Assessment of Communication Barriers between Nurses and Elderly Patients

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1.ABSTRACT

Background: Effective communication is the key element in providing high-quality nursing care, and leads to patient satisfaction and health. Researche of communication indicates that ineffective communication remains a potent barrier to the provision of health care services. Therefore, communication with older patients needs to be effective. So understanding communication barriers is highly beneficial. **Aim**: assess communication barriers between nurses and elderly patients. **Method**: A cross sectional study design was used. This study was conducted at Specialized Medical hospital of Mansoura University and General hospital which is affiliated to the Ministry of health , and involved a purposive sample of 275 elderly patients and 274 nurses. Data was collected using three tools: structured interview sheet to assess communication barriers of elderly patients, Mini -Mental state Examination was used to assess the elder's cognitive function, and Communication Barriers among Nurses Structured Interview Sheet. **Results**: It was notice that 85.5% of the studied nurses ignored psychological problems of elderly patients such as depression as causes of communication barriers between nurses and elderly, 92.7% reported that the environment was strong barriers, and, 52.7% of the studied elders were in the age ranged from 60 to 64 years with the mean age of 64. 5 ± 3.2 years. Male were more prevailed constitute 79.6%. and 69.8% of elderly using auxiliary aids as glasses and 13.1% using hearing aids **Conclusion**: The researchers concluded that more than half of the studied nurses had poor knowledge of physiological and psychological changes of elderly and its effect on communication with elderly. Furthermore, the majority of nurses had inadequate communication skills and reported that the environment was a strong barrier of communication. While physical diseases and physiological changes of elderly are prevailed to cause communication barriers. **Recommendations**: Developing guideline regarding the effective communication with elderly. Designing educational materials such as booklets and brochures about communication barriers.

Key words: Communication, Barriers, Elderly, Nurses.

2.Introduction:

Aging population is a worldwide phenomenon, so the number of geriatric people is growing faster than any other age group, as a result of both longer life expectancy and declining fertility rates (World Health Organization, 2020).

Egypt is expected to maintain the highest rank in absolute numbers in elderly populations in the region, in 2050 Egypt is expected to have the largest number of old (23.7 million) and oldest old (3.1 million) populations in the region. The percent of geriatric people is expected to reach 20.8% in 2050 (Sweed, 2016).

Communication is a multi-dimensional, multi-factorial phenomenon and a dynamic, complex process, closely related to the environment in which an individual's experiences are shared. Effective communication is the key element in providing high-quality nursing care and leads to patient satisfaction and health (Nawajah, & Jabbarien, 2021).

Research of communication indicates that ineffective communication remains a potent barrier to the provision of health care services. Therefore, communication with older patients needs to be effective and planed on their problems (Kwame, & Petrucka, 2021).

Older people face special physical and mental health challenges which need to be recognized. One of these challenges is

communication problems; hence communication problems among the elderly are often overlooked or misdiagnosed (WHO, 2022). Moreover, elderly patients have an uncomfortable experience of hospitalization for the differences of hospital environment and routines. This problem is growing because of communication barriers between the elderly patients, families and the healthcare providers (Molina-Mula & Gallo-Estrada, 2020).

The percentage of hospitalized elderly patients over 65years ranges from 50 to 80 % with an average 7.3 days compared to 4.5 days for patients less than 60 years (Bae et al., 2022). Nurses have a valuable role in enabling older people to interact more effectively in everyday situations, which could be enhanced by adopting the role of communication partner. Nurses must assess elder communication and try to understand what they want to say either verbally or non-verbally in order to help them (Rustan, 2020).

Improving communication among healthcare providers and older adults is important. The nurse who caring of elderly should have communication skills. the nurse should be a good listener, understands patients' problems, queries and answers in appropriate way for patients to understand. (WHO, 2021).

Communication in nursing profession can be a complicated process, and the possibility of sending or receiving incorrect messages frequently exists. It is important to distinguish the key components of the communication process, how to improve the nursing skills and the potential problems that exist with errors in communication. Both verbal and non-verbal communication plays a very important role in nursing communication. (Essays, 2018).

Nurse-patient communication is an inseparable part of the patients' care in every health setting; it is one of the factors that determine the quality of care. Several patient-related characteristics, nurse- related characteristics and environmental-related issues pose as barriers to effective therapeutic communication and have eventually resulted in reducing effective communication at the wards. Therefore, all these barriers must be eradicated to promote effective therapeutic communication (Amoah et al, 2019).

2.1 Aim of the study

was to assess communication barriers between nurses and elderly patients.

2.2 Research question

What are the communication barriers between nurses and elderly patients?

3 Method

3.1 Study design:

Cross sectional design was used throughout this study.

3.2 Study Setting:

This study was carried out at the specialized Medical Hospital of Mansoura University and the general hospital which is affiliated to the Ministry of Health in Mansoura city.

3.3 Study Subjects:

A purposive sample of 275 elderly patients who admitted to the previous mentioned hospitals and 274 nurses who working at the previous mentioned hospitals.

3.4 Sample calculation:

1. **Elderly patients:**

The total number of admitted elderly patients to the hospitals was 952 during the year 2019. The sample size was 275 elderly patients, the desired precision= 5%, expected prevalence of communication barriers, confidence level 95% and design effect= 1)

2. **Nurses:**

The total number of nurses who are working in the hospitals was 964 nurses. The sample size was 274 nurses expected prevalence of communication barriers, confidence level 95% and design effect=1). Proportional allocation technique was used to include number of elderly patients and nurses from the two hospitals as following:

Hospital	Total number of nurses working at studied hospitals	Studied nurses	Total number of admitted elderly patients during year 2019	Studied elderly
Specialized medical Hospital	504	143	382	110
General Hospital	460	131	570	165
Total	964	274	952	275

Inclusion criteria

For Elderly Patients

- Patients aged 60 years and above.
- Willing to participate in the study
- Able to communicate verbally
- Oriented and alert, as determined by responses to time, place, person,
- Free from mental health problems such as dementia or a psychiatric problem.

For Nurses

- Nurses who providing care for elderly patients, at least two years' experience.
- Nurses who willing to participate in the study.

3.5 Tools of Data Collection:

The researcher used three tools to collect the necessary data for the study after reviewed the literature and developed tool II and III.

Tool (I): Mini -Mental State Examination (MMSE)

(Folstien, 1999) developed this scale, validated and tested for its reliability (r =.093) by **Abd El Moniem, 2012**. It consists of 11 items, for assessing the elder's cognitive function, and used to exclude elders with moderate and severe degree of cognitive impairment. The MMSE scale score is 30 points and classified as follows:

- Score of 24-30 indicates normal cognitive function.
- Score of 18-23 indicates mild cognitive impairment.
- Score of 0-17 indicates severe cognitive impairment.

Tool II: Structured interview sheet to assess communication barriers of elderly patients

The tool included three parts:

Part 1: demographic characteristics of the patients such as age, sex, marital status, level of education, medical history, and using of auxiliary aids.

Part 2: Communication barriers related to elderly patients, it included 29 items as follow:

- ❖ **15** items for communication barriers related to Physical and Physiological Changes as influence of diseases on the way of talking, physical problems as pain, presence of auditory and visual impairment and forgetfulness and poor memory.
- ❖ **5** items for communication barriers related to psychological and social status as depression, fear, and/or anxiety
- ❖ **3** items for communication barriers related to social relations as Isolation and refusing to speak.

Part 3: communication barriers related to surrounding environment such as noisy environment, poorly light room, uncomfortable room temperature and crowded wards and rooms. This tool composed of 6 questions. and the question's answer choices included "Yes", "No". One mark awarded for each correct answer.

The scoring system the total score ranged from 0 to 29. According to the researcher's cut of point, the communication barriers level was categorized into two levels as:

- **Strong barriers**: *more than or equal 65% (score ≥18.85)*
- **Mild barriers**: *less than 65% (score < 18.85)*

Tool (III): Communication Barriers among Nurses Structured Interview Sheet

This tool included three parts: -

Part 1: demographic characteristics and occupational data of nurses such as age, qualification, years of experience.

Part 2*:* Communication barriers related to nurses included 27 items. One mark awarded for each correct answer.

- **2** items related to nurse's knowledge of physiological changes of elderly.
- **3** items related to nurse's knowledge of psychological state of elderly.

The scoring system: The total score ranged from 0 to 5. According to the researcher's cut of point, the Knowledge level was categorized into three levels as:

- *Good Knowledge: more than or equal > 65% (score ≥3.25)*
- *Fair Knowledge: 50% to less than 65% (score 2.5 to ≥3.25)*
- *Poor Knowledge: less than 50% (score < 2.5)*
  - ❖ **22** items related to nurse's experience and communication skills.

The scoring system: The total score ranged from 0 to 22. According to the researcher's cut of point, the skills level was categorized into two levels as:

- *Adequate skills: more than or equal 65% (score ≥14.3)*
- *Inadequate skills: less than 65% (score < 14.3)*

Part 3: Communication barriers related to surrounding environment and work condition such as crowdedness of wards and rooms and presence of patients in critical situations included 4 items. One mark awarded for each correct answer.

The scoring system: The total score ranged from 0 to 4. According to the researcher's cut of point, the environmental factors level was categorized into two levels as:

- *Strong barriers: more than or equal 65% (score ≥2.6)*
- *Mild barriers: less than 65% (score < 2.6)*

3.6 Data collection process:

1. The researcher issued an official letter from the Faculty of Nursing, Mansoura University to the directors of the specialized Medical Hospital of Mansoura University and the general hospital to obtain the approval to carry out the study.

2. The researcher informed the directors of the specialized Medical Hospital and the general hospital about the purpose of the study & time of data collection to take their approval& cooperation.

3. The researcher developed tool II (structured interview sheet to assess communication barriers of elderly patients and tool III (communication barriers among Nurses structured interview sheet) based on a thorough review of related literatures.

4. The researcher used the Arabic version of tool I (Mini -Mental State Examination (MMSE) in this study. The reliability was assured by means of Cronbach's coefficient alpha, r = (0.94).

5. Jury of 5 experts in the fields of Gerontological Nursing, Medical Surgical Nursing and public health Medicine tested the content validity of tools and the necessary modifications were done accordingly.

6. The researcher obtained written consent from elderly patients and nurses before beginning of the study after explaining the purpose of the study. Then, the necessary data was collected using the study tools.

7. The researcher assured the patient's privacy and maintained confidentiality of the collected data.

8. The researcher conducted a pilot study on 10% (28) elderly patients and (28) nurses from the specialized Medical Hospital and general hospital before starting the data collection to check and ensure the feasibility of the study tools in providing the required data and to make the necessary modifications. These patients and nurses were excluded from the study sample.

9. The researcher visited the specialized Medical Hospital of Mansoura University and the general hospital two days per week from 9 am – 1 pm.

10. The researcher conducted face to face interview with the elderly and with the nurses individually after introducing herself and explaining the purpose of this research. Then collected the data using the study tools. Each interview consumed between 20 to 30 minutes.

11. The researcher collected data through eight months from the first of July 2019 & finished in February 2020.

3.7 Ethical Considerations:

The researchers got the permission from the Research Ethics Committee of the Faculty of Nursing at Mansoura University. Then informed the participants about aim, risks, benefits, and procedure of the study. Participants were assured that the participation is voluntary. The researchers assured privacy and the confidentiality to the participants about the obtained data and informed they have the right to withdraw from the study at any time without incurring any penalties.

3.8 Statistical analysis of the data: -

The researchers after collected data, coded, and transferred into a specially designed format to be suitable for computer feeding. Following data entry, checking and verification process to avoid errors during data entry. Used SPSS for windows version 20.0 (SPSS, Chicago, IL) for all statistical analyses. Then categorical data and expressed in number and percentage. Described different characteristics using descriptive statistics as frequency, distribution, mean, and standard deviation. Tested relationships between categorical variables using Pearson's chi-squared test. The Cronbach's alpha is used to assess the reliability (or internal consistency) of a set of the tools. Statistical significance was set at $p \leq 0.05$.

4.Results

Table 1: shows the distribution of studied nurses according to their demographic characteristics. The age of the studied nurses ranged from 21 to more than 35 years with a mean age of (27.7 ±3.8) years. Half of nurses 50.3% their aged ranged from 26 to 30 years. Females were more prevalent they constituted 87.2%, 8.4% of the studied nurses had diploma degree, most of nurses 89.4% had technical degree, and only 2.2% had bachelor's degree.

Figure 1 shows nurses score level of knowledge about physiological &psychological changes of elderly patient that cause communication barriers. It was notified that 55.5% of the studied nurses had poor level of knowledge, 39.4% of them had fair level, but only 5.1% had good level of knowledge.

Figure 2 shows nurses experience and communication skills. It was notified that 90.1% of the studied nurses had inadequate level of communication skills, and only 9.9% had adequate level of skills.

Figure 3 shows nurses' knowledge about environmental factors that lead to communication barriers illustrates that 92.7% of the studied nurses reported that the environment was strong barriers, and only 7.3% of them reported it was mild barriers.

Table (2) shows relationship between the total knowledge and demographic characteristics of the studied nurses. It can be illustrated that there were no statistically significant relations were found between the studied nurse's demographic characteristics and their knowledge.

Table (3) reveals relationship between the level of communication skills and demographic characteristics of the studied nurses. This table found that there was statistically significant relation relationship between studied nurses' years of experience and their level of skills *P*= 0.026.

Table (4) illustrates Correlation between knowledge total mean score, total communication skills score, and the surrounding environment total score of the studied nurses. It was notice that there were statistically significant correlations between the knowledge total score of the studied nurses and communication skills total score P= 0.010, and the knowledge grade of the studied nurses and surrounding environment total score P= 0.024.

Figure 4 shows Correlation between knowledge score and communication skills score. It was declared that statistically positive

correlation between the knowledge score and communication skills score *P*= 0.024.

Table(5)clarifies demographic characteristics of the studied elderly patients. it was noticed that 52.7% of the studied elders were in the age ranged from 60 to 64 years with the mean age of 64. 5 ± 3.2years. Male were more prevailed constitute 79.6% of the studied elderly.49.8% of the them were married and only 11.6% was single. illiteracy was among 58.2% of the studied elders. 70.2% of studied elderly were living in urban area and, 90.9% of the of studied elderly reported that their income was not enough and 82.9% of them had pension., and 81.8% of studied elderly were living with their families.

Table (6) shows medical history of the studied elderly and their use of assistive devices. This table indicated that 81.1% of the studied elderly suffering of more than three diseases. The elderly who received hypertensive medications were 90.2%, diabetes mellitus medications were 80% and cardiovascular medications were 72.4%. In addition of using auxiliary aids as glasses and hearing aids were 69.8% and 13.1% respectively.

Figure 5 declares total score of elderly barriers and the total overall barriers. It's found that the barriers related to physical diseases and physiological changes had higher mean score 8.6±1.8, followed by barriers related to environment 3.5±1.2 and those related to the psychological status 2.0±0.8. furthermore, the barriers related to social relation had a mean score 1.6±0.9. Lastly, the overall barriers score was 15.6±2.7.

Figure 6 illustrates distribution of the studied elderly patients according to their communication barriers. It was found that 76.6% of the studied elderly patients had strong barriers, and only 23.4% of them had mild barriers.

Table (7) shows relationship between the total communication barriers and demographic characteristics of the studied elderly. There was statistically significant relationship regarding the total communication barriers and the studied elderly ages, and marital status (*P*=0.030 & 0.038 respectively).

Table (8) shows relationship between the total communication barriers and the medical history of the studied elderly. There were statistically relationships between the total communication barriers and the medical history of the studied elderly regarding the use of devices and use of glasses (*P*=0.018 & 0.021 respectively).

Table 1: Demographic characteristics and professional data of the studied nurses

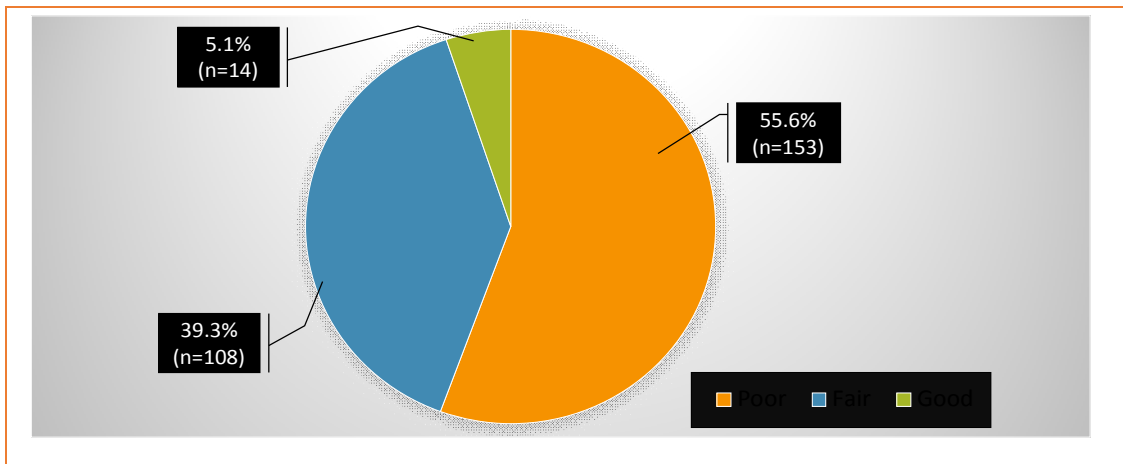| Demographic characteristics	N= 274	100%
Age (years)		
21 – less than 26	75	27.4
26 – less than 31	138	50.3
31 – less than 35	54	19.7
>35	7	2.6
Mean ±SD	27.7 ±3.8	
Gender		
Male	35	12.8
Female	239	87.2
Qualification		
Diploma degree	23	8.4
Technical degree	245	89.4
Bachelor's degree	6	2.2
Experience (years)		
0- less than 5	101	36.9
5 – less than 10	140	51.1
10 or more	33	12.0
Mean ±SD	5.9 ±2.8	

Figure 1: Nurses score level of knowledge about physiological &psychological changes of elderly patient
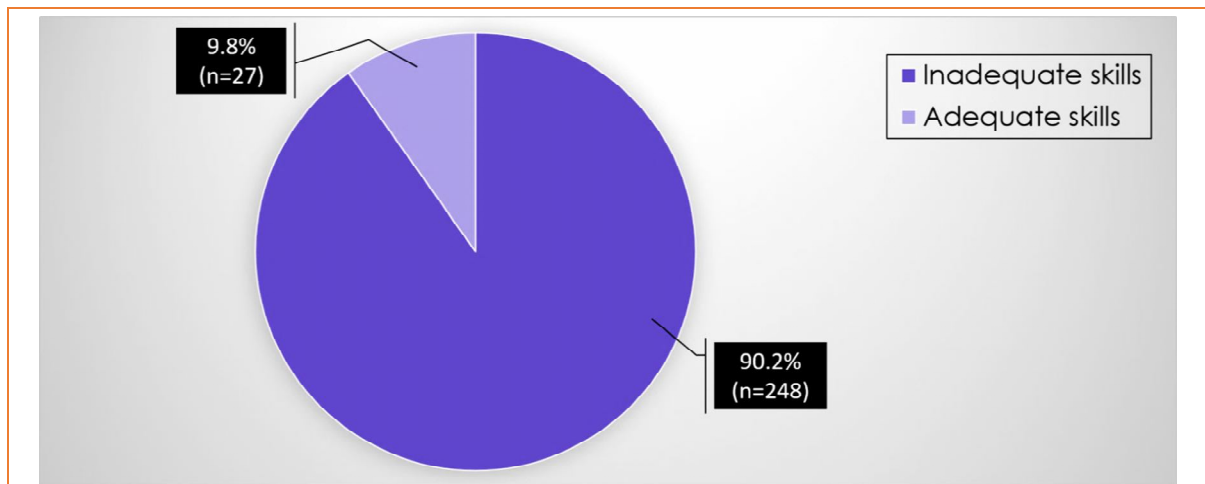

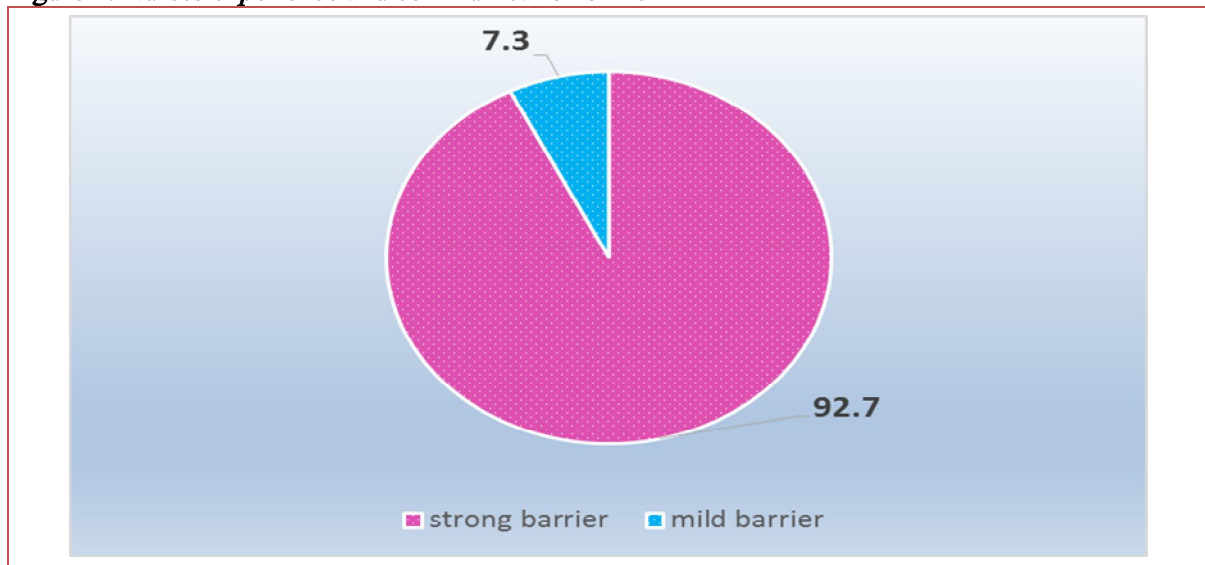*Figure 2: Nurses experience and communication skills*

Figure 3: Nurses knowledge about environmental factors that lead to communication barriers

Table (2): Relationship between the total knowledge score and demographic characteristics of the studied nurses

Demographic characteristics	Total knowledge scoreMean ±SD	Significance
Age (years)		
21 – 25	3.7 ±0.9	
26 – 30	3.6 ±0.8	F=0.538
31 – 35	3.7 ±0.8	P=0.657
>35	3.3 ±0.5	
Sex		
Male	3.8 ±0.8	T=0.959
Female	3.6 ±0.8	P=0.338
Educational level		
School of Nursing	3.5 ±1.0	F=0.680
Nursing Institute	3.7 ±0.8	P=0.508
Bachelor	3.9 ±1.2	
Residence		
Rural	3.7 ±0.8	T=1.082
Urban	3.5 ±0.9	F=0.280
Experience (years)		
<5	3.7 ±0.8	F=0.286
5 – 9	3.6 ±0.9	T=0.752
10 or more	3.6 ±0.8	

Table (3): Relationship between the level of skills and demographic characteristics of the studied nurses

Demographic characteristics	Skills grade				Chi-square test	
	Inadequate (N=248)		Adequate (N=27)		X^2	P
	N	%	N	%		
Age (years)					5.298	0.151
21 – 25	71	28.6	4	14.8		
26 – 30	120	48.4	19	70.4		
31 – 35	51	20.6	3	11.1		
>35	6	2.4	1	3.7		
Sex					0.070	0.791
Male	32	12.9	3	11.1		
Female	216	87.1	24	88.9		
Educational level					1.842	0.398
School of Nursing	19	7.7	4	14.8		
Nursing Institute	223	89.9	22	81.5		
Bachelor	6	2.4	1	3.7		
Residence					0.340	0.560
Rural	210	84.7	24	88.9		
Urban	38	15.3	3	11.1		
Experience (years)					7.319	**0.026***
<5	97	39.1	4	14.8		
5 – 9	124	50.0	17	63.0		
10 or more	27	10.9	6	22.2		

Table (4): Correlation between knowledge total mean score, total skills score, and the surrounding environmental total score of the nursing staff

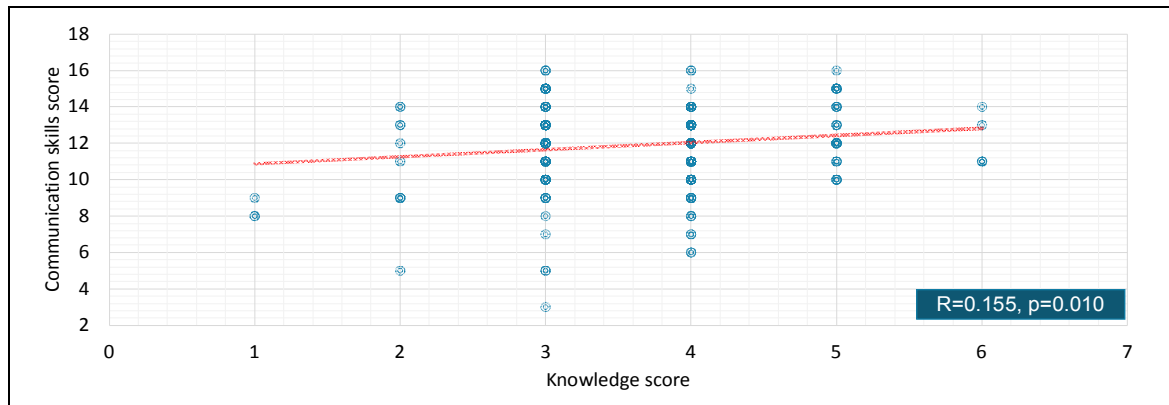| Items	skills	Environment
Knowledge grade of the nursing staff	r= 0.155	r= 0.136
	P= 0.010*	P= 0.024*

Figure 4: Correlation between knowledge score and communication skills score

Part II: characteristics of the studied elderly patients

Table (5): Demographic characteristics of the studied elderly patients

Demographic characteristics	N= 275	100%
Age (years)		
60 – 64	145	52.7
65 – 69	109	39.7
70 or more	21	7.6
Mean ±SD	64.5 ±3.2	
Sex		
Male	219	79.6
Female	56	20.4
Marital Status		
Single	32	11.6
Married	137	49.8
Widowed	106	38.6
Education level		
Illiterate	160	58.2
Reads and writes	88	32.0
Intermediate Education	5	1.8
University Education	3	1.1
Higher education	19	6.9
Residence		
Urban	193	70.2

Rural	82	29.8
Income		
Enough	25	9.1
Not enough	250	90.9
Source of income		
Pension	228	82.9
children help	28	10.2
Social Affairs	19	6.9
Living condition		
Alone	50	18.2
With family	225	81.8

Table (6): Medical history of the studied elderly and their use of assistive devices

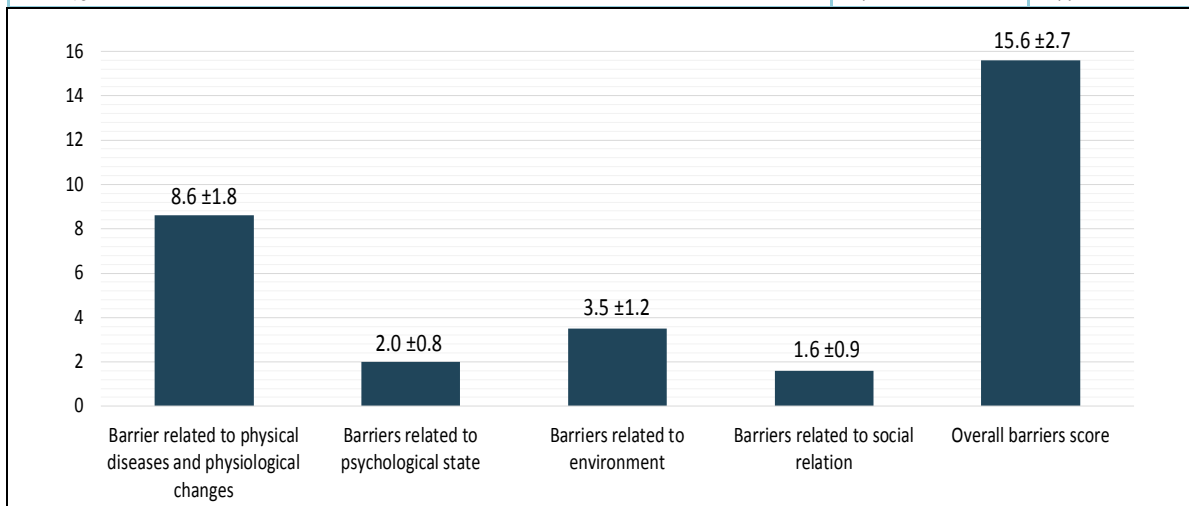| Items	N	100%
Chronic diseases		
Two disease	12	4.4
Three diseases	40	14.5
More than three diseases	223	81.1
Medications		
Diabetes mellitus	220	80.0
Hypertension	248	90.2
Cardiovascular	199	72.4
Use auxiliary aids		
Use hearing aids	36	13.1
Use glasses	192	69.8
No	47	17.1

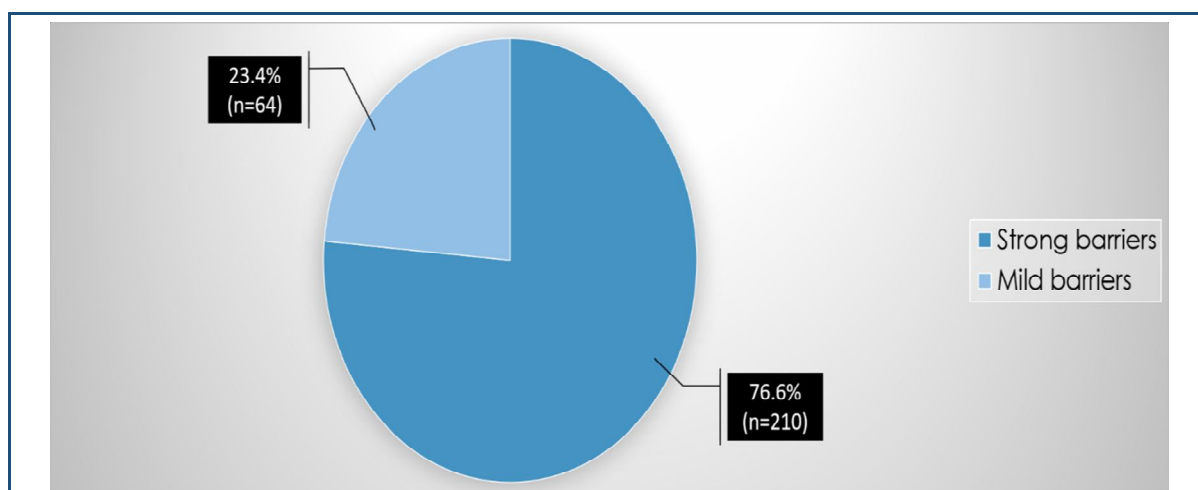*Figure5: Total score of elderly barriers and the total overall barriers*

Figure 6: Distribution of the studied elderly patients according to their communication barriers

Table (7): Relationship between the total communication barriers and demographic characteristics of the studied elderly

Demographic characteristics	Total communication barriers				Chi-square test	
	Strong barriers (N=210)		Mild barriers (N=65)			
	N	%	N	%	X^2	P
Age (years)					7.038	0.030
60 – 64	108	51.4	37	56.9		
65 - 69	81	38.6	28	43.1		
70 or more	19	9.0	0	0.0		
Sex					0.007	0.934
Male	167	79.5	52	80.0		
Female	43	20.5	13	20.0		
Marital Status					6.538	0.038
Single	28	13.3	4	6.2		
Married	96	45.7	41	63.1		
Widowed	86	41.0	20	30.8		
Education level					0.920	0.922
Illiterate	123	58.6	37	56.9		
Reads and writes	68	32.4	20	30.8		
Intermediate Education	4	1.9	1	1.5		
University Education	2	1.0	1	1.5		
Higher education	13	6.2	6	9.2		
Residence					0.184	0.668
Urban	146	69.5	47	72.3		
Rural	64	30.5	18	27.7		
Income					1.066	0.302
Enough	17	8.1	8	12.3		
Not enough	193	91.9	57	87.7		

Source of income					0.696	0.706
Pension	172	81.9	56	86.2		
Children help	23	11.0	5	7.7		
Social Affairs	15	7.1	4	6.2		
Living condition					1.974	0.160
Alone	42	20.0	8	12.3		
with family	168	80.0	57	87.7		

Table (8): Relationship between the total communication barriers and the medical history of the studied elderly

Items	Total communication barriers				Chi-square test	
	Strong barriers (N=210)		Mild barriers (N=65)		X^2	*P*
	N	%	N	%		
Chronic diseases					5.133	0.077
2 diseases	10	4.8	2	3.1		
3 diseases	25	11.9	15	23.1		
>3 diseases	175	83.3	48	73.8		
Medications						
Diabetes mellitus						0.287
No	39	18.6	16	24.6	1.133	
Yes	171	81.4	49	75.4		
Hypertension						
No	21	10.0	6	9.2	0.033	0.855
Yes	189	90.0	59	90.8		
Cardiovascular						
No	53	25.2	23	35.4	2.555	0.110
Yes	157	74.8	42	64.6		
Use aid devices						
Use hearing aids						
No	188	89.5	51	78.5	5.339	**0.021**
Yes	22	10.5	14	21.5		
Use glasses						
No	71	33.8	12	18.5	5.549	**0.018**
Yes	139	66.2	53	81.5		

5. Discussion:

Communication is a core component of nurse-patient relationships, collaborations, and co-operations, these, in turn, are essential aspects of professional practice. Thus, the quality of communication in interactions between nurses and patients has a major influence on patient outcomes (**Sibiya, 2018**). Moreover, ccommunication with the elderly is an important aspect of nursing practice. Ineffective communication can lead to feeling inadequate, disempowered, and helpless (**Jack, Ridley, & Turner, 2021**).

Generally, communication is needed not only for the transmission of information and knowledge to one another but more significantly to inter-relate as human beings everywhere. Effective interpersonal and communication skills between nurses and elderly patients are one of the most significant factors for improving patients' satisfaction, compliance, and overall health outcome (**Sibiya, 2018**). Therefore, the present study aimed to assess the communication barriers among nurses and elderly patients.

Demographic characteristics and professional data of the studied nurses.

The current study revealed that the most prevailed ages were ranged from 26 to 30 years and most of them are females. This may

be explained as the traditional working styles and nurse's job descriptions in Egypt for years and their numbers are still greater than males in nursing fields until ten years ago. Also, the fact of nursing itself is naturally a feminine job and those females historically represented dominance in this profession. Conversely to the present result **Majeed, (2017)**, found high prevalence male nurses in Iraq.

Concerning the level of education and qualification of the studied nurses; the current study revealed that the majority of studied nurses graduated from the Nursing Institute with Technical degree. This may be clarified that the demand for recruitment of technical nurses graduated from institutes higher than nurses graduated from school and get a quick job than graduated from faculties. Dissimilar to **Van Manen et al., (2021)** results in Netherlands, who found that most of nurses were licensed practical nurses.

Regarding knowledge of the studied nurses related to physiological and psychological changes of elderly and its effect on elderly patient's communication. The present study revealed that more than half of the studied nurses had poor levels of knowledge. This result may clarify that the majority of the studied nurses were graduated from technical institute of nursing and technical institute curriculum was not contained gerontological nursing.

On the same line with **Amoah et al. (2019)** result who reported that nurses' in Ghana lacked knowledge regarding communication. This contributed to poor nurse-patient relationships and stated that if there is a close relationship between the patient and the nurse, the patient can speak out all their problems to the nurse.

The current result is in the same line with **Al-Kalaldeh et al. (2021)** result who revealed inadequate level of nursing knowledge related gerontology in Jordan This inadequacy was perceived as a significant communication barrier by those nurses. Also, **Adibelli & Kılıç (2013)** found that knowledge of nurses' in Turkish was insufficient regarding gerontologic, so improvement is indicated. In addition to **Yaghmour & Gholizadeh (2016)**

result that shown low levels of relevant knowledge among nurses working with elderly patients in Saudi Arabia

Also, this result is consistent with **Shiovitz-Ezra, Ayalon, Brodsky, & Doron (2016)** found that a knowledge deficit about aging leads to the development of ageist behaviors that manifest among nurses by attributing unjustifiable stereotypes to older patients. On the same line **Guthrie et al. (2018)** stated that nurses and all health care teams in Canada must be knowledgeable regarding sensory (vision and hearing) and cognitive impairments because are prevailed among the elderly. While **Oyetunde, Ojo, & Ojewale (2013)** found in Ibadan that nurses knowledge regarding general gerontological is good.

The nurses' lacked knowledge of psychological aspect and, most of elderly were suffered depression. This may be attributed to those nurses are not aware that psychological aspect of elderly is important as physical care and should be included for managing elderly health care. This result is consistence with **Liebel and Powers (2015)** result who showed that the nurses in New York were more confident in meeting patient needs than in addressing depression care management strategies. Moreover, to **Yaghmour, & Gholizadeh, (2016)** documented in the study low levels of psychological knowledge among nurses working with elderly patients and revealed that can be due to lack of nurses' education.

In relation to psychological status of elderly patients, communication barriers related to psychological status of the studied elderly. The current study revealed that depression was the most prevailing comorbidity among the studied elderly. This finding points toward the fact that depression, as one of the most common psychological symptoms of the elderly, and the incidence rate of depression in older adults is higher than that in other age groups, with a significant increase with age. Patients depression results in accordance with **(Zhou et al., 2021)**, **Subedi, Shrestha, and Thapa (2018)**, studies in Nepal and **Yusefi et al. (2021)** study in Iran showed that nearly half of the studied elderly were

depressed. These findings go matching with **Aylaz and Yıldız (2018)** result who found that the increase in the frequency and duration of depression with age is an important psychological problem in the elderly.

Regarding to nurses' skills, the majority of the studied nurses had an inadequate level of performance. Nurses lacked skills to manage medical intervention for elderly even elderly permission for needed intervention and give treatment without explanation. Nurses lacked communication skills that make them talk to the patient from a distance, more than two-thirds of them didn't listen carefully to the patient, talk to the patient in a different tone that is not understood by the patient and dealt in an unfriendly manner. Also, more than half of them ignored the patient's point of view.

Furthermore, they weren't near the patients continuously, didn't tolerate the elderly patients, postponed talking to the patient until an appropriate time according to themselves, also called the patient by the first name, judged the patients' behaviors, failed to introduce themselves to the elderly patients, and adhered to formal and strict behavior. This is attributed to lacking communication skills, lacking knowledge related elderly physiological and psychological changes. That lead to communication barriers.

On the same line **Jack et al. (2021)** stated that older people in England with long-term health conditions need to make contact with healthcare services more often. Therefore, nurses to be able to communicate effectively with older people should have the appropriate knowledge and skills to manage elderly health care. This meaning revealed in **Keutchafo et al. (2020)** result who emphasizing of eye contact with older adult, which is suggested advice for effective communication or a means of improving communication skills and creating a communicational atmosphere with each other as **Van Humbeeck, Dillen, Piers, & Van Den Noortgate (2020)** in Ghent University hospital in Belgium documented.

This is in accordance with **Mick, Kawachi, and Lin (2014)**, study in United States, and **Taylor, Taylor, Nguyen, and**

Chatters (2018) study in USA showed that social isolation was the most prevalent symptoms among the elderly . This goes with **Aghamolaei and Hasani (2011)** study as they showed that effective communication among nurses and elderly patients plays an important role in patients' satisfaction and compliance with physicians' advice.

While **Norouzinia et al. (2016)** study confirmed that the communication barriers from the patient's perspective were sex differences between nurses and patients, nurses' reluctance to communicate because of the workload, busy environment on the ward, anxiety, pain, and patient's physical discomforts, and finally the mistrust in the nurse-patient relationship.

Regarding to surrounding environment, the current study showed that more than two-thirds of the studied nurses mentioned the surrounding environment caused communication barriers; because of crowded wards and rooms, presence of patients in critical situations, rooms are not well designed, the workload of nurses as preoccupation with administrative tasks in the same area, the nurse patients' ratio. And communication with other employees of the Medicare system that reported by only one-third of them. This is on the same line with **Norouzinia et al. (2016)** study acknowledged that communication barriers were being due to nurses workload, less attentive and attendance of emergency patient.

Additionally environmental factors, that **Alahmmari and DipOdp (2016)** defined such as work overload, the overcrowded hospital environment by a large number of patient families. Another obstacle was caused by an irregular and cooperative communication management system.

Regarding to communication barriers related to surrounding environment of the studied elderly patients. The present study clarified that these barriers included uncomfortable rooms (Inappropriate temperature), wards and crowded rooms, small rooms and suites, and insufficient lighting. Finally, noisy and poorly ventilated

environments were also barriers. By agreement, no one can deny all these factors,

In the present study, environmental factors were perceived to have the greatest effect on nurse patient communication, with the highest overall percentage was uncomfortable room. Similar result as **Al-Kalaldeh, Amro, Qtait, and Alwawi (2021)** found in Palestine. This reason simply justified by environmental connections can have both negative or positive or anyone effects on interpersonal communication and prove to be tough obstacles in the process of effective communication.

Characteristics of the studied elderly patients:

More than half of the studied elderly patients mean age was 64.5 ±3.2. Males were more prevalent among elderly patients compared to female. These results may be justified by, men, adopt unhealthy behaviors as smoking that can expect to have health problems than women. Similarly, in Egypt, **Ali, Salem, and Salem, (2015)** found that more than half of the patients are males. In contrast to the current result, **Yusefi et al. (2021)**, and **Rustan (2020)**, were conducted studies in Iran, Indonesia, and in China respectively found that the majority of the older adults are female patients.

Married older adults were representing the majority among studied elderly patients, and the least were single. This may be due to the hypotheses that men were less likely to be widowed compared to women and the almost studied older adults were men, and re-married. Similarly, to this results **(Garcia, Mahon, Boyle, Jones, & Vseteckova, 2021)**, results in England **Yusefi et al. (2021)** in Iran and by **Nejati et al. (2019)** are reported that more than two-thirds of the male's patients were married.

Concerning the level of education, illiteracy was prevailing among studied elderly patients and most of them reside urban. Illiteracy may be justified by the limited considerations and opportunities on the right of learning for older with specific gaps on adequacy, affordability and accessibility of learning opportunities **(Unfpa Asro, 2021)**.

Dissimilarly, to **Nguyen, Hargittai, & Marler (2021)** study in Switzerland and **Kahana, Yu, Kahana, & Langendoerfer (2018)** in USA found that most elderly had High school. While, **Nguyen et al. (2021)** found that most studied elderly patients reside urban which is similarly to the current study.

Regarding the medical history, most of patients suffered of more than three diseases and their use of assistive devices. This may be related to aging is a physiological process mediated by numerous biological and genetic pathways, which are directly linked to lifespan and are a driving force for all age-related diseases. These results in accordance with **Ali, etal.(2019)** result in Egypt, **Li et al. (2021)** found medical diagnoses with more than one disease and **Lyra Jr et al. (2007)** in Brazil found that the mean chronic health condition per elderly individual was 3.5 ± 1.5.

Also, most of the studied elderly in the current study used eyeglasses. This may be due to loss of visual acuity from advancing age may significantly affects their daily life and their families. Using eyeglasses can modify the daily lives. In the same line a **de Carvalho Cordeiro et al., (2021)** results, confirmed the current results. while **Williamson, and Thomas (2021)** in North Carolina found that most of the elderly used a professional sign language interpreter.

From the researcher's viewpoint using assistive devices for older adults improve the communication between the elderly and others, so nurses require to teach the elder its importance and provide adequate support for those who need it and offer help for those who have mal-functioning to renew or replace it.

Concerning communication barriers related to Physical and Physiological Changes of the studied elderly. Most of elderly studies revealed that elderly suffered auditory and visual impairment. This may be due to the impairment in the auditory, and visual sensory. These sensory are among the most common sensory that can adversely affect elderly persons. The majority, of them check anything in front of him trying to see it, but unable to express it in words. More than three-quarters of them tilt the ears toward the speaker trying

to hear in addition to the impact of diseases and drug side-effects.

Moreover, more than two-thirds of the elderly patients had dysarthria or stuttering, don't hear well (Hard of hearing), have physical problems such as pain, suffer from lack of clarity of vocalizations. Also, more than half of them complain of forgetfulness and poor memory. **Lew, Tanaka, Pogoda, & Hall Iii, (2021)** showed the same result, and in Indonesia **Rustan (2020)** showed that one third of the studied elderly had hearing loss. In addition to **Spencer et al. (2018)**, result in United States and **Kotwal et al. (2021)** result in USA found that the majority of the studied elderly had profound hearing loss.

Newton, & Shah, (2013) stated the main barrier to communicate with impaired hearing people is lacking consideration by others. These patients can face prolonged or unnecessary illnesses due to inadequate communication with their health care providers. From the researcher's perspective, nurses must be being prepared and preparing the patient, health workers to ensure good communication, thereby giving patients access to appropriate and effective health care, observe that patients with both visual and hearing impairments and provide more consideration.

In relation to social status of elderly patients, loneliness and social isolation are very complex concepts which affect later life and have often been considered as synonymous **(Beneito-Montagut, Cassián-Yde, & Begueria, 2018)**. Most studied elderly patients were refused to speak and socially isolated. This may be related to the studied elderly considered nurse-patient relationship is temporary and do not wish to speak, this refers to the poor nurse-patient relationship, as if the nurses had initiated the interdependent relationship, these barriers would not have been found.

Conclusively, effective nurse-patient communication has the potential to support well-being in older adults. However, to achieve this, nurses must be aware of their communication abilities and the factors that might affect this communication. In addition,

it is necessary for nurses to be flexible, so that they can adapt interventions to support the individual communication needs and abilities of older adults.

Furthermore, the participant nurses and the elderly identified several barriers to effective communication. Adjusting these barriers can enable the patients to express themselves better, understand others better, and be involved in decisions affecting their care and daily life. It is recommended that nurses have an overall awareness of the potential influence of all the factors controlling conversations, and work on building strong relationships with patients that effect on the quality level of care.

6. Conclusion

Based on the results of the present study, the researcher concluded that, more than half of nurses had poor knowledge of physiological and psychological changes of elderly and its effect on communication with elderly. Furthermore, the majority of nurses had inadequate communication skills and reported that environment was a strong barrier of communication. Also, two thirds of elderly patients reported the same barrier. While physical diseases and physiological changes of elderly prevailed to cause communication barriers. Moreover, there was a statistically significant correlation between nurse's knowledge and their communication skills and environmental factors.

7. Recommendations:

The researcher suggested the following recommendations:

Academic role:

- Developing guideline regarding the effective communication with elderly.
- Designing educational materials such as booklets and brochures about communication barriers.
- Designing rubric check list to assess nurses' communication skills with elderly

Health care settings role:

- Using the developed guideline and monitor nurses' communication skills with elderly patients.

- Monitoring the elderly patient's satisfaction of care.
- Provide incentives for the highly skilled nurses and warning the bad practice of nurses based on rubric check list assessment and patients' satisfaction

Further research is proposed to:

- The impact of conducting in service training for nurses regarding communication skills with elderly patients.
- Replicate this study on a larger scale for generalizing the results.

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