

Evaluation of Nurse Midwives Practice Regarding Nursing Care for Woman Receiving Oxytocin Drug During Labor At Maternity Teaching Hospitals

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Abstract

Objective of Study: Evaluation of nurse midwives practice regarding nursing care to a woman receiving oxytocin

Methodology: A cross sectional descriptive analysis of (50) nurse midwives of this category of maternity nurse midwives was conducted work in the labor room of the Bint Al-Huda teaching hospital between 5 July 2020 and 31 August 2020. The questionnaire's validity and reliability was calculated through a pilot test. Due to the condition in the nation and the governorate, the emergence of the Corona epidemic and the implementation of curfews, the questionnaire was submitted electronically and the nurses and midwives completed the questionnaire, The data collection tool is well Structured interview questionnaire Ethical consideration permission was taken from the hospital administrator and consent from each nurse midwives. Data was processed using the SPSS edition (19).

Results: The study results showed that within the age group, the largest percentage of the study sample was 76% of the research sample graduated from high school, 32% of nurses had 21-25 years of experience, 96% had no training course in oxytocin administration, 90 percent do not describe oxytocin as a hormone, 100 percent of nurses have only one response about oxytocin uses, although at least 3 answers must be right, 54 percent of nurses have only one answer about oxytocin drug complications during delivery, 32 percent of nurses have only one answer about oxytocin pre-administration evaluation is 7 points, 50% of nurses have time-consuming practices to increase the dosage of oxytocin infusion during labor after 30 minutes after the initial dose, after 30 minutes and early signs of fetal distress and uterine contractions Greater than 5 contractions per 10 mint.

Keywords: Evaluation, Nurse Midwives, oxytocin, labor Introduction

Introduction

Oxytocin drug administration during childbirth requires effective nursing supervision and close observation since oxytocin is a drug used for labor induction when cervical dilatation and fetal descent with spontaneous uterine contraction fail. In order to avoid complications such as fetal respiratory failure

due to excessive uterine contraction and uterine rupture, oxytocin is a serious medication that requires close monitoring. In addition, close monitoring is required to assess labor progress and to identify signs of induction failure if present at an early stage⁽¹⁾

The induction or increase in labor can increase the risk of neonatal complications or lead to an unnecessary

cesarean section. In complicated pregnancies, in which prolongation of gestation presents additional risks to the mother or fetus or both, these risks may need to be assumed.⁽²⁾

The patient should be informed about the indications for the use of oxytocin, the methods of administration to be used, the risks of failure and cesarean delivery, or fetal compromise before starting the oxytocin infusion.⁽³⁾

Methodology

Design of the Study:

It is a cross-sectional descriptive study of the hospital foundation. Duration of study between from 5 July 2020 and 15 December 2020. Area of study nurses who work in the Bint Al-Huda Teaching Labor Room Study population all nurse midwives who work in the labor room of the Bint Al-Huda teaching and their number is 50.

Data collection Tool:- Questionnaire Organized as research need

Method of data collection:-

Due to the condition in the nation and the governorate, the emergence of the Corona epidemic and the implementation of curfews, the questionnaire was submitted electronically and the nurses and midwives completed the questionnaire, The data collection tool is well Structured interview questionnaire Ethical consideration permission was taken from the hospital administrator and consent from each nurse midwives.

Data analysis:-

All data obtained enter in master flow chart then analyzed using software package program for social science (SPSS 19).

Results

Table (1): Distribution of the study sample according to their some variables

Variables		Frequency	Percentage
1. Age	>25 y	2	4
	25-30 y	2	4
	30-35 y	3	6
	35-40 y	5	10
	40 & above	38	76
	Total	50	100
2. Level of education 3.	Primary	2	4
	Intermediate	6	12
	Secondary	40	80
	University	2	4
	Total	50	100

Cont... Table (1): Distribution of the study sample according to their some variables

4. Years of experience	1-5 y	0	0
	6-10	10	20
	11-15	3	6
	16-20	15	30
	21-25	16	32
	26-30	4	8
	31 & above	2	4
	Total	50	100
5. Training course	Yes	11	22
	No	39	78
	Total	50	100
6. Oxytocin consider is a hormone	yes	12	22
	No	38	76
	Total	50	100

N=50

y= year

Table (1) shows that age 30-35 years 3(6%), 35-40 years 5(10%) and 40 & above frequency 38(76%). Most of the study sample their ages about 40 and above. The level of education are intermediate level 6(12%), secondary level 40 (80%) and university 2 (4%). most of study sample their level is secondary school 38 (76%). The Years of experience are 6-10 years 10 (18%), 11-15 years 3 (6%), 16-20 years 15(30%), 21-25 years 16 (32%), 26-30 years 4(8%) and 31&above two (4%) and shows that (11) 22% receiving training course and 39(78%) did not receive training course. Finally that 12(22%) answered correctly and 38(76%) gave incorrect answer.

Table (2): Practice about the uses of oxytocin drug.

Variables	Uses of oxytocin drug are three	Frequency	Percentage
1. Practices to uses of oxytocin drug a) Induction of labor b) Augmentation of labor c) In the third stage of labor for separation of the placenta and to prevent bleeding)	Gave three correct answer	3	6
	Gave two correct answer	8	16
	Gave only one answer	39	78
2. Practices about complications of oxytocin drug during labor a) Rupture uterus b) Fetal distress c) Precipitate labour 1.	Complications of oxytocin are three	Frequency	Percentage
	Gave three correct answer	3	6
	Gave two correct answer	13	26
	Gave only one answer	36	72
	Total	50	100
3. Practices of Pre administration oxytocin evaluate. a) Pregnancy history and medical history b) Gestational age of fetus c) Estimation of fetal weight d) Fetal presenting part e) Adequacy of pelvis f) Cervical status g) fetal heart sound	Pre administration of oxytocin assessment are 7 points	Frequency	Percent
	Gave one correct answer	12	24
	Gave two correct answer	6	12
	Gave three correct answer	6	12
	Gave four correct answer	8	16
	Gave five correct answer	7	14
	Gave six correct answer	7	14
	Gave seven correct answer	4	8
	4. Practices for administration route of Oxytocin during labor.	Rout administration of oxytocin	Frequency
Intravenous/ in infusion		48	96
Intramuscular		2	4
5. Practices for initial dose of oxytocin infusion.	2 micro units / minutes	Frequency	Percent
	Yes	45	90
	No	5	10
6. Practices for the time to increase the dose of oxytocin infusion during labor in delivery room.	Is after 30 minute from the initial dose.	Frequency	Percent
	yes	47	94
	No	3	6
7. Practices for the time to assess the maternal and fetal condition after start of the initial dose of oxytocin infusion.	Is after 30 minute	Frequency	Percent
	yes	39	78
	No	11	22
8. Practice of the early sign of fetal distress.	Fetal heart sound more than 160 beat per minute	Frequency	Percent
	yes	35	70
	No	15	30
9 Practices and knowledge when to discontinue the oxytocin infusion during labor.	Uterine contractions More-than 5 contractions in 10 mint	Frequency	Percent
	yes	31	62
	No	19	38

Table(2) shows that in point 1 all the study sample 50(100 percent) gave only one correct answer. Point 2 show 9(18 percent) gave three correct answer,4(28 percent) gave two correct answer and 27(54 percent) gave only one correct answer. In point3, the entire study sample gave the correct response, which is infusion/intravenous, to 50 (100 percent). The correct answer was provided by all the study sample of point 4 of 50 (100 percent), which is 2 micro units. Point 5 gave the correct response, 30 minutes from the initial dose, to the entire study sample of 50 (100 percent). The correct response was given by point 6 of the entire study sample 50 (100 percent). The correct answer was provided by all the section 7 study sample of 50 (100 percent). Finally, all of the study sample 50(100 percent) gave the right point 8.

Discussion

- The study found that nursing care procedures during oxytocin infusion administration are not as disclosed as only 2(4%) of the study sample received training course (Table 1 point 4)
- The research sample knew the concept of oxytocin drug with respect to the definition of oxytocin drug only (10 percent) and the reason may be due to a low level of their general education and may not be taught in their nursing or midwifery courses (point 5 T2)
- Oxytocin is a medication used for labor induction, labor increase, if there is no usual progress and also used in the third stage of labor for placenta delivery and vaginal bleeding, the outcome of the study sample's knowledge of the uses of oxytocin drug during labor is, all of the study sample gave only one out of three responses, the average result is 33.3%.
- It also needs close monitoring to evaluate labor progress and detect signs of induction failure if present early but unfortunately the outcome of the study sample's knowledge of complications of oxytocin during labor is low, which is only (18 percent) responding to the three correct responses, (28 percent) providing the correct response out of three and (54 percent) of the study sample providing (point 2 T2)
- Nurse midwives should evaluate the maternal and fetal condition of pre-oxytocin infusion administration by taking medical history and obstetric history to identify possible complications and to estimate the probability of success, as this is an important task for nurse midwives to play. But the result showed that only 7 percent of the study sample replied to the seven correct answers, (10 percent) gave six correct answers, (12 percent) gave five correct answers, (12 percent) gave four correct answers, (14 percent) gave three correct answers, (14 percent) gave two correct answers, (32 percent) gave only one response and the average result i. (point 3 T2)
- There are two routes for oxytocin drug administration during labor infusion and all research sample intravenous (100 percent) they knew the routes of oxytocin drug administration during labor, this finding may be attributable to their everyday practice (point 4T2)
- The initial oxytocin infusion dose is 2 micro units per minute for all research samples(100%) that were conscious of the initial oxytocin infusion dose, and this could be attributable to their everyday practice (point 5 T2).
- All research samples(100%) have complete knowledge of the time taken to raise the dose of oxytocin infusion during labor, which could benefit from their experience (point 6 T2).
- It is very important for the nurse midwives to know the time required to evaluate the maternal and fetal condition during infusion of oxytocin during labor and this is crucial for the early detection of any anomalies and for the prevention of complications, luckily all research samples(100%) knew that (point 7 T2).
- It is very important for nurse midwives to know the early sign of fetal distress, which is the fetal pulse, to sound more than 160 beats per minute in order to prevent risks and complications, and it is a positive result that all research samples(100%) are aware of that. point 8 T2
- It is important for nurse midwives to know when to stop the infusion of oxytocin during childbirth

in order to avoid mother and fetus complications, and it is good that all research samples (100 percent) know when to stop the infusion of oxytocin during labor (point 9 T2).

Conclusions

The researchers concluded from the results of the analysis that most of the study sample had a significant deficiency in the Practices on Oxytocin Drug Use in Labor, Practices on Oxytocin Drug Complications in Labor, and Practices on Mother and Fetus Evaluation Pre-administration of Oxytocin Infusion. On the other hand, both nurse midwives had 100% Practices on the route of oxytocin drug administration, the initial dose of oxytocin infusion, Practices on the period required to raise the dose of oxytocin infusion, Practices on the time after the start of the initial dose of oxytocin infusion to determine the maternal and fetal state, the early sign of fetal distress and when to discontinue the oxytocin infusion during labor

Recommendations:

1-Provide procedural instructions or procedures to the units, which should be followed by workers in the labor room.

2-Provide in-service training programs or seminars to provide information and practice to nurse midwives regarding the administration of oxytocin drugs during childbirth.

3-A trained supervisor should be given in the labor room.

4-Encourage the research sample to update itself by searching and reading.

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Conflict of Interest: None to declare.

Ethical Clearance: "All experimental protocols were approved under the College of Nursing were carried out in accordance with approved guidelines".

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