Patient's Satisfaction Regarding Critical Care Nurses' Communication Skills at Oncology Center, Mansoura University

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Abstract: Patient's satisfaction is a desirable outcome of care, possibly representing an element of the overall health of an individual. Nurse-patient communication is one of the core skills in cancer nursing. To be an effective communicator, the nurse must be aware of the different levels on which communication is conducted between nurses and patients. Applying the aspects of communication level helps the nurse establish a therapeutic relationship with the patients and thereby achieve successful outcomes of care. The study aimed to assess patient's satisfaction regarding Critical Care Nurses' Communication skills at Oncology Center, Mansoura University. A descriptive (quantitative) study design was carried from 1st of December, 2018, up to the March, 2019. A convenience sample of 100 cancer diseased patients who fulfilled the inclusion criteria was included in the study. The developed questionnaire was constructed for the study which consisted of two parts: patient's demographic and health-relevant data and patient satisfaction with nurses' communication skills. The data were collected through patient's interview. They were analyzed through the application of descriptive statistical analysis and inferential statistical data analysis. The findings of the study indicated that (48%) of the samples were in age group (40-60) years old, (53%) of them were male, (59%) of them were rural residency, (64%) of the sample were married, (29%) of the sample had lung cancer, (57%) of the sample were staying mostly 2-3 days in the ICU, (96%) were admitted to ICU more than once and the most frequent reasons for admission were for receiving chemotherapy (50%). Conclusions: Most of patients were unsatisfied regarding communication skills of the critical care nurses. Recommendations: trained educational program should be designed to increase critical care nurses' awareness and skills about modes of communication.

Key words: Patient's satisfaction · Communication skills · Critical care nurses · Oncology

INTRODUCTION

Oncology intensive care units (ICUs) are special areas of interaction and communication with the patient [1]. Critically oncology patient usually require admission of ICU; for receiving care after operations and for prevention and treatment of cancer-related complications [2].

Various nurses have difficulty in communicating with their patients, especially in oncology units where there are many obstacles and high-stakeholder decisions during diagnosis and treatment [3, 4]. The importance of satisfactory communication about the diagnosis, prognosis and treatment alternatives cannot be over-emphasized [5].

Effective communication is essential for high quality of patient care. It has been demonstrated that effective communication reduces anxiety, positively influences the rate of patients' recovery, ability to comply with treatments and better continuity of care [6-8]. Alternatively, poor communication between the nurse and the patient is a major reason for dissatisfaction and poor outcome of care [9, 10].

There is increasing evidence that without quality communication between health caregivers and those they care for, negative outcomes may prevail, such as lower health status awareness, decreased the sense of being cared about and cared for and diminished patient satisfaction [11]. Communication skills that are important

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to nurses include providing information, asking questions and involvement, reporting and cooperation [12].

Communication can mitigate the distress of receiving bad news and have an impact on oncology patients' psychological status and their adaptation to a new situation [13]. When oncology nurses have strong communication skills, they play a key role in improving patient satisfaction [14].

Oncology patient satisfaction is measured by the quality of care, the clinical environment, the functional and interpersonal aspects of care, the patient's education and the information provided by health care personnel [15]. To achieve this, various services such as support for nursing and medical care and other organizational sectors should coordinate their efforts and, by respecting the rights of the patient, provide a suitable situation to improve it [16].

Many studies were conducted to assess patient satisfaction with nurses' communications of nursing care, have found that the level of patient satisfaction with the treatment provided reflects a direct relationship with behavioral actions such as pursuing post-discharge health care programs and obtaining follow-up care [10, 17]. In a study by Macdonald *et al.* [18] patients reported that their contact with nurses is much greater than other medical professionals, but nurses' consultation depends largely on their professional plan and not on what patients need.

Communication with patients is not just one of the values of treatment, but one of the key roles of nurses. Understanding cancer patients is a crucial precondition for nurses to develop effective communication skills and provide individualized nursing care to tailor cancer patients' needs in physical and psychological support [14].

Nurse-patient communication is one of the core skills in cancer nursing. Nurses are closely involved with patients' concerns because they provide 24-hour care. Cancer patients want their nurses to provide information, show that they care about and understand them as individuals and balance hope and realism. Although many patients were grateful and satisfied with the support and help from nurses, some of them indeed suggested that many areas of nursing service need to be improved [19]. This indicates the need for nurses to continue to improve their professional knowledge, attitudes and skills, as well as their communication competence to offer informational, emotional and practical support and help, in order to promote high quality of cancer care.

The importance of patient satisfaction-focused research is crucial to cancer patients who often undergo major lifestyle changes. Perceived disease confusion and personal experience with the care they seek are critical considerations for the reliability of their assistance [15].

Communication ability is one of the issues that can cover and compensate for many obstacles and other shortcomings even as a basic principle. Therefore, nurses are required to have enough communication skills as other clinical skills [14]. Assessing patient satisfaction can help draw up recommendations, guidelines and protocols, improving patients' assistance and promote priority in all cancer services [20]. Although attention to the viewpoint and satisfaction of patients are important factors in determining the quality of the healthcare provided, there is still limited literature on the satisfaction of oncology patients in Egypt.

Aim of the Study: The aim of this study was to assess patient's satisfaction regarding Critical Care Nurses' Communication skills at Oncology Center, Mansoura University.

MATERIAL AND METHOD

Research Design: A descriptive research design was utilized to accomplish the aim of the present study.

Setting: This study was carried out in two ICUs at Oncology Center of Mansoura University. It includes 10 beds and well equipped with essential technology such as mechanical ventilators, cardiac monitors and suction machines.

Subjects: A convenience sample of 100 patients diagnosed with cancer disease, who were admitted to oncology ICU and fulfilling the inclusion criteria:
- Cancer patients of both sexes more than 18 years old.
- Chemotherapy, radiotherapy or postoperative patients.
- No alteration in verbal communication.
- Willing to participate in this study.

Sample Size Calculation: Calculating sample size for studying patients' satisfaction regarding critical care nurses' communication skills at oncology center, through clincalc.com sample size calculator soft ware, at 5% ? error (95.0% significance) and 20.0 β error (80.0% power of the study), assuming the average score of patients'

satisfaction about treating patient with respect (4.4±0.67) and it was (4.2±0.69) about understanding patients main health concern [9]. The calculated sample size is 88 in each group, we can add 15.0% for better quality of data, so the studied sample will be 100 patients.

Tool of The Study: One tool was used for data collection it composed of two parts:

Part I: Patient's Demographic And Health Relevant Data: It covered items such as age, gender, education level, residence, marital status and type of cancer.

Part Ii: Patient's Satisfaction With Nurses' Communication Skills: This part aimed to assess patient's satisfaction regarding communication skills or perception of critical care nurses during patients' hospitalization in ICU. It was adapted from the Communication Assessment Tool (CAT) [21]. Adaptation included replacing statements regarding doctors with nurses. In this study the Arabic version of CAT [22] has been used. It included 14 items measured by five point response scale that ranged from 1= poor to 5 = excellent.

The level of communication skills is determined on the basis of the score i.e. less than 60% of total score (score less than 60) was considered as Unsatisfactory communication skills and more than or equal 60% is considered as satisfactory communication skills.

Method Of Data Collection

Validity And Reliability: A pilot study was conducted on 10% of total number of patients to investigate and ensure the feasibility, objectivity, applicability, clarity, adequacy, content validity and internal consistency of the tool. The tool was tested for content validity by 5 experts in critical care nursing who reviewed the validity of content. The reliability of the tool was estimated using cronbach's alpha reliability test that measures the internal consistency of the tools, it was 0.89 which indicates high reliability. Minor modification was done and the pilot sample excluded from the study.

Ethical Considerations: An ethical approval was obtained from the Faculty of Nursing, Research Ethics Committee (FNREC)/ Mansoura University to conduct the study. Informed consent was obtained from each cancer patient at oncology ICU who accepted to participate in the study after giving them whole information about the nature and

the purpose of the study. Patients were assured that participation in the study was voluntary and that they had the right to accept or refuse to take part in the study without any effect on their care or treatment. Any questions the patients had were answered. The confidentiality of the collected data will be maintained and patients will not be identified.

Data Collection: Data were collected from 1st of December, 2018, up to the March, 2019. Before initiating data collection, a permission to conduct the study was obtained from the hospital's administrative authority after providing detailed description of the study.

The patients were informed that although they would not directly benefit from the research, their participation in the study would be helpful for the researcher to gain useful insights and information on effective nurse-patient communication. Their participation in the study would benefit themselves and other cancer patients through improved nursing care at their hospital and also benefit society through improved nursing care for cancer patients.

Data were collected through an interview that was carried out individually at the patients' bedside and lasted for 15 to 30 mints.

The questionnaire of patient satisfaction was done before their discharge and was enveloped in order to maintain anonymity and confidentiality and thus reduced the concerns of the patients in terms of answering the questionnaire honestly. These considerations contributed to increase validity and sensitivity of the Questionnaire.

Data Analysis: Collected data were coded, computed and statistically analyzed using SPSS (statistical package of social sciences), version 16. Data were presented as frequency and percentages (qualitative variables) and mean±SD (quantitative continuous variables). Student's t test was used for comparison of continuous quantitative variables (two groups) and one way anova (F test) was used for comparison of continuous quantitative variables (more than two groups). The difference was considered significant at $P \leq 0.05$.

RESULTS

Table 1 shows that the studied 100 patients, most of them were below 60 age; 47% aged 20 to 40 years, 48% aged 40 to 60 and only 5% above 60 years. Males represent 53%, 64% were married, 67% were basic

Table 1: Demographic and health relevant data of the studied patients (100)

Characters	Items	No	%
Age	20-	47	47
	40-	48	48
	60+	5	5
Sex	Males	53	53
	Females	47	47
Marital status	Single	17	17
	Married	64	64
	Divorced	3	3
	Widow	16	16
Education	Basic and less	67	67
	Secondary	19	19
	University	14	14
Residence	Urban	41	41
	Rural	59	59
Site of cancer	Gastric/esophageal	7	7
	Colorectal	14	14
	Lung	29	29
	Breast	20	20
	Hematologic	7	7
	Gynecological	15	15
	Others	8	8
Duration since diagnosis (months)	3-Jan	15	15
	6-Apr	9	9
	12-Jul	49	49
	13-24	17	17
	>24	10	10
Length of stay in hospital (days)	≤ one day	9	9
	2-3 days	57	57
	≥ 4 days	34	34
Times of hospitalization	Once	4	4
	Twice	49	49
	≥ Three	47	47
Reasons for hospitalization	Surgical operation	43	43
	Chemotherapy	50	50
	Radiotherapy	5	5
	Recurrence	2	2

and less educated while 19 and 14% were secondary and university educated respectively. More than half (59%) were from rural areas. The sites of cancer were lung (29.0%), Breast (20.0%), Gynecology (15%), Colorectal (14%), while GIT cancer, hematologic cancer and other sites were 7, 7 and 8% respectively. Duration since diagnosis of cancer ranged from one month up to more than two years. Length of stay in hospital was mostly 2-3 days (57%) and most of the patients (96%) were admitted more than once and the most frequent reasons for admission were exposure to surgical operations (43%) and for receiving chemotherapy (50%).

Table (2) shows that most of the studied patients reported fair and good response to most items of satisfaction scale and the average score of each item ranges from 2.37±0.91 for the item "Spent the right amount of time with me" to 2.92±0.88 for the item " Treated me with respect ". The average score of all items were below 3.

The total satisfaction score ranged from 19.0 to 70.0 with average 36.88 ±9.38, reduced range from 1.36-5.0 with average 2.63±0.67 and percent satisfaction score ranged from 27.14-100.0 with average 52.68±13.40. Only 21% of the studied patients had satisfactory level (≥60%) (Table 3). In contrast, 34% the studied patients reported they were generally satisfied with nurses' communication (Fig. 1).

Table (4) shows the relationship between total average satisfaction score and characteristics of the studied patients. The average satisfactory score increased by age, in females, single & widow and less educated patients but the differences were not significant (P > 0.05).

Table 2: Frequency distribution and percentages of satisfaction scales items of the studied patients.

Items	Poor 1	Fair 2	Good 3	Very good 4	Excellent 5	Average Score
1-Greeted me in a way that made me comfortable	2	35	43	15	5	2.86±0.87
2-Treated me with respect	3	29	46	17	5	2.92±0.88
3-Showed interest in my ideas about my health	5	38	42	10	5	2.72±0.90
4-Understood my main health concerns	7	32	47	10	4	2.72±0.89
5-Paid attention to me (looked at me, listened carefully	8	33	45	9	5	2.70±0.92
6-Let me talk without interruptions	10	36	41	9	4	2.61±0.93
7-Gave me as much as information as I wanted	7	33	47	8	5	2.71±0.90
8-Talked in terms I could understand	6	39	46	8	1	2.59±0.77
9-Checked to be sure I understood everything	9	38	46	4	3	2.54±0.83
10-Encouraged me to ask questions	11	40	37	8	4	2.54±0.93
11-Involved me in decisions as much as I wanted	7	42	45	3	3	2.53±0.80
12-Discussed next steps, including any follow-up plans	13	35	45	4	3	2.49±0.88
13-Showed care and concern	14	29	45	9	3	2.58±0.95
14-Spent the right amount of time with me	18	36	39	5	2	2.37±0.91

Table 3: Total patient satisfaction score and level of satisfaction

Scores	Range	Mean±SD
Total satisfaction score	19.0-70.0	36.88±9.38
Reduced satisfaction score	1.36-5.0	2.63±0.67
Percent satisfaction score	27.14-100.0	52.68±13.40

Level of Satisfaction	Level	No	%
Unsatisfactory	< 60%	79	79.0
Satisfactory	≥60%	21	21.0

Table 4: Relationship between total average satisfaction score and characteristics of the studied patients (100)

Characters	Items	No	Total score Mean±SD	Significance test
Age	20-	47	36.06±8.97	
	40-	48	37.48±10.25	F=0.376,
	60+	5	38.80±0.45	P 0.688
Sex	Males	53	36.49±8.95	t=0.439,
	Females	47	37.32±9.92	P 0.662
Marital status	Single	17	37.88±10.89	
	Married	64	36.65±09.58	F=0.133,
	Divorced	3	34.67±05.03	P 0.940
	Widow	16	37.13±07.92	
Education	Basic and less	67	37.98±08.76	
	Secondary	19	34.84±06.64	F=1.432,
	University	14	34.36±14.16	P 0.244
Residence	Urban	41	39.20±07.65	t=2.092,
	Rural	59	35.27±10.17	P 0.039*
Type of cancer	Gastric/esophageal	7	39.00±02.71	
	Colorectal	14	37.29±09.61	
	Lung	29	35.83±10.34	F=0.183,
	Breast	20	36.70±10.44	P 0.981
	Hematologic	7	39.00±08.89	
	Gynecological	15	36.53±08.87	
	Others	8	37.38±10.18	
Duration since diagnosis (months)	3-Jan	15	25.53±05.93	
	6-Apr	9	38.78±06.55	F=11.778,
	12-Jul	49	33.12±06.30	P <0.001*
	13-24	17	40.12±11.85	
	>24	10	45.00±09.61	

Table 4: Continued

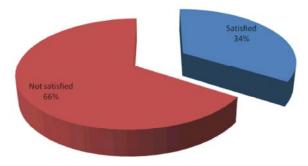| Characters	Items	No	Total score Mean±SD	Significance test
Length of stay in hospital (days)	≤ one day	9	32.11±12.41	F=1.445,
	2-3 days	57	36.93±07.74	P 0.241
	≥ 4 days	34	38.06±10.83	
Times of hospitalization	Once	4	51.50±15.80	F=5.685,
	Twice	49	35.80±07.62	P 0.005*
	≥ Three	47	36.76±09.62	
Reasons for hospitalization	Surgical operation	43	37.44±10.64	
	Chemotherapy	50	36.94±08.43	F=0.486,
	Radiotherapy	5	33.80±07.26	P 0.693
	Recurrence	2	31.00±11.31	

Fig. 1: General satisfaction reported by the patients

Patients lived in urban areas reported significant higher average satisfaction score (P<0.039). The average satisfaction score did not significantly differ in patients with neither different cancer sites nor different duration of stay. The patients diagnosed since more than one year had a significant higher average satisfaction score (P <0.001) and also, those admitted for only one time had a significant higher average satisfaction score (P 0.005).

DISCUSSION

Oncology nurses contribute to the quality of life and recovery of their patients; they play a major role in the diagnosis and treatment of cancer. To be successful in performing their duties, nurses must have a well-defined set of professional skills to ensure they are capable of delivering the highest quality nursing care.

The results of the study showed that the majority of the studied patients were dissatisfied with nurses' communication skills. This is might be due to a lot of reasons ; shortage of nursing staff, hurry up of nurses during the administration of medication as chemotherapy, too many cases at the oncology unit in which the nurses are uninterested with their condition, all these can lead to lack of communication with the patients. The results may infer that patients were not seeing their nurses practicing effective communication skills at the same level they need. This result is consistent with a previous study conducted by Badiyepeymaiejahromi *et al.* [14] who reported low nurses ' ability to communicate with patients. Moreover, Rostami *et al.* [23] who conducted a study titled "Communication skills of nurses in the viewpoint of hospitalized patients" and found the nurses had poor communication skills results.

On the contrary, this result disagree with Djambazov *et al*. [15] who stated that patients attributed a high score satisfaction with nurses communication skills. Additionally, Ayman *et al*. [9] and McAllister *et al*. [24] found patients were satisfied with nursing competency in practicing communication skills.

Similar to other medical staff, oncology unit nurses spend more time with patients building trust in close relationships. They can easily manage the stress caused by communication with patients and have a better tendency to build relationships with patients if they become familiar with a solution focused approach to communication [25]. Nurses and patients with cancer usually communicate about the cancer treatment process and all the side effects. They may lack the communication programs to be effective communicator. It is so important to educate nurses in communication skills to improve medication quality [26].

Fakhr *et al*. [27] maintained that communicating effectively with patients is considered the heart of all patients' care aspects. This includes an understanding between nurses and patients about what and how effective communication skills can be. The current study findings revealed that most of studied patients were dissatisfied and reported fair response to some items of communication satisfaction scale" encouraged the patients to ask questions and involved the patients in decisions as much as they wanted". These findings don't

agree with Ayman *et al.* [9] who shows that nurses had moderate to high level of satisfaction in the previous items.

In the current study, Nearly half of the studied patients reported good response to other items of communication satisfaction scale such as "gave the patients as much as information they wanted, understood the patients main health concerns and treated the patients with respect". On the contrary, Badiyepeymaiejahromi *et al.* [14] study which assessed quality of communication skills of nurses worked at the hospitals concluded that the communication skills of most nurses were weak in the areas of patient respecting, inner and outer harmony and the unconditional acceptance of patient.

Concerning the relationship between total average satisfaction score and demographic characteristics of the studied patients, our study depict that patients lived in urban areas reported significant higher average satisfaction score than rural areas. One possible explanation for these findings could be due to cultural and believes differences and acceptance of the disease.

Our research findings illustrated that patients diagnosed since more than one year and those who admitted for only one time had a significant higher average satisfaction score. One possible explanation is that patients in specialized care units such as oncology who diagnosed with cancer more than one year may have longer period of interaction and their disease process also may affect their level of satisfaction with the communication skills of nurses.

Regarding other patients' demographics characteristics, it was found that the average satisfactory score increase by age, in females, single & widow and less educated patients but the differences were not significant. Our results are consistent with Ayman *et al.* [9] who noticed no significant differences in the satisfaction of patients with the communication skills of nurses with respect to demographic characteristics except for medical diagnoses where patients diagnosed with cancer had a different perception of the communication skills of nurses. On the contrary, Bakhtiari *et al.* [28] stated that there was no significant difference as regards to demographic characteristics.

CONCLUSIONS

The results showed that the patients were dissatisfied with nurses' communication skills especially in items (encouraged the patients to ask questions and involved the patients in decisions as much as they wanted) and satisfied in items (gave the patients as much as information they wanted, understood the patients main health concerns and treated the patients with respect). The results also showed that there is significant higher average satisfaction score in patients diagnosed since more than one year and who admitted to ICU for only one time.

Recommendations: The present study recommends that trained educational program should be designed to increase nurses' awareness and knowledge about modes of communication. Nursing staff should be increased suitable with the number of cancer patients available in the oncology unit. Nurses are needed to develop their communication skills and use the feedback of their patients as measures of their performance. Posters, booklet, publication and journal about communication skills should be available in hospitals.

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