment of patients with dysphagia comes under the domain of speech and language pathologists. According to ASHA the practice of speech and language pathologists includes providing services for patients with dysphagia. Evaluation and treatment of swallowing disorders is included in the scope of practice for speech and language pathologist <sup>[6]</sup>. "Speech and language therapists (SLT's) are the only professionals qualified to diagnose, assess and provide a programme of care to address the communication and swallowing need" (RCSLT 2007)<sup>[8]</sup>. "Patients with dysphagia must refer to the SLP for more extensive assessment and evaluation"<sup>[9]</sup>. SLPs have extensive experience in providing dysphagia services. When problems with dysphagia are identified, an early referral to a speech and language therapist is helpful <sup>[3]</sup>. The result shows that majority of the medical practitioners do not refer patients with swallowing disorder to the speech and language pathologist, although fulltime speech and language services are available in their work setting. The role of medical practitioners is to refer the individuals with swallowing difficulties to the speech and language pathologist <sup>[1]</sup>. If the patients with dysphagia are not referred to speech and language pathologists, they may go undiagnosed and untreated; it may leads to several health problems due to dehydration and malnutrition<sup>[10]</sup>.

**CONCLUSION:** The study concludes that medical practitioners do not have adequate knowledge and understanding regarding dysphagia assessment and treatment. Medical practitioners, who are working in different hospitals, are unaware of the role of the speech and language pathologist in assessment and management of dysphagia. Medical practitioners do not refer patients with dysphagia to the speech and language pathologist although speech and language pathologists are providing fulltime services in their hospital.

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