

Effect of Educational Guidelines on Nurses' Knowledge and Practices regarding Application of Nursing Process

Yasmine Abdel-Basset Ibrahim¹, Sabah Said Mohammed², Samah El-sayed Ghonaem³, and Doaa Mohammed Mahmoud⁴

(1) B.Sc. Nursing, (2017), Nursing specialist at Technical Institute of nursing-Benha University, (2) Professor of Medical Surgical Nursing, Faculty of Nursing-Benha University, and (3,4) Assistant Professor of Medical Surgical Nursing, Faculty of Nursing-Benha University.

Abstract

Background: Nursing process is cyclical, dynamic, interpersonal, collaborative and universally applicable process. Nurses use the nursing process to achieve the best outcomes and improve patient quality management. **Aim:** The aim of this study was to evaluate effect of educational guidelines on nurses' knowledge and practices regarding application of nursing process. **Study design:** Quasi-experimental design was used to achieve the aim of the study. **Setting:** The study was conducted in Medical Departments at Benha university Hospital. **Sample:** Convenience sample of all available nurses (n=80) who working in mentioned setting. **Tools of data collection:** Two tools were used, **Tool I:** Self-administered Questionnaire and **tool II:** Observational checklist for nurses' practices. **Results:** 65.0% of the studied nurses aged between 20 <30 years old and 65.0% of nurses didn't attend any training courses. There were 36.3% & 16.2% of the studied nurses had satisfactory level of knowledge and practices regarding application of nursing process pre educational guidelines, which improved to 75 % & 55% post guidelines implementation, respectively. There was a highly statistically significant positive correlation between total nurses' knowledge and their total practices of nursing process pre and post guidelines implementation. **Conclusion:** Implementation of educational guidelines had statistically significant improvement on nurses' knowledge and practices regarding implementation of nursing process. **Recommendations:** provision of continuing education programs and training workshops regularly and periodically which must be obligatory for all nurses in order to update nurses' knowledge and enhance their practice level regarding application of nursing process.

Keywords: Educational guidelines, Knowledge, Nursing process, Practices

Introduction

Around the world, Nursing process has gained popularity and is being used in clinical settings to offer quality individual nursing care to patients and has been proven through research to be offering a framework that acts as a guideline to the nurses towards provision of care that is systematic and organized in clinical area (Lekenit et al., 2020). Nursing process application combines the art and science of nursing which has proved to be a valuable tool that continued to revolutionize nursing practice as well as patient outcome globally (Yilak et al., 2022).

Nursing process is a dynamic, systematic, client-centered and universally acceptable frame-work that encompasses five sequential and interlinked steps that begins with assessment, involving a systematic collection of subjective and objective data about the patient's condition, nursing diagnosis, that encompasses the actual or potential health problems that nurses deal with, planning which involves prioritizing the problems, setting goal and expected outcome, implementation plans and implementation of care involves skillful and competent actions taken to meet the needs of the client. Finally,

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evaluation is done to determine the success of the implemented care (Zerihun et al., 2022).

Implementation of the nursing process is key to the core of professional nursing practice and allows nurses to deliver quality nursing care within a systematic goal-directed framework. Effective implementation of the nursing process in patient care enhances nursing efficiency by standardizing nursing practice, facilitates documentation of care and providing a unified language for the profession of nursing (Bassah et al., 2023).

All steps require accurate documentation, since they represent activities developed in providing care to the patient. Nurses should document all activities carried out in each step of the nursing process. Documentation is the most important aspects communicating the nursing process among nursing staffs and other healthcare providers. It promotes a precise documentation that prevent errors, omissions and unnecessary repetitions in the nursing care (Areri et al., 2024).

The application of the nursing process is an essential component of professional nursing practice as professional nurses are trained to use the nursing process and are expected to implement it in the clinical area. The nursing process approach is reality orientated and integrates nursing theory and practice in a nursing care setting (Hussein, 2020). The nursing process is a universal model and a standardized tool used by the nurses to render continuous nursing care to individuals' according to their needs (Owusu-Ansah and Agyeman-Yeboah, 2022).

Significance of the study

All over the world, nurses constitute a very high percentage of healthcare system personnel. As compared to other healthcare professionals, they spend more time with patients and play a pivotal role of the

healthcare system in most countries (Aniekwe, 2023). Nurses are on the frontline with patients in the health care field. Therefore, nurses are responsible for the quality of nursing care using the nursing process (Alharbi et al., 2023).

Around 1 in every 10 patients is harmed in health care and more than 3 million deaths occur annually due to unsafe care (WHO, 2023). The effective and efficient implementation of the nursing process in clinical areas brings improvements to the quality of nursing care and the patients' health outcomes (Mutshatshi and Mothiba, 2020).

The nursing process is the gold standard for nursing care provision. Most countries face major issues with its effective implementation in almost all health care settings and the extent to which it is implemented is still very unclear (Tadzong and Dufashwenayesu, 2021). In Egypt a study by Abdelkader and Othman, (2017) on "Factors Affecting Implementation of Nursing Process: Nurses' perspective" revealed that, lack of utilizing nursing process can decrease the quality of care. Nurses of this study reported that factors such as lack of knowledge, lack of educating, training and motivating factors affected the application of the nursing process. So, there is an urgent need to conduct current study to evaluate the effect of educational guidelines on nurses' knowledge and practices regarding application of nursing process.

Aim of the study:

The aim of the current study was to evaluate effect of educational guidelines on nurses' knowledge and practices regarding application of nursing process.

Study hypotheses:

The following hypotheses were formulated to fulfill the aim of this study:

H1- Nurses' knowledge regarding application of nursing process could be significantly improved after implementation of the educational guidelines than before.

H2- Nurses' practices regarding application nursing process could be significantly improved after implementation of the educational guidelines than before.

H3- There could be a significant correlation between Nurses' knowledge and their practices after implementing guidelines.

Subjects and Method

Study design:

A quasi-experimental design (pre-post test design) was used to achieve the aim of the current study.

Setting:

The study was conducted in Medical departments affiliated to Benha University Hospital at Qalubya Governorate, Egypt. Medical departments are located in the medical building on the fifth and sixth floor. The fifth floor contains three internal medicine units, first unit which consists of 2 rooms and 6 beds, second unit which consists of 2 rooms and 12 beds and third unit which consists of 2 rooms and 12 beds. The sixth floor contains 2 units: liver and digestive system department which consists of 2 rooms and 12 beds, hematology and oncology unit which consists of 2 rooms and 6 beds, nursing station and physician office.

Subjects:

Convenience sample of all available nurses (n=80) (40 at internal medicine units, 22 at liver and digestive system department and 18 at hematology and oncology unit) who were working at previously mentioned setting during the time of data collection and agree to participate in this study.

Data Collection Tools:

Two tools were used to collect data for this study:

Tool I: Self-administered questionnaire for nurses

This tool was designed by researchers and written in simple clear Arabic language after reviewing relevant literatures and scientific references to gather data in relation to the following two parts:-

Part I: Nurses' personal data:- This part designed to assess personal data of the studied nurses. It included 11 questions about nurse's age, gender, marital status, educational level, years of experience, the current work unit, Primary role in the department, working hours per day, Ratio of patients to nurses, Training regarding application the steps of the nursing process during the study and attendance of any training courses on how to apply the nursing process.

Part II: Nurses' knowledge assessment (pre/ post test).

It was developed by researchers after reviewing of the relevant literature such as (Gulanick and Myers, 2021); Harding and Hagler, 2021) and Moorhead et al., 2023). It was used to assess nurses' knowledge regarding nursing process which included 32 questions distributed into three sections as the following:

First section: that included 9 questions related to adequacy of information about overview of nursing process and its barriers as definition, benefits number of steps of nursing process, instructions to be followed during application of nursing process and barriers to implementation of nursing process.

Second section: that included 15 questions related to assessment, nursing diagnosis and planning phase.

Third section: that included 8 questions related to implementation, necessary precautions during implementation of nursing care plan, evaluation and documentation of nursing process.

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Knowledge scoring system:

All knowledge variables were multiple choice questions. Each correct answer was scored (1), each incorrect answer was scored (zero). The total score for knowledge was (32) marks. The knowledge scores were converted into a percentage and categorized as follows:

- < 80% was considered as an unsatisfactory level of knowledge (Less than 26 marks).
- ≥80% was considered as satisfactory level of knowledge (26 marks or more).

Tool II: Nurse's practices observational checklist (pre/ post test):

This tool was adapted from **Miskir and Emishaw, 2018**) to assess nurses' practices during the implementation of nursing process. The checklist included 52 steps divided into five parts with three responses of always, sometimes and never as the following:

- **Part one:** which included 13 steps related to assessment for history and physical examination.
- **Part two:** which included 8 steps related to nursing diagnosis.
- **Part three:** which included 12 steps related to planning.
- **Part four:** which included 13 steps related to implementation
- **Part five:** which included 6 steps related to evaluation.

Scoring system

For each question, the score was given as 2 scores for always, 1 score for some times and zero score for never regarding the application of nursing process. Then the scores were summed up and the highest score were 104. The scores were converted into a percentage and graded as the following :-

- < 85% graded as incompetent level of practice (Less than 88 score).

- ≥85% graded as competent level of practice (88 score or more).

Tools validity

Once prepared in its preliminary form, the face and content validity were ascertained for comprehensiveness, relevance, simplicity, clarity and ambiguity through a jury of five experts from the medical surgical nursing department, Faculty of Nursing, Benha University (one professors and four assistant professors). Also, educational guidelines which covered all items related to nursing process based on newest current literature were revised by the same experts and all recommended modifications were done according to their comments and opinions and the final form of the study tools was used for data collection.

Tools reliability

Reliability was tested statistically to assure that the tool was reliable before data collection and it was evaluated using test-retest method to test the internal consistency of the tools, by administration of the same tools to the same subjects under similar condition on two different occasions. Testing the reliability of the tools through Cronbach's Alpha Test. Tool reliability for self-administered questionnaire that used to assess nurses' knowledge was 0.757 and tool reliability for observational checklist that used to assess nurses' practices was 0.795.

Ethical Considerations:

The study approval was obtained from the research ethical committee of Faculty of Nursing (code:REC-MSN-P64), Benha University. Interviewing with nurses before starting data collection procedure was conducted to establish a good relationship with them and explain the aim and nature of the study. Nurses' oral and written consent to participate in the study was obtained. Nurses were informed about the nature of the study,

privacy of their information, their right to withdraw from the study and the confidentiality of the individual data.

Administrative Considerations:

Official permissions for data collection were generated from Hospital directors and head managers of Medical departments at Benha University Hospital by the submission of a formal letter from the dean of Faculty of Nursing at Benha University. The study was carried out with full cooperation of the different levels of authority.

Preparatory phase:

- It included extensive reviewing literature and studies related to current study using the national and international resources to prepare the study tools and the educational guidelines from September to November 2023.
- The tools were under supervisors' guidance and experts' opinions were considered.

Pilot study:

A pilot study was carried out on 10% of all nurses that were included in the study (8 nurses) from the total number of nurses (80) in order to test the clarity and applicability of the tools. There were no modifications in the tools. So, the nurses involved in the pilot study (8 nurses) were included in the main study (the study sample). The pilot study was done two weeks before starting the study at December, 2023.

Field work:

Data collection of the current study was carried out through four months from the beginning of December, 2023 to end of March 2024. The process of data collection was achieved through: (pre-test): before implementing guidelines to have baseline assessment about nurses' level of knowledge and practices and (Post-test): immediately after implementing of guidelines using the same tools. The process of data collection was achieved through the following phases:-

Assessment phase:

It was carried out for all studied nurses by the researchers to collect baseline data regarding nurses' knowledge and practices. The researchers attended the clinical setting (medical departments) three days weekly in the morning and afternoon shifts (long day shift). The researchers explained the aim of the study and components of the tools to the studied nurses. Pre-test questionnaire was administered to the studied nurses to assess their actual level of knowledge regarding nursing process using **Tool I** and the researchers observed their practices during shift dependent on previous designed checklist regarding application of nursing process using **Tool II**.

Planning phase:

The researchers put plan for carrying out the study after collecting data about the study setting. Based on the nurses' results of needs assessment and in the light of the relevant literature, the researchers designed educational guidelines in the form of (PowerPoint presentation and guide booklet). The educational guidelines emphasized the areas of major deficiency in nurses' knowledge and practices regarding application of nursing process.

Teaching materials were determined and prepared e.g. discussion, demonstration, PowerPoint presentation, video, pictures, posters and manual booklet that helped in covering theoretical and practical information. The sessions number and its content were determined.

Implementation phase:

All available nurses in the Medical departments during the time of data collection and agree to participate in this study were recruited into the study.

- The researchers gave the instructional colored guidelines booklet to nurses immediately after data collection. The booklet was written in a simple Arabic

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language and supplemented by pictures and illustrations to help the nurse understanding of the contents.

- Total number of the studied nurses was 80 nurses; they were divided into 16 groups. Each group contained five nurses in every session. The researchers was attended three days/week in the morning and afternoon shift.
- The researchers met every group for three sessions: Two sessions for theory and one session for practice. Each session ranged between 30-45 minutes including the period of discussion.
- Each session started with a brief summary about what had been given through the previous session, then the objectives of the new topics, taking into consideration the use of simple language to suite the level of all nurses' educational level.
- Discussion, motivation and reinforcement during the intervention sessions were used to enhance learning. At the end of each session the researchers allowed for nurses to ask any question to correct any misunderstanding.

The first session: (introductory session) it included orientation and explanation of reasons and importance of designed guidelines and gave an explanation about nursing process such as definition, benefits , barriers to implementation of nursing process and instructions to be followed during application of nursing process.

The second session: it included an explanation about steps of nursing process, necessary precautions during implementation of nursing care plan and documentation of nursing process.

The third session: It covered items related to Practices regarding application steps of the nursing process, skills required during each step and role of nurses.

The researchers carried out a revision and reinforcement according to nurses' needs. Also, at the time end of each session the nurse's questions were answered and discussed to correct any misunderstanding. At the end of the implementation of the guidelines, the researchers received notes from the nurses and thanked the nurses for their cooperation.

Evaluation phase: -

After implementation of guidelines the post test was administered using the same tool of pretest through evaluation of nurses' knowledge using self-administered questionnaire (Tool I part two) and practices through observational checklist using (Tool II). Comparison was done between the pretest and post test at the end of the study to determine the effectiveness of designed guidelines on nurses' knowledge and practices regarding application of nursing process.

Data Statistical Analysis

The collected data were organized, categorized, tabulated and analyzed using the number and percentage distribution. The statistical analysis of data was done by using the computer software of Microsoft Excel Program and Statistical Package for Social Science (SPSS) version 25. Data were presented using descriptive statistics in the form of frequencies and percentage for quantitative data, the arithmetic mean (\bar{X}) and standard deviation (SD) for quantitative data. Chi-square test (X^2) was used to examine the difference and relation between qualitative variables during different periods. Pearson coefficient test was used to test correlation between numerical variables.

Degrees of significance of results were considered as follows:

- P-value > 0.05 Not significant (NS)
- P-value ≤ 0.05 Significant (S)

- P-value ≤ 0.001 Highly Significant (HS).

Results

Table (1): Shows percentage distribution of studied nurses according to their personal data. It reveals that 65.0% of the studied nurses aged between 20 <30 years old with mean age of 29.36 ± 0.50 years; 75.0% of them were females. Also, 61.3 % of them were married ,50.0% of them qualified by nursing technical institute and 61.3% of studied nurses had years of experience in nursing between 5<10 years. As 50.0% of them were working in the internal medicine units. The primary role of 82.5 % of nurses were providing nursing care, only 12.5% of them were developing a nursing care plan .while,71.2 % of nurses working 12 hours per day, 42.5% of studied nurses were assigned to provide care to more than 5 patients during work. Also,85.0% of nurses received adequate training during study . Moreover, 65.0% of nurses didn't attend any training courses about nursing process.

Figure (1): Illustrates differences between nurses' total knowledge level about nursing process pre and post guidelines implementation, there were 36.3% of studied nurses had satisfactory level of total knowledge regarding application of nursing process pre guidelines implementation, which improved to 75 % post guidelines implementation with a highly statistically significant differences in total knowledge level between pre and post guidelines implementation at ≤ 0.001 .

Figure (2): Give picture about difference between nurses' total practices level regarding nursing process application pre and post guidelines implementation. It demonstrates that 16.2% of studied nurses had competent level of total practices regarding application of nursing process pre guidelines implementation, which improved to 55% post guidelines implementation with a statistical significant differences in total

practices level between pre and post guidelines implementation at $p=0.003$.

Table (2): Clarifies correlation between nurses' total knowledge and practices pre and post guidelines implementation It illustrates that there was a statistically significant positive correlation between total nurses' knowledge and their total practices regarding nursing process pre guidelines implementation at r-value 0.231. Also, there was a highly statistically significant positive correlation between total nurses' knowledge and their total practices regarding nursing process post guidelines implementation at r-value 0.905.

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Table (1): Percentage distribution of studied nurses according to their personal data (n = 80)

Nurses' personal data	No.	%
Age / years		
20 <30	52	65.0
30 < 40	27	33.7
40-<50	1	1.3
Mean ± SD	29.36 ± 0.50	
Gender		
Male	20	25.0
Female	60	75.0
Marital status		
Married	49	61.3
Not married	31	38.7
Educational level		
Nursing diplom	9	11.3
Nursing Technical institute	40	50.0
Bachelor of Nursing	25	31.2
Post graduate studies in nursing	6	7.5
Years of Experience		
< 5 years	6	7.5
5< 10 years	49	61.3
≥10years	25	31.2
Mean ± SD	9.24 ± 0.57	
The current work unit		
Internal medicine units	40	50.0
Department of liver and digestive system	22	27.5
Hematology and oncology unit	18	22.5
Primary role in the Department		
Providing nursing care	66	82.5
Develop a nursing care plan	10	12.5
Nursing supervision	4	5.0
working hours per day		
8 hours	20	25.0
12 hours	57	71.2
24 hours	3	3.8
Ratio of patients to nurses		
3 cases	20	25.0
4 cases	12	15.0
5 cases	14	17.5
More than 5 cases	34	42.5
Training regarding application the steps of the nursing process		
Yes	68	85.0
No	12	15.0
Attended any training courses on how to apply the nursing process		
Yes	28	35.0
No	52	65.0
If yes, when was this session	(n=28)	
< 6 months	9	32.1
≥ 6 months	19	67.9

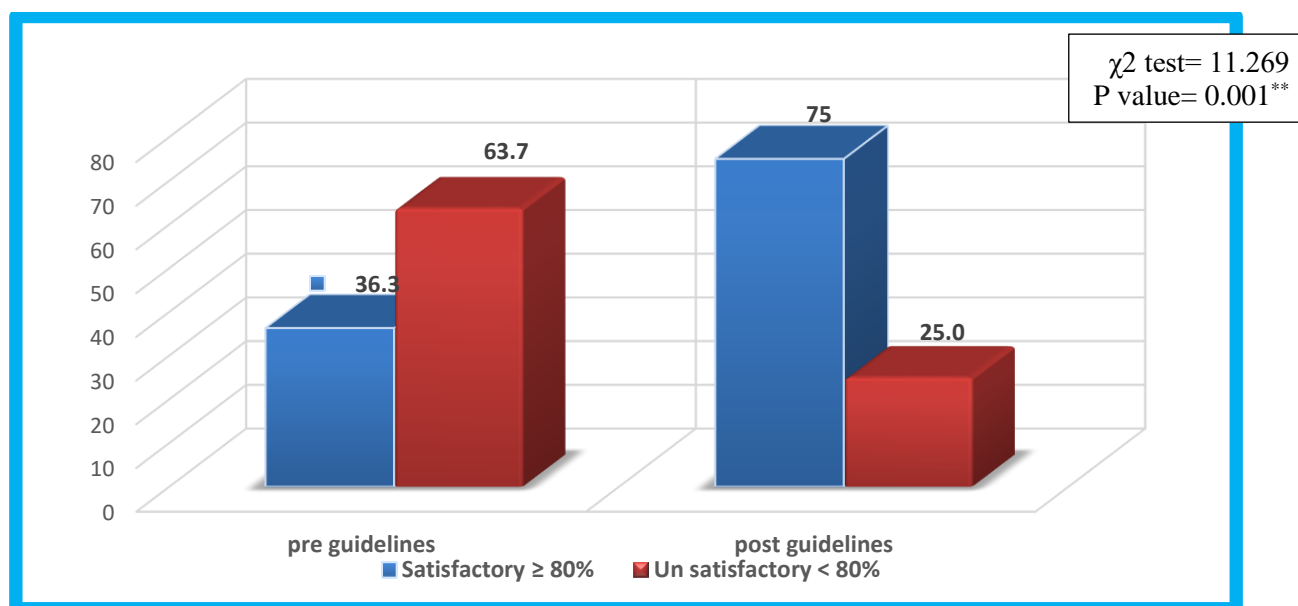


Figure (1): Differences between nurses' total knowledge level about nursing process pre and post guidelines implementation (n=80)

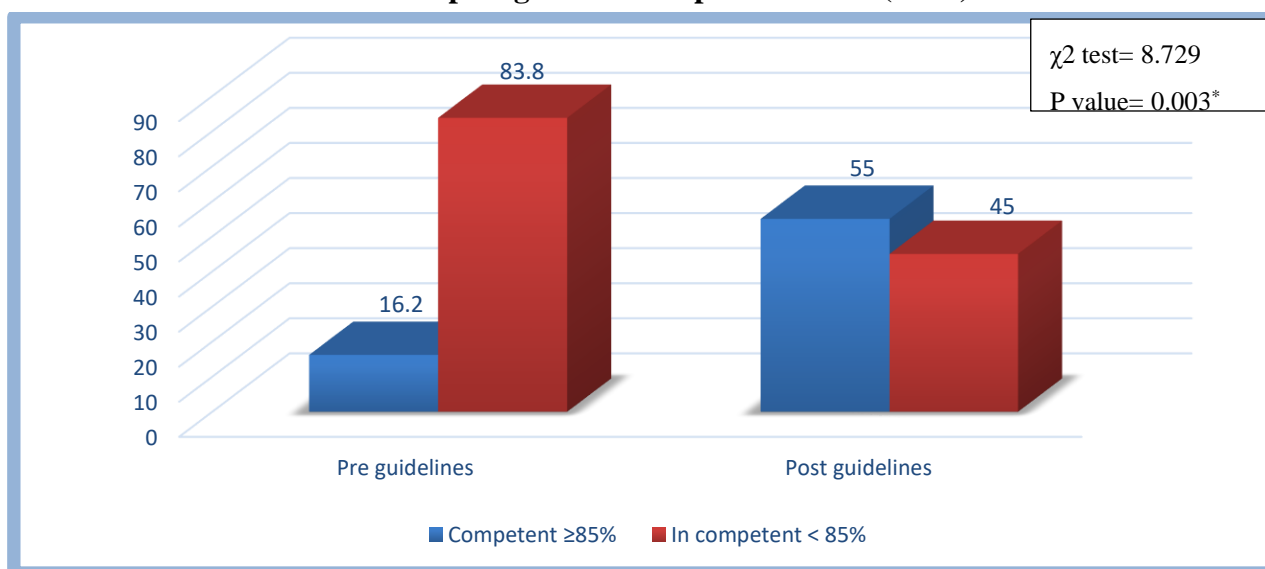


Figure (2): Difference between nurses' total practice level regarding nursing process application pre and post guidelines implementation (n=80)

Table (4) Correlation between nurses' total knowledge and practice pre and post guidelines implementation (n=80)

r-\p values	Periods	Total knowledge	
		R	p- value
Variable Total practices	Pre guidelines	0.231	0.040*
	Post guidelines	0.905	<0.001**

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Discussion

The discussion of the study findings covered four main parts; to fill the objective of the study, findings are presented in four main parts. The first part discusses personal data of the studied nurses. The second part discusses nurses' knowledge regarding nursing process pre, post guidelines implementation, the third part discusses nurses' practices regarding application of nursing process pre, guidelines implementation. Finally, the fourth part discusses the correlation between the studied nurses' total knowledge score, nurses' total practice score pre, post guidelines implementation.

Regarding to nurses' personal data, the results of the present study revealed that almost two thirds of studied nurses were aged from 20 to less than 30 years old, one half of studied nurses qualified by nursing technical institute. Also, three fifths of studied nurses had from 5 to less than 10 years of experience, the majority of studied nurses were providing nursing care and only one eighth of them were developing a nursing care plan. While nearly three quarters of the studied nurses were working 12 hours per day, two fifths of studied nurses were assigned to provide care to more than five patients during work and about two third of nurses didn't attend any training courses about nursing process.

These personnel findings were like a study conducted by **Sharma et al., (2023)**. and stated that more than three quarters of the participants were in the age group of 20–30 years. agreed with **Bassah et al., (2023)** who reported that nearly half of the participants had a higher national diploma in nursing, Also, was in accordance with **Ajemba et al., (2023)** who reported that that more than third of respondent had 5-10 years of experience and matched with **Obonyo et al., (2019)**

reported that , the majority of the participants were aware of their role in providing care to patients.

Additionally these results were in the same line with a study done by **Asseri , (2023)** reported that majority of nurses were working from 8-12 hours daily. Also, were similar with **Yousaf et al., (2021)**, who mentioned that, majority of study participants were serving five to ten patients at a time and agreed with **Feleke et al., (2019)** stated that, approximately three quarters of studied nurses not trained on nursing process guideline.

Concerning nurses' knowledge level regarding nursing process, the current study revealed that more than one third of studied nurses had satisfactory level of total knowledge regarding application of nursing process pre guidelines implementation, which improved to three quarters post guidelines implementation with a highly statistically significant differences in total knowledge level between pre and post guidelines implementation, this finding supported the first research hypothesis. **From the researchers' point of view**, this improvement might be related to the fact that majority of studied nurses are young and are enthusiastic to learn, the highly needs of this group of nurses to learn more about certain areas like nursing process. In addition to, effective role of designed guidelines for improving nurses' knowledge.

This result matched with **Ali, (2020)**, who carried out a study entitled “Outcome of nursing intervention on knowledge and use of nursing process among nurses in zonal hospitals, rivers state, Nigeria” and stated that, the participant's level of knowledge about nursing process in the intervention group was enhanced compared to the control group after their exposure to the training program.

Concerning nurses' practice level regarding nursing process application, the present study revealed that less than one fifth of the studied nurses had competent level of total practices regarding application of nursing process pre guidelines implementation, which improved to more than half post guidelines implementation with a statistical significant differences in total practices level between pre and post guidelines implementation, this finding supported the second research hypothesis. **From the researchers' point of view**, these results pre guidelines could be due to high patients' to nurses' ratio, lack of proper training , lack of orientation program for newly graduated nurses , absences of an instructional posters and booklets, poor monitoring ,supervision and poor evaluation of nursing practice and might be due to carelessness of nurses toward implementation of nursing process. Also ,the improvement post guidelines may be related to the effect of educational guidelines.

These results agreed with **Jamal et al., (2023)** who, demonstrated that about two third of the participants were not applying nursing process due to several reasons. As well as, corresponded with the finding of studies conducted by **Hussein, (2020)** who reported that, there was a highly statistically significant difference between pre- and post-program in studied nurses regarding total scores on nurses' performance in the nursing process. More than three-quarters of them had good competence in the post-program, while about half had poor competence in the pre-program. Which supported the second hypothesis.

Correlation between nurses' total knowledge and practice pre and post guidelines implementation: the current study showed that there was a statistically significant positive correlation between total

nurses' knowledge and their total practices regarding nursing process pre guidelines implementation. Also, there was a highly statistically significant positive correlation between total nurses' knowledge and their total practices regarding nursing process post guidelines implementation, which support the third research hypothesis.

From the researchers' point of view, when nurses' knowledge increased, the competent level of nurses' practices increased. Implementing the nursing process in clinical settings needs primarily knowledge about the steps of the nursing process and how to apply these steps. Also, applying nursing process needs training about how to assess patient condition through physical examination, how to judge on patient condition through diagnosis, how to put a plan to satisfy patient' needs then implement this plan as nurses decided and finally how to test the effectiveness of this plan and these steps.

These results were congruent with **Alshammari et al., (2020)** who revealed that, there is a highly significant statistical correlation between nurses' total knowledge and performance regarding the nursing process. Also, these results were in a harmony with **Gazari et al., (2021)** who studied "Qualitative exploration of the challenges and the benefits of the nursing process in clinical practice" and illustrated that inadequate knowledge of the nursing process posed a challenge to its implementation. Which supported the third hypothesis.

Finally, before the guidelines, the majority of nurses had unsatisfactory total score level of knowledge and practices regarding application of nursing process in Medical departments, while the majority of the studied nurses had satisfactory total score level of knowledge and practice post guidelines.

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Conclusion

More than one third of studied nurses had satisfactory level of total knowledge regarding application of nursing process pre guidelines implementation, which improved to three quarters post guidelines. As well as , less than one fifth of the studied nurses had competent level of total practices pre guidelines, which improved to more than half post guidelines implementation and there was a statistically significant positive correlation between total nurses' knowledge and their total practices pre and post guidelines implementation. Hence the study's findings supported the research hypotheses.

Recommendations

For Nurses: -

- Provision of continuing education programs and training workshops regularly and periodically and must be obligatory for all nurses in order to update nurses' knowledge and enhance their practices level regarding application of nursing process

- Continuous evaluation of nurses' knowledge and practices is essential to identify their needs about application of nursing process.

- A standardized nursing care plan should be inserted on an alert system to facilities for nursing intervention.

- Application of educational programs for nurses about new technology using the nursing informatics- based nursing process.

Further Studies:-

Further studies should be carried out to assess factors affecting the implementation of the nursing process in clinical practice.

Further studies should be carried out in Egypt using wider geographic scope and larger sample size to generalize the results.

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تأثير الإرشادات التعليمية على معلومات وممارسات الممرضين فيما يتعلق بتطبيق العملية التمريضية

ياسمين عبدالباسط ابراهيم - صباح سعيد محمد - سماح السيد غنيم- دعاء محمد محمود

تُعد العملية التمريضية إطارًا دائريًا وديناميكيًا وتفاعليًا وعالميًا يطبقه الممرضين لتحقيق أفضل النتائج وتحسين جودة رعاية المرضى. لذا هدفت هذه الدراسة إلى تقييم تأثير الإرشادات التعليمية على معلومات وممارسات الممرضين فيما يتعلق بتطبيق العملية التمريضية. تم استخدام تصميم البحث الشبه تجريبي لإجراء هذه الدراسة، وأُجريت الدراسة في أقسام الباطنة بمستشفى بنها الجامعي، وشملت الدراسة عينة متاحة مكونة من (٨٠ ممرض) وكانوا يعملون في المكان المذكور اعلاه. أظهرت النتائج أن ٦٥٪ من الممرضين تتراوح أعمارهن بين ٢٠ و ٣٠ عامًا، وأن ٦٥٪ من الممرضين لم يسبق لهم حضور أي دورات تدريبية. قبل تنفيذ الإرشادات، كان ٣٦,٣٪ فقط من الممرضين لديهم مستوى مرضٍ من المعرفة، و ١٦,٢٪ لديهم مستوى مرضٍ من الكفاءة للممارسة. وبعد تنفيذ الإرشادات، تحسنت هذه النسب بشكل كبير لتصل إلى ٧٥٪ للمعرفة و ٥٥٪ للممارسات. كما وُجدت علاقة إيجابية ذو دلالة إحصائية عالية بين معرفة وممارسات الممرضين الإجمالية فيما يتعلق بتطبيق العملية التمريضية قبل وبعد تنفيذ الإرشادات. ولخصت الدراسة ان تطبيق الإرشادات التعليمية أدى إلى تحسين كبير في معلومات وممارسات الممرضين فيما يتعلق بتطبيق العملية التمريضية. وأوصت الدراسة بتقديم برامج تعليمية مستمرة، و ورش عمل تدريبية بشكل منتظم ودوري ويجب أن تكون إلزامية لجميع الممرضين من أجل تحديث معلوماتهم وتحسين مستوى الممارسة لديهم فيما يتعلق بتطبيق العملية التمريضية.