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Training program: A mean for Improving staff nurses' patient centered communication skills in cancer care settings: A time series study

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The present study aimed to determine the influence of training program in improving staff nurses patient centered communication skills in cancer care settings. Time series design was employed to conduct this study. The study was conducted at Menoufia Oncology Institution, Egypt. Convenience sampling technique was used to select a group of (42) staff nurses working at Menoufia Oncology Institution. Observational checklist was used throughout the study phases (pre, post and follow up). The current study revealed that staff nurses' skills in patient centered communication were unsatisfactory before training and there was a statistical significant improvement in their skills after training. In conclusion, training program was highly effective in improving nurses' skills in patient centered communication.

Keywords: Training program, staff nurses, patient centered communication skills, cancer care.

INTRODUCTION

Cancer is a complex disease, and each patient has exceptional experiences emerged from the type of cancer, the stage at which it is diagnosed, the availability of treatment options, and one's physical responses to treatment. Effective communication is a key element for successfully engaging cancer patients in their diagnosis, treatment, and survivorship. This necessitates that health care providers understand and practice strategies that address the psychological and socio-emotional issues surrounding different individuals' experiences with cancer Traeder, 2015. Communication is pervasive during all stages of cancer disease progress including screening, diagnosis and treatment, and survivorship. It is much more likely that patients and providers will agree to a treatment plan when patients keenly share in decision-making. This can only be achieved by asking questions, sharing goals, and

demonstrating understanding of the information by saying it back to the provider Politi & Street 2011.

The benefits of effective communication in an oncology setting are multifold and include the overall well-being of patients and health professionals, adherence to treatment regimens, psychological functioning, and improvements in quality of life Vogel et al. 2009 and Smita et al. 2016

Although cancer communication is much common than communication in other health conditions, several distinctive features of cancer care make cancer communication research significant. Among the unique features of cancer care that affect communication are that few other illnesses are both life-threatening and possibly curable, that care encompasses various clinicians and numerous treatment modalities (such as oral and intravenous medications, radiation, and surgery); that there is often a long period of uncertainty after treatment, and that the patient's

health care team often changes over time. In particular, communication in the cancer care settings must assist patients in receiving bad news, handling the emotional effect of a dangerous disease, understanding and remembering multiplex information, communicating with multiple health providers, dealing with uncertainty while maintaining hope,

and building trust that will maintain long-standing clinical relationships Epstein et al. 2007.

Models of patient-centered communication in cancer care not only must label the process of effective communication between clinicians and patients but also must identify, and control for contextual factors moderating the link between communication and health outcomes (figure 1).



Source: Epstein R, Street R Jr. Patient-Centered Communication in Cancer Care: Promoting Healing and Reducing Suffering. National Cancer Institute. 2005.

For communication to contribute to healing and reduce suffering, clinicians, patients, and their families must have the capacity to participate in communication behaviors that contribute to the objectives of patient-centered care. Clinicians and patients will communicate competently when each is motivated and has sufficient knowledge, understanding, and self-awareness of what is required to communicate effectively. Another important prerequisite for effective communication is having suitable perceptual and linguistic skills to produce effective communication behaviors and adapt them appropriately Traeder, 2015.

Many clinicians learn communication skills by inspecting mentors while communicating with patients or through didactic approaches, but research indicates that there are more effective means of enhancing communication skills. Among most effective communication skills training are (1) recognition and definition of the essential skills in communication (for example, demonstrating empathy, using open-ended questions, and assessing psychosocial care needs); (2) practice communication skills through role-playing; (3)

thoughtful feedback from skilled communicators; (4) self-reflection through video and audio recordings; and (5) continuous practice of communication skills [Back et al, 2007].

There are many models available to develop nurses' communication skills in the cancer setting. Oncotalk is one program that uses a series of learning modules (e.g., fundamental communication skills, communicating bad news, discussing treatment options, and informed consent, etc.) to teach clinicians about specific communication tasks and provide suggestions for implementing these skills. One of the communication approaches advocated by Oncotalk is the ask-tell-ask method, which has clinicians ask their patients to describe their understanding of an issue by using prompts. The process of asking for this information can expand the patient-clinician relationship, demonstrate a clinician's readiness to listen, and assist in directing the conversation. Then, the information that needs to be conveyed is communicated in straightforward language, and broken down so as not to overwhelm the patient. In the final step,

clinicians ask patients if they comprehend the information to see if patients received the information the clinician tried to impart and provides an opportunity for patients to ask questions Back et al. 2007 and Moore et al. 2013.

Significance of the study

Acquisition of patient centered Communication skills is a basic need for any nurse in all care settings especially cancer care settings when dealing with patients with such dangerous disease. Unfortunately, few specialized guidelines exist to help nurses develop these skills in cancer care settings. Research should focus on the most effective and efficient ways to expand nurses capabilities in using patient-centered communication, particularly in the skill domain which is an essential element of successfully engaging cancer patients in their diagnosis, treatment, and survivorship. Training nurses working in cancer settings on effective communication skills can markedly improve nurse's communication capabilities and hence patient centered care which significantly improves patient outcomes Traeder, 2015. Thus the aim of this study was to determine the influence of training program in improving staff nurses patient centered communication skills in cancer care settings.

What is already known about the topic?

1. Patient-clinician communication is crucial to the delivery of high quality patient care especially at cancer care settings.
2. An important prerequisite for effective patient centered communication is having suitable perceptual and linguistic skills to produce effective communication behaviors and adapt them appropriately.

What the paper adds?

1. This paper gives indication about the level of patient centered communication at cancer care settings and how it was significantly improved after training sessions.
2. This paper also highlights the effectiveness of complex interventions directed at staff nurses that include condition-specific educational materials about patient centered communication.

The aim of the Study

The current study aimed to determine the influence of training program in improving staff nurses patient centered communication skills in cancer care settings.

Research hypotheses

- H1. It was hypothesized that staff nurses at Menoufia University Oncology Institution are not skilled in patient centered communication.
- H2. It was hypothesized that the training program will be effective in improving staff nurses' patient centered communication skills.
- H3. It was hypothesized that there will be a relationship between staff nurses' total patient centered communication skills scores and their socio-demographic characteristics.

MATERIALS AND METHODS

Operational definitions:

1. Training program: a group of three practical sessions about patient centered communication will be provided to staff nurses working at Menoufia Oncology Institution.
2. Patient centered communication skills: staff nurses skills in establishing connections and demonstrating empathy, collaborating with and educating cancer patients, and communicating with finesse with cancer patients
3. Cancer care settings: all health care settings where care is provided to patients in all stages of cancer.

Research design:

An interrupted time series research design was employed to determine the influence of training program in improving staff nurses patient centered communication skills in cancer care settings.

Study setting:

The study was conducted at Menoufia University Oncology Institution, Menoufia governorate, Egypt. Units included were outpatient clinics, chemotherapy and radiotherapy units, and inpatient department.

Subjects: -

The study subjects consisted of one group of (42) staff nurses: Convenience sampling technique was used to include all available staff nurses working at Menoufia University Oncology Institution who accept to participate in the study.

Inclusion criteria:

The study included staff nurses working at Menoufia University Oncology Institution from both sexes, all ages and all nursing educational levels and experiences.

Tools of data collection: Patient centered communication skills tool

An observational checklist designed by Theresa et al. 2012 was used. Minor modifications were done by the researchers after reviewing relevant literature. This checklist consisted of 18 items divided into three major categories of patient centered communication namely; establishing connection and demonstrating empathy, collaborating with and educating patients, and, communicating with finesse.

Scoring of the tool:

The subjects response was rated on a five point Likert scale (unsatisfactory, needs improvement, adequate, capable and proficient). Unsatisfactory item was assigned a score of "1", needs improvement item was assigned a score of "2", adequate item was assigned a score of "3", capable item was assigned a score of "4" and proficient item was assigned a score of "5". Therefore the maximum possible score was 90. A score equal to or less than 50% was considered as unsatisfactory patient centered communication. A score more than 50% to 70% was considered as adequate and more than 70% was considered as proficient in patient centered communication.

Validity and reliability of the tool

Tool was tested for reliability using the Cronbach's alpha coefficient. The overall Cronbach's alpha of the observation checklist was 0.91 and the tool had high construct validity. A bilingual group of five experts tested the content and face validity of the tool. The tool was considered valid from the experts' perspective.

Pilot study

A pilot study was conducted before starting the actual data collection. The questionnaire was tested on a sample of five staff nurses who were not included in the main study sample. The time required to fill the observation checklist was estimated to be 20-25 minutes. Minor modifications were done after the pilot study.

Date collection procedure

1- Data collection continued from the first of December 2017 till the end of May 2018.
2- Subjects were interviewed by the researchers for 30 minutes for completion of socio-demographic assessment part of the tool. Observational checklists of the pretest were collected by the researchers from 5 December 2017 to 5 January 2018.

3- Each staff nurse was observed at two different times in two different weeks and two different shifts while providing care and communicating with cancer patients to determine the degree of centeredness in communicating with patients.

4- The training program and educational tools were prepared by the researchers based on the results of the pretest, literature review and the oncotalk program for communicating with cancer patients. Communication training methods used included play in enacting clinician-patient relationships, simulation, watching videos and the presentation prepared by the researchers.

5- The program lasted for three weeks starting from 18th of February to 9th of March, 2018. The program included information about concept of patient centered communication skills, its advantages to nurses and patients, principles of communication, how to establish therapeutic relationship with cancer patients, how to include patient perspective in care, techniques of demonstrating empathy, collaborating with and educating cancer patients, how to communicate bad news and principles of communicating with finesse.

6- The study sample (42) was divided into 4 groups (two groups included 10 nurses and the other two groups included 11 nurses). The program was provided for each group separately to allow training, simulation, and role playing to be more effective, also to maintain consistency in patient care throughout the training period. Each group received three training sessions and each of them was about 180 minutes. Each group was provided one session every week.

First session: the researchers presented the theoretical background of patient centered communication and give hint about methods used in communication skill training.

Second session: the researchers asked each nurse to give brief conclusion about his/ her benefit from first session and provided brief conclusion about the first session then presented the prepared videos about examples of nurse's use of patient centered communication skills for the first 30 minutes followed by staff nurses practicing of simulation and role play in enacting nurses-patients' relationship. In this session researchers act as nurses and nurses act as patients and vice versa.

Third session: included brief summary about pre learned knowledge and skills followed by real interviews between some patients or patients' relatives and the trained staff to evaluate how is

the trained staff nurses apply the learned skills in the real setting.

Posttest data was collected using the same observational checklist used for collecting pretest data. One observation was conducted in the first week after completion of the training program to assess immediate effect of the training and the second was conducted after two months from training completion to assess retained effect of the training program.

Administrative and ethical aspects

- 1- Official steps were taken to obtain permission to conduct the study at Menoufia University Oncology Institute.
- 2- Written approval was obtained from the medical and nursing institute authority after explanation of the aim of the study and programmed schedule for completion of study procedures.
- 3- The objectives and procedures of the study were explained to all available oncology institute staff nurses and they were informed that they had the right to accept or refuse to participate in the study and that their information will be treated with confidentiality

and for the purpose of research only. An informed consent was obtained from all participants.

Statistical methods:-

Results were collected, tabulated, statistically analyzed by IBM personal computer and statistical package SPSS version 22. Two types of statistics were done:

Descriptive statistics:

Descriptive statistics:e.g. Percentage (%), mean (x) and standard deviation (SD).

Analytic statistics:

Analytic statistics: e.g. Chi-square test (χ^2) was used to study association between two qualitative variables. Student t-test is a test of significance used for comparison between two groups having quantitative variables. ANOVA test is a test of significance used for comparison between more than two groups having quantitative variables. Pearson's correlation coefficient measures how variables or rank orders are related.

RESULTS

Table 1: Shows the Socio-demographic characteristics of the studied sample.

Table 1: Socio-demographic characteristics of the studied sample (n=42).

Variables	Staff nurses	
Age (years) Mean± SD	27.81±5.58	
Variables	No	%
Sex:		
Females	35	(83.3%)
Males	7	(16.7%)
Education levels:		
Secondary nursing school diploma	11	(26.2%)
Associate nursing degree	20	(47.6%)
Bachelor degree	11	(26.2%)
Years of experience		
Less than 5 years	21	(50%)
5 to 10 years	13	(31%)
More than 10 years	8	(19%)

Table 2: Staff nurses' skills in establishing connection and demonstrating empathy with cancer patients before and after training (n=42).

Items	Staff nurses' skills					P-value
	U N (%)	NI N (%)	A N (%)	C N (%)	P N (%)	
1. Create rapport						
1 st assessment	8 (19.0)	31(73.8)	3 (7.1)	0	0	P1:NA
2 nd assessment	8 (19.0)	31(73.8)	3 (7.1)	0	0	P2: 0.145
3 rd assessment	0	3 (7.1)	24(57.1)	15 (37.7)	0	P3: <0.001*
4 th assessment	0	3 (7.1)	15(37.7)	22 (52.4)	2 (4.8)	P4: <0.001*
Verify, and prioritize patient concerns						
1 st assessment	30 (71.4)	11(26.2)	1 (2.4)	0	0	P1:NA
2 nd assessment	30 (71.4)	11(26.2)	1 (2.4)	0	0	P2: NA
3 rd assessment	2 (4.80)	7(16.7)	21(50.0)	12(28.6)	0	P3: <0.001*
4 th assessment	2 (4.80)	7(16.7)	21(50.0)	12(28.6)	0	P4: <0.001*
Plan the visit with the patient						
1 st assessment	32(76.2)	10(23.8)	0	0	0	P1:NA
2 nd assessment	32(76.2)	10(23.8)	0	0	0	P2: NA
3 rd assessment	11(26.2)	8(19.0)	17(40.5)	6(14.3)	0	P3: <0.001*
4 th assessment	11(26.2)	8(19.0)	17(40.5)	6(14.3)	0	P4: <0.001*
Explore and integrate patient's perspective						
1 st assessment	30(71.4)	8(19.0)	4 (9.5)	0	0	P1:NA
2 nd assessment	30(71.4)	8(19.0)	4 (9.5)	0	0	P2: 0.995
3 rd assessment	1(4.2)	9(21.4)	22(52.4)	10(23.8)	0	P3: <0.001*
4 th assessment	1(4.2)	9(21.4)	21(50.0)	11(26.2)	0	P4: <0.001*
Acknowledge emotions						
1 st assessment	10(23.8)	26(61.9)	5(11.9)	1(2.4)	0	P1:NA
2 nd assessment	10(23.8)	26(61.9)	5(11.9)	1(2.4)	0	P2: NA
3 rd assessment	0	6(14.3)	6(14.3)	29(69.0)	1(2.4)	P3: <0.001*
4 th assessment	0	6(14.3)	6(14.3)	29(69.0)	1(2.4)	P4: <0.001*
Respond appropriately to emotion						
1 st assessment	0	39(92.9)	3(7.1)	0	0	P1:NA
2 nd assessment	0	39(92.9)	3(7.1)	0	0	P2: 0.042*
3 rd assessment	0	8(19.0)	13(31.0)	21(50.0)	0	P3: <0.001*
4 th assessment	0	8(19.0)	4(9.5)	30(71.4)	0	P4: <0.001*

P1: before (1&2) p2: after (3&4) P3: before 2 & after 3 p4: before 2 & after4

As shown in this table, the mean age of staff nurses was 27.81±5.58 and the majority of them were females (83.3%). Furthermore, about half of them (47.6%) had technical nursing degree while equal percentage had secondary nursing school diploma degree and bachelor degree in nursing. The highest percentage of studied nurses (50%) had experience less than 5 years in the field of cancer care.

Table 2: Shows staff nurses' skills in establishing connection and demonstrating empathy with cancer patients before and after training. As presented in the table, there was no statistical significant difference in staff nurses' skills in all items of establishing connection and demonstrating empathy with cancer patients between the two pre training observations or between the two post training observations. On the other hand, there was a highly statistical significant improvement in staff nurses skills in establishing connection and demonstrating

empathy with cancer patient when comparing pre training observations with either immediately after training or 8 weeks after training observations (p value <0.001*). It's also evident from the table that the highest percentage of skill improvement after training was in acknowledging patients' emotions (71% become capable and proficient) and in responding to patients' emotions (71% become capable).

Table 3: Illustrates staff nurses' skills in collaborating with and educating cancer patients before and after training. As shown in the table, there was no statistical significant difference in staff nurses skills in all items of this dimension between the two pre training observations or between the two post training observations. On the other hand, there was a highly statistical significant improvement in staff nurses skills in collaboration and education of cancer patient when comparing pre training observations with either immediately or 8 weeks after training (p

value <0.001*). As noticed from the table, the highest percentage of skill improvement after training was in preparing the patient for discharge

as 45.2 % of staff nurses become capable immediately after training while 76.2 % of them become capable 8 weeks after training.

Table 3: Staff nurses' skills in communicating with finesse with cancer patients before and after training (n=42).

Items	Staff nurses skills					p- value
	U N (%)	NI N(%)	A N(%)	C N(%)	P N(%)	
Maintain rapport						
1 st assessment	1(4.2)	36(85.7)	5(11.9)	0	0	P1= .95
2 nd assessment	1(4.2)	36(85.7)	5(11.9)	0	0	P2= 0.014*
3 ^{ed} assessment	0	5(11.9)	15(35.7)	22(52.4)	0	P3<0.001*
4 th assessment	0	5(11.9)	4(9.5)	33(78.6)	0	P4<0.001*
Effective question-style						
1 st assessment						P1:NA
2 nd assessment	41(97.6)	1(2.4)	0	0	0	P2= 0.545
3 ^{ed} assessment	41(97.6)	1(2.4)	0	0	0	P3 <0.001*
4 th assessment	0	4(9.5)	22(52.4)	16(38.1)	0	P4 <0.001*
Appropriate language						
1 st assessment	0	4(9.5)	22(52.4)	14(33.3)	2(8.4)	
2 nd assessment	19(45.2)	23(54.8)	0	0	0	P1:NA
3 ^{ed} assessment	19(45.2)	23(54.8)	0	0	0	P2: NA
4 th assessment	0	5(11.9)	3(7.1)	30(71.4)	4(9.5)	P3 <0.001*
Non-verbal expression						
1 st assessment	0	5(11.9)	3(7.1)	30(71.4)	4(9.5)	P4<0.001*
2 nd assessment	4(9.5)	35(90.5)	3(7.1)	0	0	P1:NA
3 ^{ed} assessment	4(9.5)	35(90.5)	3(7.1)	0	0	P2=0.520
4 th assessment	0	5(11.9)	21(50.0)	16(38.1)	0	P3 <0.001*
Confidence						
1 st assessment	0	5(11.9)	18(42.9)	17(40.5)	2(8.4)	P4<0.001*
2 nd assessment	4(9.5)	33(78.6)	5(11.9)	0	0	P1NA
3 ^{ed} assessment	4(9.5)	33(7.86)	5(11.9)	0	0	P2 <0.001*
4 th assessment	0	5(11.9)	21(50.0)	16(38.1)	0	P3<0.001*
Professional attitude						
1 st assessment	0	5(11.9)	4(9.5)	30(71.4)	3(7.1)	P4<0.001*
2 nd assessment	0	19(45.2)	23(54.8)	0	0	P1:NA
3 ^{ed} assessment	0	19(45.2)	23(54.8)	0	0	P2= 0.087
4 th assessment	0	5(11.9)	3(7.1)	34(81.0)	0	P3<0.001*
	0	5(11.9)	3(7.1)	28(66.7)	6(14.3)	P4<0.001*

χ² test was used

P1: before (1&2) p2: after (3&4) P3: before 2 & after 3 p4: before 2 & after4

Table 4: Presents staff nurses' skills in communicating with finesse with cancer patients before and after training. As shown in the table, there was no statistical significant difference in staff nurses skills in all items of communicating with patients finesse with cancer patients between two pre training observations or between the two post training observations. It is noticed from the table that there was a highly statistical significant improvement in staff nurses skills in communicating with finesse with cancer patient when comparing pre training observations either with 1 week or 8 weeks after training observations (p value <0.001*). As presented in the table, the highest percentage of improvement in nurses' skills in communicating with finesse was in using appropriate language as about 81% of staff

nurses become capable or proficient immediately and 8 weeks after training and in demonstrating professional attitude as 81% of staff nurses become capable immediately after training and 81% become capable and proficient 8 weeks of training.

Figure (1): Shows staff nurses' skills in patient-centered communication total score before and after training. As shown in the figure, all of the studied staff nurses had unsatisfactory skills in patient centered communication before training. Furthermore, these skills had markedly improved immediately after training as 71.4% of staff nurses had adequate patient-centered communication skills and 23.8% become proficient on it. Also, the follow up observations had shown the same improvement approximately.

Fig (2): Presents the relationship between

staff nurses' skills in patient-centered communication total score retained after training with their education levels. As shown in this figure, there was a significant positive correlation between the patient-centered communication skills total score and staff nurses' education levels as the score increased with the increase of their level of education.

Fig (3): Shows the relationship between staff nurses' skills in patient-centered communication total score retained after training with years of experience. As presented in the figure, there was

a significant negative correlation between years of experience and the patient-centered communication total score retained after training. As the staff nurses' years of experience increase, there total patient centered communication skills score decrease.

N.B: it wasn't applicable to perform any correlation between years of experience or educational level and total skills' score before training as all of them had unsatisfactory skills before training.

Table 4: Staff nurses' skills in collaborating with and educating cancer patients before and after training (n=42).

Items	Staff nurses skills					p- value
	U N (%)	NI N (%)	A N (%)	C N (%)	P N (%)	
Involve patient in decision-making						
1 st assessment	5(11.9)	34(81.0)	3(7.1)	0	0	P1:NA
2 nd assessment	5(11.9)	34(81.0)	3(7.1)	0	0	P2= 0.754
3 rd assessment	0	9(21.4)	15(35.7)	18(42.9)	0	P3<0.001*
4 th assessment	0	9(21.4)	12(28.6)	21(50.0)	0	P4<0.001*
Determine goals and propose plans with patient						
1 st assessment	31(73.8)	11(26.2)	0	0	0	P1:NA
2 nd assessment	31(73.8)	11(26.2)	0	0	0	P2= 0.812
3 rd assessment	3 (7.1)	5(11.9)	17(40.5)	17(40.5)	0	P3<0.001*
4 th assessment	3 (7.1)	5(11.9)	13(31.0)	21(50.0)	0	P4<0.001*
Assess baseline knowledge of plan						
1 st assessment	27(64.3)	13(31.0)	2(4.8)	0	0	P1:NA
2 nd assessment	27(64.3)	13(31.0)	2(4.8)	0	0	P2= 0.708
3 rd assessment	1(4.2)	5(11.9)	20(47.6)	16(38.1)	0	P3<0.001*
4 th assessment	1(4.2)	5(11.9)	15(35.7)	21(50.0)	0	P4<0.001*
Explore and discuss patient's level of agreement to plan						
1 st assessment	28 (66.7)	14 (33.3)	0	0	0	P1:NA
2 nd assessment	28 (66.7)	14 (33.3)	0	0	0	P2: NA
3 rd assessment	13 (31.0)	7 (16.7)	18 (42.9)	4 (9.5)	0	P3 <0.001*
4 th assessment	13 (31.0)	7 (16.7)	18 (42.9)	4 (9.5)	0	P4 <0.001*
Provide education and verify patient understanding						
1 st assessment	2 (4.8)	35 (83.3)	5(11.9)	0	0	P1:NA
2 nd assessment	2 (4.8)	35 (83.3)	5(11.9)	0	.0	P2= 0.335
3 rd assessment	0	5 (11.9)	24(57.1)	13 (31.0)	0	P3 <0.001*
4 th assessment	0	5 (11.9)	18(42.9)	17 (40.5)	2 (4.8)	P4 <0.001*
Prepare for discharge						
1 st assessment	3 (7.1)	34 (81.0)	5(11.9)	0	0	P1 = NA
2 nd assessment	3 (7.1)	34 (81.0)	5(11.9)	0	0	P2 =0.114*
3 rd assessment	1 (4.2)	4 (9.5)	18(42.9)	19 (45.2)	0	P3 <0.001*
4 th assessment	1 (4.2)	4 (9.5)	5(11.9)	32 (76.2)	0	P4 <0.001*
P1: before (1&2) p2: after (3&4) P3: before 2 & after 3 p4: before 2 & after4						

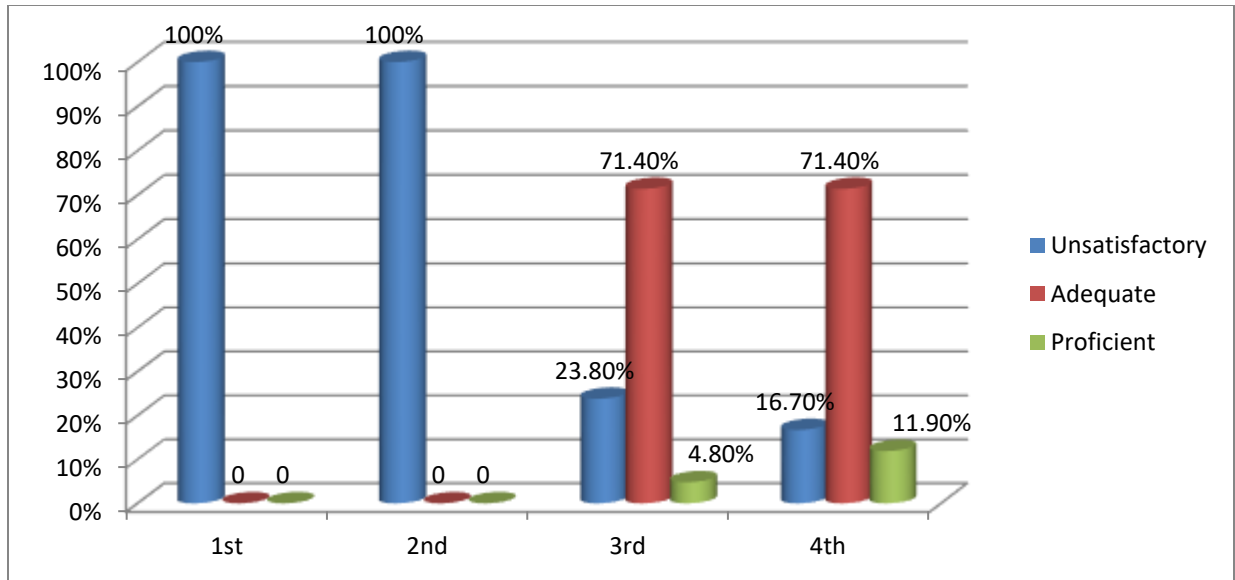


Figure (1): Staff nurses' skills in patient-centered communication total score before and after training (n=42).

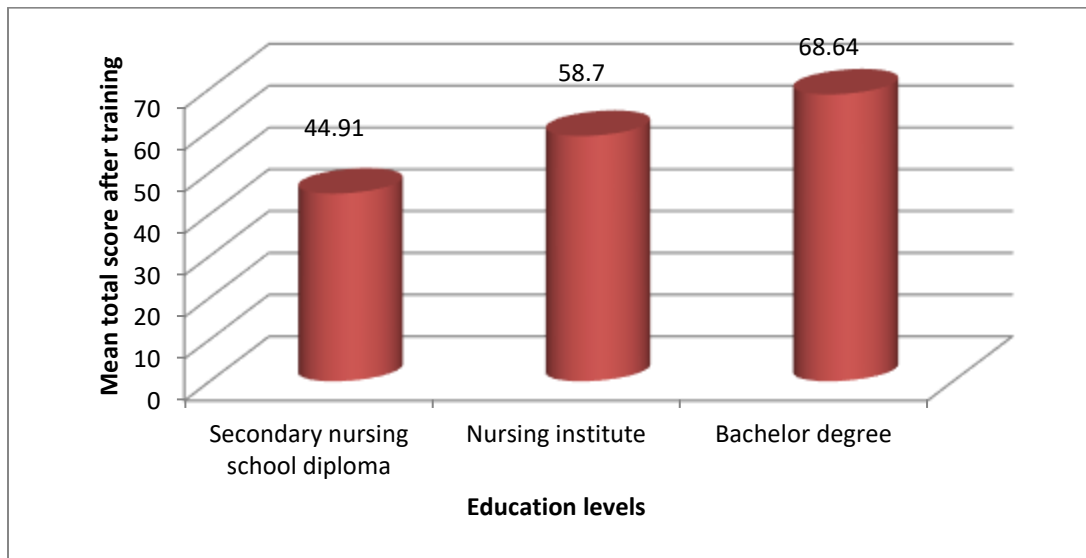
N.B: χ^2 test was used

P1=NA

P2=0.404

P3<0.001*

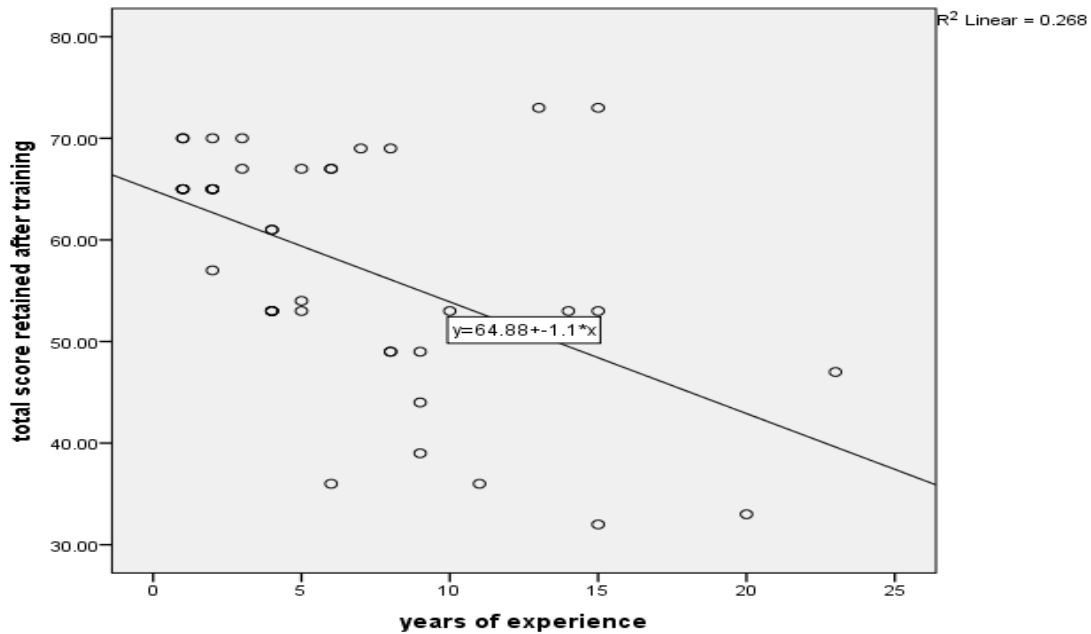
P4<0.001*



ANOVA=26.94

p-value <0.001*

Figure (2): The relation between nurse's educational level and their retained total scores in Patient-Centered Communication skills



$$r = -0.52$$

$$p\text{-value} < 0.001^*$$

Figure (3): The relationship between nurses' years of experience and their retained scores in patient-centered communication

DISCUSSION

The "Discussion" should deal with There is great evidence supports the importance of communication skills as a dimension of improving health care providers' competences Ann King et al. 2013. Patient-centered care has been recognized as an essential element of health care restructuring that is associated with quality and safety Bernstein, 2016; Rathert & May, 2017. Patient-centered care is an important safety strategy currently recommended by high profile research and safety organizations, as well as accreditation bodies Rockville, 2018.

The current study findings showed that the majority of studied participants were females and this difference is out of the researchers hand as the distribution of staff nurses at oncology institute is approximately 9 female: 1 male and this is in line with Rappleye, 2015 who stated that women continue to outnumber men in nursing nationwide approximately 91% of professionally active nurse work force in United States are females. Furthermore, the current study findings revealed that approximately half of the studied oncology staff nurses (47.6%) were graduated from 2 years nursing and (52.4%) are divided equally between bachelor degree in nursing and 3years diploma and this is congruent with Jacobes and Mayer, 2018 who found that most oncology staff nurses worldwide had gained two years associate degree or three years nursing diploma and contradicted

with College Atlas, 2015 on its 2015 oncology nurse education and training requirement that stated that oncology nurse are required to be registered nurse and it is best to earn 4 years bachelor degree. But this contradiction may be attributed to worldwide nursing shortage and aspiring nurses.

The present study results revealed that staff nurses' skills in patient centered communication were very poor before training as the two pre training observations of their communication skills were unsatisfactory and this supports the first hypothesis of the study that stated that staff nurses at Menoufia Oncology Institution are not skilled in patient centered communication.

The current study concluded that there was a statistical significant improvement in staff nurses' skills in patient-centered communication after training and this supports the second study hypothesis that stated that the training program will be effective in improving staff nurses' patient centered communication skills. This is on line with Fossli et al. 2011 who found a significant improvement in the amount of patient-centered communication behavior by staff members after training.

In addition, the current study findings supports the positive effects found by Maatouk-Bu`rman et al. 2016 who conducted one of the few literature reviews about importance of communication training and underlined the

effectiveness of training on improving patient centeredness of health care providers and supported the idea that patient-centered communication skills can effectively be learned and/or improved on a general level.

However, the current study contradicts with the study of Lewin et al. 2001 that concluded that clinician patient communication patterns are difficult to change and concluded that intentionally brief communication training was ineffective in improving patient-centered communication in advanced cancer. This contradiction may be due to that they build their teaching programs on giving only one lecture to newly graduated clinicians while the current study used variety of learning methods and instruments through many training sessions involving nurses with all educational levels and experiences.

Also, the study results revealed that the provided training program had improved staff nurses skills in establishing connection and demonstrating empathy to cancer patients and this result is in agreement with Epstein et al. 2007 and Helitzer et al. 2011 who stated that there was clinically meaningful increases in engaging patients in discussions, responding to emotions and preferences, provision of emotional support by trained health care team on patient centered communication skills than before training. Furthermore, Prigerson et al. 2015 and Bernsten, 2016 reported that patient centered communication training program was fundamental in improving health care providers' attitudes in encouraging patients' expression of emotions, opinions and preferences and respecting them.

Many recent studies had reported that clinicians trained on patient centered communication skills had improved in involving patients as active partners in care and education as asking for patient preferences, being assertive, asking questions and requesting clarification most times Lee et al. 2012, Prigerson et al. 2015, and Zikmund et al. 2017. This report is congruent with the present study results which revealed that staff nurses skills in collaboration and education of cancer patients had improved significantly after training. Moreover, Maatouk-Buermann, 2016 added that communication training significantly improved patient centeredness during provision of education and implementing plan of care.

On the other hand, the study results contradict with Weeks et al. 2012, Bakitas et al. 2015 who reported that establishing good communication training did not affect ability of health care

providers to establish collaboration with advanced cancer patients and this contradiction from our own point of view may be due to that they measured staff use of such skills when dealing with advanced cancer patients to start palliative care or deliver bad news while the current study assessed and trained nurses to use such skills in caring for patients during all stages of cancer.

The study results also supports the third study hypothesis which stated that there will be a relationship between staff nurses' total patient centered communication skills scores and their socio-demographic characteristics. The current study showed that there was a significant negative correlation between years of experience and the patient centered communication total score after training, while it wasn't applicable to make such relation before training as all of nurses had unsatisfactory patient centered communication skills. This negative correlation means that the increase in years of experience is associated with little improvement in staff nurses' patient centered communication skills after training. This is incongruent with Maatouk-Buermann, 2016 who said that training on improving patient centeredness of highly experienced health care providers was more effective than training of newly graduated. However, this contradiction may be due to that in the current study six of eight nurses with more than 10 years of experience had secondary school diploma in nursing which may affected this result.

Contrary, the current study results found a significant positive correlation between the level of education and the total score of skills in patient centered communication after training while it wasn't applicable to make such relation before training as all of them were unsatisfactory in communication skills. This positive correlation means that the total skill score increase with the increase of the level of staff nurses' education. This result is supported by Rathert & May 2017 who recommended for the oncology nurse to be highly educated as highly educated ones are more motivated to learn, train and improve their practice in their field of experience.

Finally, the training had improved the patient centered communication skills of staff nurses as high percentage of them had adequate skills after training. However, low percentage reached to the professional level. From the researchers point of view, this may be attributed to that communication is a two way process and this necessitates the training of patients also on communication skills. Also, many challenges hinder proficient

communication at Menoufia oncology institution as time constrains due to shortage of nurses, patients' limitations in health literacy, lack of experience with the health care system, and lack of available information on prognosis, treatment options and likelihood of treatment responses.

CONCLUSION

According to the study results, it was concluded that training program on patient centered communication skills for staff nurses caring for patients with cancer was highly effective in transferring patient-centered communication skills to nurses. This gives indication that complex interventions directed at staff nurses that include condition-specific educational materials have beneficial effects on nurses' communication. Unexpectedly, the results concluded that there was a significant negative correlation between the total patient centered communication skills scores and nurses' years of experience. On the other hand, there was a significant positive correlation between these scores and the nurses' levels of education. Thus, it would be more beneficial to increase the number of highly educated nurses in cancer care settings.

CONFLICT OF INTEREST

The authors declared that present study was performed in absence of any conflict of interest.

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Recommendations for practice

Cancer care settings should focus on providing comprehensive and formal training in patient centered communication. .

It is recommended that cancer care settings must also provide such training for patients on communication skills so as to improve patient clinician communication.

Another important aspect is to take steps towards the possibility of delivering such intervention in other similar units.

Recommendations for nursing education

Those responsible for nursing education should give more attention toward communication skills training for student nurses and provide meaningful support for them to participate and show excellence in such skills.

Recommendations for future research

Further research is recommended to determine whether behavioral changes after

communication training can be maintained over a longer period of time and under what pre-conditions.

Also, future research is required to study the effect of patient centered communication training on patient outcomes. Further research is recommended to study the effect of such skill training on other members of the cancer care team for examples physicians and social specialists and on different health care units as critical care units.

AUTHOR CONTRIBUTIONS

ARG suggested the research idea, and prepared and wrote the introduction and methodology sections. ARG and NA prepared the study tools and the program, collected data, executed the program and reviewed data analysis. NA wrote the results and discussion section. All authors read the final version of the manuscript, checked the Plagiarism and editing, and approved the final version of the manuscript.

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