

Assessment of Awareness Among Speech and Language Pathology Regarding Dysphagia

Muhammad Azzam Khan¹, Muhammad Moazzam^{1,2}, Rabia Qamar¹, Ahmer Shehzad¹, Wafa Fatima², Syed Bilal Hassan².

¹Department of health Professional Technologies, The University of Lahore, Pakistan.

²University Institute of Public Health, The University of Lahore, Pakistan.

*azzam.khan@dhpt.uol.edu.pk,

Abstract

Background:

Dysphagia is the difficulty in swallowing and speech pathologists are the professional which deal with the disorder. As it is a rare and complicated disorder so most speech language pathologist avoid or ignore such patients due to lack of exposure. Despite sound theoretical knowledge, clinical practice was lacking.

Objective:

To understand the awareness of dysphagia among speech and language pathology in Pakistan.

Methods:

It is a cross-sectional study conducted across Pakistan. Data was collected by questionnaire based on demographic profile and *theoretical and professional knowledge* among 75 participants. The data was analyzed by "Statistical Package for Social Sciences" SPSS (version 20.0).

Results:

Our results showed that 62.2%, of speech language pathologists did not have significant knowledge of dysphagia, 65% of speech language pathologist had minimum experience working with dysphagia, and 65% speech language pathologist said that they have at least worked once with dysphagia. A significant relationship was found between awareness of dysphagia among speech language pathologist.

Conclusion:

After analyzing the data using SPSS, it was concluded that majority of people had awareness of dysphagia. Majority of the lacking was seen in people who did not practice with patients of dysphagia and fresh graduates had

goods results because of recent academic exposure.

Key words:

Dysphagia, awareness, speech-language pathology.

Introduction:

Dysphagia which is usually caused by a stroke is due to brain lesion caused by cerebrovascular disease or cerebrovascular accident. There is usually little discussion, about dysphagia in traditional medical and neurological textbooks.¹ Speech and language pathologist has the responsibility of assessing, diagnosing, and treating the disorders of speech, language and swallowing. It is paramount that they are skilled all the attributes of their profession and have ample knowledge of all the disorders so as to not compromise the quality of treatment of the patient. Proper awareness of all the disorders and aspects of the professions can be kept in touch by continuous revision of the courses offered in the country and including and excluding topics as they come and go. As continuous research is done on the treatment methods, assessment methods and on the nature of disease itself, it is necessary to keep the field professionals up to date about those innovations via seminars and publishing of researches in journals. As for the student body their courses need to be reviewed and kept up to the mark to produce competent personnel. The disorder which is often over looked and least practiced in Pakistan by the SLPs is those of swallowing disorders. Even the profession's name speech and language pathology does not give clue of this domain but it is a very real domain which is

studied and practiced by SLP professionals all over the world. In Pakistan most of the SLPs limit themselves to children, in which dysphagia is not that common; this lack of patient availability puts our professionals out of practice and out of touch with the disorder. In medical colleges and allied institutions often don't regard it as major disorder and put more emphasis on the prevalent disorders which is rightly so that professionally those disorders should be focused more but as being a student we should academically treat all disorders as equals and make our-self skillful in treatment of all disorders. The student's vocabulary should be updated regarding everything in their field. Dysphagia, which is derivative of two Latin words, "dys" which means abnormal and "phagia" which means eating. It is a disorder which hampers a patient's ability to take food from mouth to the stomach. Swallowing has three main phases: the oral phase, the pharyngeal phase, and esophageal phase. Problem in any of these phases there will be a case of dysphagia. The causes of dysphagia can vary from physical abnormality to psychogenic. From deformation of teeth which make it difficult for a child to eat hence avoidance of food to regurgitation of food due to a bad cardiac sphincter. The treatment of dysphagia varies with the degree of severity of the disorder. It could be as simple as counseling the patient about proper positioning to NG tube if necessary. Sometime only changing the food consistency or texture can make a marked difference in the life of dysphagia patient, but proper identification of the cause of dysphagia and its severity needs to be assessed. Video-fluoroscopy is the many observational tool in this regard to point out the point at which swallowing is impaired, the observation and a proper history of eating patterns can also give us valuable clues as to the nature of the problem. The study is designed to study the awareness of dysphagia among SLPs in the field.

Materials and Methods:

This cross-sectional study was conducted at various public and private institute, clinics and special schools with Speech services, over a period of six months from mid of 2020 till its end. A total of 75 questionnaires distributed among Speech and Language Pathology. The inclusion criteria, practitioners provide fulltime services. Total 75 practitioners agreed to take part in this study. The response rate of this study was 80%. Convenient sampling technique was selected to collect the data. Data was collected through self-made questionnaire. The questionnaire consists of two parts, first part discussed the interaction of the participants with dysphagia patients, work experience, research on dysphagia and frequency of patients, as well as seminars and conferences they attended on dysphagia. Second part of questionnaire consisted on to measure the level of theoretical knowledge regarding dysphagia of participants. The questionnaire is consisted of 25 items. Each item correct answer scored "1" and incorrect answer scored "0". The scores are ranging from low score of "0" to high score of "25". For data analysis, we have used SPSS version 25.0. The data was collected using social-media platforms and online questionnaires, surveys. We found the awareness & knowledge among speech and language pathology regarding dysphagia. The relationship between demographic profile and awareness & knowledge among speech and language pathology regarding dysphagia nurses were measured.

Results:

Demographic	Features	N (%)
Age		
Mean 25.32		
SD \pm 3.620		
Gender	Male	4(5.5)
	Female	69(94.5)
Education	Diploma	2(2.7)
Degree	Bachelor	56(76.7)
	Master	15(20.5)

Demographic	Features	N (%)
Place of work	Government	13(17.8)
	Private	60(82.2)
Work experience	0-3	48(65.8)
	4-7	20(27.4)
	8-12	3(4.1)
	13-20	2(2.7)
Working experience with dysphagia	Yes	48(65.8)
	No	25(34.2)

Table 1: Shows the participants' characteristics

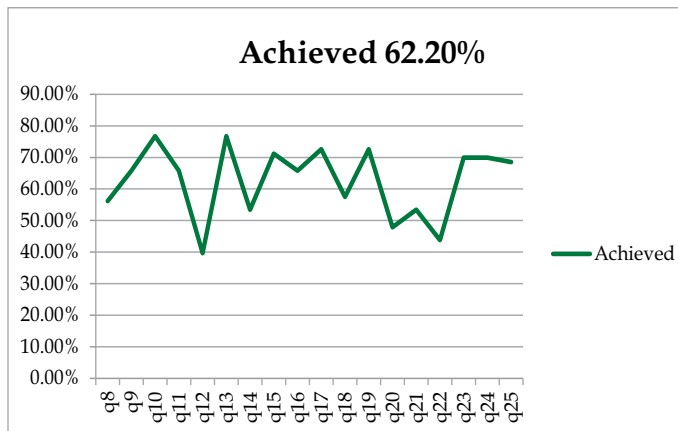


Figure 1: Participant's Dysphagia score results

According to graph 1, Dysphagia which falls out of practice almost immediately after graduation is not only neglected but also improperly handled by the handful of people which do deal with this disorder. This research aims to study the contact and interaction of the graduated speech and language pathologists with dysphagia and also their practical knowledge regarding it.

Questions	Achieved	Total
Q8	56.2%	100%
Q9	65.8%	100%
Q10	76.7%	100%
Q11	65.8%	100%
Q12	39.7%	100%
Q13	76.7%	100%
Q14	53.4%	100%
Q15	71.2%	100%

Questions	Achieved	Total
Q16	65.8%	100%
Q17	72.6%	100%
Q18	57.5%	100%
Q19	72.6%	100%
Q20	47.9%	100%
Q21	53.4%	100%
Q22	43.8%	100%
Q23	69.9%	100%
Q24	69.9%	100%
Q25	68.5%	100%
Total	62.20%	100%

Table 2: Participants' questions responses

Discussion:

This study is conducted to find the awareness of dysphagia among the speech and language pathologists in Pakistan. As Punjab being the most populated and developed region of Pakistan(census 2017), and due to ease of access to a good chunk of population of Punjab, the sample of speech and language pathologists for this study was taken from here. The data constitutes the speech pathologists working in hospitals, private practices, rehabilitation centers, special schools as well as academics in the field. The swallowing disorder known as dysphagia comes under the domain of speech and language pathologists. So it is to be taught and practiced like all the other disorders and should be given same attention and focus. A questionnaire was used for this purpose which consists of 2 phases. Phase 1 discusses the interaction of speech and language pathologists with dysphagia patients and their research and study of new developments and therapeutic techniques of dysphagia. Phase 2 discusses the practical knowledge and clinical aspects of dysphagia. A total of 25 questions were asked and the questionnaire was distributed through social and electronic media. 72 speech pathologists took part in the study. 95% of the

participants were females and 5% were males. With age ranging from 22 years to 40 + years. Total sample was divided according to qualification of speech and language pathologists in which 2% were diploma holders, 76% were bachelor, 20% were master degree holder. According to the results 18% of speech and language pathologists were working in government sectors and 82% were working in private sectors. It was evident from the result that 66% of the participants had 0-3 years of experience and 65% of the participants admitted that they had dealt with dysphagia at least once during their professional careers. 67% of the participants admitted that they treat dysphagia in their respective practices. Academically, 66% of the participants said that they studied dysphagia separately as a course. And only 27% and 38% respectively, of participants admitted that they read the latest articles, researches and findings regarding dysphagia and contribute to research of dysphagia. From the result it is shown that 38% of the patients said that they attend seminars regarding dysphagia. Taking into account that seminars were not supposed to be exclusively of dysphagia. From analysis it is shown that 82% of the participants admitted that they understand the pathology of dysphagia as well as the related conditions which can cause dysphagia. From survey it was shown that 42% of the patients claimed that they have dealt with oral phase dysphagia most of the time. These usually include patients with craniofacial abnormalities. A research was conducted in December 2011 in this study 470 persons with Parkinson's disease asked about swallowing problem related to their disease, they were evaluated using a self-administered questionnaire regarding their difficulty of their swallowing problem. The questionnaire was ascertained by the use of Rasch analysis and classical validation methods. The safety and effectiveness of directions of the Dysphagia fit the Rasch model well. The efficacy direction showed significant differences for men and

women, duration of the illness, awareness regarding dysphagia and times of meals. Significant values were also noted in the safety direction for duration and intensity of illness, knowledge of dysphagia, speech therapy and knowledge of thickening agents. It was noted that 90% of patients had problems concerning effectiveness and safety in swallowing, 79.45% patients were suffering from dysphagia but were not aware of their problem. The Dysphagia questionnaire is a suitable measure of dysphagia in PD, according to the Rasch analysis. Numerous patients with PD have dysphagia, although it was seen that the awareness of the condition was not as prevalent, so patients were unaware of the consequences of the thickening agents. It is known that many of the swallowing disorders in PD are asymptomatic and that the level of awareness of the disorder is not as prevalent. It is recommended that specific questionnaires as well as clinical and instrumental evaluation of dysphagia in clinical practice. A research undertaken in 2018 patients with craniofacial anomalies and related genetic defects may have a wide range of abnormalities causing dysphagia problem. Most have functional and anatomical factors contributing to their feeding and swallowing dysfunction, and many have other anomalies, such as TOF, congenital heart disease, etc. This may worsen their overall feeding abilities. These patients benefit from the fact that early feeding assessment in the neonatal period and close monitoring of weight gain and growth. A multidisciplinary approach with experienced practitioners in the specialty care of these patients is key to their management. A research was conducted at Riphah College of rehabilitation sciences, Riphah international university, Islamabad in 2010, which explored the awareness of medical GPs regarding the awareness of dysphagia and role of SLP regarding dysphagia. In which a similar pattern of descriptive survey was conducted with the help of self-made questionnaire. The GPs were

given this questionnaire which was divided on basis of two main phases of swallowing i.e. oropharyngeal phase and esophageal phase. The data was collected from Railway hospital, Fauji foundation hospital and Pakistan institute of medical sciences. 52 practitioners were included in the study (27 males and 25 females). The research used SPSS program to calculate results. This study found that the practitioners have inadequate knowledge about dysphagia and its treatment.

Conclusion:

After careful analysis, it was concluded that the graduating speech and language pathologists do not have enough knowledge and training regarding dysphagia. As shown by final results 62.2% had adequate knowledge of the disorder. So the universities and teaching hospitals should review their focus on this disorder.

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