

ORIGINAL ARTICLE

Physicians' Perception about the Role of Speech and Language Pathologist in DysphagiaFAIQA SALEEM¹, ARSHAD MEHMOOD NAZ², HUNIA KASHIF³, LARAIB RAMZAN⁴, FAHAD MASOOD⁵, ATTAULLAH KHAN NIAZI⁶¹Speech and language pathologist, Cradles to Crayons Learning Centre.²Assistant Professor, Department of Rehabilitation Sciences, Faculty of Allied Health Sciences, University of Lahore.³Speech and language pathologist, Department of Rehabilitation Sciences, Faculty of Allied Health Sciences, University of Lahore.⁴Speech Language Pathologist, Hameed Latif Hospital, Lahore.⁵Assistant Professor, Department of Rehabilitation Sciences, Faculty of Allied Health Sciences, University of Lahore.⁶Associate Professor Cardiovascular surgery Shalamar medical and dental collegeCorrespondence author: Faiqa Saleem, Email: sfaiqa7@gmail.com, Cell: +92-308-7035353**ABSTRACT****Introduction:** Dysphagia is characterised as having trouble digesting food from the mouth to the stomach. It is the sensation of the hindrance of food when it's passing from the mouth through the oesophagus. Dysphagia can be caused due to or pharyngeal or oesophageal etiologist.**Objective:** To determine the physician perception about speech-language pathologists' role in dysphagia.**Methodology:** To achieve this goal, the researcher surveyed physicians including otolaryngologists, neurologist and gastroenterologists about their perception about the involvement of SLP in the management of dysphagia. A cross-sectional survey was conducted in Lahore, Pakistan. Data for the study was collected from the public and private hospitals and clinics by convenient sampling technique. 97 Doctors completed a questionnaire created by the researcher that had two sections, each of which captured the participant's demographics, closed ended questions regarding physician's perception (15 items).**Results:** The results depict that 40.2% of physicians thinks that speech and language pathologist rarely become a part of the team when patient reports difficulty during Preparatory and Pharyngeal phase of swallowing with the mean±SD = .92 ± .909. While 37.1% of the physician thinks that SLPs frequently becomes a part of team when patient complaints about voice alternations with the mean±SD = 2.43 ± 1.117, 53.6% of the physician thinks that SLPs frequently becomes a part of team when patient complaints about Drooling with the mean±SD = 2.59 ± .887, 53.6% of the physician thinks that SLPs frequently becomes a part of team when patient complaints about Poor tongue movements with the mean±SD = 2.74 ± .916, 50.5% of the physician thinks that SLPs frequently becomes a part of team when patient complaints about asymmetrical facial musculature with the mean±SD = 2.97 ± .847.**Practical Implication:** The field of speech and language pathology has the main domain of dealing with dysphagia patients but the physicians have yet to understand the scope of speech language pathologists and the role they play in the diagnosis and management of dysphagia, this research will serve to point out the gap of knowledge and awareness of the physicians and the areas that need to be addressed to narrow this gap and increase patient care quality.**Conclusion:** This study concluded that most of the physicians had insufficient knowledge about the involvement of Speech and language pathologist in the multidisciplinary team for the management of dysphagia.**Keywords:** Speech and language pathologist, Dysphagia, Swallowing disorders, Feeding disorder.**INTRODUCTION**

Dysphagia is characterised as having trouble digesting food from the mouth to the stomach.¹ It is the sensation of the hindrance of food when its passing from the mouth through the oesophagus. Dysphagia can be caused due to oropharyngeal or oesophageal etiologies².

Swallowing is a complex procedure which is performed voluntary and involuntary by the coordination of muscles and several cranial nerves. Normal swallowing consists of three phases, the oral preparatory phase, pharyngeal phase and oesophageal phase.⁵ During the oropharyngeal or oesophageal phase of swallowing, there is an abnormal delay in the movement of bolus that can be solid or liquid. This delay can be temporary, last few seconds or can be manifested as fixed delay⁷.

Oral sign and symptom of dysphagia includes anterior leakage i.e., drooling, difficulty in chewing food, delayed initiation of the swallow, oral residue, inability to maintain lip closure, leading to food and/or liquids leaking from the oral cavity i.e., anterior loss of bolus, extra time needed to chew or swallow.⁸

Pharyngeal sign and symptoms poor bolus movements from mouth to stomach nasopharyngeal regurgitation, complaints of food sticking or complaints of a fullness in the neck, complaints of pain while swallowing known as odynophagia, changes in vocal quality like wet or gurgle voice during or after eating or drinking, coughing or throat clearing during or after eating or drinking, Respiratory problems while eating, aspiration pneumonia, fever or respiratory infections.¹³

In the United States, approximately 600,000 patients with neurological impairment are affected by dysphagia each year.⁹

The primary goal of dysphagia intervention is to support adequate nutrition and hydration and return to oral intake including

incorporating the patient's dietary preferences and consulting with family members or caregivers to ensure that the patient's daily living activities are being considered^{10,23}

Speech and language pathologist play very important role in the management and evaluation of the swallowing disorder which is also known as dysphagia.^{4,24} Dysphagia effects on patient's health, safety, quality of life, participation and health care expenditure.^{5,25} A primary goal of SLP in management is to prevent aspiration, aspiration pneumonia, dehydration and malnutrition, and to improve swallowing-related health outcomes¹¹. SLPs have knowledge of the structure, system, and functional aspects of the upper aerodigestive system as they are related to swallowing and speech. No matter the place of employment, the general objective for each speech-language pathologist, is to "optimize individuals' ability to communicate and swallow, thereby improving quality of life"^{12,26}

A study to evaluate first-line healthcare professionals FHPs' knowledge and referral procedures for SLPs for people of all ages with mild traumatic brain injury e.g., dysphagia. This study included 126 Athletic trainers, doctors, physician assistants, nurses, and nurse practitioners. Data is collected by completing an online survey. The result of this study indicated that majority of first-line healthcare professionals lack of understanding of the SLP's function in management of mild traumatic brain injury e.g., dysphagia. Which could account for the weak referral trends noted by first-line health professionals for SLP services.^{5,27}

An investigation into the awareness, expertise, and involvement of medical and dental professionals in the management of dysphagia in Malaysia. 391 medical and dental professionals were included in this study overall. Participants answered questions on their amount of involvement, knowledge,

and understanding of the role of SLPs and symptoms of dysphagia. The findings showed a substantial correlation between the degree of medical and dental professionals' involvement, the proportion of head and neck cancer patients they referred, and the level of awareness of the SLP's function. In order to enhance their swallowing function and prevent additional issues including dehydration, starvation, and death, head and neck cancer patients should receive swallowing care from speech-language pathologists, according to the study's findings.¹⁴

M.S. Brammer. and, C.A Vicari., in 2020 conducted a study in which inter professional collaboration among SLPs and physicians who works with patients diagnosed with dysphagia. It was a cross sectional survey study which included physicians like otolaryngologist and gastroenterologists with the sample size of 30. Data was collected from the hospitals and private care settings. The results of this study indicated that there is lack of collaboration between SLP and gastroenterologists as compared to otolaryngologists. This study concludes that the physicians who works with dysphagia sees benefits benefit in interprofessional practice.¹⁵

The field of speech language pathology is bourgeoning and there is limited literature available to consult on a national and international level. The evolution of the field needs to be documented to develop the field and make corrective strategies when needed.

METHODOLOGY

The cross-sectional survey was conducted. This investigation lasted six months from November to April. The participants for the study were selected based on convenience sampling technique. Sample size was calculated by using RAOSOFT. Subjects was included in the study with 1 to 6 years of working experience in private or public hospital or clinical settings which includes Mayo Hospital, Fatima Memorial Hospital and private clinical settings of Lahore. This study included 33 Otolaryngologists, 33 Neurologists and 31Gastroenterologists. Data was collected by using a researcher made questionnaire consisting of 15 closed ended questions, consists of two components: 1st component were demographics and basic information about the participants, and 2nd

consisted on questions related to the perception of physicians about the involvement of SLPs in management of dysphagia. Three experts who were consultant SLPs and An Otolaryngologist evaluated the face and content validity of the questionnaire. The cornbach's alpha value of the questionnaire was $\alpha = 0.68$.

RESULTS

The statistical package for social sciences (SPSS) software, version 20, was used to analyse the data. Data is presented in the form of tables and graphs. The quantitative variables were presented as mean, standard deviation, frequency and percentages. Three professions that are included in this study were analysed separately to determine the frequency of each response. Then, an overall result was established. Data was taken from 97 physicians from different areas of Lahore, Pakistan.

Table 1:

Demographics/Basic Information		Frequency	Percentage
Gender	Male	80	82.5
	Female	17	17.5
Qualification	Neurologist	33	34.0
	Gastroenterologist	31	32.0
	Otolaryngologist	33	34.0
Work Experience	1-2 years	18	18.6
	3-4 years	36	37.1
	5-6 years	43	44.3
Work Settings	Hospital	49	50.5
	Clinical	23	25.8
	Both	23	23.7

Out of 97 participants, Majority were males. 33 neurologist, 31gastroentrolgist, 33 otolaryngologists from different areas of Lahore participated in this study. 450.5% data was obtained from the individuals working in hospital settings, 25.8% of the data was obtained from individuals working in private clinical settings while 23.7% of them were working in both clinical and hospital settings. 18.6% had 1-2 year of experience, 37.1% had experience of 3-4 years of working experience while 44.3% had 5-6 years of working experience.

Table 2:

Sr no.	Questions	N (%)				
		0 (never)	1 (seldom)	2 (sometimes)	3 (frequently)	4 (always)
1	Nasal Regurgitation	23(23.7%)	34(35.1%)	31(32.0)	8 (8.2 %)	1(1.0%)
2	Difficulty Initiating Swallowing	24(24.7%)	26(26.8%)	35(36.1%)	11 (11.3%)	1(1.0%)
3	Food Pocketing	18(18.6%)	39(40.2%)	28(28.9%)	11(11.3%)	1(1.0%)
4	Throat Clearing	21(21.6%)	33(34.0%)	26(26.8%)	16(16.5%)	1(1.0%)
5	Aspiration/Penetration	30(30.9%)	39(40.2%)	14(14.4%)	11(11.3%)	3(3.1%)
6	Food Sticking	31(32.0%)	33(34.0%)	25(25.8%)	7(7.2%)	1(1.0%)
7	Pills Sticking	39(40.2%)	32(33.0%)	21(21.6%)	5(5.2%)	0
8	Pharyngeal Reflex	29(29.9%)	28(28.9%)	29(29.9%)	11(11.3%)	0
9	Voice Alternations	6(6.2%)	14(14.2%)	25(25.8%)	36(37.1%)	16(16.5%)
10	Reduced Laryngeal Elevation	28(28.9%)	37(38.1%)	17(17.5%)	10(10.3%)	5(5.2%)
11	Problem Chewing	20(20.6%)	35(36.1%)	27(27.8%)	14(14.4%)	1(1.0%)
12	Drooling	1(1.0%)	13(13.4%)	21(21.6%)	52(53.6%)	10(10.3%)
13	Multiple Swallow	24(24.7%)	37(38.1%)	20(20.6%)	11(11.3%)	5(5.2%)
14	Poor Tongue Movement	0	14(14.4%)	14(14.4%)	52(53.6%)	17(17.5%)
15	Asymmetrical Facial Musculature	0	7(7.2%)	15(15.5%)	49(50.5%)	26(26.8%)

By applying descriptive statistics, the results were presented in the form of frequency and percentages which indicated that 35.1% of participants thinks that SLPs seldomly involves if patient reports nasal regurgitation, 36.1% of participants thinks that SLPs sometimes involves if patient reports difficulty initiating swallowing, 40.2% participants thinks that SLPs seldomly involves if patient reports food pocketing, 34.0% participants thinks that SLPs seldomly involves if patient reports excessive coughing or throat clearing, 40.2% of participants thinks that SLPs seldomly involves if physician observes aspiration or penetration, 34.0% of participants thinks that SLPs seldomly involves if patient reports

food sticking, 40.2% of participants thinks SLPs never involves if patient reports pills sticking in the throat, 29.9% of the participants thinks that SLPs never involves if physician observes reduced pharyngeal reflex, 37.1% of participants thinks that SLPs frequently involves if patient reports changes in voice, 38.1% of participants thinks that SLPs seldomly involves if physician observe reduced pharyngeal reflex, 36.1% of participants thinks SLPs involves seldomly if patient is unable to chew food properly, 53.6% of participant thinks SLPs frequently involves if patient complains about drooling, 50.5% of participants thinks SLPs involves if physician observe asymmetrical facial musculature

DISCUSSION

Dysphagia is swallowing disorder which is caused due to aging, neurological impairments and structural anomalies. Physicians are the one who diagnose the type of dysphagia then further refer to SLP or other health professionals for interventional procedures.¹⁶⁻¹⁸ Present study is aimed to determine the perception about the role of SLP in dysphagia. The analysis supports the theory that some of physicians surveyed thinks that SLP does not involve in multidisciplinary team regarding to dysphagia management while majority of the respondents thinks that SLP rarely involves in multidisciplinary team for dysphagia management, some of the respondents thinks that SLP plays a vital role in the management of dysphagia. The finding of the present study is similar to the findings presented by¹⁹⁻²¹ with the objective to explore collaboration between speech-language pathologist and physicians who were working with patients diagnosed with dysphagia. They found that the majority of the gastroenterologists thought that SLP rarely involves in an interprofessional team while some otolaryngologist thought that SLP involves in an interprofessional team when it comes to dysphagia

Similarly, In Iran, in 2019 presented finding with the objective to determine physician's perspective on a multidisciplinary approach to dysphagia management. Data was taken from public and private hospitals of Iran with the random sampling technique. All related participants such as Otolaryngologist, Neurologist, Internees and general practitioners were invited to participate in the studies. Investigator evaluated their OPD knowledge about the sign and Symptoms of dysphagia. It is described in the study that physicians' do have knowledge about the signs and symptoms of dysphagia but they had inadequate knowledge about the role of other health professionals in OPD management.²²

CONCLUSION

This study concluded that most of the physicians had insufficient knowledge about the involvement of Speech and language pathologist in the multidisciplinary team for the management of dysphagia.

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