Awareness and Quality of life Among Geriatric Patients with Dysphagia at Sohag University Hospital

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Abstract

Background: Dysphagia is a health condition that causes impairment of eating, drinking functions in geriatric clients and impairs quality of life in a number of ways, including emotional, physical, and social. **Aim of the study:** To assess awareness and quality of life among geriatric clients with dysphagia. **Design of the study:** A descriptive research design was used. **Setting:** This study was conducted at gastroenterology and neurologic outpatient clinics at Sohag University hospital. **Sample:** The sample composed of 220 geriatric clients. **Tools: three tools were used: tool (I)**: demographic data of geriatric clients and their health history of geriatric patients. **Tool (II):** Dysphagia Awareness Assessment questionnaire. **Tool (III):** Swallowing quality of life questionnaire. **Result:** Mean age of studied sample was 73.59 ± 7.41, 51 % were female, 40.0 % had poor knowledge, (76.8%) had positive attitude and swallowing quality of life score mean was 54.68 ± 5.31. **Conclusion:** Most of geriatric clients had limited knowledge about dysphagia, positive attitude and moderate score quality of life. **Recommendation:** Implementing an educational program for geriatric clients with dysphagia to improve their awareness and quality of life.

***Keywords: Awareness; Dysphagia; Geriatric; Quality of Life*.**

Introduction

As fertility and mortality rates decline, the number of geriatrics is increasing. Around 730 million people worldwide were 65 years of age or older in 2019, making up 9% of the total population. By 2050, that number will have doubled to approximately 1.5 billion people, or 16% of the total population. **(Machicado et., 2021).** The proportion of Egyptians over 60 was 6.3% in 2006, 7% in 2016, and 7.7% in 2023. By 2050, it is predicted to rise to 20.8%. **(Abd Elaziz & Shawky, 2024).**

A change in the swallowing process known as dysphagia makes it difficult for geriatric people to eat enough food in the right way. Choking while eating or drinking water, food or water flowing out of the nasal cavity (nasal reflux), difficulty chewing, food or saliva flowing out of the mouth, food remaining in the mouth for an extended period of time without being swallowed, changes in eating habits, hoarseness, recurrent pneumonia, unexplained fever, and weight loss are all signs of dysphagia. (**Saleedaeng et al., 2023**).

The geriatric may have dysphagia for a number of reasons. As people age, their bodies undergo abnormal changes that may impact their ability to swallow. Swallowing may become more challenging as a result of these alterations, which may include weakening of the muscles, decreased salivation, and diminished sensory perception. neurological conditions like dementia, multiple sclerosis, Parkinson's disease, and stroke. The muscles and nerves involved in swallowing may be harmed by these disorders. Irritation and inflammation brought on by gastroesophageal reflux disease result in dysphagia and structural abnormalities like tumors. **(Nazarko., (2024).**

Dysphagia can result in a number of complications, including pneumonia, dehydration, malnourishment, and others. These complications can lengthen hospital stays, worsen the course of the disease, have a major negative impact on patients' quality of life (QoL), and even cause death. **(Sun et al., 2024).**

When it comes to dysphagia, awareness is the ability to recognize the symptoms that are currently present along with information about acute or chronic aspiration signs. This is crucial because actions and referrals to other medical professionals are impacted by knowledge of dysphagia symptoms. Furthermore, in interprofessional collaboration, every patient and specialist need to be aware of and appreciate the opinions and contributions of other professionals **(Hady et al., 2023)** and attitude describes a person's evaluation position or inclination toward a specific health-related behavior, idea, or message. **(Alissa, & Alwargash, 2024).**

Knowledge and abilities are essential for self-management because they enable people to take part in decision-making and make well-informed health

decisions **(Zhang et al.,2023).** The goal of raising awareness of dysphagia in geriatric adults is to help them become more aware of how they swallow and identify symptoms early on for better care. (**Alpman et al., 2023**).

Gerontological nurses educate clients and their families about dysphagia, its causes, and potential complications. They usually collaborate closely with other medical specialists, such as occupational therapists, speech-language pathologists, dietitians, and doctors, to create a suitable care plan for clients with this condition **(Engh & Speyer, 2022).**

Significance of the study

Swallowing disorders may become more prevalent in geriatric adults, due to changes in their swallowing physiology. About 10% to 30% to 40% of geriatric adults in the community worldwide suffer from dysphagia. Up to 60% of residents in nursing homes and up to 80% of older adults in hospitals may have it, making it even more common in these settings **(Fedecostante et al., 2023).**

According to studies conducted in Egypt, the prevalence is 45% among geriatric stroke patients **(Mohamed & Li, 2022)** and 14.7% among geriatric hospitalized clients **(Abdelbaky et al., 2023).** This study was conducted because there aren't many studies on the awareness and quality of life of geriatric clients with dysphagia.

Aim of the study

To assess awareness and quality of life among geriatric clients with dysphagia.

Research questions

1- What is the level of awareness among geriatric clients with dysphagia?
2- What is the quality of life among geriatric clients with dysphagia?

Methodology

Research design: A descriptive research design was used to conduct this study.

The study setting

This study was conducted at gastroenterology and neurologic outpatient clinics at Sohag University hospital.

Sample

A convenient sample of their geriatric clients with dysphagia and the total number of them were 220 male and female.

Inclusion criteria:

- Elderly patients aged 60 years and above of both sex.
- Elderly patients diagnosed with dysphagia.
- Accept to participate in the study & able to communicate.

Tools of the study: Three tools were used

Tool (I): Structured Interview Questionnaire: it was developed by investigator to assess the characteristics of the studied patients and include two parts.

Part (1) Demographic data. Which include; client code, age, sex, level of education, occupation, marital status, residence and smoking.

Part (2) Health history; duration, risk factor and causes of dysphagia, dental condition, nutrition, medical history of geriatric as cardiovascular disease, stroke, kidney disease, diabetes, arthritis, osteoporosis, hypertension, cancer and family history of dysphagia.

Tool II: Dysphagia Awareness Assessment Questionnaire (Kwon et al.,2018):

Which consists of 2 parts: -

Part (1) Knowledge Assessment: To assess geriatric knowledge about chewing and swallowing among geriatric clients suffering from dysphagia. It consists of 10 items and knowledge score were calculated with 1 point for correct answer and 0 point for an incorrect answer or no answer. The total score that ranges from ten -point scale and then the Mean ± SD measured for scale **(Kwon et al.,2018).** The scoring can be categorized in three level poor level of knowledge <50%, faire knowledge level 50%-<60% and good knowledge level 60%- 100% **(Mobed et al., 2019).**

Part (2) Attitude Assessment:

To assess geriatric attitude related to chowing and swallowing among geriatric clients suffering from dysphagia. It consists of five questions, participants indicated their level of agreement with each statement on a 4 points scale (1= strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree). The total score that ranges from twenty-point scale and then the Mean ± SD measured for scale **(Kwon et al.,2018).** The questionnaire it can be categorized in to negative attitude< 50 % and positive attitude > 50 % **(Luo et al., 2022).**

Tool III: Swallowing Quality of Life Questionnaire (Abdou et al., 2021):

It consisted of 44-item questionnaire that is designed to assess dysphagia over 10 quality of life domains, and it has a supplemental section on symptom frequency. the 10 domains are general burden, eating duration, eating desire, food selection,

communication, fear, mental health, social role, fatigue, and sleep. the symptom scale includes 14 dysphagia related symptoms: coughing, choking, gagging, and drooling. Each domain is scored on a 5-point Likert scale that ranges from 1 (worst state) to 5 (best state). All domains are transformed to provide a range of 0 to 100, in which a score of "0" represents the worst score and "100" the most ideal score**.** The total score for each domain that ranges from 0 –100 then the Mean ± SD measured for each subscale **(Abdou et al., 2021).**

Reliability of tools

Tool II, III (Dysphagia Awareness Assessment Questionnaire, Swallowing Quality of Life Questionnaire) were assured by means of **Cronbach`s Alpha** (Cronbach `s coefficient alpha is one of the most frequently used ways of estimating internal consistency reliability) (α) = 0.624, (α) = 0.843, (α) = 0.50 to 0.99% respectively that demonstrating acceptable result.

Validity of tools

Study tools (I, II, III) were tested for its content validity by five experts in the gerontological nursing field to assess the clarity, relevance, comprehensiveness, understanding and applicability of the tools.

Method of data collection

Administrative phase

An official letter of approval was be obtained from the Dean of the faculty of nursing at Sohag University to director of Sohag University Hospital. This letter included permission to carry out the study and explained the purpose and the nature of the study.

Ethical considerations

The faculty of nursing ethical Committee gave an ethical code number 1120230714 its approval to the research proposal, and there was no risk to clients being researched when the study was being conducted.

The study followed the common ethical principles in clinical research, and client's informal agreement was obtained after they had been informed of the study's nature and objectives. They were informed that they had the right to refuse participation in the study at any time and that they could withdraw from it at any time without providing a reason. The privacy of study participants was taken into account when data was collected.

Pilot study

pilot study was carried out before starting data collection on 10% of the sample to examine the clarity of questions and time needed to complete the study tools. Based on the results, no modifications were done so the pilot study sample were included in the total sample of the study.

Field of work

Data were collected in six months from the beginning of March to the end of August 2024, two days a week. Before meeting the geriatric, the investigator met the staff of outpatient`s clinics and introduce herself and explaining the purpose of the study. The investigator introduced the agreement letters of the director of hospital, asking of their permission for data collection in the outpatient clinics and asked for support from nurses as well as the agreement with geriatric clients.

The investigator met the geriatric in the waiting hall of the outpatient`s clinics. She introduced herself and the purpose of the study the asked the geriatric to participate in the study after assuring the confidentiality of their data. The average number of geriatric clients which interviewed to fill questionnaire was 4-5 cases per day (two days weekly); the average time was spent during filling of sheet was 20-30 minutes. The investigator assessed level of Awareness and quality of life among geriatric clients with dysphagia.

Statistical analysis

Data entry and data analysis were done using SPSS version 22 (Statistical Package for Social Science). Data were presented as number, percentage, mean, and standard deviation. Chi-square test was used to compare between qualitative variables. Pearson correlation was done to measure correlation between quantitative variables. P-value considered statistically significant when $P < 0.05$ and highly Statistical significance difference $p < 0.00$.

Results

Table (1): Regarding the distribution of geriatric clients with dysphagia according to their demographic data. It was observed that 36.8% of studied clients were aged from 70 < 80 years with Mean ± SD 73.59 ± 7.41, 51 % of them were female, 94.1% were married. Regarding education and residence, it was, 34.5 % of geriatric clients were read and write and 57.3 % of them were residence in rural and 63.6% of them were no smoking.

Table (2): shows the distribution of geriatric patients with dysphagia according to their health

history. It was found that 70 % of geriatric clients had hypertension followed by stroke 62.7% and 55.5% of them had diabetes mellitus. It was that 86.4 of the geriatric client didn`t have family history of dysphagia. Regarding the duration & risk factors and causes of dysphagia, it was found that 49.5 % of the geriatric had dysphagia for 6 – 12 months. 62.7% of them had dysphagia because of post stroke, 88.2% of them were eating semi liquid diet and 40.5% of them had teeth decay.

Figure (1) Demonstrates the knowledge regarding dysphagia among geriatric clients. It was observed that (40,0 %) of them had poor knowledge, (40.9%) had fair knowledge and only (19.1%) had good knowledge.

Figure (2) Illustrates the Attitude of geriatric clients regarding dysphagia, which it clarifies that (76.8%) of them had positive attitude, while (23.2%) of them had negative attitude regarding dysphagia.

Table (3): Reveals the quality of life domains of geriatric clients with dysphagia, it was noticed that, the mean ± SD of general burden, eating desire and eating duration were (49.32 ± 10.02), (48.82 ± 10.92) and (49.64 ± 11.26) respectively. According to the food selection, Symptoms and Communication domains of them. It was (47.91 ± 12.50), (61.29 ± 5.06) and (64.45 ± 14.72) respectively. Regarding the fear of eating, mental health and social functioning domains of geriatric clients was 59.98 ± 5.94, 56.71 ± 14.30 and 54.75 ± 9.65 respectively. Concerning the fatigue and sleep domains of geriatric clients was (47.24 ± 11.39) and (61.36 ± 14.43) respectively while the mean total score of the SWAL-QOL among geriatric clients was (54.68 ± 5.31).

Table (4): Relation between demographic data of geriatric clients with their knowledge. It was found that the knowledge of geriatric clients was a statistical significance with level of education andresidence p – value (0.000 & 0.023) respectively.

Table (5) Explains that relationship between demographic data of geriatric clients with dysphagia with their attitude. It was found that the level of attitude was statistically significance with occupation, level of education, residence and smoking p- value (0.006, 0.031,0.005& 0.000) respectively

Table (6) Exhibits relationship between swallowing quality of life of geriatric clients with their level of knowledge. It was found that the level of knowledge of geriatric clients was statistically significance differences with fatigue domains p – value (0.010).

Table (7) Explains relationship between swallowing quality of life and attitude, it was clarified that there were statistically significance differences between attitude level and symptoms domain p value (0.042).

Table (8) Illustrates correlation among knowledge and attitude of the geriatric clients, it was observed that there were positive correlation and highly statistical significance between level of knowledge and attitude (P- 0.002 & r- 0.206)

Results

Table (1): Distribution of geriatric clients with dysphagia according to their demographic data (No = 220).

Demographic data	No. (220)	%
Age: (years)		
60 - < 70	75	34.1
70 - < 80	81	36.8
≥ 80	64	29.1
Mean ± SD	73.59 ± 7.41	
Gender		
Male	106	48.2
Female	114	51.8
Level of education		
No read and write	21	9.5
Read and write	76	34.6
Basic education	62	28.2
Secondary	32	14.5
University	29	13.2
Marital status		
Divorced	4	1.8
Married	207	94.1
Widow	9	4.1
Residence		
Urban	94	42.7
Rural	126	57.3
Smoking		
Yes	56	25.5
No	140	63.6
Stopped smoking	24	10.9

Table (2): ***Distribution of geriatric clients with dysphagia according to their health history (No = 220).***

Health history	No. (220)	%
Past medical history *		
Cardiovascular disease	52	23.6
Stroke	138	62.7
Diabetes	122	55.5
Hypertension	156	70.9
Kidney disease	70	31.8
Arthritis	64	29.1
Osteoporosis	13	5.9
Cancer	18	8.2
Family history of dysphagia		
Yes	30	13.6
No	190	86.4
Duration of dysphagia		
< 6 months	73	33.2
6 - 12 months	109	49.5
> 12 months	38	17.3
Risk factors and causes of dysphagia *		
Post Stroke	138	62.7
Gastro-esophageal reflux	64	29.1
Immobility	25	11.4
Tumor in the neck and head	8	3.6
Nutrition type		
Liquid	26	11.8
Semi-liquid	194	88.2
Dental condition *		
Natural teeth	15	6.8
Complete teeth loss	64	29.1
Teeth decay	89	40.5
Denture	10	4.5
Partial teeth loss	86	39.1

* ***More than one answer***

Figure (1): Knowledge of geriatric clients regarding dysphagia

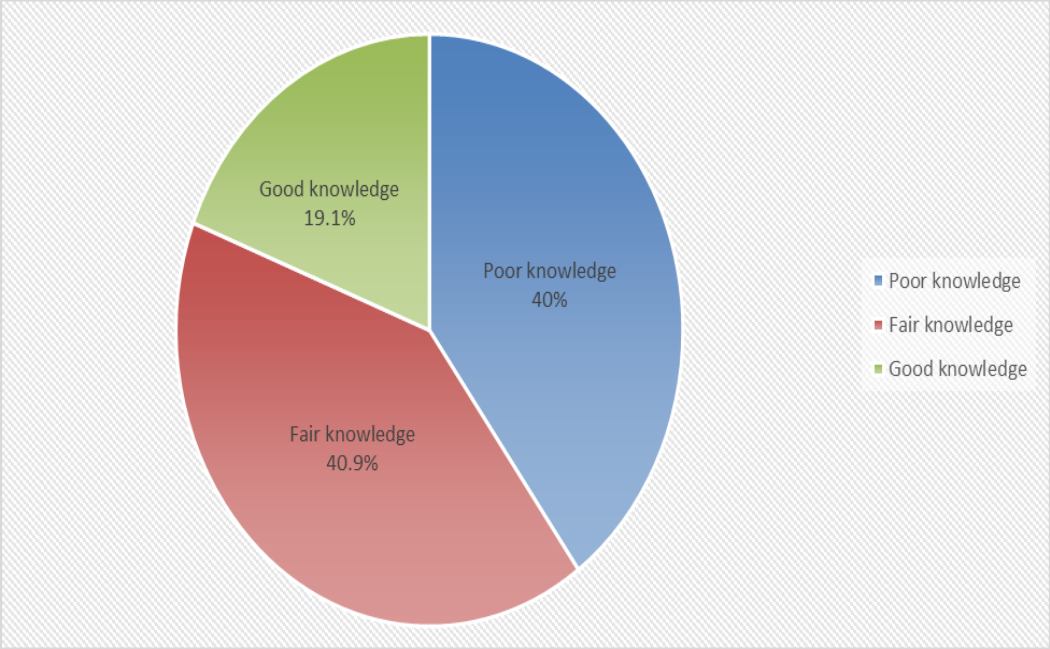

Figure (2): Attitude of geriatric clients regarding dysphagia

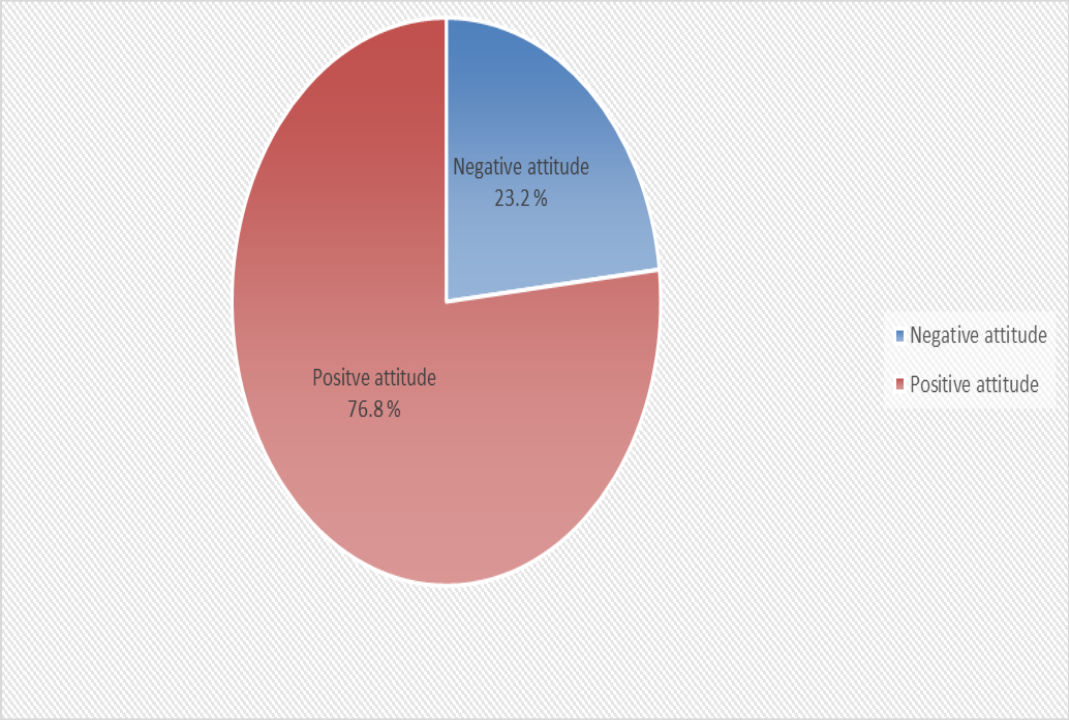

Table (3): Quality of life domains of geriatric clients with dysphagia (N = 220)

Swallowing quality of life domains	Mean ± SD	Range
General burden	49.32 ± 10.02	20.0-80.0
Eating desire	48.82 ± 10.92	20.0-73.3
Eating duration	49.64 ± 11.26	20.0-80.0
Symptoms	61.29 ± 5.06	45.7-71.4
Food selection	47.91 ± 12.50	20.0-80.0
Communication	64.45 ± 14.72	30.0-100.0
Fear of eating	59.98 ± 5.94	50.0-80.0
Mental health	56.71 ± 14.30	40.0-100.0
Social functioning	54.75 ± 9.65	36.0-76.0
Fatigue	47.24 ± 11.39	20.0-60.0
Sleep	61.36 ± 14.43	40.0-80.0
Total QOL mean score	54.68 ± 5.31	41.8-69.2

Table (4): Relation between demographic data of geriatric clients with dysphagia and their knowledge

Demographic data	Knowledge						P-value
	Poor		Fair		Good		
	No.	%	No.	%	No.	%	
Age: (years)							
60 - < 70	25	33.3	34	45.3	16	21.3	
70 - < 80	38	46.9	31	38.3	12	14.8	0.463
≥ 80	25	39.1	25	39.1	14	21.9	
Gender							
Male	44	41.5	45	42.5	17	16.0	0.539
Female	44	38.6	45	39.5	25	21.9	
Occupation							
Farmer	17	54.8	12	38.7	2	6.5	
Manual work	6	31.6	10	52.6	3	15.8	
Housewife	15	31.3	24	50.0	9	18.8	0.238
Not working	31	47.7	22	33.8	12	18.5	
Retired	13	35.1	13	35.1	11	29.7	
Free business	6	30.0	9	45.0	5	25.0	
Education							
No read and write	21	100.0	0	0.0	0	0.0	
Reads and writes	21	27.6	43	56.6	12	15.8	
Basic education	30	48.4	22	35.5	10	16.1	**0.000****
Secondary	10	31.3	14	43.8	8	25.0	
University	6	20.7	11	37.9	12	41.4	
Residence							
Urban	30	31.9	39	41.5	25	26.6	**0.023***
Rural	58	46.0	51	40.5	17	13.5	
Smoking							
Smoker	26	46.4	25	44.6	5	8.9	0.078
Non-smoker	62	37.8	65	39.6	37	22.6	

Table (5) ***: Relation between demographic data of geriatric clients with dysphagia and their attitude***

Demographic data	Attitude				P-value
	Negative		Positive		
	No.	%	No.	%	
Age: (years)					
60 - < 70	17	22.7	58	77.3	
70 - < 80	24	29.6	57	70.4	0.138
≥ 80	10	15.6	54	84.4	
Gender					
Male	22	20.8	84	79.2	0.411
Female	29	25.4	85	74.6	
Occupation					
Farmer	12	38.7	19	61.3	
Manual work	0	0.0	19	100.0	
Housewife	17	35.4	31	64.6	**0.006****
Not working	13	20.0	52	80.0	
Retired	5	13.5	32	86.5	
Free business	4	20.0	16	80.0	
Level of education					
No read and write	10	47.6	11	52.4	
Reads and writes	18	23.7	58	76.3	
Basic education	10	16.1	52	83.9	**0.031***
Secondary	9	28.1	23	71.9	
University	4	13.8	25	86.2	
Residence					
Urban	13	13.8	81	86.2	**0.005****
Rural	38	30.2	88	69.8	
Smoking					
Smoker	2	3.6	54	96.4	**0.000****
Non-smoker	49	29.9	115	70.1	

Table (6): Relation between swallowing quality of life of geriatric client with dysphagia and knowledge

Swallowing quality of life	knowledge			P-value
	Poor	Fair	Good	
	Mean ± SD	Mean ± SD	Mean ± SD	
General burden	48.41 ± 9.08	49.22 ± 10.19	51.43 ± 11.38	0.274
Eating desire	50.08 ± 10.93	48.52 ± 10.62	46.83 ± 11.45	0.269
Eating duration	50.11 ± 11.69	48.89 ± 11.46	50.24 ± 10.00	0.716
Symptoms	61.35 ± 4.62	61.54 ± 5.56	60.61 ± 4.86	0.614
Food selection	46.82 ± 11.89	49.33 ± 12.25	47.14 ± 14.19	0.370
Communication	63.75 ± 14.33	65.89 ± 15.50	62.86 ± 13.84	0.462
Fear of eating	60.51 ± 6.70	59.83 ± 5.53	59.17 ± 5.05	0.463
Mental health	57.23 ± 13.32	55.96 ± 14.61	57.24 ± 15.84	0.811
Social functioning	56.00 ± 9.24	54.09 ± 9.98	53.52 ± 9.72	0.277
Fatigue	44.29 ± 10.39	45.93 ± 12.01	50.00 ± 10.70	**0.010***
Sleep	62.05 ± 14.24	60.44 ± 15.57	61.90 ± 12.34	0.735

Table (7): Relation between the studied geriatric client`s swallowing quality of life and attitude

Swallowing quality of life	Attitude		P-value
	Negative	Positive	
	Mean ± SD	Mean ± SD	
General burden	49.80 ± 8.60	49.17 ± 10.43	0.694
Eating desire	50.85 ± 8.11	48.21 ± 11.59	0.130
Eating duration	47.25 ± 10.02	50.36 ± 11.54	0.085
Symptoms	60.90 ± 4.96	62.55 ± 5.23	**0.042***
Food selection	48.43 ± 13.02	47.75 ± 12.38	0.734
Communication	67.84 ± 14.60	63.43 ± 14.64	0.060
Fear of eating	59.61 ± 4.98	60.09 ± 6.21	0.613
Mental health	57.80 ± 13.06	56.38 ± 14.68	0.534
Social functioning	54.43 ± 9.05	54.84 ± 9.85	0.792
Fatigue	47.84 ± 9.86	47.06 ± 11.83	0.668
Sleep	62.75 ± 16.98	60.95 ± 13.59	0.437

Table (8): Correlation among knowledge, attitude and swallowing quality of life of the geriatric clients with dysphagia.

		Knowledge	Attitude
	r-value		
	P-value		
Knowledge	r-value		
	P-value		
Attitude	r-value	**0.206**	
	P-value	**0.002****	
Swallowing Quality of Life	r-value	-0.079	0.041
	P-value	0.242	0.547

Discussion

Dysphagia can have significant negative impacts upon quality of life, particularly for people with more severe forms of dysphagia. Dysphagia can also be managed through range of strategies including texture modified food (**Smith et al., 2024**).

Regarding the demographic data of the geriatric patients with dysphagia, the current study found that less than two fifth of the studied geriatric client`s age was 70 - < 80 with mean age of them was 73.59 ± 7.41. **This may be explained by** the fact that various changes with aging that could affect clinical characteristics and outcomes in patients with dysphagia.

The result was in the same line with study done in China by **Zhang et al., (2020)** who studied**"** Association between skeletal muscle strength and dysphagia among community-dwelling elderly adults" and with study done in China by **Zhang et al., (2023)** who studied" Association between health literacy and dysphagia in the community-dwelling older population" they revealed that the mean age was 72.64 ± 6.10 years old.

The current findings showed that dysphagia is more common in females than males, as more than half of geriatric patients with dysphagia were females. These results were supported by **Pontes et al., (2017),** who reported that more than half of the study sample were female.

Regarding educational level, the current study observed that more than one third of the studied geriatric clients had read and write and more than one quarter had basic education. **From my point of view,** this results from their belief that obtaining basic education and the ability to read and write means that they have reached the pinnacle of education.

These results were different from study done in Egypt by **Abdelmowla et al., (2022)** who studied "Effect of Swallowing Exercises on Swallowing Function for Patients with Neurogenic Dysphagia", they reported that more than one third had preparatory school and less than quarter had primary school of the studied patients.

According to, the marital status, the present study showed that vast majority of geriatric clients were married. This results consistent with study done in Brasil by **Ferreira et al., (2023)** who studied **"**Association between risk of dysphagia and signs suggestive of sarcopenia, nutritional status and frequency of oral hygiene in hospitalized elderly**",**

they reported that most of the patients were married. While these results were contrary to the study by **Kurosu et al., (2021),** who showed that less than two fifth of study population were widowed.

The current study recorded that more than half of the studied geriatric clients were lived in rural areas and the remainder were lived in urban. This finding differs from study done in Duke by **Jones et al., (2023)** who studied**"** Older adults with dysphagia have increased odds of being food insecure and homebound"**,** they found that quarter of them were rural residents.

As regard the smoking habits, the present study illustrated that less than two third of the geriatric clients had no smoked. **In my opinion,** smoking can lead to increased dryness and inflammation of the throat, which makes swallowing more difficult, in addition to weakening the immune system and increased exposure to lung infection. This result was supported by **Ferreira et al., (2023),** who showed that most of the patients reported never having smoked.

According to, the health history, the present study demonstrated that stroke, DM and HTN were the most frequent diseases among the studied geriatric clients where less than two third of them had stroke, more than half of them had diabetes and more than two third of them had hypertension.

This finding was consistent with study done in Egypt by **Hafez et al., (2024)** who studied **"**Association between sarcopenia and dysphagia among elderly"**,** they reported that diabetes and hypertension were the most frequent disease among the studied geriatric patients.

On other hand, this result differs from that recorded done in Turkia by **Savaş et al., (2023**) who studied "Determination of Dysphagia Using Different Tools Nursing Home Residents**,** who found that there were more ten percent of them had diabetes mellitus and nearly half of them suffered from hypertension.

Concerning the presence of a previous history of dysphagia among their family members, the present study found that the majority of studied geriatric clients reported no family history of dysphagia. **From my point of view,** because the difficulty in swallowing was the result of exposure to pathological conditions such as strokes and chronic esophageal reflux, which made the geriatric clients find it difficult to eat food and liquid and also the physiological changes that occur in the elderly increase the chances of pathological conditions occurring, and this varies from one person to another.

In addition to, the disease may be the result of individual causes or specific factors in the environment such as air pollution and exposure to allergens, which can affect the tissue of the throat and larynx that directly affect the person.

According the duration of dysphagia, the current finding demonstrated that almost half of the studied geriatric clients had dysphagia from 6 to 12 months. **From investigator point of view,** this may be due to various factors such as underlying medical conditions causing dysphagia, the severity of the condition, the effectiveness of treatment or therapy, patients' adherence to recommended interventions and presence of comorbidities can also influence the duration of dysphagia symptoms experienced by patients.

These results were contradicted by a study done in Kingdom by **Allen et al., (2024)** who studied **"**Living with dysphagia: a survey exploring the experiences of adults living with neuromuscular disease and their caregivers", they showed that more than half of the studied clients had symptoms of dysphagia from 15 years or more. In additionally to, this result disagreed with a study done in Korea by **Kim & Cha, (2014)** who studied "Reliability and validity of Korean version of the SWAL-QOL" they observed that more than two fifth of study sample had symptoms of dysphagia from 3 month and more.

Regarding risk factors and causes of dysphagia, our present study revealed that less than two third of the studied geriatric clients caused by stroke and more than one quarter of them caused by gastroesophageal reflux disease. **In my opinion,** aging increased the possibility of clot formation due to the accumulation of fat and cholesterol in the arteries over time and the lack of exercise. As for esophageal reflux, the gastric outlet muscle weak with age. Which increased the possibility of stomach acid leaking into the esophagus.

These results were matched done in Pakistan by **Bibi et al., (2015)** who studied "The impact of oropharyngeal dysphagia on quality of life in individuals with age over 50 years"**,** they showed that about half among the studied geriatric patients caused by stroke and less than quarter caused by parkinsonism.

As regard the nutrition type, the current study found that the majority of the studied geriatric patients were eating semi liquid diet. In my opinion it is easier for them to swallow and reduces the risk of choking or aspiration.

This result was supported by a study done in Italy by **Jukic Peladic et al., (2023)** who conducted **"**Multidisciplinary assessment and individualized nutritional management of dysphagia in older outpatients**",** they revealed that more than two third were consuming thin liquids.

As regard the dental condition, the present study revealed that about nearly two fifth had teeth decay and nearly two fifth had partial teeth loss of the studied geriatric clients. **In my personal opinion,** this is due to the lack of oral care, history of smoking and unhealthy eating habits, which contributes to the deterioration of dental health.

This result was similar with study done in Jaban by **Okamoto et al., (2015)** who studied "Association of

tooth loss with development of swallowing problems in community-dwelling independent elderly population **",** they reported in their study, relationship between the number of teeth and swallowing problems in geriatric people living independently. After adjustment for the effects of age, disease history, and physical function, indicated that significant relationships remained between swallowing problems and a smaller number of remaining teeth, and between swallowing problems and decrease in the number of teeth during the survey.

Regarding the mean knowledge among geriatric clients with dysphagia, the current study showed that total mean knowledge among studied geriatric clients was 5.75 ± 1.14, **This result might be** due to the fact that may high rates of illiteracy and limited reading and writing abilities, limited health education services as well as geographical obstacles that hinder elderly patients from accessing information, in addition to culture customs and tradition that reduce the importance of obtaining information because most of the cases from rural areas. These results are agreed with **Kwon et al., (2018),** who stated that a total mean score level of knowledge of the studied geriatric patients was 3.7 ±2.0.

In addition to that, the present finding found that two fifth of the studied geriatric clients had poor knowledge, two fifth of them had fair knowledge while only fifth of them had good knowledge. These results are supported by a study in Genesis health system facilities by **Becker., (2011)** who researched**"** Patient awareness of dysphagia"**,** he found that more than two fifth of patients were demonstrated reduced awareness of their dysphagia.

On other hand, this finding is consistent with a study done in Salford and Trafford by **Parker et al., (2004)** who studied **"**Awareness of dysphagia by patients following stroke predicts swallowing performance**",** they reported that over half of the studied dysphagic stroke patients had poor awareness of their swallowing dysfunction.

Concerning the total attitude among geriatric clients with dysphagia, the current finding revealed that more than third quarter of them had positive attitude. It may be due to the geriatric patient`s desire to improve his medical condition, reduce the symptoms of the disease and be able to carry out his daily activities.

while these results are in contrast with a study done in China by **Zhang et al., (2023),** who conducted "Knowledge, attitudes and practices of clients with chronic pharyngitis toward laryngopharyngeal reflux " they found that only more than two fifth of clients had expressed a positive attitude towards the comprehensive management of reflux laryngitis. In addition, the mean SD total score of the attitude were 12.32 ± 1.1. This result is in the same line with **Kwon et al., (2018),** who stated that mean SD total score of the geriatric patient`s attitude regarding dysphagia were 15.19 ± 2.70.

Regarding the mean score swallowing quality of life, the current study found that the total mean score 54.68 ± 5.31 of studied geriatric client quality of life. **This could be explained by** the fact that dysphagia can also result in a decreased enjoyment of meals leading to decreased appetite and overall lower quality of life.

These results are confirmed with a study done in Turkey by **Arslan et al., (2019)** who studied **"**The relationship between patient reported dysphagia symptom severity and swallowing related quality of life in patients with neurological disorders**",** they showed that the mean total score of SWAL-QOL was 50.63 ± 23.52.

On other hand, the finding is contrast with the study done in Lithuania by **Rugaitienė et al., (2024)** who studied "Impact of Modified Diet, Swallowing Exercises, and Electrostimulation on Quality of Life of Older Patients Suffering from Oropharyngeal Dysphagia"**,** they stated that total mean score of swallowing quality of life was 34.392.

Regarding relationship between level of knowledge and demographic data, the present study demonstrated that there was a statistically significant difference between level of education and residence. **This can be interpreted that** the geriatric patients with better education and a higher level of awareness can be more likely to recognize the symptoms of the disease and its treatment methods. In addition, place of residence may lead to greater availability of health resources and health information, making it easier for individuals to obtain needed health treatment and care.

In addition to that, the education rate in the village was low, and this affects the knowledge rate and most of the studied geriatric clients only read and write not had high level of education and lived in rural. These findings were supported to the study done in Suwon and Inchon (Korea) by **Byeon et al., (2018)** who studied "Level of Knowledge of the Elderly in Local Communities on the Swallowing Disorders After Stroke and Related Factors"**,** they revealed that education level had positive significant relationship with the knowledge on swallowing disorder.

According to the relation between attitude and demographic data, the current study demonstrated that a statistically significance between attitude, occupation, level of education, residence and smoking of the studied geriatric clients. **This might be related to the fact that** due to good attitude that improve occupation level by influence the willingness of elderly individuals with dysphagia to seek treatment and adhere to recommendations for managing their condition, geriatric client with higher levels of education may be more likely to seek help for their

condition and comply with medical recommendations compared to those with lower levels of education and residence of geriatric clients with dysphagia can impact access to healthcare services and resources for managing their condition and positive attitudes towards health and wellness may motivate elderly individuals with dysphagia to quit smoking.

Regarding relation between swallowing quality of life and knowledge, the current study demonstrated that a statistically significance between knowledge with fatigue of the studied geriatric clients. **From investigator point of view,** this may be due to fatigue can have a significant impact on swallowing function and quality of life for individuals with dysphagia and lead to decreased energy levels, when clients understand the impact of difficulty swallowing on their quality of life, they can deal with the disease better and seek appropriate treatment.

In addition, cognitive awareness can help reduce the psychological impact of the condition and increase adherence to treatment, which contributes to improving overall quality of life. reduced overall quality of life and knowledge level played a crucial role in managed dysphagia effectively especially most geriatric clients read and write poorly.

Regarding relation between swallowing quality of life and attitude, the current study found that a statistically significance between symptoms of the studied geriatric clients. **From investigator point of view,** this may be due to attitude levels could play a crucial role in how geriatric clients change behavior to cope with their dysphagia symptoms and overall quality of life. Positive attitudes, can help geriatric clients manage their condition more effectively, seek appropriate interventions, and maintain social connections and engagement in activities they enjoy.

As regard the correlation among knowledge and attitude among geriatric with dysphagia, the current study found that there was statistically significance positive correlation between knowledge and attitude of the studied geriatric clients. **From investigator point of view**, this may be because attitude is highly positively affected by knowledge. Also, is influenced by various factors such as emotions, beliefs, values, and personal experiences and even if a patient has limited knowledge about dysphagia, their attitude towards their condition may still be positive if they have a supportive healthcare team, access to resources, and have a positive ability to manage and improve their condition

Conclusion

Most of the studied geriatric clients had limited knowledge about dysphagia, positive attitude and moderate score quality of life.

Recommendation

Implementing an educational program for geriatric clients with dysphagia to improve their awareness and quality of life.

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