

Maternity Nurses Knowledge and Practice Regarding Evidence-Based Practice During the Care of Mothers in Intra-partum Period

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Abstract

Background: Improving maternal health during pregnancy and the intrapartum period is one of the World Health Organization's Millennium Development Goals. This can be accomplished by employing evidence-based practice. The objective of this study was to investigate maternity nurses' knowledge and practice of evidence-based practice throughout the intrapartum period. A descriptive design was adopted in this study.

Method: A hundred nurses from three hospitals were included in the study. Between September 2020 and February 2021, these nurses evaluated their knowledge and practice of Evidence-Based Practice during the intrapartum period. Personal and professional forms were used to gather data about nurses. Interviewing and an observational checklist form were used to assess knowledge, and practice of maternity nurses regarding evidence-based practice during the intrapartum period. The interviewing questionnaire was used to evaluate the barriers that maternity nurses face in applying evidence-based practice during the intrapartum period.

Results: During the intrapartum period, maternity nurses had a low level of knowledge and practice regarding evidence-based practice. The major barriers to evidence-based practice utilization were related to maternity nurse barriers, then hospital barriers and followed by communication barriers.

Conclusion: Maternity nurses had low knowledge and practice of evidence-based practice in the intrapartum period. So that, maternity nurses should have on-going training regarding evidence-based practice in the intrapartum period.

Keywords: Knowledge and Practice; Evidence-Based Practice; Intra-Partum Period

Introduction

Evidence-based practice (EBP) is a problem-solving approach to clinical practice that joins the best evidence from well-designed findings, patient values and inclinations [1].

EBP is acknowledged as the model approach to improving healthcare results, saving time, giving superior persistent results, and providing medical attendants with more practice [2]. Evidence-based practice is critical because evidence is constantly being created, and modern discoveries are changing things we thought were true in the past [3]. Quality in labour and delivery management must be judged by the minimum maternal and perinatal morbidity and mortality, not by present limits on interventions [4].

Maternal mortality percentage as one indicator of the quality of maternal health care has been a problem of public health concern around the world, especially in developing countries [5]. The use of scheduled mediations without substantial signs in the management of obstetric complications has helped to extend this marker. Subsequently, WHO has proposed numerous key strategies, such as applying the greatest evidence in clinical care [4].

The success of evidence-based practice adoption is dependent on several factors, including individuals' knowledge of EBP. Previous findings stated barriers to implementing EBP, including a lack of time and funds [7]. The nurse's role includes evaluating and examining a woman's preferences, recommending alternative positions, providing back pain relief methods, non-pharmacologic pain relief, and giving information and advice [8].

Significance of the study

According to Kacmar and Mhyre (2020). over a third of maternal mortality and a significant proportion of pregnancy-associated life-threatening situations are assigned to complications that occur during labour or the direct postpartum period, often as a result of hemorrhage or obstructed labor [10].

Improving maternal wellbeing in pregnancy and the intra- partum period is one of the main developmental aims of the fifth millennium of the World Health Organization. The maternal mortality rate, as one indicator of the quality of maternal health care, has been an issue of public health concern worldwide, especially in developing countries [11]. The maternity nurse's role in applying evidence-based practice in the care of mothers during the intra-partum period is very important [12].

Aim of the study

Research questions

1. What is the knowledge level and practice of maternity nurses regarding evidence-based practice in the care of mothers during intra partum period?
2. What are the barriers facing maternity nurses in applying Evidence-Based Practice during intra partum period?

Material and Methods

Design: A descriptive design was used in carrying out the present study. The current study was conducted at the obstetric departments of three settings in Menoufia governorate: University Hospital, Shebin ElKoom Teaching Hospital, and Menouf Hospital.

Sample type and size

A purposive sample was used to all maternity nurses working in the labor unit. The total sample size (100 maternity nurses) was taken from the hospitals mentioned above.

Instruments for data collection

Data were gathered using two instruments created by the researcher and revised by qualified experts before being tested for validity and reliability.

Instrument I

A specialized self-structured interviewing questionnaire was developed by the researcher to collect the necessary data about the study subjects. It comprised of:

- **Part 1: Maternity nurses' socio demographic and professional characteristics included:** age, marital status, level of education, job title, years of experience in the maternity department, and training courses attended in evidence-based practice.
- **Part 2: A questionnaire to assess the knowledge level of maternity nurses about the application of evidence-based practices during the intrapartum period [13]).**

Instrument II: A structured interviewing questionnaire is used to assess barriers facing maternity nurses in applying evidence-based practice during the intrapartum period. It was based on Funk, *et al.*, (2013), developed by the researcher to accommodate the research consisted of 18 items and three subscales:

1. Characteristics of the Adopter (maternity nurses) (seven items).
2. Characteristics of the setting (hospitals) (eight items).
3. Characteristics of the Presentation (communication) (three items). The items are randomly arranged throughout the questionnaire without identification of the factor titles.

The scoring system

The answers were given on a 5-point Likert Scale: 1 = no extent or disagree; 2 = to a little extent; 3 = to a moderate extent; 4 = to a great extent (agree) and 5 = no opinion or do not know (the latter was excluded when calculating total score). To perform the analysis, score of "no opinion" was not calculated in the mean, and then the value was calculated. The score of each subscale was calculated by summing the scores of different items and then dividing by the number of items in the subscale.

Validity of instrument 1 and II

The validity of the instrument was done by five qualified experts (three Professors in Maternal and Newborn Health Nursing and two physicians from obstetrics and gynecology department at faculty of medicine) they reviewed the instruments for content accuracy and internal validity. And modifications were incorporated into the instrument.

Reliability of instrument 1 and II

Reliability of the instrument was applied by the researcher for testing the internal consistency of the instrument, using test-retest reliability, and this method was done through administration of the same instruments to the same participants under similar conditions on one or more occasion. Results from repeated testing were compared.

Human rights and ethical considerations

The ethical endorsement was acquired from the committee of ethics in the faculty of nursing at Menoufia University on 15-1-2020 and hospitals that were incorporated into the study. An informed assent was obtained. Participants signed the informed assent form and were welcome to go to the study.

Pilot study

It was performed on 10% of the total sample, which is equal to 10 nurses. A sample of the pilot study was excluded from the main sample based on changes made.

Study field work

A broad review related to the study area was done, including electronic studies, available books, articles, and publications to create a knowledge base relevant to the study area. The data was collected over a 6-month period, from the beginning of September 2020 to the end of February 2021, with each hospital taking about two months to collect the necessary data. The researcher went to the labour units of the Obstetrics Department in the previously mentioned hospital three days a week. At the three selected hospitals, the researcher attended to about 13 cases of normal delivery every month. During the initial contact, the researcher clarified the purpose of the research and gained their acceptance from nurses and cases.

During each visit, the researcher observed the practice of nurses during the intra-partum period (first, second, and third stages of labour and 2 hrs. after labor) and assessed their knowledge of EBP during the intrapartum period through fulfilling questionnaires that included items related to continuity of care, stages of labor, care of the new-born, and care of mothers two hours after labor. Also, through visits, the researcher assessed the availability of equipment's and inputs in the labour room and discussed barriers facing them and recorded them in the forms.

Statistical analysis

Data was entered and statistically analyzed on an IBM personal computer running the Statistical Package for Social Science (SPSS) version 22 (SPSS, Inc, Chicago, Illinois, USA).

Results

The findings of this study included the socio-demographic characteristics of the study nurses, professional characteristics of studied maternity nurses. Knowledge of the studied maternity nurses about correct practice or evidence-based practice during the intra-partum period, practice of the studied nurses during first, second, third, and fourth stage of labour. Finally, barriers that facing maternity nurses in applying evidence-based practice during the intra-partum period.

Socio-demographic characteristics of the study nurses

Statistical analysis in table 1 showed that 42% of the studied maternity nurses were aged between 20 and 30 years or between 31 and 40 years, with a mean of 27.4 ± 2.3 years. Concerning educational level, slightly more than one third of maternity nurses had 2ry nursing school (35%) followed by a technical institute (30%). Approximately half of them were practical nurses (49%), and more than eighty percent were married (86%).

Socio demographic characteristics		Frequency	
		NO.	%
Age (Years):	20 – 30	42	42
	31 – 40	42	42
	41 – 50	10	10
	> 50 years	6	6
Mean ± SD (Years)		27.4 ± 2.3 years	
Educational Level	2ry nursing school	35	35
	Technical Institute	30	30
	Faculty of Nursing	27	27
	Others*	8	8
Marital status	Married	86	86
	Single	12	12
	Widow	2	2
Job Title	Practical nurse	49	49
	Registered nurse	38	38
	Supervisor	13	13
Total		100	100

Table 1: Socio-Demographic Characteristics of Studied Nurses (N = 100).

Professional characteristics of studied nurses

Statistical analysis in table 2 revealed that about two thirds of maternity nurses had experience in the maternity department for more than 10 years (60%) with a mean of 13.2 ± 3.4 years. In addition, 72% of the study nurses define EBP during IPP as «correct and incomplete.» Most of them (73%) had not attended the training courses in EBP.

Professional characteristics		Frequency	
		NO.	%
Experience in Maternity Dep.	2- < 5 Y	20	20
	5 - <10 Y	20	20
	≥ 10 years	60	60
Mean ± SD (Years)		13.2 ± 3.4 years	
Define EBP during IPP	Incorrect answer	15	15
	Correct and incomplete	72	72
	Correct and complete	13	13
Attendance of training courses in EBP	No	73	73
	Yes	27	27
Total		100	100

Table 2: Professional Characters of Studied Maternity Nurses (N = 100).

Knowledge of the studied maternity nurses regarding evidence-based practice during the intra-partum period

Statistical analysis in table 3 revealed that the majority of the study participants (93%) had knowledge and replied “yes” regarding “Giving intramuscular oxytocin to women after delivery,” followed by (90%) of study participants “encouraging the adoption of mobility and an upright position during labour in women at low risk,” but the most common evidenced practice that the study nurses had no awareness of were “Manual techniques such as massage or application of warm packs for pain management” (92%), followed by (71%) of study participants who cut the umbilical cord earlier than 1 minute after birth.

Evidence Based practice during intrapartum period (Correct practice)	No		Yes	
	No	%	No	%
Continuity of care				
1. Respectful maternity care by maintaining dignity, privacy, and confidentiality, ensures freedom from harm and mistreatment, and enables informed choice and continuous support during labor	50	50	50	50
2. Effective communication between maternity care providers and women in labor	49	49	50	50
3. A companion of choice for all women throughout labor and childbirth	19	19	81	81
stages of labor				
4. Digital vaginal examination at intervals of two hours	39	39	61	61
5. Using partograph chart for assessment labor progress	68	68	32	32
6. Washing hands and wear sterile gloves before any procedures during labor	32	32	68	68
7. Intermittent auscultation of the fetal heart rate with either a Doppler ultrasound device or Pinard or fetal stethoscope for healthy pregnant women in labor	17	17	83	83
8. Opioid analgesia for pain relief as doctor order	67	67	33	33
9. Relaxation techniques for pain management	61	61	39	39
10. Manual techniques such as massage or application of warm packs for pain management	92	92	8	8
11. Encouraging the adoption of mobility and an upright position during labor in women at low risk	10	10	90	90
12. Intravenous fluids for preventing dehydration	22	22	78	78
13. Intramuscular oxytocin given after delivery	7	7	93	93
14. Delayed umbilical cord clamping (not earlier than 1 minute after birth)	71	71	29	29
Care of the newborn				
15. Newborns without complications kept in skin-to-skin contact (SSC) with their mothers during the first hour after birth	70	70	30	30
16. Initiation of breast feeding within one hour after birth when they are clinically stable, and the mother and baby are ready.	29	29	71	71
17. Prophylaxis using vitamin K	18	18	82	82
Care of mothers two hours after labor:				
18. Regular assessment of vaginal bleeding, uterine contraction, fundal height, temperature and heart rate (pulse) routinely during the first 24 hours starting from the first hour after birth.	36	36	64	64

Table 3: Awareness of the Studied Maternity Nurses about Correct Practice or Evidence Based Practice during Intrapartum Period (N = 100).

Total knowledge levels regarding the application of EBP during intra-partum period

Statistical analysis in table 4 demonstrated that the about half of the studied nurses (45%) had poor awareness levels. The highest percentage was 50% in the total score of the second stage of labor, followed by a total score of care for the first stage with 40% poor knowledge.

Knowledge aspects	knowledge levels					
	Poor		Moderate		Good	
	N0.	%	N0.	%	N0.	%
Total score of continuity of care	36	36	30	30	34	34
Total score of first stage labor	40	40	40	40	20	20
Total score of second stage labor	50	50	47	47	3	3
Total score of care of new-born	36	36	52	52	12	12
Total score of care of mother	25	25	53	53	22	22
Grand total score of awareness about application of EBP during IPP	45	45	40	40	15	15

Table 4: Total Knowledge Levels Regarding Application of Evidence Based Practice During Intrapartum Period among Studied Nurses (N = 100).

Practice of the studied nurses during first stage

Statistical analysis in table 5 revealed practice of the studied nurses during first stage of labor. Regarding continuity of care, it can be noticed that the majority of nurses were done all the three items. The highest practice was done “A companion of choice for all women throughout labor and childbirth” with (81%). Regarding first stage of labor, the highest practice was done” Encouraging the adoption of mobility and an upright position during labor in women at low risk (90%), followed by the item “Intermittent auscultation of the fetal heart rate with either a Doppler ultrasound device or Pinard or fetal stethoscope for healthy pregnant women in labor” with (83%). However, the highest practice was not done” Manual techniques such as massage or application of warm packs for pain management” (92%), followed by “Routine vaginal cleansing with chlorhexidine during labor for the purpose of preventing infectious morbidities” with (87%).

Practice of Studied Maternity Nurses during first stage of labor	Not done		Done	
	No	%	No	%
Continuity of care				
1. Respectful maternity care by maintaining dignity, privacy and confidentiality, ensures freedom from harm and mistreatment, and enables informed choice and continuous support during labor	50	50	50	50
2. Effective communication between maternity care providers and women in labor	49	49	51	51
3. A companion of choice for all women throughout labor and childbirth	19	19	81	81
Mean total score (continuity)	6.5±1.0			
First stage of labor				
4. Routine assessment of fetal well-being on labor admission in healthy pregnant women	56	56	44	44
5. Routine perineal or pubic shaving prior to normal labor	86	86	14	14
6. Enema on admission	79	79	21	21
7. Digital vaginal examination at intervals of two hours	39	39	61	61

8. Using partograph chart for assessment labor progress	68	68	32	32
9. Washing hands and wear sterile gloves before any procedures during labor	32	32	68	68
10. Continuous cardiotocography for assessment of fetal well-being in healthy pregnant women	52	52	48	48
11. Intermittent auscultation of the fetal heart rate with either a Doppler ultrasound device or Pinard or fetal stethoscope for healthy pregnant women in labor	17	17	83	83
12. Opioid analgesia for pain relief as doctor order	67	67	33	33
13. Relaxation techniques for pain management	61	61	39	39
14. Manual techniques such as massage or application of warm packs for pain management	92	92	8	8
15. Encouraging the adoption of mobility and an upright position during labor in women at low risk	10	10	90	90
16. Routine vaginal cleansing with chlorhexidine during labor for the purpose of preventing infectious morbidities	87	87	13	13
17. Active management of labor for prevention of delay in labor	60	60	40	40
18. The use of amniotomy for prevention of delay in labor	67	67	33	33
19. The use of early amniotomy with early oxytocin augmentation for prevention of delay in labor	49	49	51	51
20. Intravenous fluids for preventing dehydration	22	22	78	78
Mean total score (first stage labor)	27.4 ± 3.2			

Table 5: Practice of Studied Maternity Nurses during First Stage of Labor (N = 100).

Practice of the studied maternity nurses during second stage of labor

Statistical analysis in table 6 showed practice of the studied maternity nurses during second stage of labor, it revealed that (100%) of the studied nurses using lithotomy position, and (71%) “clamping umbilical cord earlier than 1 minute after birth”

Practice of studied nurses	Not done		Done	
	No	%	No	%
Second stage of labour				
21. Using lithotomy position during second stage of normal labor	0	0	100	100
22. Application of manual fundal pressure to facilitate childbirth during the second stage of labor	33	33	67	67
23. Routine use of episiotomy for primiparous women undergoing normal labor	30	30	70	70
24. Intramuscular oxytocin given after delivery	7	7	93	93
25. Vaginal packing	27	27	73	73
26. Delayed umbilical cord clamping (not earlier than 1 minute after birth)	71	71	29	29
27. Sustained uterine massage as an intervention to prevent postpartum hemorrhage (PPH) in women who have received prophylactic oxytocin.	22	22	78	78
Mean total score (2nd stage labor)	10.6 ± 1.4			

Table 6: Practice of Studied Nurses during Second Stage of Labor (N = 100).

Care of the new-born, and care of mothers two hours after labor

Statistical analysis in table 7 showed care of the new-born, and care of mothers two hours after labor, (96%) of study participants routinely suction the newborn, and (70%) do not kept the newborns in skin-to-skin contact with their mothers during the first hour after birth.

Practice of Studied Nurses	Not Done		Done	
	No	%	No	%
Care of the newborn				
22. Routine nasal or oral suction	4	4	96	96
23. Newborns without complications kept in skin-to-skin contact (SSC) with their mothers during the first hour after birth	70	70	30	30
24. Initiation of breast feeding within one hour after birth when they are clinically stable, and the mother and baby are ready.	29	29	71	71
25. Prophylaxis using vitamin K	18	18	82	82
Mean total score (care of new born)	6.7 ± 1.0			
Care of mothers two hours after labor:				
26. Routine antibiotic prophylaxis for women with uncomplicated vaginal birth	7	7	93	93
27. Regular assessment of vaginal bleeding, uterine contraction, fundal height, temperature and heart rate (pulse) routinely during the first 24 hours starting from the first hour after birth.	36	36	64	64
Mean total score (care of mother)	3.4 ± 1.0			

Table 7: Care of the Newborn, and Care of Mothers Two Hours after Labor (N = 100).

Barriers Facing Maternity Nurses in Applying Evidence-Based Practice during the Intra-Partum Period Statistical analysis in figure 1 showed that the greatest barrier was adaptor barriers (48%), followed by hospital barriers (21%), and followed by communication barriers (16%).

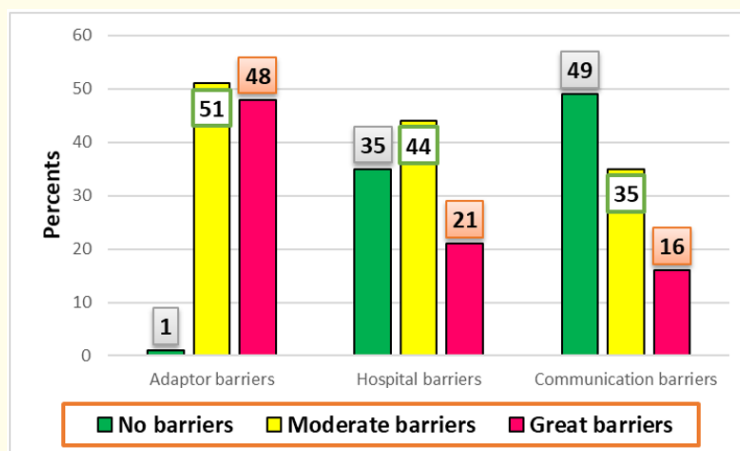


Figure 1: Levels of the three subscales of barriers facing maternity nurses in applying evidence-based practice during intrapartum period. Score of grand total barriers = Σ scores of grand total barriers / 18.

Discussion

Before discussing the results, light should be directed to the sociodemographic characteristics of the studied subjects, which have been answered in table 1 and 2). The result of the present study showed that about 84% of the study nurses aged between 20 and 40 years old. The present finding comes in agreement with [15] in India who investigated “evidence-based care practices for labour before and after a quality progress intervention.” Their findings showed that the mean age of the nurses included in the study was 30 ± 2.3 years.

Concerning educational level, slightly more than one third of maternity nurses had 2ry nursing school, followed by the Technical Institute, while the lowest percent (27%) were bachelor graduate nurses. From the investigator’s point of view, this may be because of the nurses’ choice to work immediately after finishing nursing school and the hospitals they were employed in did not provide any financial or administrative benefits to those who improved their educational level. This result comes in agreement with the study of Iyengar [15], which studied “Adherence to evidence-based care practices for labor before and after a quality improvement intervention in health facilities in Rajasthan, India” and stated that half of the study participants had a diplom in nursing.

Concerning the years of experience of the study nurses, it revealed that about two thirds of maternity nurses had experience in the Maternity Department for more than 10 years (60%) with a mean of 13.2 ± 3.4 years. This may be due to nurses’ choice to work immediately after finishing nursing school. This was consistent with the study findings of [11], who had studied «Evidence-based intra-partum practice and its associated factors at a tertiary instruction hospital» in the Philippines, a descriptive mixed-methods study. It stated that two thirds of the study participants had experience in maternity departments for more than 10 years.

Regarding attendance at the training courses in EBP, most of the study nurses did not attend any training courses in EBP. This was congruent with [16], who conducted a study about the implementation of best intra-partum care practices and specified that more than two thirds of the study medical attendants had not attended any specific courses related to EBP or indeed may not have had the opportunity to get any EBP preparation. On the other hand, a study conducted by [17] showed that more than two fifths of nurses had gone to prepare courses about EBP.

Regarding the study nurse’s knowledge level of EBP during the intra-partum period. The study results showed that about half of the study nurses had poor awareness level about the application of EBP during the intra-partum period, followed by nearly one third of them having a moderate level. Unfortunately, few of them had good awareness levels. From the researcher’s point of view, this result could be attributed to a lack of preparation of nurses in undergraduate studies and in workplace hospitals about evidence-based nursing practice and might be due to an absence of access to research results, inadequate evidence, and deficient time.

This result comes in line with [18] who investigated a study in Indonesia about “Assessment of Knowledge of EB Maternal and New-born Care Practices among Maternity Nurses.” This result revealed that most nurses had poor knowledge level about labor. These findings are also supported by the study of [19] in India who investigated “improving the knowledge of labor and delivery nurses.” Identify and remove perceived barriers to applying EBP during intra-partum period among maternity nurses. The results revealed that the greatest barrier was adaptor (maternity nurse) barriers, followed by hospital and communication barriers.

The present finding comes in agreement with [20] who investigated barriers to applying evidence-based intrapartum care”: A descriptive exploratory qualitative study. Their findings revealed that the main barriers related to mothers during labour and people providing care, followed by the organizational environment, and finally the health system.

Regarding awareness of the Studied Maternity Nurses about Correct Practice during IPP, the present study revealed that the majority of nurses (93%) given intramuscular oxytocin to women after delivery, on the researcher point of view the majority of nurses given oxytocin after delivery to prevent post-partum hemorrhage by helping the uterus to contract.

This study finding agreed with Erickson, Lee and Emeis (2017) in American who investigated “role of prophylactic oxytocin in the third stage of labor: physiologic versus pharmacologically influenced labor and birth” their findings revealed that Prophylactic oxytocin is generally considered effective and safe after delivery and is promoted by national organizations for standardized use.

This finding is in opposite to Béranger and Chantry (2017) who studied “Oxytocin administration during spontaneous labor: Guidelines for clinical practice” and reported that many nurses reduce oxytocin use during spontaneous labor.

Also, the findings revealed that (90%) of the study nurses encouraging the adoption of mobility and an upright position during first stage of labor in women at low risk, this may be due to changing position not only helps women cope with the pain of labor; upright positions use gravity to bring the baby down, whereas changing position frequently moves the bones of the pelvis, helping the baby find the best fit.

This finding coincides with Côrtes, *et al.* (2018) who study “implementation of evidence-based practices in normal delivery care” in American the findings revealed that the first stage of labor approximately an hour shorter for women who are upright or walk around during the first stage of labor. The women’s body position did not affect the rate of interventions.

Regarding “Manual techniques such as massage or application of warm packs for pain management” unfortunately (92%) of the study nurses have not awareness about these techniques this is rationalized to the poor awareness level of study nurses about EBP during IPP or might be due to lack of time and women unwillingness.

This finding is consistent with that found by Ramasamy, *et al.* (2018), in Kenya who investigated “knowledge, attitude, practice and barriers to educational implementation of nonpharmacological pain management during labor” cross sectional descriptive study design. The majority of the nurses 42% have inadequate knowledge regarding non-pharmacological pain management during labor.

In relation to delayed umbilical cord clamping (not earlier than 1 minute after birth), the study revealed that (71%) of the study nurses have not awareness about this procedure, this might be due to lack of knowledge about updates in labor.

This finding is in the same line with Mwakawanga and Mselle, (2020) in Tanzania, who conducted a study about “early or delayed umbilical cord clamping? Experiences and perceptions of nurse-midwives and obstetricians at a regional referral hospital” This study revealed that the maternity nurse ‘and obstetricians` commonly practiced clamping the umbilical cord immediately after delivery.

Heelan, *et al.* (2019) found in his study “barriers to research use among labour and delivery nurses” that most nurses had low educational levels in labour and there was a lack of good communication between clinicians and maternity nurses.

The major barriers to research utilization in another study by [22] among Iranian medical attendants were that the medical attendants do not have time to examine research, facilities are lacking for implementation, and the medical attendants do not feel they have sufficient specialists to alter quiet care methods. The discovery of a survey from 11 considered around inquiring about utilization in Iran by [23] also revealed that time restrictions were the biggest obstruction. A study carried out by [6] about “maternity nurses’ attitude and barriers to evidence-based practice in maternity care” revealed that the maternity nurse shortage and heavy workload of maternity nurses are common issues in the Iranian health system.

The two other barriers were related to the belief that physicians would not coordinate with implementation and that medical caretakers don’t feel they have sufficient authority to change care strategies. Based on the show’s thinking about discoveries, the research questions for this consideration were replied to. To improve the quality of care advertised to pregnant and childbearing women, maternity medical attendants should be considered as a significant factor in upgrading EBP usage.

Limitations of the Study

1. An important limitation of this study is that random selection of the sample does not exist due to a lack of maternity nurses and a lack of study settings, so generalization of results cannot be done.
2. The limitation of this study is that COVID-19 led to the increase in the timing of data collection to 6 months with an effect on nurse attendance and a decreased flow rate of cases of labor.

Conclusion

In light of the present study results, it can be concluded that the maternity nurses had low levels of knowledge about evidence-based practice during the intra-partum period. The majority of the study participants had knowledge and replied “yes” regarding “Giving intra-muscular oxytocin to women after delivery,” followed by “encouraging the adoption of mobility and an upright position during labour in women at low risk,” but the most common evidenced practice that the study nurses had no knowledge of and replied “no” were “Manual techniques such as massage or application of warm packs for pain management and cutting the umbilical cord earlier than 1 minute after birth. Also, total knowledge levels regarding the application of EBP during the intra-partum period were poor for about half of the studied nurses. Where, the highest percentage of poor knowledge was 50% in the total score of the second stage of labor, followed by a total score of care for the first stage with 40%.

Therefore, the present study concluded that it is important to improve nurses’ awareness about the application of evidence-based practice during the intra-partum period.

Recommendations

Continuous training programs for the nurses in labor units to improve their knowledge and practice regarding EBP, provide clinical practice guidelines for nurses to avoid complications and improve maternal and fetal outcomes, should be continuous follow up and evaluation of the nurse’s performance, and empower nurses to go to nursing conferences, logical meetings, and include them within the developmental activities.

Further research is needed to test the effect of the application of evidence-based practice during the intrapartum period on the quality of mothers’ care.

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