

Geriatric Inpatients Perception of Nurses' Communication: the Relationship between Patient-Centered Communication Practices and Satisfaction with Nursing Care

Maha Mohammed Abd El-Moniem, Marwa Ibrahim Mahfouz and Hanaa Abou Elsoued Hussein

Department of Gerontological Nursing, Faculty of Nursing, Alexandria University, Alexandria, Egypt

Abstract: *Background:* Shifting towards more patient-centered care approach; including application of patient-centered communication style by the health care providers, especially nurses who possesses the premier contact with patients; may improve patient satisfaction and control of long term co-morbidities of geriatric inpatients. This study aimed to determine geriatric inpatients' perception of nurses' use of patient-centered communication practices and to investigate its relationship to patient satisfaction with communication and nursing care. *Materials and Method:* The study was conducted in the internal medicine inpatient units of the Main University Hospital, Alexandria, Egypt. The study sample comprised 140 geriatric inpatients. Three tools were used to collect the data; a Socio-Demographic and Clinical Data Structured Interview Schedule, Patient-Centered Communication (PCC) Scale and Patient Satisfaction Instrument (PSI). *Results:* The study revealed that 62.8% of geriatric inpatients moderately perceived that their nurses were practicing patient-centered communication behaviors. 70% of geriatric inpatients were moderately satisfied with nurses' communication. More than two thirds (67.9%) of geriatric inpatients held a moderate degree of satisfaction toward nursing care. Statistically significant relationships were evident between geriatric inpatients' perception of nurses' patient centered communication and satisfaction with nurses' communication with geriatric inpatients' satisfaction of provided nursing care. *Conclusion:* Nurses use of specific patient-centered communication behaviors as perceived by geriatric inpatients were significantly related to their satisfaction with nurses' communication and satisfaction with the overall nursing care. *Recommendations:* Health care organizations must value or be aware of the significance of nurses' use of patient-centered approach when communicating with geriatric inpatients to guarantee the provision of quality patient care.

Key words: Hospitalized Older Adults • Individualized-Patient Care • Patient's Contentment • Gerontological Nurse

INTRODUCTION

Nowadays, healthcare providers, policy creators and researchers are charged with managing competent and creative practice while delivering care in style that enhances patient satisfaction and provides for optimal outcomes [1]. Shifting toward more patient-centered care approach including application of patient-centered communication style by the health care providers especially nurses who possesses the highest contact with patients may improve patient satisfaction and control of long term co-morbidities [2].

The nurse-patient interaction is a core component of nursing science and high quality nursing care. Steffen *et al.* [3], contend that 'the main intention of communication and interaction, in the health setting, is

to influence the patient's health status or state of well-being'. As a profession, nursing care predominately requires interacting with and connecting to, patients at personalized base. Communication is a dynamic two way process used to convey a message between the nurse and the patient either verbally or non-verbally. Person-centered communication is described as a group of capabilities of the health provider demonstrated through verbal and non-verbal communication that facilitates person-centered care. The exact goal of Person-centered communication is confirming the healthcare provider's attention to the person as a whole and includes: sharing information and decisions, providing compassionate and empowering care and being sensitive to patient needs. It is also acknowledged as a must to deliver person-centered care [4, 5].

The reintroduced interest in the role of communication in addressing patient concerns and feelings related to the disease and treatment plans as well as their expectations, is based on the assumption that communication patterns nurses use might play a role in achieving successful assessment of the patient's health problems and needs by listening and asking questions; discussing nursing care plans and treatment modalities with the patient and family and providing the older patient with the needed information. Unsatisfactory communication, presented by nurses who are unprepared to deal with older patients with complex communications needs, may result in excessive suffering of older inpatients and lowering their satisfaction with the received care [6, 7].

There is plentiful confirmation to support that nurse-patient communication is a key feature in the measurement of patient preferences and satisfaction with the provision of healthcare services. However, this traditional focus on the relationship between patient satisfaction and provided nursing care is no longer enough. A better understanding of patient self-perceived satisfaction should involve not only assessing nursing care during hospitalization period, but also patient-centered communication practices [8-10].

Patient satisfaction can be described as a patient's subjective evaluation of all facets of the health care services equipped as well as the providers of such care. It is related to patient perception of the outcome of care and the extent to which it meets their prospects [11]. Theoretically, patient satisfaction has been defined as patient's judgment on the quality and goodness of care [12]. Satisfaction may affect the patient selection of health care institution for receiving sound and appropriate care and this subsequently affects the economical capability and reputation of the institution [13, 14].

On the other hand, dissatisfaction could be defined as a failure to promote health and well-being of patients as dissatisfied patients defeated to enter a treatment program, may be less adhered with their health care regimens or intentionally and prematurely terminated it, implemented their therapeutic instructions incompletely, discontinued the course of treatment early, have negative contact with their healthcare providers and less seeking medical advice and utilization of services [15, 16].

Older adults constitute the core users of hospitals as they account for up to 40% of inpatient hospital admission and in most cases, have multiple co morbidities that require significantly more medical resources and quality nursing care than younger patients and will need such care for a longer period of time [17, 18]. According

to Canadian Institute for Health Information [19], older adults stayed in hospital 1.5 times longer than non-seniors. Older patients often admitted to the hospital wards with multiple illnesses which presented atypically with subsequent multiple prescriptions. Furthermore functional deficits, communication problems and cognitive impairment may be present [20].

Older patients also may confront ageist attitudes of ill-educated and unprepared nurses. So this diverse group of population has unique needs for the delivery of skilled and proficient health care provided by well-informed and competent nurses. Unless older adults get an optimal skilled nursing care addressing their special needs and outlooks, they are more likely to be discharged with health problems, noncompliance with discharge plans with increased risk of readmission and consequent exhaustion of health care resources [21].

Older patients' expectations about type of care anticipated are likely to be bordered by a variety of aspects among which are the hospital environment, admission and discharge procedures, patient relation and interaction with the medical whole architectures and practitioners to provide acceptable and professional standard of care needed, nutrition and housekeeping services and physician and nursing care. Out of these, nursing care represents a crucial point in shaping patients' perception of quality of care [22]. This is supported by many studies which found nursing care to be the most imperative determinant for evaluation of patients' satisfaction with care and explaining patients' perceptions of health care service quality. Nurses provide the predominant connection with the older patients more than any other persons in the healthcare team. Thus, the nurse holds an influential position to guide and promote effective patient relationships [23-25].

The Egyptian geriatric health services within the hospitals are unfortunately inadequate all over the country, despite being the core consumers of health care services for longer hospitalization periods. The continuum of high quality care for this special sector is not well achieved because of the complexity of care associated with illnesses in older adults and lack of effective communication skills addressing emotional behavior [26, 27]. On that base, it was acknowledged that working on effective nursing communication in improving patient satisfaction and providing a high quality patient care is effective. In spite of this, older patient satisfaction with nurses' communication in the hospital setting and its relation to patient satisfaction with nursing care received are less likely to be recognized when evaluating patient satisfaction with health care quality [28].

Significance of the Study: Presently, patient satisfaction during hospital stay is a particular challenge in geriatric nursing practice. The geriatric nurse's responsibility for upgrading and enhancing older patients' satisfaction may require in-depth assessment and detection of the area of dissatisfaction and at the same time improve the nursing services which shorten hospital stay, improve health and wellbeing of older adults, decrease hospital readmission and save health care costs. Nurses' communication behaviors encouraging older patient choice and participation in decision-making can make a significant impact on older patient's satisfaction and sense of control of their own life [5, 29].

In spite of these advantages, many geriatric inpatients don't actually benefit from them due to low satisfaction and experiences concerning communication and interactions in the hospital settings [30-32]. Despite increasing attention to these issues, little is known about the nurses' application of patient-centered communication style and the effects of using this communication style on patient satisfaction with communication and nursing care as reported by patients [33-37]. The current study offers an insight in exploring these relationships.

Aim of the Study: To determine geriatric inpatients' perception of nurses' use of patient-centered communication practices and its relation to patients' satisfaction with communication and nursing care.

Research Questions:

- What is the extent of nurses' use of patient-centered communication from the perception of geriatric inpatients?
- Is there a relation between nurses' use of patient-centered communication and Geriatric inpatients' satisfaction with communication?
- Is there a relation between nurses' use of patient-centered communication and Geriatric inpatients' satisfaction with nursing care?

MATERIALS AND METHODS

Study design: A descriptive correlational research design was used in the present study.

Setting: This study was carried out in various inpatient wards of the internal medicine departments of the Main University Hospital in Alexandria, Egypt. This hospital is a referral hospital serves three governorates; Alexandria, Matrouh and El-Beheira and receives patients from urban and rural areas. It equipped with 1700 beds which offers

medical, surgical and intensive and emergency health care, serving population of all ages. It is the only hospital which contains a specialized unit for geriatric care all over Alexandria. The length of patient stay in medical inpatient wards ranged from (4) to (27) days with a mean of (13.82±5.11) days.

The current study was conducted in internal medicine building which entails 10 different medical inpatient specialties namely: Gastrointestinal unit, Geriatric medicine unit, Renal diseases and Dialysis unit, Liver and Gall bladder unit, Cardiovascular and Catheterization unit, Endocrine and Diabetes Mellitus unit, Dermatology unit for skin diseases, Respiratory disorders unit, Rheumatism and Immunology unit and Tropical medicine unit.

Subjects: The study population comprised a convenient sample of one hundred and forty (140) male and female geriatric inpatient who admitted to the previously mentioned settings, aged 60 years and above, didn't have any obstacles of communication such as sensory-perceptual disorders as severe uncorrected hearing or visual impairment; absence of any neurological or cognitive disorder that could affect communication(e.g. cerebral vascular stroke, Parkinson's disease and Alzheimer's disease), and accept to participate in the research; all were recruited in the study.

The sample size was estimated using the Epi info 7.0 program based on these parameters; population size: 764, expected frequency 50%, acceptable error 10%, design effect 1%, confidence coefficient 95% and minimal sample size equals 136, reached to 140.

Tools: Three tools were used in this study:

Tool 1 Socio-Demographic and Clinical Data Structured Interview Schedule: It was designed by the researchers based on recent relevant literature to collect information related to geriatric inpatients' socio-demographic characteristics such as age, sex, marital status and educational level, occupation before retirement, income and its source, their clinical data as the previous hospitalization and its frequency within the last 12 months, the contribution of nursing care in improving their health status and to what extent they were satisfied with the level of treatment provided.

Tool 2 Patient-Centered Communication scale (PCC): PCC scale was devised by Wanzer *et al.* [8] as a tool for the assessment of patient's perception of the extent to which nurses used patient-centered communication practices during daily care. The PCC is valid and reliable

scale and comprised of 13 items representing six domains of communication as follows: **(1) clarity** (1 item No. 7), **(2) Humor** (1 item No 2), **(3) Immediacy** (4 items No. 5, 6, 9 and 13), **(4) Introduction** (2 items No.4 and 8) **(5) Listening** (1 item No. 1) and **(6) Empathy** (4 items No. 3, 10, 12 and 14).

Satisfaction with nurses communication was assessed from geriatric inpatients' responses to the communication satisfaction statement, "Overall, I was satisfied with the communication with my nurse." This statement was included within the Patient-Centered Communication questionnaire (items No. 11) but its score was calculated separately.

Patients were asked to rate their responses on a five point Likert scale ranging from "very often" (5) to "never" (1) for the PCC scale items and communication satisfaction statement. PCC scale is obtained by calculating the mean scores of all 6 domains. The higher scores of PCC and communication satisfaction were reflecting greater patients' perception of nurses' use of patient-centered communication practices and communication satisfaction.

Tool 3 Patient Satisfaction Instrument (PSI-25): It was originally developed by Risser [11] and progressed by Hinshaw and Atwood [38]. PSI is a 25- item validated measure with a 5- point Likert-type response format. It ranging from strongly disagree (1) to strongly agree (5). It was used to measure geriatric inpatients' satisfaction with nursing care provided in the previously mentioned inpatient unites wards across three dimensions of care quality namely; (1) *technical-professional* (items No. 12, 13, 15, 16, 18, 20 and 25), (2) *interpersonal-educational* (items No. 2, 7, 8, 11, 17, 21 and 24) and (3) *interpersonal-trusting relationship* (items No. 1, 3, 4, 5, 6, 9, 10, 14, 19, 22 and 23).

PSI-25 has 10 negatively stated statements (worded in a manner that agreement declares dissatisfaction with nursing care provided). These negative sentences distributed along the 3 subscales which reversed and recorded in a manner that higher scores reflect higher patient satisfaction with nursing care. The scale is obtained by calculating the mean score of all 25 items and the higher ratings reflecting greater patients' satisfaction with nursing care provided.

Study Method:

- An official approval letter was issued from the Faculty of Nursing, Alexandria University to the director of the Main University Hospital, to the nurse manager of the hospital's medical units and each

nursing supervisor per each unit to obtain their approval in order to collect the necessary data. Then the purpose of the study and the schedule of data collection were clarified.

- Tool I was developed by the researchers after review of the relevant literature. Tool II and tool III were translated into Arabic language and tested for content validity by a jury of five experts in the related field. The required modifications were carried out accordingly. These tools were tested for reliability on 14 geriatric inpatient by using Cronbach alpha test $\alpha = 0.750$ for PCC and 0.985 for PSI.
- A pilot study was carried out on 14 geriatric patients from Hematological diseases unit and excluded from the total sample to ensure the clarity of the tools, examine its applicability and identify obstacles that may be encountered during data collection and estimate the time needed to fill the questionnaires.
- The researchers used to go to the previously mentioned setting two days/week from 9.00 am to 1.00 pm. Each patient was interviewed individually to collect the necessary data. Filling of the questionnaire took approximately 20-30 minutes.
- Data collection started from the first of July 2014 to the end of December 2014.

Ethical Considerations:

- The participants' rights were protected by explaining the purpose and significance of the study. In addition, participants were reassured that their responses will be kept anonymous and confidential used for the research purpose only and no remarks will be made to identify the client's identity.
- The patient was informed that his/her participation in the study is voluntary and can withdraw at any time without affection on the level of care received during his/her hospital stay.
- Patients who agreed to participate in the study and met the inclusion criteria were asked to sign a written informed consent form. In case of illiteracy, the patients' verbal agreement to participate in the study was obtained.

Limitation of the Study: Due to the large number of nurses involved in delivering patient care and absence of bed side nurse, patients were stated that it is ambiguous to answer the questionnaire as nurses vary in their responsiveness and competency level. To overcome this variation, patients were asked to put their average score of overall nursing care.

Statistical Analysis: SPSSIBM version 20 was utilized for data processing and analysis. After entry of data, inspecting and investigation processes took place in order to avoid errors. Descriptive statistics in the form of frequencies and percent were used to describe the categorical data variables. Quantitative factors were summarized by the arithmetic mean and standard deviation. The given graphs were constructed using Microsoft excel software. Analysis of categorical data is done using Mont Carlo exact test. Pearson's Correlation Coefficient was used for testing relationship between variables. Reliability of the tools was determined by Cronbach alpha. Significance level for all tests was established if $p \leq 0.05$.

RESULTS

Table (1) determines the level of perception, geriatric inpatients had, regarding nurses' use of patient-centered communication acts. Less than two thirds of them (62.8%) moderately perceived that their nurses were practicing

patient-centered communication behaviors, compared with only 2.9% who had higher perception of nurses' use of patient-centered communication behaviors. The total mean score is 35.15 ± 5.67 with 54.07 ± 8.73 of the mean percent score of the total scale subcategories.

Table (2) indicates that all domains of PCC are differently perceived by the geriatric inpatients. Some domains (such as clarity and listening) were perceived as highly used by their nurses (i.e. 65% of geriatric inpatients often and very often perceived that nurses communicated with them in a clear and direct manner, while 57.9% perceived that nurses listened intently to them during communication. Introduction domain behaviors were the lowest perceived one. As, the geriatric inpatients stated that nurses never and rarely mentioned their titles represented by (77.1%, 18.6%) respectively, as well never and rarely introduce themselves to the patients (74.3%, 16.4%) during primary communication. 42.9% of patient perceived that nurses sometimes used appropriate humor during conversation. Different levels of perception were seen within items of the same domain of the rest

Table 1: Description of the studied subjects according to their perception of nurses' use of patient-centered communication practices using PCC scale

Geriatric inpatient perception of nurses use of patient-centered communication	Frequency (n= 140)	Percent
Low perception (score < 50)	48	34.3
Moderate perception (score 50 - < 75%)	88	62.8
High perception (score $\geq 75\%$)	4	2.9
Total score		
Mean \pm SD.	35.15 ± 5.67	
Percent score		
Mean \pm SD.	54.07 ± 8.73	

Table 2: Frequency and Percent of Patient-centered communication (PCC) sub-domains' items

PCC sub-domains items During nurse-patient communication, the nurse	Never		Rarely		Sometimes		Often		Very often		NA*	
	no	%	no	%	no	%	no	%	no	%	no	%
I. Domain: Listening												
1: Listened intently	2	1.4	12	8.6	45	32.1	53	37.9	28	20.0	0	0.0
II. Domain: Humor												
2: Used appropriate humor	18	12.9	24	17.1	60	42.9	34	24.3	4	2.9	0	0.0
III. Domain: Empathy												
3: Encouraged patients to express any concerns	50	35.7	27	19.3	45	32.1	16	11.4	2	1.4	0	0.0
10: To Whom patients comfortably expressed worries or concerns	19	13.6	27	19.3	39	27.9	25	17.9	11	7.9	91	13.6
12: Invited discussion of any concerns or fear	28	20.0	36	25.7	37	26.4	14	10.0	3	2.1	22	15.7
14: Directed conversation away of patients' concerns or worries	9	6.4	17	12.1	38	27.1	33	23.6	10	7.1	33	23.6
IV. Domain: Introduction												
4: Provided title/position when approached	108	77.1	26	18.6	5	3.6	1	.7	0	0.0	0	0.0
8: Introduce self to patients	104	74.3	23	16.4	12	8.6	1	.7	0	0.0	0	0.0
V. Domain: Immediacy												
5: Looked at patients while talking	5	3.6	5	3.6	51	36.4	64	45.7	15	10.7	0	0.0
6: Used appropriate gestures while speaking	1	.7	13	9.3	54	38.6	57	40.7	15	10.7	0	0.0
9: Smiled at patients during communication	12	8.6	20	14.3	45	32.1	34	24.3	29	20.7	0	0.0
13: Had a tense body position while talking	9	6.4	18	12.9	67	47.9	27	19.3	18	12.9	1	.7
VI. Domain: Clarity												
7: Communicated with patients in a clear and direct manner	1	.7	8	5.7	40	28.6	47	33.6	44	31.4	0	0.0

* NA: Not Applicable

Table 3: Description of the studied subjects according to their level of satisfaction with nurses' communication practice

Geriatric patient satisfaction with nurses' communication	Frequency	Percent
Low satisfaction (score < 50)	19	13.6
Moderate satisfaction (score 50 - < 75%)	98	70.0
High satisfaction (score ≥ 75%)	23	16.4
Total score	Mean ± SD.	3.46±0.99
Percent score	Mean ± SD.	69.28±19.98

Table 4: Description of the studied subjects according to their level of satisfaction with nursing care provided during the hospitalization using Patient Satisfaction Instrument (PSI)

Geriatric patient satisfaction with nursing care	Frequency (n= 140)	Percent
Low satisfaction (score < 50)	25	17.9
Moderate satisfaction (score 50 - < 75%)	95	67.9
High satisfaction (score ≥ 75%)	20	14.3
Total score		
Mean ± SD.	76.08±14.81	
Percent score		
Mean ± SD.	60.86±11.85	

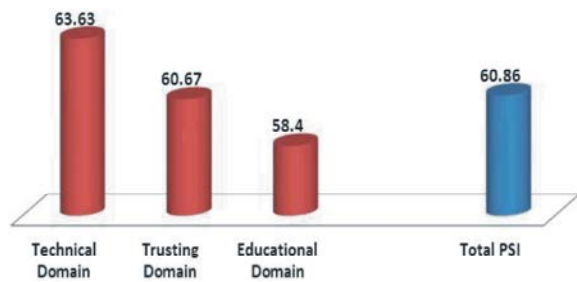


Fig. 1: Mean percent (%) of patients' satisfaction with nursing care provided according to the domains of Patient Satisfaction Instrument (PSI)

domains. For illustration, within immediacy domain, 56.4% stated that nurses often and very often looked at them during talking, while 32.2% said that nurses were tensed while communicating them.

Table (3) illustrates that 70% of geriatric inpatients in the present study were moderately satisfied with communication with their nurses with a mean percent score of 69.28±19.98 for satisfaction with communication. Satisfaction with nurses' communication practices was assessed from geriatric inpatients responses to the communication satisfaction statement; "Overall, I was satisfied with the communication with my nurse."

Table (4) represents that the level of satisfaction among geriatric inpatients with nursing care provided. More than two thirds of them (67.9%) expressed moderate level of satisfaction, compared with only 14.3% who reported being highly satisfied. The total mean score is 76.08±14.81 with 60.86±11.85 of the mean percent score of the total scale subcategories.

Regarding the geriatric inpatients' satisfaction with the nursing care, Fig. 1 reflects that technical-professional (63.63±12.96) was the highest scored domain; it means that, the studied subjects were more satisfied with the technical and professional nursing skills, information, behavior and degree of nurses' knowledge during care of them. On the other side, the lowest level of satisfaction was linked to interpersonal- educational (58.40±12.49) one as the geriatric inpatients were less satisfied with nurses' attitude when dealing with them and the degree of mutual information exchange in nurse-patient reciprocal actions.

Table (5) reveals that there were positive significant correlations founded between nurses' use of patient-centered communication practices and geriatric inpatients' satisfaction with this communication across all domains of the PCC scale.

Table (6) denotes that there were positive statistically significant correlations founded between nurses' use of patient-centered communication (PCC) and geriatric inpatients' satisfaction with nursing care across all domains of the (PSI) scale and its overall score. This finding proposes that geriatric inpatients were more satisfied with the provided nursing care when they perceived that the communication was patient-centered.

Table (7) shows that there were positive significant correlations founded between satisfaction with nurses' communication and geriatric inpatients' satisfaction with nursing care across all domains of the (PSI) scale and its overall score. This result signifies that inpatients were more satisfied with the provided nursing care when they are satisfied with nurses' communication practices.

Table 5: Correlations between nurses' use of patient-centered communication and geriatric inpatients' satisfaction with nurses' communication

Items	Patient satisfaction with communication	
	F	P
Clarity	6.235	□0.001*
Humor	8.353	□0.001*
Immediacy	4.956	□0.001*
Introduction	2.582	0.029*
Listening	17.007	□0.001*
Empathy	3.036	□0.001*
Total PCC	3.484	□0.001*
F: ANOVA test	P: p value of ANOVA test	*Significant P ≤0.05

Table 6: Relation between geriatric inpatient perception of nurses' use of patient-centered communication and their satisfaction with nursing care

(PSI) Domains/subscales	PCC	
	F	P
Technical Professional Domain	4.013	□0.001*
Interpersonal Educational Domain	2.528	0.001*
Interpersonal Trusting Domain	3.710	□0.001*
Total PSI (inpatient satisfaction with nursing care)	3.355	□0.001*
F: ANOVA test	P: p value of ANOVA test	*Significant P ≤0.05

Table 7: Relation between geriatric inpatient satisfaction with nurses' communication and their satisfaction with nursing care

PSI Items	Patient satisfaction with communication	
	F	P
Technical Domain	5.755	≤0.001*
Educational Domain	2.620	0.001*
Trusting Domain	7.189	≤0.001*
F: ANOVA test	P: p value of ANOVA test	*Significant P =0.05

Table 8: Relation between geriatric inpatients' perception of nurses' use of centered-communication and their satisfaction with nurses' communication with their satisfaction with nursing care provided

Variables	Inpatient' Satisfaction with Nurse communication							Significance	
	Low no. (19) %	Moderate no. (98) %	High no. (23) %	Total no. (140) %					
Perception of patient-centered communication (PCC)									
Low perception (score < 50)	14	73.7	32	32.7	2	8.7	48	34.3	^{MC} P:□0.001'
Moderate perception (score 50 - < 75%)	5	26.3	65	66.3	18	78.3	88	62.9	
High perception (score = 75%)	0	0.0	1	1.0	3	13.0	4	2.9	
Geriatric inpatients' satisfaction with nursing care (PSI)									
Low satisfaction (score < 50)	15	78.9	10	10.2	0	0.0	25	17.9	^{MC} P:□0.001'
Moderate satisfaction (score 50 - < 75%)	4	21.1	82	83.7	9	39.1	95	67.9	
High satisfaction (score = 75%)	0	0.0	6	6.1	14	60.9	20	14.3	

^{MC}P: Monte Carlo Sig.

*Significant at ^{MC}P =0.05

Table (8) clarifies a statistically significant relationships between both geriatric inpatients' perception of nurses use of patient-centered communication (^{MC}P =<0.001*) and geriatric inpatients' satisfaction with nurses' communication (^{MC}P =<0.001*) with geriatric inpatient satisfaction with nursing care.

DISCUSSION

Optimizing nursing communication with patients provides a foundation proven to be the key to long-term

success. The lack of open, clear and effective communication between the nurse and the patient in the hospital setting can negatively impact patient satisfaction with care and hospital readmissions. Communication between nurse and patient is a key to establish relationships, providing improved patient care and creating positive outcomes. With ever more complex geriatric health conditions, increasing demands for cost-effective care that insists the nurse perform at a more efficient level and the focus on patient-centered care with patient satisfaction [39, 40].

In the hospital setting, nurses carry out many of their patient-related responsibilities in a face-to-face manner at the bedside and these instants can facilitate effective communication to occur between the nurse and the patient in a respectful manner with ongoing sharing of useful information and patient engagement in decision making, which is patient-centered. In this study, less than two thirds of the geriatric inpatients included in the current study (62.9%) moderately perceived that nurses were patient centered while communicating with them with a total percent score of 54.07 ± 8.73 . Different findings were obtained by Bauley [41] and McCabe [42], who expressed that the majority of nurses do not use a patient-centered communication style while interacting with their patients.

However, the finding of the present study is less reflective of the true interactive relation between nurses and their geriatric inpatients. It was observed by the researchers that nurses were more concerned with doing their work than communicating with geriatric inpatients personally and from their point of view; nursing care is limited to administration of medication, taking blood specimens or measuring vital signs hastily irrespective of interpersonal aspects of care. This is supported by the findings of McCabe [42] who noted that nurses interact with patients only when performing administrative or functional activities and nursing 'practice was predominately task-orientated'. The discrepancy between the findings and the researchers' observations may be explained by the present study geriatric inpatients' unawareness of the nurse's position and duties, the patients in the present study view nurses as a submissive group of people who carried out the orders of physicians; Crowe [43] supports this.

Additionally, the studied geriatric inpatients added that they have to be satisfied with the presented nurses' communication as they haven't other better alternative of health care because of their lower socioeconomic status and higher health costs in the non-governmental hospitals which are beyond their withstand. Moreover they disclosed fear of being abused if providing unprejudiced evaluation of the nurse. Attree [44] suggested that patients are reluctant openly to criticize nurses because of a fear of retribution or the passive nature of the patient role or acceptance of the national health care delivery. They propose that instead patients 'wrap up' their criticisms in socially acceptable responses.

In the present study, a positive statistically significant relation was found between nurses' use of PCC and satisfaction with communication as more than two

thirds (70%) of the studied geriatric inpatients were satisfied with their nurses communication with a percent score of 69.28 ± 19.98 . This finding is consistent with the work of Rohrer *et al.* [45] who found that the highest levels of patient satisfaction with overall quality and aspects of communication was related to patient-centeredness. In the same line, an Italian study (2013) proved that the strongest determinant of satisfaction and patient-centered outcome was communication quality [46].

The use of direct and clear communication among nurses and their geriatric inpatients is a must. Age-related sensory perceptual and cognitive changes may impose limitations on communication and aggravate misconception of older adults as hearing and vision impairments. In this regards, more than three quarters ($77.86 \pm 18.84\%$) of geriatric inpatients in the present study professed that nurses dialog them in direct and clear manner (Table 2) with a statistically significant relation between nurses' use of clear communication and geriatric inpatients' satisfaction with communication (Table 5). This is supported by the findings of Levinson *et al.* [47] and Hudon *et al.* [48] studies who reported that adults appreciated communication when their physician offered clear expectations and directions about what steps to take next and what to expect during treatment. Likewise, Parks [34] concluded that use of direct communication and discussion of the patient at the bedside may improve the quality communication among health care professionals and patients. Reader *et al.* [49] concluded that clear explanations, in a way that the patient can understand, promote improved health outcomes and patient satisfaction with their care.

With respect to listening, nearly three quarters of geriatric inpatients ($73.29 \pm 18.83\%$) perceived nurses as attentive listeners during conversing them. Higher percentages (90.0% and 82.6%) of attentive listening demonstration by nurses were shown in the study of parks [34] providing older patient who have age-related difficulty in ward retrieval, slow response and shrunken social networks with few minutes to talk about their concerns without disruption will yield warmer and trustful relations than a quick paced interaction. On contrary, Hingel and Robinson [50] indicated that feelings of being rushed will cause older adults to feel that they are not being heard or understood. The current research revealed a statistically significant relation between nurses' attentive listening and geriatric inpatients' satisfaction with communication (Table 5). A similar association between perceived listening and satisfaction with communication and care was reported by Wanzer *et al.* [8].

According to Astedt-Kurki *et al.* [51], use of humor in the nurse-patient communication helps to create bonds and build confidence, relieves anxiety and tension and conveys unspoken emotional messages. In this respect, it was evident from the findings of the current study that more than half of geriatric inpatients perceived that nurses had humorous conversations with them with a statistically significant relation between nurses' use of humorous conversations and geriatric inpatients satisfaction with communication. The practice of humor in nurse-patient interaction can help to lessen the undesirable effects of the long hospitalization periods and improve geriatric inpatients coping with tedious hospital life routine. This is come in accordance with McCabe *et al.* [42].

Nonverbal immediacy behaviors are an essential method for conveying warmth, love and support. It is specifically important for older adults with hearing impairment as they depend mainly on the nonverbal cues to comprehend messages. Eye contact, smiling and body position are reported by Caris-Verhallen *et al.* [52] among the most important nonverbal behaviors which were found to be essential in nurses' attempt to build rapport with their patients. However, a near percent of the geriatric inpatients in the present study (56.4%) and (51.4%) respectively reported that nurses looked at them and used appropriate gestures while talking to them. By throwing a closer view on the important goal of such behaviors (eye contact and appropriate gestures) for establishing support and rapport, these percentages in the current study are not satisfactory for accomplishing an effective therapeutic patient relationship. On the other hand, only one third of the geriatric inpatients in the current study disclosed that the nurse never had a tense body position while communicating with them which may interpreted by the geriatric inpatients as lack of interest causing blocking of communication. Nearly one quarter of the study geriatric inpatients (22.9%) reported that nurses never smiled while approached them even though the importance of smiling as a mean of nonverbal immediacy for conveying acceptance and warmth. Similar findings were reported by Caris-Verhallen *et al.* [52].

The current research revealed a statistically significant relation between nurses' use of nonverbal immediacy behaviors and geriatric inpatients satisfaction with communication.

Empathy is considered an elementary competence in communicating with older adults. Conveying a message of recognition and understanding of patient condition and caring about them as human beings is more necessary for geriatric inpatients with multiple comorbidities and related

somatic and psychological complaints. The process of emotional engagement of the nurse with the patient is referred to empathetic communication Morse *et al.* [53]. Empathetic communication conveys a message of nurses' recognition and understanding of patient condition and caring about them as human being. In the present study, less than half (44.39±18.77%) of geriatric inpatients revealed that nurses conveyed empathetic behaviors with a statistically significant relation between nurses' use of empathetic behaviors and geriatric inpatients satisfaction with communication. More than half of the geriatric inpatients in the present study reported that nurses never asked them to express their feelings and concerns including those related to their illnesses and care provided. Moreover nearly one third of geriatric inpatients never felt comfortable expressing any worries or concerns to the nurse and a similar percent stated that their nurses diverted conversation away from their worries or concerns. In addition, nearly half of them revealed that nurses never invited them to express their anxieties or fears. These findings didn't support the concept of patient - centered approach of care as patients' feelings and concerns were not addressed somewhere leaving the patient uncertain and anxious. Different results were obtained by Wanzer [8] and Lakatoo [54] who concluded that older adults were more satisfied with communication when they felt that their feelings and experiences were understood by their care providers.

With regard to introduction domain, which was assessed through the nurse introduce his/herself to new inpatients and the nurse introduce his/her title or position). The current study revealed that introduction related behaviors were the least exhibited behaviors as perceived by the majority of the studied sample with a statistically significant relation between nurses' introduction related behaviors and geriatric inpatients satisfaction with communication. The introduction has been termed "the first step in the therapeutic process" by Desmond & Copeland [55].

It is the starting point of the communication and may be used by the nurse to acknowledge the patient's existence and build a relationship. Introduction is specifically important for older adults who have sensory and cognitive decline, difficult remembering of names, in addition to, multiple chronic illnesses and subsequent multiple care providers of different specialties. So, frequent nurses' introduction of self and position can prevent confusion, anxiety and fear of unknown in the hospital environment.

Satisfaction with nursing care has repeatedly been documented as the most important predictor of overall satisfaction with hospital care. More than two thirds of geriatric patients in the present study had moderate level of satisfaction with the received nursing care (67.9%) with a total percent score of 60.86 ± 11.85 and only 14.3% were highly satisfied (Table 4). Similar level of patient satisfaction was found by Alhusban *et al.* [56]. Further study was done in Brazil revealed that the patients expressed high levels of satisfaction and positive experiences with nursing care during hospitalization [1].

In the current study technical-professional and interpersonal-trusting aspects of care were the highest scored domains, while the lowest level of satisfaction was linked to interpersonal- educational one. Lower levels of patient satisfaction with interpersonal-educational aspects of care were related to the diminished amount and type of information nurses gave to patients about their condition & treatment. A recent study initiated in Sohag, Egypt (2013), determined that lack of preoperative surgical information and guidance was found to affect patients' satisfaction [57]. Similarly, a study conducted in Saudi Arabia (2012) proved that lack of information received from the nurses about self-management and the laboratory tests results contributed to lower mean score of nursing care ratings [58]. In addition, lower level of satisfaction was associated with the nurses' explanation of medical tests and procedures in Kuwait [59].

In the present study the geriatric inpatients who perceived that nurses' communication was basically patient-centered demonstrated higher mean scores of satisfaction with the received nursing care on PSI. Thus, it can be said that these behaviors PCC significantly and positively impacted the studied patients' satisfaction level. In congruence, a study done in Egypt (2002) found that a client-centered interaction was associated with a three-fold increase in the likelihood of client satisfaction. Furthermore consistent results from previous studies found that provision of individualized care and focused communication can influence patients' perception and reactions toward care provided [60-62].

In fact, the main cause lied behind inpatients' satisfaction, in this study, with technical-professional and trusting relationships back not to their actual satisfaction or the acceptable level of nursing performance but in largely. In Egypt, there is a shortness of nursing numbers in relation to their duties and responsibilities and much number of patients. Doctors are the only health

professionals able to answer questions, explain and teach. This is explained by the general situation of nursing in Egypt. Egypt has one of the lowest qualified nurses to population ratios in the region. The majority of nurses in Egypt (almost 90%) are high school level education degree which is considered to be inadequate/insufficient quality nurse education. Those assistant nurses are typically the lower educated nurse category. The shortage is much more severe in Upper Egypt (Egypt Human Development Report, 2005) [63] as there is a geographical disparities across the 27 Governorates in the distribution of both qualified (Bachelor and Technical Institute graduates) and assistant (High school diploma graduates) nurses in Egypt. Those nurses have not received in their basic or continuing education the core geriatric care principles such as communication tips, timely screening of potential geriatric syndromes with early identification of risk factors and recognition of age-specific factors that increase the risk of hospitalization. Lack of advanced geriatric education for nurses lead to consequently unsuccessful implementation as care providing depends primarily on direct care staff with the knowledge and competencies to deliver evidence-based care to older patients. Most importantly, is the absence of interdisciplinary communication of the various disciplines' input that is essential [63].

Finally, communication is crucial when persons are receiving health-related care. In order to provide optimal level of health care for older adult, the nurses must understand the communicative needs of older patients as they own many age-related physical and psychosocial changes which may jeopardize communication and apply interventions aimed to promote patient-centered care approaches in inpatient settings. In this context, it was argued that management of patients' illness at the admitting wards in acute care settings may be impaired without constant individualized nursing care, treatment and supportive & motivated communication [64, 65].

CONCLUSION

From the current study's findings, it can be concluded that nurses' use of specific patient-centered communication practices as perceived by geriatric inpatients were significantly related to their satisfaction with nurses' communication and satisfaction with the overall nursing care.

Geriatric inpatients demonstrated moderate level of perception of nurses' use of PCC and satisfaction with nurses' communication and care.

Moreover, nurses' use of patient centered-communication practices such as attentive listening, use of clear and direct communication and use of humor were perceived as highly used by the nurses and were responsible for geriatric inpatients' satisfaction with nurses' communication and care provided. While behaviors related to introduction and empathy were the least exhibited behaviors.

Recommendations:

- Nurses caring for older patients must be equipped with the necessary communication skills to fulfill complex communication needs of hospitalized older patients including mobility, sensory and cognitive needs as well as communication barriers from generation gaps during their hospital stay.
- Develop and implement In-service health education programs for all nurses caring for hospitalized older adults in governmental and nongovernmental hospitals in Egypt to raise their awareness about uniqueness of older adult population. This is done via workshops and seminars, web-based discussions, conferences and other internal hospital educational venues.
- Health care organizations must value or be aware of the significance of nurses' use of patient-centered approach when communicating with geriatric inpatients to guarantee the provision of quality patient care.

Recommendations for Further Researches:

- Because patient satisfaction is considered a quality indicator of care, further studies about older patients' satisfaction in the hospital and clarifying the factors influencing patient satisfaction in different clinical settings is needed.
- Developing specific instruments to measure older patient satisfaction with different aspects of care including communication with health care providers.

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