

Evaluation the Effect of Evidence Based Guidelines for Maternity Nurses to Cope with Aborted Women

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Abstract

Caring of the women who are considering abortion is a sensitive area of practice that requires appropriate evidence knowledge, skills and practice. Aim: to evaluate the effect of evidence based guidelines for maternity nurses to cope with aborted women. Material & method: A quasi experimental design was used. A total sample of (67) staff nurses were recruited in the study. Setting: The study was conducted in obstetrics & Gynecological department at Benha University Hospital. Tools: two tools were used I): An interviewing questionnaire sheet II): Evidence nursing care practice for practices of abortion care. Results: revealed that there was a highly statistically significant difference regarding studied nurses' knowledge about evidence based practice in nursing and abortion pre & post guidelines. As well as 73.2% of nurses had poor performance level before evidence guidelines. However, 86.5% of them had good performance level immediately after evidence guidelines respectively. Conclusion: The implementation of an evidence based guidelines was effective and significantly improved nurse's knowledge and performance towards abortion and abortion care. Recommendations: The nursing curriculum should include the evidence based practice to update the evidence knowledge regarding recent advances in abortion care. Specific procedure booklets should be available to standardize the nursing care provided in obstetrics department.

Keywords

Abortion Care, Maternity Nurses, Evidence-Based Knowledge & Practice

1. Introduction

In many countries abortion constitutes an important health obstetrics problem for women during pregnancy. It is a matter of concerns from medical, psychological, social, legal, bioethical, and religious perspectives. So that, it can has serious maternal complications with appreciable risks of maternal morbidity and mortality. Miscarriage or spontaneous abortion is the most common type of pregnancy loss in the first twenty weeks [14].

Globally 10-25% of all clinically recognized pregnancies will end in spontaneous abortion, and more than 80% happen before 12 weeks. This occurs when a pregnancy is lost shortly after implantation, resulting in bleeding that occurs

around the time of her expected menses which caused by abnormal chromosomal in the fertilized ovum that prevent the development of embryo [19]. Abortion care can be safely provided by properly trained health care provider, including, who are trained effectively to provide basic clinical procedures including bimanual pelvic examination to determine the gestational age & positioning of the uterus and other trans- cervical procedures [21].

Although many of significant advances & scientific evidence, nurses still have more to do to achieve the evidence based practice. Additionally a recent survey of the state of evidence based practice on nurses indicated that, nurses had a positive attitudes toward evidence based practice, skills and wished to gain more knowledge, they still faced significant barriers in employing it in practice [11].

In nursing, evidence based practice has been considered as critical element to improve quality of health services for achieving excellence in patient care and also considered as a keystone for health care quality, it has gained its importance by influencing the knowledge and practice of nurses, it is the integration of the best current evidence for clinical decision making process, It serves as an approach for problem-solving and also a framework for decision making to answer emerging clinical questions while considering the patient's values and practitioner's own views [1].

Evidence-based guidelines for abortion service delivery, including abortion care, refers to the underlying principles and essential requirements for providing equitable access to adequate quality of abortion services for the delivery of safe abortion care such as routine review & updates ensure that they continue to promote women's physical, mental, and social well-being to reflect new evidence of best practices. These guidelines should be developed and updated with the intent of eliminating barriers to obtaining the highest valuable standard of woman's reproductive health [5].

Practice guidelines may describe baseline & best practice or the ideal that must be achieved; this may depend on available resources. It is also very important to recognize the obligation of health care providers to provide appropriate care in emergency situations, facilitate a woman's access to information about abortion and services as requested, contribute to creating an atmosphere of caring & respect for the choices of women, their families, and the choices of colleagues with respect to this issue [12].

1.1. Significance of the Study

The annual number of abortions decreased in developed countries, from about 12 million to 7 million, while it increased in developing countries from 38 million to 49 million as the reproductive-age population grew at a similar pace. Globally in the developing countries the prevalence of abortion increases from 76% to 88%. Almost all abortion-related deaths occur in developing countries, with the highest number occurring in Africa. Recently the studies determine that from 8 to 18% of maternal mortality worldwide are due to unsafe abortion, and the number of abortion-related deaths in 2014 ranged from 22,500 to 44,000 [17]. Evidence from the United States has shown that the mortality rate for women obtaining legally induced abortions is 0.7 per 100,000 procedures overall and 0.1 per 100,000 procedures at or before eight weeks of pregnancy [18]. Hence, it is imperative to raise nurses' evidence based guidelines about recent issues of evidence based knowledge and practice regarding abortion care. Thus, this study is conducted to improve maternity nurses' evidence based knowledge and practice regarding abortion care and its utilization by applying an evidence guideline.

1.2. Aim of the Study

The aim was to evaluate the evidence based guidelines (knowledge and practice) for maternity nurses to cope with

aborted women.

1.3. Research Hypothesis

Maternity nurses who received an evidence based guidelines would have improved based knowledge and practice toward caring of women with abortion than before guidelines.

2. Materials and Method

2.1. Research Design

A quasi Experimental design was used (pre and post intervention of guidelines) was utilized to fulfil the aim of this study.

2.2. Setting

This study was conducted in Obstetrics and Gynaecological Department at Benha University Hospital.

2.3. Sample

All nurses working in the above mentioned setting at the time of the data collection were included in the study. Total number was (67) staff nurses.

2.4. Tools of Data Collection

Two main tools were used for data collection:-

2.4.1. First Tool

A structured interviewing questionnaire:

It was designed by the researchers after reviewing related literature. It was written in an Arabic language in the form of close and open-ended questions. It encompassed two major parts:

Part 1 included on the personal and socio demographic data such as (age, qualifications, experience years and attendance of training courses in obstetrics department).

Part 2 included nurses' knowledge about evidence based practice in nursing. It consisted of (2) sections;

Section (1) general knowledge regarding evidence based practice in nursing, it consisted of (5) items (meaning of evidence based knowledge, meaning of evidence based practice, characteristics & steps of evidence based in nursing, and barriers of evidence based in nursing).

Section (2) knowledge regarding abortion, it consisted of (10) items (definition, causes, types, signs & symptoms of abortion, immediate danger signs of abortion, problems encountered after abortion, time of resumption of menstruation after abortion, time of returning sexual intercourse after abortion, protection the woman from abortion, and the time in which woman waiting before trying the next pregnancy).

Scoring system:

Each item was assigned a score of (2) given when the answer was completely correct, a score (1) was given when the answer was incompletely correct and a score (0) was

given when the answer was incorrect or unknown. The total score of each section was calculated by summation of the scores of its items. The total score for the knowledge of nurse was calculated by the addition of the total score of all sections. The mean and standard deviation was calculated. In addition, nurses' total knowledge score was converted into total percent and graded as the following; the knowledge was considered adequate if percentage of the total knowledge score equals 75 -100%, and considered inadequate if the percentage of total knowledge score is less than 75%.

2.4.2. Second Tool

An evidence nursing care practice of abortion:-

This tool was developed by the researchers after reviewing related literatures to assess nurses evidence practice regarding abortion care and consisted of (15) items such as (greeting the woman, assessment signs & symptoms of vaginal bleeding, pelvic cramping, backache, and taking history of Previous episodes of vaginal bleeding or pelvic camping with current pregnancy; passage of tissue or clots..... etc.).

Scoring system:

The items were judged according to evaluate of each checklist was considered for the general procedures and the score was graded 2 if done correctly, 1 if done incorrectly or incompletely done, and zero if not done. Total score of performance = 76. The performance was considered good if the percentage of total performance score equals more than 75% and considered average if the percentage of total performance score equals 50- 75%, and considered poor if the percentage of total performance score equals less than 50%.

2.4.3. Validity and Reliability

Tools were reviewed by a panel of seven experts in the field of obstetrics and woman's health nursing to test its content validity. Modifications were done accordingly based on their judgment. Reliability was done by Cronbach's Alpha coefficient test which revealed that each of the two tools consisted of relatively homogenous items as indicated by the moderate to high reliability of each tool.

2.4.4. Ethical Considerations

An official permission was granted from the directors of the pre mentioned settings. Each nurse was informed about the purpose of the study then a written consent was obtained before starting the data collection. Confidentiality was ensured throughout the study process, and the nurses were assured that all data was used only for research purpose. Each nurse was informed that participation is voluntary and free to withdraw from the study at any time.

2.4.5. The Pilot Study

A pilot study was carried out on six nurses (about 10% of the sample), it was chosen randomly to assess tools contents, clarity, consistency and applicability using the interviewing questionnaire and the checklist. Modifications were accordingly made on the study tools in order to be more

applicable and the necessary changes were fulfilled by correction, omission or addition of items, until the final shape of the tools was reached. Nurses involved in the pilot study were included in the study due to small study sample numbers.

2.5. Procedure

The following phases were adopted to fulfil the aim of the current study; assessment, planning, implementation, and evaluation phases. These phases were carried out from the beginning of April 2017 to the end of September 2017 covering six months. Official approvals and letters to conduct this research were obtained from dean of researchers faculties to directors of the previous mentioned setting.

2.5.1. Assessment Phase

This phase encompassed interviewing the nurses to collect baseline data, at the beginning of interview the researchers greeted each nurse, explained the purpose, duration, and activities of the study and taken written consent. Pre-test was done to assess nurses' evidence based knowledge and practice regarding abortion. The data obtained during this phase constituted the base line for further comparison to evaluate the effect of the guideline. Average time for the completion of each nurse interview was around (30-40 minutes).

2.5.2. Planning Phase

Based on baseline data obtained from pre-test assessment and relevant review of literature, the guideline was developed by the researchers in a form of printed Arabic booklet to satisfy the studied nurses' deficit knowledge, and practice regarding abortion. The general objective of the guideline was to improve nurses' evidence knowledge and practice about abortion care.

2.5.3. Implementation Phase

Implementation of the guideline took (12) weeks period. The researchers visited each previous mentioned setting in the two shifts (morning and afternoon), three days/week alternatively. The educational intervention involved (3) scheduled sessions and were implemented according to working circumstances, nurses' physical and mental readiness. These sessions were repeated to each subgroup of (4-5) nurses. The duration of each session lasted from half an hour to one hour including periods of discussion according to their achievement, progress and feedback. At the beginning of the first session an orientation to the guideline and its aims took place, Arabic language was used to suit the nurse's level of understanding. Feedback was given in the beginning of each session about the previous one. Different methods of teaching were used such as modified lecture, group discussion and brainstorming. Suitable teaching media were included an educational guideline that distributed to all nurses in the first day of the intervention as well as suitable teaching aids were specially prepared for the program application as: colored posters, lab top CD, and handouts.

2.5.4. Evaluation Phase

Evaluation was applied post the intervention guideline by using the pretest formatting, in order to identify the differences areas of improvement as well as to detect any defects. It was done immediately post implementation of the guideline to evaluate the effect of the implemented guideline intervention.

2.6. Statistical Analysis

Data were verified prior to computerized entry. The Statistical Package for Social Sciences (SPSS version 20.0) was used. Descriptive statistics were applied (e.g., mean, standard deviation, frequency and percentages). Test of significance (chi square and paired t test) was applied to test the study hypothesis. Correlation coefficient was calculated between based knowledge, and practice scores. A statistically significant difference was considered at p-value $p \leq 0.05$, and a highly statistically significant difference was considered at p-value $p \leq 0.001$.

Limitation of the study

Sometimes the sessions were protracted due to workload, noise and other individuals' interruption that required more time that is devoted and effort. In addition, most of nurses are considered firstly this topic different and difficult from traditional issues that oriented before.

3. Results

Table 1: shows socio-demographic characteristics of the studied nurses. It was found that less half of nurses (46.3%) was aged from 20-29 years, with a mean of age 31.63 ± 8.26 years. As far as nurses' level of education, more than three

thirds of them (70.2%) had diploma of secondary school nursing. Regarding years of experience in obstetrics department, about less than half of nurses (43.3%) their experience less than 10 years. Only 4.5% of nurses were attended training courses about abortion.

Table 2: Shows that, there was a highly statistically significant difference pre/ post guideline regarding studied nurses' knowledge about evidence based in nursing, with the highest mean score regarding their knowledge about meaning of evidence based knowledge and barriers of evidence based in nursing.

Table 3: illustrates nurses' knowledge about abortion, it was found that there was a highly statistically significant difference regarding studied nurses' knowledge about abortion pre/ post guideline, with the highest mean score regarding their knowledge about definition of abortion.

Table 4: represents that, there was highly statistically significant difference pre/ post guideline of implementing intervention in relation to nurses' performance regarding evidence nursing care of abortion, with the highest mean score regarding their performance in Place woman in trendelenburg position.

Figure 1: illustrates that, only (5.9%) had good performance level before intervention of the evidence guideline. However, immediately after intervention, most of them (86.5%) got good performance level.

Table 5: Illustrates that, there was a statistically significant difference between studied nurses total evidence knowledge score, and their age, level of education, training the courses, and years of experience.

Table 6: Shows that there was a statistically significant difference between studied nurses total performance score, and their level of education, socioeconomic standards, and years of experience.

Table 1. Distribution of the studied sample according to their socio-demographic characteristics (n=67).

Socio-demographic characteristics	Frequency	%
Age in years		
20-	31	46.3
30-	23	34.3
40+	13	19.4
Mean± SD=31.63±8.26		
Level of education		
Diploma of secondary school nursing	47	70.2
Technical institute of nursing	12	17.9
Bachelor degree in nursing science	8	11.9
Years of experience		
<10	29	43.3
10-	27	40.3
20 +	11	16.4
Attendance of training courses about evidence knowledge and practice of abortion		
Yes	3	4.5
No	64	95.5

Table 2. Mean scores of knowledge of the studied sample regarding evidence based in nursing pre & post guidelines. (n= 67).

Items	Mean ±SD		Paired t test	P value
	Pre	Post		
Meaning of evidence based knowledge.	0.66±0.59	1.72±0.87	14.55	<0.001**
Meaning of evidence based Practice.	0.70±0.40	1.65±0.67	18.49	<0.001**
Steps of evidence based nursing.	0.40±0.72	1.70±0.84	17.85	<0.001**
Characteristics of evidence based in Nursing.	0.50±0.86	1.50±0.82	17.86	<0.001**
Barriers of evidence based in nursing.	0.30±0.69	1.72±0.58	18.17	<0.001**

Table 3. Mean scores of knowledge of the studied sample regarding abortion pre & post guidelines. (n= 67).

Items	Mean ±SD		Paired t test	P value
	Pre	Post		
Definition of abortion.	1.03±0.46	1.90±0.30	13.24	<0.001**
Causes of abortion.	0.90±0.80	1.45±0.21	15.41	<0.001**
Types of abortion.	0.32±0.74	1.60±0.64	17.62	<0.001**
Signs and symptoms of abortion.	0.15±0.67	1.80±0.21	19.82	<0.001**
Immediate danger signs of abortion.	0.90±0.90	1.30±0.30	13.44	<0.001**
Problems encountered after abortion	0.20±0.49	1.80±0.64	16.16	<0.001**
Time of resumption of menstruation after abortion	0.50±0.50	1.80±0.60	14.27	<0.001**
Time of sexual intercourse after abortion.	0.62±0.66	1.80±0.60	13.52	<0.001**
Protection the woman from abortion	0.70±0.64	1.65±0.62	15.69	<0.001**
The time in which woman waiting before trying the next pregnancy	0.34±0.66	1.65±0.56	17.37	<0.001**

Table 4. Mean scores of performance of the studied sample according to guidelines of evidence practice during nursing care of abortion pre& post guidelines. (n= 67).

Steps of nursing care	Mean ±SD		Paired t test	P value
	Pre	Post		
Greeting the woman.	0.80±0.72	1.75±0.50	11.78	<0.001**
Assessment signs & symptoms of vaginal bleeding	1.03±0.60	1.78±0.43	12.52	<0.001**
Assessment signs & symptoms of Pelvic cramping and backache.	0.60±0.76	1.55±0.74	13.57	<0.001**
Taking history of Previous episodes of vaginal bleeding or pelvic camping with current pregnancy; passage of tissue or clots	0.20±0.48	1.85±0.45	25.71	<0.001**
Monitor vital signs: TPR and BP, monitor FHR with Doppler If gestational age greater than 14 weeks gestation	0.50±0.74	1.58±0.72	14.57	<0.001**
Observe the woman for signs of excessive bleeding, signs of shock and start IV as order	0.70±0.42	1.85±0.46	15.73	<0.001**
Place woman in trendelenburg position	0.30±0.63	0.90±0.65	9.69	<0.001**
Laboratory investigation (CBC, Rh type & cross match immediately and blood clotting).	0.80±0.80	1.85±0.53	15.78	<0.001**
Palpate for uterus, measure funds if uterus is palpable; palpate it for consistency and tenderness.	0.60±0.50	1.78±0.40	14.78	<0.001**
Provide educative information (Complete bed rest, avoid stress & coitus in threaten abortion.	0.70±0.40	1.80±0.47	16.23	<0.001**
Provide emotional support to mother	0.60±0.48	1.80±0.46	18.76	<0.001**
Prepare for possible surgery. (D&C) in inevitable and incomplete abortion.	0.60±0.40	1.85±0.46	19.73	<0.001**
In septic abortion culture & sensitivity and board spectrum antibiotic as prescribed	0.50±0.35	1.70±0.30	15.04	<0.001**
Prepare woman for possible fetal loss and assist the parents to begin grieving if fetal loss is inevitable	0.60±0.46	1.65±0.47	16.73	<0.001**

**A highly statistical significant difference (p ≤ 0.001)

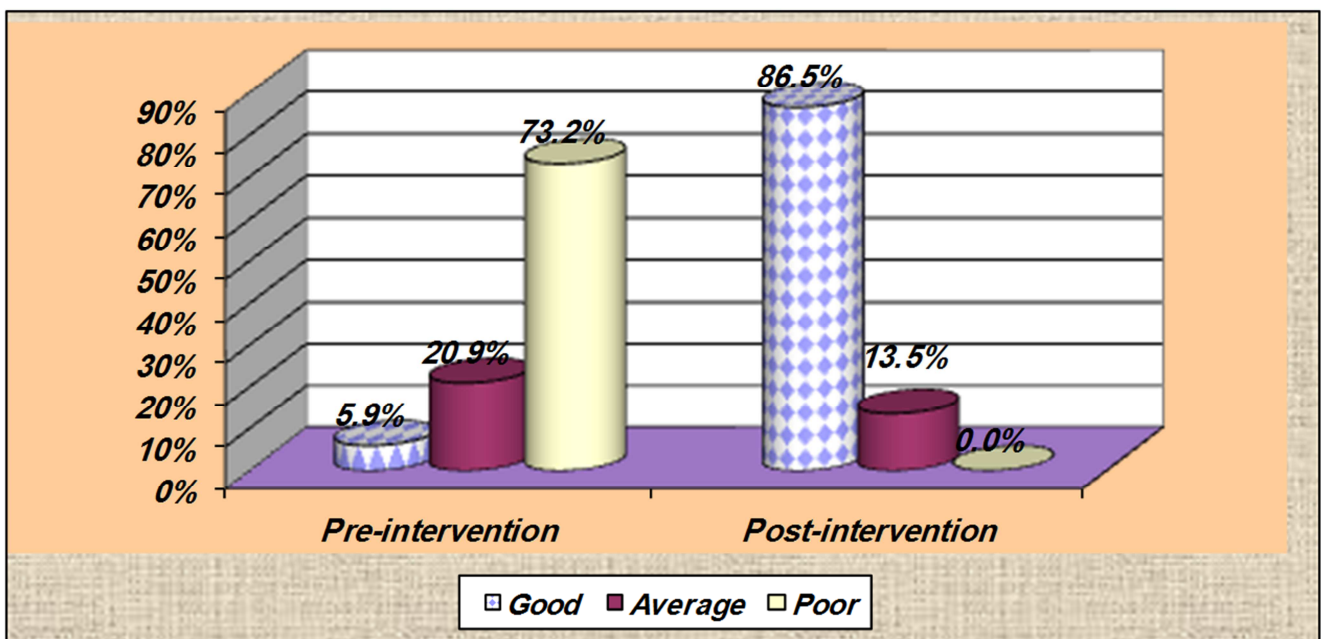


Figure 1. Percentage distribution of the studied nurses in relation to their total performance score pre/ post guideline.

Table 5. Distribution of the studied sample total knowledge score in relation to their socio-demographic characteristics.

Socio- demographic Characteristics	Total evidence knowledge score immediate post- guideline intervention				X ²	P value
	Average N=9		Good N=58			
	No	%	No	%		
Age in years						
20-	2	2.9	29	43.3	5.66	<0.05
30-	3	4.5	20	29.9		
≥40	4	5.9	9	13.5		
Educational level						
Diploma of secondary school nursing	6	9.00	41	61.2	5.38	<0.05
Technical institute of nursing	0	0.0	8	11.9		
Bachelor degree of nursing science	3	4.5	9	13.5		
Years of experience						
>10 years	2	2.9	27	40.4	5.25	<0.05
10-20 years	3	4.5	24	35.8		
≥20 years	4	5.9	7	10.5		
Attendance of training courses about abortion						
Yes	5	7.5	45	67.2	7.18	<0.05
No	4	5.9	13	19.4		

A statistical significant difference ($P \leq 0.05$)

Table 6. Distribution of the studied sample total performance score in relation to their socio-demographic characteristics.

Socio- demographic Characteristics	Total performance score post program				Total		X ²	P value
	Average N=15		Good N=52					
	No	%	No	%	No	%		
Age in years								
20-	5	55.56	4	44.44	9	21.95	2.72	<0.05
30-	6	40.0	9	60.0	15	36.59		
≥40	4	23.53	13	76.47	17	41.46		
Educational level								
Diploma of secondary school nursing	12	53.83	35	67.30	47	70.26	1.42	<0.05
Technical institute of nursing	1	12.50	7	87.50	8	11.94		
Bachelor degree in nursing science	2	16.67	10	83.23	12	17.91		
Years of experience								
>10	5	7.5	24	35.8	67	100.0	9.57	<0.05
10-	5	7.5	22	32.8				
≥20	5	7.5	6	8.9				
Attendance of training courses about abortion								
Yes	10	20.0	40	80.0	50	74.63	0.219	<0.05
No	5	29.41	12	70.59	17	25.35		

4. Discussion

Various complications can develop during the pregnancy and can affect the health of the mother and her fetus as well as the outcome of the pregnancy. Early pregnancy loss is the most common complication of pregnancy and occurs in approximately 75% of women who are trying to conceive; a more specific term used to describe early pregnancy loss is spontaneous abortion or miscarriage when abortion occurs without medical or mechanical means to empty the uterus [23]. Integrate evidence-based health interventions in nursing Professionals need to adopt a reflective and critical approach to clinical practice to create more effective and meaningful care processes for increasing awareness among nurses through enhanced communication, monitoring system and alerts for new information, as well as to enhance adoption and adherence should provide clear instructions on the desired change [13].

The present study was undertaken to evaluate the effect of evidence based guidelines (knowledge and practices) for

maternity nurses to cope with aborted women. Additionally the findings of the present study achieved and supported the research hypothesis.

As regard characteristics of the studied sample, the results of the present study indicated that less half of nurses (46.3%) was aged from 20-29 years, with a mean of age 31.63 ± 8.26 years. As far as nurses' level of education, more than three thirds of them (70.2%) had diploma of secondary school nursing. Regarding years of experience in obstetrics department, about less than half of nurses (43.3%) their experience less than 10 years. Only 4.5% of nurses were attended training courses about abortion. The same line [16] found that, about half of nurses' ages were ranged 20-30 years, the majority of them held diploma degree in nursing. In addition, nearly half of nurses had experience less than ten years in the obstetrics department.

Concerning evidence based knowledge of the studied sample in nursing pre & post evidence guideline, the current study revealed that, there was a highly statistically significant difference pre & post evidence guideline, with the highest mean score regarding their knowledge about meaning of

evidence based knowledge and barriers of evidence based in nursing. The present study findings are in congruence with [2] who found that, significant positive correlations between years of experience and practice. Nurses with more years of experience reported increased use of evidence based practice, and fewer barriers to research. Nurses with a baccalaureate degree reported fewer barriers to research than those qualified at a diploma level. Nurses who perceived more barriers to research reported less use of evidence based practice and limited evidence based knowledge and also added that, the greatest barriers to developing evidence based practice among nurses were insufficient time and resources to change practices for research.

Furthermore [7] who reported that, nurse's education and training plays an important role in the development of evidence based practice to achieve a basic strategies of their role and its purpose of it. Nursing education should integrate the best available evidence into teaching, and educators should encourage them to adopt a more reflective and critical approach to current practice, thus should work closely with experts in education and research to draw up long-term strategies to facilitate the adoption of evidence based practice. As well as added that continuing education regarding it for nurses is crucial in order to enhance nurses' clinical practice, knowledge and skills, and that hospital management should take steps to reduce the barriers to evidence based practice implementation.

Concerning nurse's knowledge regarding abortion pre & post evidence guidelines, the findings of the current study revealed that, there was a highly statistically significant difference regarding studied nurses' knowledge about abortion pre& post guideline, with the highest mean score regarding their knowledge about definition of abortion. These findings are in the same line with [22] which informed that information and counseling from a trained nurse is a necessary & important component should always be provided to women considering abortion in simple language. This is concentrate, interactive process through which the woman receives support and guidance including, the abortion types, management of pain, any tests that may be performed before, during and after the procedure; how long the process of bleeding is likely to take; how to recognize potential complications, how and where to seek help, if required.

More over [4] who informed that, The primary objective of the evidence-based recommendations for providing safe abortion, post-abortion care and post-abortion complications counseling including safety, effectiveness, feasibility and acceptability of interventions for health care provider. This may be due to counseling is considered a core competency element for nursing staff for provision of abortion and post abortion care.

In addition to [15] who found that every nurses must be understand the complexity of decision making around a woman's decision to terminate her pregnancy. Nurses should have access to appropriate continuing professional development to enable them for providing high quality evidence-based care to develop new knowledge, skills and

practice. It is equally important to encourage them to become more politically aware, so that as nursing evidenced practice becomes available around termination of pregnancy so it is a critical opportunity to advocate for nurses around improving women's health.

Regarding nurse's performance according to guidelines of evidence practice during nursing care of abortion pre& post guidelines, there was highly statistically significant difference pre& post guideline of implementing evidence nursing care of abortion, with the highest mean score regarding their performance in Place woman in trendelenburg position. These findings were supported by [3] who noticed evidence in the literature shows that post training support is sufficient to ensure provision of a new service after training. In response, this intervention includes a multifaceted post training support model that is integrated into the existing health system. The post training support model constitute of individual provider support, creation of a provider support team, a whole-site orientation,, quality improvement through the client-oriented provider-efficient approach (a performance improvement strategy), which increase awareness-raising activities, in early pregnancy detection and referral programs.

Additionally, the nurses in the present study demonstrated poor performance level before intervention of the evidence guidelines. Implementing evidence based guidelines that achieved their needs proved successful for improving their performance level, thus leading to acceptance of the research hypothesis. The effectiveness of the evidence based guidelines knowledge and practice was apparent from the results. The findings are in congruence with the results of [6] who illustrated evidence-based interventions used for other health issues are applicable in abortion care. Evaluation of these practices in the abortion counselling setting can determine their appropriateness and effectiveness, as well as added that abortion care providers may be able to integrate additional women-centred practices to improve psychological adjustment after abortion.

Additionally, [20] added that nurses have a vital role in improving evidence knowledge, therefore, the nursing curriculum should include the current evidence based practice to upgrading the knowledge regarding recent advances of evidence practice in addition to structured teaching programme is one of the most effective methods to acquire and improve knowledge.

The results of this study also indicated that nurses with more years of experience reported greater use of evidence based practice, more positive attitudes towards this evidence and fewer barriers to finding and reviewing research. These results are consistent with [2], who found that nurses with more years of experience in nursing were more confident in implementing it, because they had more exposure to evidenced-based information as part of their continuing education and concluded that new nurses were less confident in using evidence based practice due to their limited practical knowledge and experience.

These findings are disagree with, [10] who found that the

relationship between years of experience and the implementation of evidence based practice was weak, in order to effectively implement evidence based practice, less experienced nurses should be supported by senior nurses & nursing leaders with encouragement and the provision of necessary resources. Such support could be provided by increasing the opportunities for nurses to attend training of evidence based practice, to improve their confidence and how to cope and utilize of this evidence.

The findings of the current study illustrated that, there was statistically significant difference between studied nurses total evidence knowledge, evidence performance score, and their age, level of education, training courses, and years of experience. This was supported by [22] which suggested that attending in- service education programs, national conferences, continuing formal and informal education are necessary for knowledge and practice to be up to date. This might be due to nurses who have more experience will be responsible for administrative and managerial activities.

Additionally [8] who assured that effective health-care provider skills and performance through: training; supportive and facilitative supervision; monitoring, and evaluation. Training should be competency based & address health-care provider attitudes and ethical issues related to the provision of safe, induced abortion. Monitoring and evaluation include the collection of routine service statistics and safe abortion indicators, the use of checklists, periodic special studies, and feedback mechanisms to ensure continuous evidence based practice.

Further more [9] who suggested that, Evidence-based guidelines assist health care providers to utilize the best data available for providing safe abortion care, prevent many of risks and disabilities that result from it. Nurses' practice toward evidence based practice had the highest mean score followed by the knowledge, skills and then the practice. There are several factors of this evidence may help to increase positive knowledge education, skills and training among nurses, including longer working experience, having administrative position, research experience, provided basic information to hospital educators and better professional attitude.

Also [5] who illustrated that, it is important for maternity nurses depend on evidence-based knowledge, special attention to upgrading their skills and competencies. Nurses should understand that practices and methods used in nursing are based on the best available evidence care practices are consistent across units and organizations. And also it is important for them to be aware of the best available evidence and know how to use it to influence care decisions.

5. Conclusion

In the light of the study findings, it can be concluded that, the implementation of an evidence based guidelines was effective and highly significantly improved nurse's knowledge and performance towards abortion and abortion care. Furthermore, the above mentioned findings proved and

supported the research hypothesis.

Recommendations

The nursing curriculum should include the evidence based practice to update the evidence knowledge regarding recent advances in abortion care. Specific procedure booklets should be available to standardize the nursing care provided in obstetrics department.

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