
Immediately Postpartum Care among Nurses/Midwives in Rania City

Renas Mohammed Khdir; *Department of Maternity Nursing, College of Nursing, Raparin University.*

(Correspondence: renas.mohamed@gmail.com)

Sanaa Hassan Abdul-sahib; *Department of Community Nursing, College of Nursing, Raparin University.*

ABSTRACT

Background and Objective: The first hours after childbirth are considered risky for mother and newborn, with many deaths occurring during or immediately after childbirth. Quality of care provided to mother and newborn after birth is important for the prevention of postpartum complications as well as neonatal and maternal morbidity and mortality. This study aimed to determine the knowledge and practice of nurses-midwives regarding care immediately after birth and to explore the relationship between nurses/midwives' socio demographic characteristics with overall their level of knowledge and practice.

Methods: A descriptive study was conducted with all nurses and midwives (N=22) who worked in delivery room of Maternity Teaching Hospital in Rania City, from July 15, 2016 to December 20, 2017. A questionnaire and a checklist was designed to capture quality of care immediately after birth. The data were collected through interview and observation. Frequency, percentage and chi-square test were used for analyzing the data.

Results: The results of the study revealed that the overall nurses/midwives' knowledge and practice regarding immediately post-delivery was good. In addition, the study results showed that there was no significant relationship with socio-demographic characteristics of nurse/midwives with the quality of immediately postpartum care.

Conclusion: The overall knowledge and practice of the nurses/midwives regarding some basic immediate postpartum care were acceptable. A comprehensive training courses regarding standard immediately postpartum care is recommended.

Keywords: quality of care, nurses, midwives.

Received: 2/1/2018

Accepted: 22/10/2018

Published: 30/11/2018

INTRODUCTION

During first hours after delivery many physiological changes occur that require close observation and monitoring to prevent unwanted complications to the mother as well as neonates. Therefore, the quality of care during immediately postpartum is a vital key to prevent complications and any life-threatening consequences. Lasting up to four hours, it is clear that in the last stage, the uterus

makes its initial process to readjustment to non-pregnant state. Actions undertaken by the health care staff are crucial to maintain of the quality of the woman's physical and psychological well-being post-delivery [1]. Interventions by nurses and midwives to prevent maternal and neonatal morbidity and mortality are essential for optimum quality of health services.[2]

All health care staff should be actively involved to provide appropriate quality of care. All must have adequate knowledge and clinical care expertise because the needs of mothers are need different based on their ethnicity, cultural background, and their living environment. The immediately postpartum period starts roughly one hour after the delivery of the placenta and includes the following 24 hours. Postpartum care should respond to the special needs of the mother and baby include: the prevention and early detection and treatment of complications and disease, and the provision of advice and services on breastfeeding, birth spacing, and maternal nutrition. During the first hours after the birth, the care-giver must ensure that the uterus remains well contracted and that there is no heavy loss of blood.[3] Nurses/midwives have an important enabling role to assist the woman during childbirth. As a result, they require high knowledge and interpersonal skills to deliver care to the mother and her newborn baby immediately postpartum. In addition, it is known that nursing services are the backbone for health care system in almost of the countries in the world. This study aimed to assess the knowledge and practice of nurses/midwives working in the delivery room at Maternity Teaching Hospital in Rania City regarding immediate postpartum care.

METHODS

A descriptive study was carried out from July 15, 2016 to December 20, 2017 with 22 nurses and midwives of delivery room in Maternity Teaching Hospital, which has 50 beds. This hospital services four towns and 40 villages. All of nurses and midwives who work in delivery room were involved in the study. Two study tools

was used for data collection. The first questionnaire format which included socio-demographic data and knowledge of nurses and midwives regarding immediately postpartum care. The second tool included an observation check list of practice of nurses and midwives regarding immediately postpartum care. Four experts in the field reviewed the questionnaire and checklist who suggested changes in some items in order to improve internal validity of the tool. A pilot study was carried out to acquire the reliability of the questionnaire was determined through the use of split-half approach of the computation of Cronbach's Alpha Correlation coefficients, on ten midwives- nurses and they were excluded from the original sample. The result of correlation was ($r=0.81$) for the entire questionnaire. All nurses and midwives were observed by researcher during immediate postpartum care and their knowledge were assessed through 30 minutes interviews. Knowledge was assessed through a questionnaire with 24 items in which there were two responses: yes (correct answer) and no (incorrect answer). Each correct answer counted for two points and incorrect answers were worth one point. Knowledge level was divided to three groups: good (40-48 points), fair (32-39 points), and poor (24-31 points). Practice of the nurses/midwives was collected through observation of 21 items on a checklist, in which items were either observed to be accomplished or not. Each item that was practiced by the nurses/midwives counted for two points and each item that was not practiced was worth one point. The practice levels were divided to three groups: good (35-42 points), fair (28-34 points) and poor (21-27 points). The proposal of the study was approved by Scientific Committee of College of Nursing/Raparin University. The formal permission

was given by administration of the hospital. Informed consent was taken from nurses/midwives for participation in the study after explaining the purpose of the study.

Data were inserted into and analyzed by Statistical Package for the Social Sciences (SPSS) version 21. Statistical analyses included frequency, percentage, correlation coefficient, and chi-square test.

RESULTS

Twenty-two nurses/midwives were involved in this study. Half of the study sample aged between 25-34 years old (35.68±8.63). Most (45.4%) had 6 to 14 years of experience working. Half of the graduates graduated from a nursing institute. The majority of them were married. Sixty-eight percent had not ever received training regarding postpartum care (Table 1).

Nearly all nurses/midwives had correct knowledge regarding following immediate postpartum care: uterus massage after delivery, giving oxytocin to mother to prevent bleeding, containing of vaginal blood from clots, emptying bladder, putting identification band for newborn immediately before cutting the cord, newborn mouth suction, drying the baby, covering head, encourage mother to breastfeeding and importance of skin to skin contact. However, they had no any information regarding following: mothers' needs to nutritional and intake fluid support, individualized care is necessary for mother's care, checking vital signs, checking vaginal discharge every 15 minutes, or the 4th stage of labor as the most risky time for postpartum hemorrhage (Table 2). Only seven nurse/midwives had good overall knowledge and rest had fair knowledge regarding immediate postpartum care (Table 3). Regarding nurses/midwives

practice, generally they were good in all care which they had had knowledge about that except following care: checking the perineum for any laceration and tear, assessing maternal comfort and maternal intake and encourage intake (Table 4).

Table1: Sociodemographic characteristics of the study sample

Characteristics		F	%
Age group	25-34	11	50
	35-44	6	27.3
	45-54	5	22.7
M ± SD = 35.68 ± 8.63			
Years of experience	≤ 5	8	36.4
	6-14	10	45.4
	≥ 15	4	18.2
Level of Education	Primary school of nursing graduates	1	4.5
	Secondary school of nursing graduate	7	31.8
	Nursing institute graduate.	11	50
	College of nursing graduates	3	13.7
Marital Status	Single	4	18.2
	Married	18	81.8
	Separated	0	0
	Divorced	0	0
	Widow/Widower children	0	0
Have you training course for immediate postpartum care	Yes	15	68.2
	No	7	31.8

Table 2: Nurses/midwives’ knowledge regarding immediate postpartum care

Items	Yes		No	
	F	%	F	%
1-4th stage of labor begins after delivery of placenta	7	31.8	15	68.2
2-4th stage of labor is the most risky time for postpartum hemorrhage	0	0	22	100
3-4th stage lasts for 48hours after delivery.	12	54.5	10	45.5
4-Checking vital signs	0	0	22	100
5-Uterus massages after delivery of placenta help the uterus to well contract	22	100	0	0
6-Fundal height of uterus it above the umbilical cord after birth	17	77.3	5	22.7
7-Oxytocin is given to mother to prevent bleeding	20	90.9	2	9.1
8-Vaginal blood contains small clot and mucus after birth	22	100	0	0
9-Bladder empty after birth decrease of bleeding occurrence	22	100	0	0
10-Breast feeding initiate after two hours of birth.	14	63.6	8	36.4
11-All mother encouraged to breast feed after birth.	21	95.5	1	4.5
12-Breast feeding increase immunity of newborn baby	22	100	0	0
13-Breastfeeding s the best way to maintain newborn body temperature	22	100	0	0
14-Skin to skin contact between mother and newborn baby occur after one hour	21	95.5	1	4.5
15-Skin contact skin is important for breast feeding	22	100	0	0
16-Skin to skin contact is important for prevention of newborn heat loss	22	100	0	0
17-Checking vaginal discharge every 15 minutes	0	0	22	100
18-Each newborn baby needs suction with bulb syringe	17	77.3	5	22.7
19-The newborn babies dried immediately after birth to prevent heat loss	22	100	0	0
20-Is important to cover the head of newborn after birth	21	95.5	1	4.5
21-Mothers need to nutritional and intake fluid support	0	0	22	100
22-Individualized care is necessary for mother's care	0	0	22	100
23-Identification band put immediately before cutting the cord	20	90.9	2	9.1
24-The band should include mother name only	18	81.8	4	18.2

Table 3: Overall nurses/midwives’ knowledge regarding immediate postpartum care

Overall Knowledge	F	%
Good	7	31.8
Fair	15	68.2
Poor	0	0
Total	22	100

Table 4: Nurses/midwives’ practice regarding immediate postpartum care

Items	Not done		Done	
	F	%	F	%
1-Wash hands during contact with mother.	4	18.2	18	81.8
2-Wearing gloves, cap, gown.	2	9.1	20	90.9
3-Inspect placental membrane	2	9.1	20	90.9
4-Uterus massage after delivery of placenta.	2	9.1	20	90.9
5-Observe vaginal discharge.	3	13.6	19	86.4
6-Check perineum for any laceration and tear.	22	100	0	0
7-Monitore mother vital signs.	2	9.1	20	90.9
8-Encourage the mother to empty bladder.	2	9.1	20	90.9
9-Encourage the mother to initiate breast feeding 30 min. after birth	2	9.1	20	90.9
10-Put the newborn skin to skin contact.	2	9.1	20	90.9
11-Hand washing during contact with newborn baby.	2	9.1	20	90.9
12-Using sterile instrument with newborn baby	2	9.1	20	90.9
13-Cleaning air way.	7	31.8	15	68.2
14-Suction the secretion from the mouth and nose.	5	22.7	17	77.3
15-Dry and covering the baby with clean towel.	2	9.1	20	90.9
16-Assess for maternal comfort	22	100	0	0
17-Assess maternal intake and encourage intake	22	100	0	0
18-Weighting of newborn.	6	27.3	16	72.7
19-Taking newborn temperature.	7	31.8	15	68.2
20-Put tag on the baby's hand.	8	36.4	14	63.6
21-Record mother name, sex of baby, date on the tag	5	22.7	17	77.3

Table 5: Overall practice of nurses/midwives regarding immediate postpartum care

Overall practice	F	%
Good	13	59.1
Fair	7	31.8
Poor	2	9.1
Total	22	100

Table 6: Association between nurse/midwives' knowledge with their socio characteristics

Sociodemographic attributes		Knowledge				P-value Fisher's Exact Test
		Fair		Good		
		F	%	F	%	
Age group	25-34	3	27.3	8	72.7	0.511 NS
	35-44	3	50	3	50	
	45-54	1	20	4	80	
Years of experience	≤ 5	3	37.5	5	62.5	0.896 NS
	6-14	3	30	7	70	
	≥ 15	1	25	3	75	
Level of Education	Primary school of nursing graduates	0	0	1	100	0.323 NS
	Secondary school of nursing graduate	3	42.9	4	57.1	
	Nursing institute graduate	2	18.2	9	81.8	
	College of nursing graduates	2	66.7	1	33.3	
Marital Status	Single	0	0	4	100	0.131 NS
	Married	7	38.9	11	61.1	
Training course regarding postpartum care	Yes	3	20	12	80	0.081 NS
	No	4	57.1	3	42.9	

DISCUSSION

Knowledge and practice of 22 nurses/midwives were assessed regarding immediate postpartum care. The results of the present study show that nurses/midwives generally had fair knowledge and practice regarding those immediate postpartum care which are essential but not standard care. The fourth stage of labor arbitrarily lasted approximately two hours after delivery of the placenta. This is the period of immediate recovery when homeostasis is re-established and it serves as an important period of observation for complications such as abnormal bleeding [4]. According to the results of the present study nurses/midwives did not check vital signs, status of perineal area, and comfort level. In fact, this is performed by physicians..

During the first hour after birth, vital signs are taken every 15 minutes then every 30 minutes for the next hour if needed [5-8]. Assessment of vaginal discharge (lochia) occurs every 15 minutes for the first hour and every 30 minutes for next hour, with palpating the fundus at the same time, to ascertain its firmness and help to estimate the amount of vaginal discharge [9]. These results agree with results of Nuriy and Ahmed (year) [10] who conducted a study on 15 nurses/midwives in the Erbil Maternity Teaching Hospital to assess quality of nursing care during labor. They found that necessary practices and intervention for postpartum mother were not completed by all nurses/midwives. The findings of the present study are almost similar with the result of previous study conducted in

Khartoum, to assess midwifery and nursing care for patient with episiotomy, which concluded that no midwives gave the mother advice about pain relief, they did not give advice about hygiene or food intake, and they did not observe for complications after episiotomies in the first two hours [11]. The results also agree with results of Nuriy and Ahmed because there is no significant association between practice of nurses/midwives and their level of education and taking training course [10]. Good practices by nurses/midwives should be routine care for all mothers and newborn. Incomplete and substandard immediate postpartum care by nurses/midwives in this study may be due to an absence of hospital policies, guidelines, and protocol for care in the delivery room regarding postpartum care. It may also be due to not having proper, up-to-date, and continuous training courses on postpartum care. It may also be due to lack of clear job descriptions and poor commitment of health care providers in the delivery, as well as a lack of follow-up policies by administrative of the hospital in cases of substandard care.

Limitation of the present study include the fact that is it a one-time observation of the nurses/midwives during immediate postpartum care.

CONCLUSIONS

The overall knowledge and practice of the nurses/midwives regarding some basic immediate postpartum care were acceptable. A comprehensive training course regarding standards for immediate postpartum care is recommended for all nurses and midwives in the delivery room. It is recommended that continuous training through regular educational program for those nurses in delivery room in maternal child health hospital be

employed to increase awareness. Providing regular training courses, especially outside the country, on the importance of nursing care and quality of nursing care is important. Improving the knowledge of midwives and nurses will improve the quality of care in the hospital. The Ministry of Health should increase the number of midwives and nurses that are working in delivery and recovery room to provide the best quality of care.

CONFLICT OF INTEREST

The authors report no conflict of interests.

REFERENCES

- [1] Abdel- Kareem, S., *factor affecting the quality of nursing care in intensive care unit: perception of physicians and nurses versus health care consumers*. (Master Thesis). Cairo: Ain Shams University; 2008.
- [2] Hoda, M. saving lives of mother and babies (an assessment on nurse's midwives knowledge in Bangladesh) an assessment skilled birth attendant's knowledge in Bangladesh, University of Gothenburg. (2012).
- [3] Steven ED, Jennifer ED, Niebyl, Joe ED, Simpson. *Obstetrics: Normal and Problem Pregnancies*. 4th ed. Newyork: Churchill living stone; 2002.
- [4] Basavanthappa, B.T. *Textbook of Midwifery and Reproductive Health Nursing*. 2nd ed. New Delhi: Jaypee Brothers Medical Publishers; 2006.
- [5] Hacker N., Moore J., Gambone J. *Essential of Obstetrics and gynecology*. 4th ed. China: Elsevier; 2015.
- [6] London M, Ladewig P, Ball J, & Bindler R. *Maternal and Child Nursing Care*. 2nd ed. New Jersey: Pearson; 2007.
- [7] Cunningham FG, Leveno K, Bloom S, Hauth J, Gilstrap L, & Wenstrom K. *Williams Obstetrics*. 23rd ed. USA: McGraw-Hill Companies; 2009.

- [8] World Health Organization. *Pregnancy, childbirth, postpartum and newborn care: A guide for essential practice*. 3rd edition. 2015
- [9] Ladewig PW, London ML, Davidson MR. *Contemporary Maternal – Newborn Nursing Care*. 6th ed. New Jersey:Pearson Education; 2006.
- [10] Nuri LA, Ahmed HM. Nurse/Midwives' Practices during Labor and Delivery in Maternity Teaching Hospital in Erbil City. *Erbil Journal Nursing Midwifery*.2018;1 (1):23-30.
- [11] Khaier MGM. *Assessment of midwifery and nursing care for patients with episiotomy in Albanjaded Teaching Hospital*. Thesis , Univerisity of Medical Sciences and Technology,2006.