International Journal of Research in Engineering and Science (IJRES)
ISSN (Online): 2320-9364, ISSN (Print): 2320-9356
www.ijres.org Volume 11 Issue 4 ǁ April 2023 ǁ PP. 641-645

Assessment of Quality Of Life in Individuals with Dysphagia: A Questionaire in Arabic

Nazia A Manaf, Dr. Satish Kumaraswamy

Date of Submission: 11-04-2023 Date of acceptance: 26-04-2023

I. INTRODUTION

Dysphagia or swallowing difficulty is an impairment of the emotional, cognitive, sensory and/or motor acts involved with transferring a substance from mouth to stomach, resulting in a failure to maintain hydration and nutrition and posing a risk of choking and aspiration. (Tanner 2006). Dysphagia is defined as a condition resulting from the halting in the eating pleasure or in proper hydration and nutrition, which also implies routine changes and subsequent decline in the quality of life. Quality of life is defined as individual perception on their life status in the cultural context and value system where they live in, and in relation to their goals, expectations, patterns, and concerns.

According to (WHO,1995) the quality of life of an individual may be affected by impaired physical health, psychological state, level of independence, social relationships, personal beliefs, and environment related factors. Dysphagia mostly affects the fundamentals of human functions such as eating and drinking that are associated with a wide range of speech and language disorders. It has a significant effect on individuals quality of life with several disease conditions. (Leow, Huckabee and Beckert 2010).

Swallowing can be affected due to various disorders like neurological diseases, chronic obstructive pulmonary diseases, post-polio syndromes, Parkinson's disease, dementia, cerebral palsy, stroke, acquired brain injury, mandibulectomy, glossectomy, head and neck cancer.

II. REVIEW OF LITERATURE

Normal swallow has been described as a series of four phases that relate to the passage of the bolus through specific anatomic structures. These phases are the oral preparatory, oral pharyngeal and esophageal phase. The act of swallowing is complex because respiration, swallowing and phonation all occur at one anatomic location the region of the pharynx and larynx.

Swallowing to be normal, the anatomical structures of the upper aero digestive system must be intact and their function in sequence with each other must be appropriately timed. This requires the integrity of both the motor and sensory nervous system.

The control of swallowing is complex processes that depend on a number of coordinated neuromuscular interaction between the central nervous system, the enteric nervous system. and the muscular components of swallowing apparatus. (Perlman and Delrieu 1997).The control of swallowing include specific region of the cortex and two primary sites the lower brain system. The neurons surrounding the reticular formation also are involved. The two regions are represented on both sides of the brain stem and are interconnected extensively, so that either side can coordinate the pharyngeal and esophageal phase of swallowing (Richamod and storey 1967).

Swallow Phase

The swallowing process consists of four types: oral preparatory, oral, pharyngeal and esophageal. The first two phases are entirely voluntary, with the pharyngeal phase both voluntary and involuntary, the esophageal phase completely involuntary.

Oral preparatory phase

The oral preparatory phase length varies considerably depending on the texture of the food. Phase will involve the manipulation of food in the mouth to form a bolus. Helping to prevent a bolus of liquid from entering the pharynx before the swallow produced.

Oral phase
The action is manipulating a bolus of food or liquid include elevation of the tongue followed by a posterior direction.

Pharyngeal phase
The production of swallow and the elevation of the soft palate to close off the nasopharynx. This phase consists of peristaltic contraction of the pharyngeal constrictors to propel the bolus through the pharynx. The proactive function of the larynx is the production of the proactive cough reflex.

Esophageal phase
This phase is completely involuntary. It moves the bolus through the esophagus and ends when the food passes through the gastroesophageal junction. Avedeson and Brodsky (1993)

Causes of swallowing disorders
Swallowing is complex, and several conditions can interfere with this process. However, Dysphagia generally falls into one of the following categories.

Esophageal Dysphagia: Refers to the sensation of food sticking or getting hung up in the base of your throat or in your chest after you've started to swallow. Some of the cause of esophageal Dysphagia include.

Achalasia: When your lower esophageal muscle (sphincter) doesn't relax properly to let food enter your stomach, it may cause you to bring food back up into your throat.
Diffuse spam: This condition produces multiple high-pressure, poorly coordinated contractions of your esophagus, usually after the swallowing.
Esophageal tumors: Difficulty swallowing tends to get progressively worse esophageal tumors are present.
Gastroesophageal reflux disease: Damage to esophageal tissue from stomach acid backing up into your esophagus can lead to spam or scarring and narrowing of your lower esophagus.

Scleroderma: Development of scar like tissue, can weaken your lower esophageal sphincter, allowing acid to back up into your esophagus and cause frequent heartburn.
Effects of disorders on swallowing
Disorders that affect swallowing can be categorized in many different ways, including by the anatomic site of lesion such as central or peripheral nervous system by the underlying etiology or by the clinical presentation such as ischemia and degeneration.

Parkinson's disease: They lose control of their mouth and throat muscles. They have difficulty in chewing and managing solid foods.
Brain tumor: The result in Dysphagia depending on the brain region involved. Mainly the treatment modalities for the tumor including surgery and radiation therapy can affect swallowing.

Cancer: Cancer is when the cells start to grow out of control. The cancer cells keep on growing and making new cells. They crowd out normal cells. This causes problems in the part of the body where the cancer started.

There are several factors to be considered in assessing Dysphagia person's quality of life. Lawton (1999) defines quality of life is a multidimensional framework, inclusive of both subjective and objective criteria. Objective environment, behavioral competence, perceived quality of life and psychological function.

AIM OF THE STUDY
The aim of the present study:
- To assess the quality of life in Dysphagia patients
- To compare the quality of life between male and female patients.

III. METHODOLOGY

The aim of the present study was to: -
- To assess the quality-of-life in Dysphagia patients
- To compare the quality of life between male and female patients.

Subject selection criteria
30 patients who were further divided into 15 males and 15 females with an age range of 50-65 years participated in present study.

Procedure
The study was carried out in two phases; first phase included preparation of a questionnaire, and second phase was administration of the developed questionnaire on individuals with dysphagia.
Preparation of Questionnaire: -
This questionnaire which was developed and used in Malayalam language was translated to Arabic by an Arabic language professor and later validated by 10 speech language pathologists who were working in Middle east for more than 5 years.

Administration of the Questionnaire
The questionnaire was administered on patients. The questionnaire includes demographic data (name, age, gender, occupation, address, and phone number), medical history, mode of feeding. The following sections were included in the questionnaire; functional, eating, psychosocial and physical and were made to rate each question with provided rate scale. The response obtained were tabulated with rating scale.

Analysis
Responses were taken on a five-point rating scale (never-1, hardly ever-2, sometimes-3, often-4, almost always-5).

IV. RESULTS AND DISUCUSSION

The aim of the present study was to find the quality of life in dysphagia patients and compare between male and female.
The obtained data was statistically analyzed, and results are discussed below.

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Functional	Male	15	3.347	.493	.127
	Female	15	3.227	.454	.117
Eating	Male	15	3.273	.443	.114
	Female	15	3.387	.453	.117
Psychosocial	Male	15	3.162	.327	.0844
	Female	15	3.196	.514	.134
Physical	Male	15	3.559	.540	.14
	Female	15	3.731	.712	.183
Total Score	Male	15	13.341	1.408	.723
	Female	15	13.5407	1.677	.436

Table 1: Showing mean, standard deviation and Gender wise descriptive statistics of various characteristics.

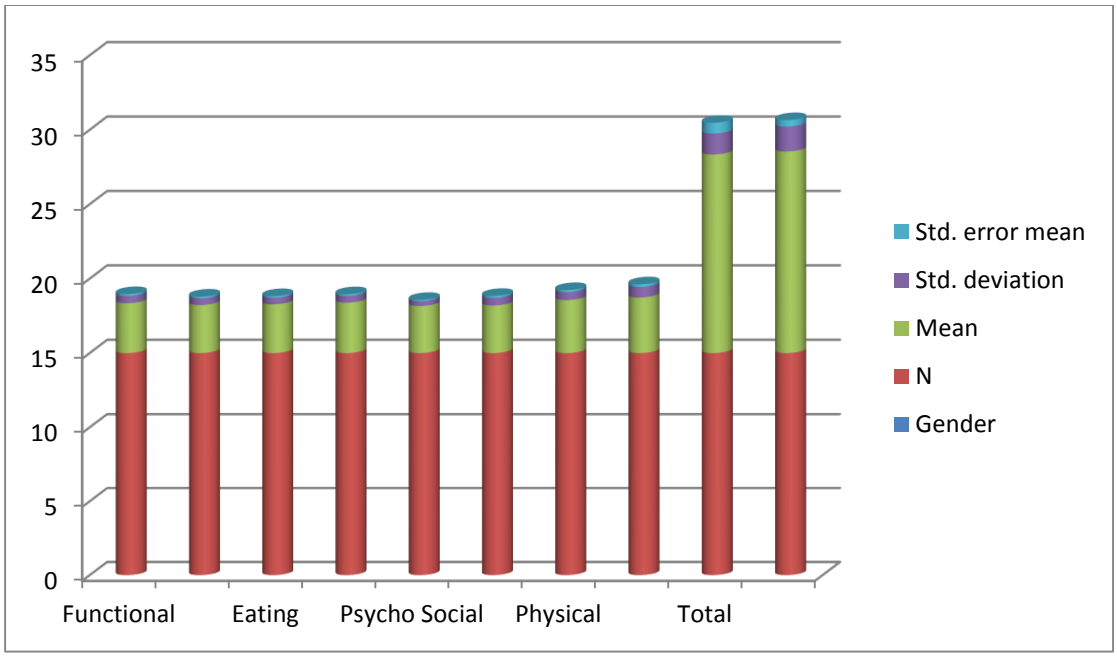

Fig 1: Showing the gender wise descriptive statistics of various characteristics.

From figure 1 and table 1 observed that all factors like functional, eating, psychosocial and physical were affected. When compare with male and female hence indicate all are equally affected with dysphagia.

	t-test for Equality of Means				
	T	**Df**	**P-Value**	**Mean Difference**	**Std. Error Difference**
Functional	.694	28	.494	.1200000	.1730217

$\propto = 0.05$

Table 2: Showing the comparison of the mean scores of functional sections according to gender.

From the table it can be observed there is no significant difference male and females. Males and females are not significantly different from their functional scores at 5% ($\propto = 0.0$) level. Because p-value is .494 which is greater than $\propto = 0.005$ which shows not much difference.

	t-test for Equality of Means				
	T	**Df**	**P-Value**	**Mean Difference**	**Std. Error Difference**
Eating	-.694	28	.494	-.1133333	.1636877

$\propto = 0.05$

Table 3: showing comparison of the mean scores of eating section according to gender.

From the table it can be observed there is no significant difference male and females. The test is not significant because P-value is greater than
$\propto = 0.05$. So, we can conclude that eating scores of males and females are equal.

	t-test for Equality of Means				
	T	**Df**	**P-Value**	**Mean Difference**	**Std. Error Difference**
Psychosocial	-.216	28	.831	-.0340000	.1573834

$\propto = 0.05$

Table 4: showing comparison of the mean scores of Psychosocial section according to gender

From the table it can be observed there is no significant difference male and females. P-value is very much higher than $\propto = 0.05$.

	t-test for Equality of Means				
	T	**Df**	**P-Value**	**Mean Difference**	**Std. Error Difference**
Physical	-.748	28	.461	-.17267	.23077

$\propto = 0.05$

Table 3: showing comparison of the mean scores of Physical section according to gender

From the table it can be observed there is no significant difference male and females. At 5% level of significant here we can conclude that the male and female cancer patients are not statistically significant. That here P-value is greater than $\propto = 0.05$.

V. DISCUSSION

The aim of the present study was to find the quality of life of dysphagia and to compare between male and females. The subjects were made to rate the responses on 5-point rating scale.5 for almost/ always 4 for often /3 for sometimes /2 for hardly ever/ 1 for never/.

From above study clear there is not much significant for attribute functional, physical, psychosocial and eating also compare females and males no significant. The result of the present study can be compared with study of Youman (2006), were says that tongue function related to normal swallowing compared to gender based there is a no significant difference. All parameters which were include questionnaire did not have much significant difference.

VI. SUMMARY AND CONCLUSION

Swallowing changes are threat as it is an essential part of live hood. A quality-of-life factor was four type physical, psychosocial, eating, and functional. Dysphagia is a swallowing difficulty.

The aim of the present study was to find the quality of life in dysphagia patients and to compared between male and females. The questionnaire was of total 46 questions and 4 parameters like physical, psychosocial, eating, and functional were also included. From above study clear there is not much significant for attribute functional, physical, psychosocial and eating also compare females and males no significant.

This study is in accordance with Youman (2006), who studied the function of the tongue related to normal swallowing and found that there was no significant difference among genders in normal swallowing process. All the four parameters (physical, psychosocial, eating, and functional) that were included in the questionnaire had no significant difference.

REFERENCE

[1]. Arvedson, C.P, and Brodsky L. Pediatric swallowing and feeding: Assessment and management, Whurr Publishers, UK p 29-35

[2]. Chen AY, Frankowski R, Bishop-Leone J, et al. The development and validation of a dysphagiaspecific quality-of-life questionnaire for patients with a head and neck cancer: the Anderson MD dysphagia inventory. Arch Otolaryngol Head Neck Surg. 2001;127:870

[3]. Cohen, S. M., Garrett, C. G., Dupont, W. D., Ossoff, R. H., & Courey, M. S. (2006). Voice-related quality of life in T1 glottic cancer: irradiation

[4]. versus Endoscopic excision. Annals of Otology, Rhinology & Laryngology, 115(8), 581-586

[5]. Deleyiannis, F. W., Weymuller, E. A., & Coltrera Jr, M. D. (1997). Quality of life of disease-free survivors of advanced stage (III or IV) oropharyngeal cancer. Head & Neck, 19(6), 466-73.

[6]. Dwivedi, C., Rose, S., Roe, J. W., Khan, A. S., Pepper, C., Nutting, C. M., Clarke, P. M., Kerawala, C. J., RhysEvans, P. H., Harrington, K. J. & Kazi, R. (2010). Validation of the Sydney Swallow Questionnaire (SSQ) in a cohort of head and neck cancer patients. Oral Oncology, 46(4),10-14.

[7]. Ekberg, O., Hamby, S., Woisard, V., Wuttge, H. A., & Ortega, P. (2002). Social and psychological burden of dysphagia: its impact on International classification of disability and health, World Health Organization diagnosis and treatment. Dysphagia, 17, 139-146.

[8]. Efficace, F., Bottomley, A., Osoba, D., Gotay, C., Flechtner, H., D'haese, S., & Zurlo, A. (2003). Beyond the development of health-related quality-of-life (HRQOL) measures: a checklist for evaluating HRQOL outcomes in cancer clinical trials does HRQOL evaluation in prostate cancer research inform clinical decision making. Journal of Clinical Oncology, 21(18), 3502-3511.

[9]. Gillespie, M. B., Brodsky, M. B., Day, T. A., Lee, F. S., & Martin Harris, B. (2004). Swallowing Related Quality of Life After Head and Neck Cancer Treatment. The Laryngoscope, 114(8), 1362-1367.

[10]. Guedes RLV, Carrara de-Angelis E, Chen AY, Kowalski LP, Vartanian JG.Validation and Application of the M.D. Anderson Dysphagia Inventory in Patients Treated for Head and Neck Cancer in Brazil. Dysphagia. 2013;28(1):24-3

[11]. Kshetrimayum, N.Sulavali.S(2012) .oral health-related quality of life and nutritional status of institutionalized elderly population ged 60 years above in Mysore City, India Gerodotology,30(2), 119-125.