



## Effect of Patient\_ Centered Care Training Program on Nurse- Patient Communication Skills at AS- Salam Hospital in Port Said: a quasi-experimental study

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### ABSTRACT

**Background:** Patient-centered care (PCC) can highlight the need for substantial changes in the healthcare system. New healthcare systems are structured around patient needs. PCC assists multidisciplinary health teams in making informed decisions, ensuring improved healthcare treatments for patients. Understanding the patient's illness perspective and expressing empathy are key features of patient-centered communication. **Aim:** This study aimed to explore the effects of patient-centered care training programs on the communication skills of nurses. **Subjects and Method:** A quasi-experimental study design was employed to achieve the objectives of this research across all in patient units at AS Salam Hospital, involving 324 nursing staff members. Two data collection instruments were used: the Nurses' Knowledge of Patient-Centered Care Questionnaire and the Patient Communication Skills Assessment Questionnaire. **Results:** The study's results indicated significant improvements in nurses' knowledge of patient-centered care and their understanding and application of communication skills at three different points: before the training, immediately after the training, and six months following the program. **Conclusion:** The educational program focused on patient-centered care had a positive impact on the communication skills of nurses when interacting with patients.

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**Keywords:** Patient - Centered care, and Nurse- Patient Communication.

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### Introduction

Patient-centered care (PCC) is widely recognized as a fundamental aspect of high-quality healthcare. There is widespread recognition that we must make healthcare more responsive to the needs of patients as individuals with preferences, values, and their own lives (Sullivan 2017). Patient centered care views patient as an active participant who should be involved in any decision making processes. In 2001, Institute of Medicine(IOM) identified PCC as one of the six main goals of healthcare. It defined



PCC as “care that is respectful of and responsive to individual patient preferences, needs and values, and ensuring that patient’s values guide all clinical decisions.

Studies have indicated that the patient-centered approach enhances staff confidence and work output. Furthermore, it fosters improvement and public credibility for healthcare personnel and systems, stemming from a positive image due to endorsements by patients who receive patient-centered care. Patient-centered care also ensures that individuals receive optimum satisfaction and value for their money due to their inclusion in the decision-making when receiving health services (Gover et al 2022).

PCC, which stands for "patient-centered communication," refers to the communicative behaviors that enhance the quality of the relationship between healthcare providers and patients, based on trust. It is closely linked to the patient's need for information and their desire for shared decision-making .It is crucial in improving patient understanding, fostering empathy, and promoting patient involvement (Dross man &Ruddy,2020).

Effective communication is crucial in nurse-patient interactions and is a fundamental aspect of nursing care. It fosters trust and mutual respect in the care process, which in turn promotes care practices that cater to the needs, concerns, and preferences of patients and caregivers. Therefore, effective nurse-patient clinical communication is vital for improving patient-centered care and achieving positive care outcomes. nature of nurse-patient relationships, seeing individual (Kwame&Petruck,2021).

Effective communication between nurses and patients is crucial to delivering high-quality healthcare and improving patient outcomes. Effective communication helps patients manage their conditions and positively influences their physiological functions. Research has linked successful communication with improved patient satisfaction and well-being, increased professionalism, and better quality of care. On the other hand, inadequate communication has the potential to cause health risks for patients, including medication errors and inadvertent harm (Han et al 2024).



## **Significance of the study**

Patient-centered care represents a transformative approach that prioritizes patients and their specific needs in the delivery of healthcare. Nurses are pivotal in realizing patient-centered care, yet numerous factors can either facilitate or impede its effective implementation. Strong communication, education, and the promotion of a collaborative environment are essential for nurses to deliver care that honors individual values and preferences. This approach to care enhances patient satisfaction, adherence to treatment, and overall health outcomes. As the healthcare landscape changes, the adoption of patient-centered care becomes crucial for achieving comprehensive, patient-focused healthcare experiences. This transition necessitates ongoing education, organizational backing, and a dedication to nurturing empathetic, responsive, and patient-centered nursing practices (Adebanke, Adejumo, & Oluwafunke, 2024)

Finally, health policy must be oriented towards healthcare practices and management to facilitate patient-centered care and communication. Nonetheless, if patients are placed at the center of care and treated with dignity and respect, most of the challenges and barriers of patient-centered care will diminish. Empowering practicing nurses, equipping them with interpersonal communication skills through regular in-service training, supporting them to overcome their emotional challenges, and setting boundaries during nurse-patient interactions will enhance patient-centered care practices (Kwame&Petruck, 2021).

## **AIM OF STUDY**

The study aims to explore the effect of Patient - Centered care training program on nurse -patient communication skills in their interactions with patients through the following objectives:

1. Assessing the level of nurses' knowledge regarding patient-centered care.
2. Determining the level of communication skills between staff nurses and patients.
3. Explore the effect of Patient - Centered care training program on nurse -patient communication skills.

## **SUBJECTS AND METHOD**

### **Research design:**



A quasi-experimental study design was utilized to achieve the aim of this study.

### **Study setting:**

The study was conducted in all patient units at AS-Salam Hospital which affiliated with Universal Health Insurance In Port Said Governorate ,the total hospital capacity is 274 beds.

### **Subjects:**

The study included all nurses who working inpatient units, with total number 324 nurse .

### **TOOLS OF DATA COLLECTION:**

Two tools were used for data collection Nurses' Knowledge of patient \_centered care Questionnaire, and A self-administered Nurse- Patient Communication Skills Assessment Questionnaire.

**I.** A self-administered Nurses' knowledge of patient - centered care Questionnaire.

**II.** Nurse- Patient Communication Skills Assessment Questionnaire.

### **Tool I: Nurses' Knowledge of patient - centered care Questionnaire.**

It was developed by the researcher in Arabic language after a thorough literature review( Epstein&Street,2011;Zhou etal,2016;Nkrumah&Abekah,2019; Jogindra,2020; Kwame&Petrucka,2021). To assess nurses' knowledge regarding patient \_centered care concept. It consist of 34 sentences subdivided into 3 categories: Concept of PCC, Dimensions of PCC, and barriers of PCC. First one includes Concept of patient \_centered care (1 item),Second includes dimension of PCC ;Patient values &preferences(4items),Coordination &integration of care(4 items),Patient education(4 items), physical comfort(4 items ),Emotional Support (4 items), Involvement of family &Friends (4 items),Continuity& Transition(4 items),Access to care(4items),And finally barriers of patient \_centered care(3 items).

### **Scoring system:**

Responses were measured on three-point Likert scale ranging from(2=Agree,1=DisAgree&0=Don't Know). A score of 0-22 indicates low levels of



patient- centered care ; 23-45 indicate moderate level ,and 46-68 indicate high of patient- centered care

## **Tool II: A self-administered Nurse- Patient Communication Skills Assessment Questionnaire**

Nurse- Patient Communication Skills Assessment Questionnaire. It was developed by researcher in Arabic language after a thorough reading literature review (Berma,2010;Kourkouta&Papthansiou,2014; Marhamati, etal ,2016 ;Amoah,2019; & Abdulla,2022 ) to measure nurses' communication skills. It consisted of two sections. The First section contained 20 questions on nurses' information about communication skills. The Second section Nurse –patient Communication Observational Checklist contained 15 items .

In addition to personal and job characteristics covering data of nurses' s age, sex, marital status, work setting, educational qualification, residence, experience years and training courses about communication

### **Scoring system:**

Responses were rated on a three-point Likert scale: (Always = 3, Sometimes = 2, Rarely = 1). A score equal to or above 55% reflects sufficient knowledge among nurses regarding communication skills while a score of 68% or more signifies adequate communication practices with patients based on statistical analysis.

## **II OPERATIONAL DESIGN:**

The operational design covers field work, content validity, reliability, pilot study.

### **Fieldwork**

- An official written permission to conduct the study was obtained from the director of the study setting (As Salam hospital) and written consent was obtained from each participant to be included in the study and then wrote her/his name on the questionnaire after the researcher introduced himself and explaining clarification of the nature and purpose of the study.

- Field study was conducted for seven months from the beginning of April (2023) to the end of October (2023). The study was carried out through the following phases:



**Phase I (Assessment phase):** In this stage, the researcher visited the study settings and arranged with the nursing director for the actual implementation of the study. Participants who were invited to participate in this study and signed a written informed consent form. The researcher clarified the sheets and asked them to complete them before conducting the educational sessions. Each tool was filled in about 15 minutes to 30 minutes.

**Phase II (Planning):** The educational program was designed based on theoretical and empirical findings of a literature search on patient -centered care and the assessment data collected in Phase I. The educational program was aimed to enhance nurses' knowledge regarding patient \_centered care concept. The educational program was designed to cover information that contributes to developing the studied nurse' knowledge about patient \_centered care concept and nurse -patient communication skills. The handout includes theoretical content was prepared to facilitate remembering knowledge. The program covers the following parts: definition, benefits, 8 dimensions, barriers and Strategies to overcome obstacles about patient -centered care.

**Phase III (The educational program implementation):** At the beginning, the researcher met with nurse individually, explained the aims of the study, and invited them to participate. The training program is composed of four sessions ( every session 3 hour), for a total of 12 hours. In the first session, an overview of patient-centeredness will be provided, including its objectives and importance. During the second session, participating nurses will learn about the various dimensions of patient-centered care: patient preferences and expressed needs, coordinated and integrated care, physical care, and emotional support. The third session will continue discussing dimensions of patient-centered care, focusing on family involvement, continuity and transition, communication, patient education, and access to care. The fourth session will address the challenges and strategies to overcome barriers to implementing patient-centered care. Each participant will receive a manual with comprehensive details about the training content. This manual will be a valuable tool to reinforce the concepts covered in each session and offer further insights into patient-centered care.

The educational sessions conducted as three days per week for each group as the following table:



<div>Weeks Groups</div> <div>No. Groups</div>	1st week	2nd week	3rd week	4th week	Session duration
1 <sup>st</sup> group (n=100)	Saturday Sunday	Saturday Sunday	Saturday Sunday	Saturday Sunday	Every group Three hour
2nd group (n=100)	Monday Tuesday	Monday Tuesday	Monday Tuesday	Monday Tuesday	
3 <sup>rd</sup> group(n=100)	Wednesday Thursday	Wednesday Thursday	Wednesday Thursday	Wednesday Thursday	
Total =300					

#### **N.B Each group was divided into 2 subgroups, each containing 50 nurses.**

The program conducted by the Arabic language to avoid misunderstanding and presented in clear and concise form using different teaching methods while discussing with them the rationale and the precaution for each step as small discussions, lectures, demonstrations, and re-demonstrations and appropriate teaching media as audiovisual material . At the end of the researcher's demonstrations nurse were asked about any unclear steps which needed repetitions or explanation before re-demonstration. The researcher emphasized that this session was done for teaching purposes not for evaluation, so mistakes and forgetting were allowed and were corrected immediately by the researcher.

**Phase IV (Evaluation phase):** The program outcomes was evaluated by using the study' tools immediately after program implementation. As well as, Nurse-patient Communication Observational Checklist reevaluated by staff nurses to assess progress communication skills in their interactions with patients post-program..

**Phase V (follow-up):** A follow-up test was repeated six months after the posttest assessment using the same data collection forms.

#### **Validity of the Tools:**





The Arabic version validity for these tools was reviewed and confirmed by five nursing experts to ensure face and content validity. The CVI of nurse-patient communication checklist is 93%, the CVI of nurses' information about communication skills is 90%, and CVI of patient centered care tool = (88%).

### **Reliability:**

Cranach's alpha coefficient was calculated to assess the reliability of the tools in terms of their internal consistency. The reliability of the nurses' Knowledge of Patient-Centered Care Questionnaire was found to be 0.707, while the reliability of the nurses' Information about Communication Skills Questionnaire was 0.681. Additionally, the reliability of the Nurse-Patient Communication Observational Checklist was 0.933.

### **Pilot study:**

A Pilot study was carried out on 32 nurses (not included in the study) who represent 10 % of the total sample from the studied hospital of research work to assure the stability of the answers. The purpose of the pilot study was to test the applicability, feasibility, and objectivity of the study tools before starting data collection, and estimate the needed time to complete the questionnaire, and they were excluded from the original sample to assure stability of the answers. As a result ,data obtained from the pilot study were analyzed and slightly modifications were done . The time needed to complete the questionnaires was 20 minutes.

### **III. ADMINISTRATIVE DESIGN:**

Before conduction of the study, an official letter from the dean of the Faculty of Nursing was sent to the medical directors as well as to the nursing directors of the El-Salam Hospital to obtain their approval. The medical and nursing director of the facility were contacted and informed to obtain permission to include the nurses in the study.

### **Ethical considerations:**

Verbal consent was obtained from all participants before data collection, ensuring they understood the purpose and nature of the study. The nurses involved were informed that their participation was voluntary and that they could withdraw from the study at any time without any consequences. Throughout the data collection process, each participating





nurse verbally agreed to participate after the study's aims and objectives were clearly explained. The researcher also reassured the nurses that their responses would remain anonymous and that the information collected would be used solely for scientific research purposes and treated confidentially. Measures were taken to ensure the confidentiality of the gathered information, and anonymity for the participants was guaranteed.

#### IV. STATISTICAL DESIGN:

Data were fed to the computer and analyzed using the IBM SPSS software package version 22.0. (Armonk, NY: IBM Corp) . The normality of data distribution was examined by a one-sample Kolmogorov–Smirnov test. Qualitative data were described using numbers and percentages. Quantitative data were described using range (minimum and maximum), mean, standard deviation, and median. Also, content validation (CVI) was assessed.

#### Results

Table 1 The study predominantly included female participants, who made up 66% of the sample. The mean age of participants was  $33.76 \pm 9.17$  years, and their ages ranged from 22 to 59 years. The educational backgrounds of the participants were diverse: 39% held a Bachelor's degree, 34% had a Diploma, and 26% possessed a Technical qualification. A small minority, 1%, reported having other types of educational credentials. In terms of work experience, the years varied widely from 1 to 40, with an average experience of 13.05 years and a standard deviation of 10.42 years, illustrating a mix of relatively new and highly experienced individuals. Regarding marital status, 71% of participants were married, 23% were single, and a smaller proportion 3% were divorced or widowed. Finally, 66% of participants had received training relevant to the focus area of the study.

Table 2 outlines the shifts in nurses' overall knowledge levels regarding patient-centered care through different stages: pre-intervention, post-intervention, and follow-up. Initially, during the pre-intervention phase, no nurses were classified under low knowledge; however, 65% exhibited moderate knowledge, and 35% had adequate knowledge. A significant improvement is observed in the post-intervention phase, where 95.7% of nurses achieved adequate knowledge, up from 35%, and only 4.3%



remained at moderate knowledge. This trend continued into the follow-up phase, with 91% maintaining adequate knowledge and a slight increase to 9% in moderate knowledge. The results indicate substantial enhancements in knowledge, confirmed by a significant Chi-Square test value ( $\chi^2 = 356.560$ ,  $p < .000$ ).

Table 3 presents the results of pairwise comparisons among different phases of the intervention, examining the changes in nurses' knowledge regarding patient-centered care. The comparisons highlight statistically significant improvements from pre-intervention to post-intervention and follow-up phases. Notably, the knowledge levels post-intervention show a significant increase from the pre-intervention levels, with a mean difference of 19.827 ( $p < 0.001$ ), suggesting a robust impact of the intervention. The knowledge retention from post-intervention to follow-up remains high with a slight, yet significant, difference, indicating sustained knowledge gains among participants.

Table 4 presents the changes in nurses' information levels concerning communication skills through pre-intervention, post-intervention, and follow-up phases. Initially, during the pre-intervention phase, The highest percentage (67%,  $n=201$ ) exhibited insufficient information levels about communication skills, while only 33% ( $n=99$ ) were classified as having sufficient information. A significant improvement is observed post-intervention, with 92.3% ( $n=277$ ) achieving sufficient information levels and only 7.7% ( $n=23$ ) remaining insufficient. The follow-up phase shows a slight decrease in sufficiency to 72.3% ( $n=217$ ), with 27.7% ( $n=83$ ) scoring insufficient.

Table 5 illustrates the changes in nurse-patient communication practices across three phases: pre-intervention, post-intervention, and follow-up. Initially, during the pre-intervention phase, a majority of nurses (56%,  $n=168$ ) were assessed as having adequate communication practices, whereas 44% ( $n=132$ ) fell into the inadequate category.

Unexpectedly, post-intervention results show a complete shift, with 100% of the nurses ( $n=300$ ) categorized under inadequate communication practices. The follow-up phase shows a partial recovery, with 45.7% ( $n=137$ ) of nurses improving back to adequate levels, though still lower than pre-intervention figures. The remaining 54.3%



(n=163) demonstrate inadequate practices, suggesting ongoing challenges sustaining the intervention's impact over time.

Table 6 details the changes in nurses' information about communication skills measured at pre-intervention, post-intervention, and follow-up stages. The results highlight significant improvements. From pre to post-intervention, the mean difference in nurses' information was substantial at 8.913 (Std. Error = 0.275,  $p < 0.001$ ), with a confidence interval ranging from 8.252 to 9.575. Similarly, the follow-up compared to the pre-intervention phase showed a significant increase with a mean difference of 5.697 (Std. Error = 0.338,  $p < 0.001$ ), and the confidence interval was between 4.882 and 6.511. Furthermore, comparing post-intervention to follow-up, there was a notable mean difference of 3.217 (Std. Error = 0.377,  $p < 0.001$ ), with a confidence interval from 2.309 to 4.124.

Table 7 provides a detailed analysis of the mean differences in nurse-patient communication practices between the pre-intervention, post-intervention, and follow-up stages. The differences are statistically assessed with significance levels marked accordingly.

**Post vs. Pre-Intervention:** The mean difference increased in nurse-patient communication practice from pre to post-intervention is significant, showing an improvement of 10.590 points (SE = 0.445,  $p < .000$ ). The 95% confidence interval ranges from 9.519 to 11.661, indicating a strong and positive effect of the intervention on communication practices immediately following the intervention.

**Follow-Up vs. Pre-Intervention:** Conversely, the follow-up phase shows a slight but significant decrease in practice levels compared to the pre-intervention stage, with a mean difference of -1.507 (SE = 0.572,  $p = .027$ ). The negative mean difference highlights a regression in communication skills over time, with the confidence interval extending from -2.884 to -.130.

**Post vs. Follow-Up Intervention:** Comparing the post-intervention and follow-up phases, there is a notable recovery in communication practices, with an increase of 12.097 points (SE = 0.383,  $p < .000$ ). The confidence interval, spanning from 11.176 to



13.018, suggests a substantial rebound in effective communication practices after an initial decline.

Table 8 highlights the substantial impact of a training program on nurses' knowledge of patient-centered care, their information about communication skills, and their practical communication with patients across three stages: pre-intervention, post-intervention, and follow-up.

**Patient-Centered Care Knowledge:** There was a significant increase in nurses' knowledge from pre-intervention ( $42.070 \pm 8.087$ ) to post-intervention ( $61.8967 \pm 5.682$ ), and sustained knowledge at follow-up ( $60.2500 \pm 8.349$ ), demonstrating the training's effectiveness in enhancing understanding of patient-centered care principles.

**Nurses' Information About Communication Skills:** Initial mean scores increased significantly from pre-intervention ( $9.50 \pm 2.863$ ) to post-intervention ( $18.4133 \pm 4.110$ ), showing a dramatic improvement in nurses' comprehension of effective communication techniques.

**Nurse-Patient Communication Practice:** The most remarkable enhancement was observed in practical communication skills, where mean scores soared from pre-intervention ( $31.0800 \pm 7.524$ ) to a peak at post-intervention ( $41.6700 \pm 1.890$ ), reflecting the profound impact of the training on real-world communication practices with patients.



**Table 1: Frequency of staff nurse according to their personal & job characteristics**  
 (n = 300).

Demographic characteristics	N	%
Age groups		
< 20 years	0	0
20 : < 30 years	144	48.0
30 : < 40 years	87	29.0
≥ 40 years	69	23.0
Mean age ± SD	33.7600±9.16638	
Range	22-59	
Gender		
Male	102	34.0
Female	198	66.0
Educational levels		
Diploma	102	34.0
Technical	78	26.0
Bachelor	117	39.0
Other	3	1.0
Years of experience		
< 5 years	84	28.0
5 : 15 years	105	35.0
> 15 years	111	37.0





knowledge mean differences regarding the patient centered through program phases		Error		Lower Bound	Upper Bound
Knowledge post and pre intervention	19.827	.542	.000*	18.523	21.131
Knowledge follow-up and pre intervention	18.180	.671	.000*	16.564	19.796
Knowledge post and follow -up intervention	1.647	.582	.015	.245	3.049

\* The mean difference is significant at the .05 level

(P): p value for comparing the groups studied\*

a. Adjustment for multiple comparisons: Bonferroni.

**Table 4:** Nurses' information levels difference regarding the communication skills through pre-intervention, post-intervention, and follow-up (n = 300).

Nurses' Information About Communication Skills	Levels				test of significant	
	Insufficient		Sufficient			
	N	%	N	%	2χ	P
Pre Intervention	201	67.0%	99	33.0%	212.421	.000*
Post Intervention	23	7.7%	277	92.3%		
Follow-up Intervention	83	27.7%	217	72.3%		

\*Significant (P<0.05).                      2χ Chi-Square test

**Table 5:** Nurses' –patient communication practice levels difference regarding the communication skills through pre-intervention, post-intervention, and follow-up (n = 300).





Nurse –Patient Communication Practice	Levels				test of significant	
	Adequate		Inadequate			
	N	%	N	%	2 $\chi$	P
Pre Intervention	168	56.0%	132	44.0%	327.342	.000*
Post Intervention	0.0	0.0	300	100.0%		
Follow-up Intervention	137	45.7%	163	54.3%		

\*Significant (P<0.05).
2 $\chi$  Chi-Square test

**Table 6:** Pairwise comparisons of nurses' information mean differences about communication skills through pre-intervention, post-intervention, and follow-up (n = 300)

Pairwise comparisons of nurses' information mean differences regarding the communication skills through program phases	Mean Difference	Std. Error	Test of Sig.a (P)	95% Confidence Interval for Difference	
				Lower Bound	Upper Bound
Nurses' information post and pre intervention	8.913*	.275	.000*	8.252	9.575
Nurses' information follow-up and pre intervention	5.697*	.338	.000*	4.882	6.511
Nurses' information post and follow - up intervention	3.217*	.377	.000*	2.309	4.124



\* The mean difference is significant at the .05 level (P): p value for comparing the groups studied\*  
 a. Adjustment for multiple comparisons: Bonferroni.

**Table 7:** Pairwise comparisons of nurse –patient communication practice mean differences regarding communication skills through pre-intervention, post-intervention, and follow-up(n = 300)

Pairwise comparisons of nurse –patient communication practice mean differences regarding the communication skills through program phases	Mean Difference	Std. Error	Test of Sig.a (P)	95% Confidence Interval for Difference	
				Lower Bound	Upper Bound
Nurse –patient communication practice post and pre intervention	10.590*	.445	.000*	9.519	11.661
Nurse –patient communication practice follow-up and pre intervention	-1.507*	.572	.027	-2.884-	-.130-
Nurse –patient communication practice post and follow -up intervention	12.097*	.383	.000*	11.176	13.018

\* The mean difference is significant at the .05 level (P): p value for comparing the groups studied\*  
 a. Adjustment for multiple comparisons: Bonferroni.

**Table 8:** The effect of the training program on nurses' total knowledge regarding the patient \_centered care, total nurses' information about communication skills, and total nurse –patient communication practice through pre intervention, post intervention, and follow- up (n = 300)

Nurses' information items through program phases	Pre Intervention	Post Intervention	Follow-up Intervention	F	Sig.	η2	Effect size
	Mean ±D	Mean ± SD	Mean ± SD				
Patient - Centered	42.070±8.08722	61.8967±5.68216	60.2500±8.34944	45612.239	.000*	.921	Large



Care Nurses' Knowledge							
Nurses' Information About Communication Skills	9.50±2.86310	18.4133±4.11082	15.1967±5.05137	1066.453	.000*	.973	Large
Nurse –Patient Communication Practice	31.0800±7.52478	41.6700±1.89024	29.5733±6.49141	2976.400	.000*	.990	Large

F = Repeated Measure ANOVA  
Partial η2 = Partial Eta Squared  
\*Significant (P<0.05).

Discussion

Patient-cantered care (PCC) emphasizes the pivotal role of effective communication between healthcare providers and patients, fostering active patient involvement in their treatment journey (Kwame & Petrucka, 2021). This approach is crucial for achieving optimal healthcare outcomes by reducing physical discomfort and emotional distress while improving patient satisfaction. Notably, the PCC model redefines patients' roles, transitioning them from passive recipients of care to empowered participants in decision-making processes (Ashahrani et al., 2018).

This finding of study the effects of training program between patient-centered care and nurse-patient communication in hospitals showed that a significant improvement in nurses' knowledge of patient-centered care following the intervention, underscores the effectiveness of the educational program implemented in this study.



Initially, a large proportion of nurses demonstrated only moderate understanding of patient-centered care concepts. Post-intervention, there was a marked transition to a higher level of knowledge, which was largely maintained at follow-up. This pattern suggests not only the immediate impact of the intervention but also its sustained influence over time. These findings align with earlier studies showing that targeted training programs can effectively enhance nurses' knowledge (Pakkonen et al., 2021).

Concerning the knowledge of staff nurses regarding total communication skills, the study findings indicated that there were significant statistical enhancements in overall knowledge about communication skills among the staff nurses during both the posttest phase and a slight decrease in the follow-up phase compared to the pretest phase. In agreement with this finding, a study conducted by Chang H.Y. and Chang H.L. (2021) in Taiwan found a similar improvement in nurses' communication knowledge following an educational intervention about communication skills. Also, the study by Patel et al. (2021) supported the effectiveness of communication training programs in improving nurses' knowledge and found that structured communication training led to substantial gains in nurses' communication skills and knowledge.

In addition to ,study that nurses' knowledge regarding communication was increased post-implementation of the educational program, compared to the pre-educational program. This finding supports the notion that periodic reinforcement and refresher training are necessary to maintain high levels of competence over time Abelairas-Gómez et al. (2021).

The findings from this study demonstrate significant improvements in nurses' understanding and application of communication skills following the educational intervention, with gains observed across all assessed items. The results reveal that the



intervention was highly effective in equipping nurses with essential communication competencies critical for patient care. Several previous studies have indicated the need for a specific training for nursing professionals to enhance communication skills with patients and their relatives. There is evidence that training to enhance communication skills can increase self-efficacy and patient centered communication skills (Banerjee et al 2017)

The pairwise comparisons of nurses' showed substantial gains in communication skills from pre-intervention to post-intervention, with sustained improvements observed during the follow-up phase. These findings are consistent with previous studies emphasizing the impact of targeted educational programs on enhancing communication-related skills among healthcare professionals (Mata et al., 2019; Moore et al., 2018).

This study analyzed the practices of staff nurses regarding total communication skills and found statistically significant improvements in their communication skills during both the post-test phase and a slight decline in the follow-up phase compared to the pretest phase. These improvements were largely due to the successful implementation of a well-designed communication skills program. However, the study also emphasized the need for ongoing reinforcement to maintain and further develop these skills.

Notably, the study also highlights the effectiveness of the intervention in addressing less familiar aspects of patient-centered care, such as understanding barriers to its implementation. While gains in this domain were smaller compared to others, the improvement is significant and reflects the capacity of well-designed training to address both theoretical and practical barriers. Similar findings have been reported by Pakkonen



et al. (2021), who emphasized the importance of contextualized training in overcoming implementation challenges in patient-centered care.

In the same line of this finding a study conducted by Lee, J., & Kim, S. (2023) reported that effective training programs can lead to significant enhancements in practice by providing targeted skills and strategies. Also, the study by Jones, R., & Brown, S. (2020) who found that structured training positively impacts practice through increased confidence and skill application.

Despite the overall success of the intervention, the slight decline in knowledge retention for some skills during the follow-up phase highlights the need for continuous professional development. Future programs could include refresher modules and simulation-based training to reinforce critical skills and ensure long-term application in patient care. This approach has been recommended in previous studies, which advocate for ongoing training to adapt to preserve the effect of the training program (Sulosaari et al., 2022).

### **Limitation of the study**

The study was conducted in a single setting. No comparison was made with other hospitals. Therefore, the results of this study may be limited only to the setting of the study and should not be generalized. Also, The findings do not represent patients' views on patient-centered care practices and communication skills applied by nursing staff. A full investigation of provider-patient communication will be necessary.

### **CONCLUSION**

***Based on the findings of the present study, it can be concluded that:***



This research highlights the crucial link between patient-centered care and nurses' ability to communicate effectively with patients. The educational program about patient -centered care was effective in enhancing nurse' knowledge regarding patient centered care practices . Through the evaluation of studied nurses immediately post the program and after 6 months follow-up, it was found that the participants showed a moderate level of knowledge regarding patient -centered care. Also, there was a highly statistically significant improvement in staff nurses' practices of communication in the post and follow up phases .

### **RECOMMENDATIONS:**

**Based on the results of the present study, it is recommended to:**

#### **Recommendation at hospital administration level:**

- Enhance healthcare facilities by incorporating patient-cantered designs, focusing on cleanliness, accessibility, and physical layouts that foster a supportive and welcoming environment for patients.
- Implement recognition and reward systems to motivate nursing staff by establishing clear goals and acknowledging those who excel in delivering patient-cantered care.
- Create a healthcare culture that prioritizes patient-cantered care, ultimately improving patient satisfaction, outcomes, and overall healthcare experiences.

#### **Recommendation at educational level:**

- communication skills training program should be applied in all nursing curricula. Regularly provide nurses with training programs focused on communication skills.

#### **Recommendation for further research**

- Future studies should adopt a multidisciplinary approach, engaging families and patients, and explore patient-specific factors influencing the successful implementation of patient-centered care .





- Further studies should be developed to handle the barriers of implementation of communication skills training program in nursing courses.

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## تأثير برنامج تدريبي عن المريض محور الرعاية ومهارات التواصل بين الممرض والمريض

في مستشفى السلام ببورسعيد

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**الخلفية:** تُبرز الرعاية المتمحورة حول المريض الحاجة إلى تغييرات جوهرية في نظام الرعاية الصحية حيث تُبنى أنظمة الرعاية الصحية الجديدة وفقًا لاحتياجات المرضى كما أنها تُساعد على اتخاذ قرارات مدروسة مما يضمن تحسين الرعاية الصحية للمرضى. **الهدف:** هدفت هذه الدراسة إلى اكتشاف تأثير برنامج تدريب الرعاية التي تركز على المريض على مهارات الاتصال لدى الممرضات عند التعامل مع المرضى. **الموضوعات والطريقة:** تم استخدام تصميم دراسة شبه تجريبية لتحقيق أهداف هذا البحث في جميع وحدات المرضى في مستشفى السلام، والتي شملت 324 عضوًا من أعضاء طاقم التمريض. تم استخدام أداتين لجمع البيانات: استبيان معرفة الممرضات بالرعاية التي تركز على المريض واستبيان تقييم مهارات الاتصال لدى المريض. **النتائج:** أشارت نتائج الدراسة إلى تحسن كبير في معرفة الممرضات بالرعاية التي تركز على المريض وفهمهن وتطبيقهن لمهارات الاتصال في ثلاث نقاط مختلفة: قبل التدريب، وبعد التدريب مباشرة، وستة أشهر بعد البرنامج. **الاستنتاج:** كان للبرنامج التعليمي الذي ركز على الرعاية التي



تتمحور حول المريض تأثير إيجابي على مهارات الاتصال لدى الممرضات عند التعامل مع  
المرضى