The NATIONAL RIBAT UNIVERSITY

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Assessment of the Nurses midwives Knowledge and Practice Regarding Care of the Second and third stages of Labor in The national Ribat Hospital 2016 (Sudan).

A thesis submitted for Requirements of the Master Degree of M.sc in Obstetric and Gynecological Nursing

By

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الآيـــــة

قال تعالي :

{قَالُواْ سُبْحَانَكَ لاَ عِلْمَ لَنَا إِلاَّ مَا عَلَّمْتَنَا
إِنَّكَ أَنتَ الْعَلِيمُ الْحَكِيمُ}

صدق الله العظيم
البقرة الآية (32)

Dedication

TO MY PARENTS

May ALLAH rest them in heaven and be

Merciful to them as they are to my childhood. My grateful thanks to my brother and sister who helped me through my life and much through my under graduate & post graduate studies. My grateful thanks

Acknowledgement

All thanks to Allah from start to end.

I would like to thank the national Rribat University for giving me this opportunity to continue my post -graduate education

I am deeply indebted and grateful to my supervisor

Dr. Siddig Alrawa for his tireless support and advices from the beginning to the end of this study I hope following student will profit from your knowledge and wisdom , also I would like to thanks Dr. saida Abd Elmageed for her grateful help and support during this study . My endless thanks to the administrative of obstetrical and gynecological department in AL ribat University Hospital and Nurse midwives for their cooperation during the data collection. I would like to extend my thanks to all those who have helped me, throughout the preparation of this research I would like to thanks my supervisor

My special grateful thanks are extended to Dr. Saida Abd Elmageed for her great help and endless positive advice. Finally I would like to extend my great thank to all who contributed To made this piece of work. Special thank to the head nurse in al ribat university Hospital who made this work to come out and reach the end.

Abstract

Objective: To assess the nurses-midwives' knowledge and practices regarding the management of second and 3rd stage of labor and to find out the association between their knowledge and practices and socio-demographic characteristics and working years and experience.

Material and methods : A descriptive study was carried out from 2013, to 2016 through total coverage sample of (75) Nurse-Midwives which was from the National Ribat University hospitals. A questionnaire was consisted of two parts: (socio-demographic characteristics and the assessment tool for Nurse-Midwives' knowledge and health practices performed by Nurse-Midwives). The correlation coefficient was (0.90) for knowledge and (0.83) for practices.
Data were collected through interview and observational tool and analyzed through the application of descriptive and inferential statistical approaches.

Results: The study findings indicated that there was a high mean of scores in Nurse-Midwives' knowledge 69.3%regardingfetal sound heart (FSH) and knowledgeable regarding **gown before delivery was 93% and 77.3% of the participants was knowledgeable** regarding

checks the placental lobe: and a low mean of scores for their practices in 80% of the participant was not knowledgeable regarding **Wipe the baby face immediately after delivery of the head**. The study findings also indicated that there is a significant association between nurses-midwives' practices and their educational level, and birth number average. highly significant difference between participants' Practices regarding 2^{nd} and 3^{rd} stages of labor and their educational level and birth number average. **Recommendations:** The study recommends that; educational program for Nurse-Midwives to upgrade the techniques necessary to assess, evaluate and improve the quality of care rendered to laboring women, to emphasis on the Ministry of Health to conduct training course for the Nurse-Midwives in order to change their malpractices and updating their knowledge with regular supervision on their performance

الخلاصة

تقييم معارف وممارسات الممرضات–القابلات فيما يتعلق بالعناية خلال الدورالثاني والثالث للولادة

الهدف :تقييم معارف وممارسات الممرضات–القابلات فيما يتعلق بالعناية خلال الدورالثاني والثالث للولادة وإيجاد العلاقة بين معارف وممارسات الممرضات -القابلات خلال الدور الثاني والثالث للولادة والمتغيرات الديموغرافية الاجتماعية وسنوات العمل والخبرة.

المنهجية :دراسة وصفية أجريت خلال المدّ ة من **2013** ولغاية **2016** . تكونت عينة البحث من ٧٥ ممرضة –قابلة تم اختيارهن بصورة التغطية الكاملة من مستشفيى الرباط الجامعى في مدينةالخرطوم . عن طريق الاستبيان بواسطة اسئلة تكونت من جزءين) المعلومات الديموغرافية وأداة تقييم معارف الممرضات -القابلات والممارسات التي قمن بها .(تم تحديد ثبات ومصداقية الاستمارة من خلال العينة الاستطلاعية وحلل الاستبيان بالكمبيوتر بواسطة الحزم الاحصائية .(تم جمع العيّنة من خلال المقابلة فيما يتعلق بالمعلومات والملاحظة فيما يتعلق بالممارسات .كما تم تحليل النتائج باستعمال الإجراءات الإحصائية الوصفية والاستنتاجية. **النتائج** :أشارت نتائج الدراسة إلى وجود متوسطات عالية في معارف الممرضات -القابلات 69.3% فى مايخص قياس نبضات قلب الجنين ام لبس المريلة اثناء الولادة فكان **93% كان مفهوم الممرضات عن فحص الحبل السرى 77.3%اما مفهوم تنظيف وجه الجنين كان 20%**ومتوسطات متدنية في الممارسات فيما يخص الدورالثاني والثالث للولادة. كما بينت النتائج وجود علاقة ذات دلالة إحصائية بين ممارسات الممرضات -القابلات والتحصيل الدراسي **التوصيات** : اوصت الباحثة بضرورة تقديم برنامج تعليمي للممرضات–القابلات لرفع تقنياتهن الضرورية لتقييم وتقويم وتحسين نوعية العناية المقد مة للماخض، واتوصية الى وزارة الصحة لإقامة دورات تدريبية مستمرة لغرض تغيير الممارسات الخاطئة بممارسات صحيحة وتحديث معلوماتهن مع الإشراف المستمر على أدائهن.

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Introduction

1.1. Background:

Maternal morbidity and mortality have been a major issue for decades, despite different avenues and programmers created to reduce it; the rate of improvement remains slow. Hemorrhage being the leading cause can be prevented if every second stage and third stage of labour is actively managed. Maternal mortality due to haemorrhage is highest where there is poor access to skilled providers, transport systems, and emergency services. Globally, obstetric haemorrhage constitutes 31% of maternal death, of which 99% of these deaths occurs as primary post partum haemorrhage (PPH) (1). In Nigeria, 1 in 20 women die of pregnancy/delivery related causes, compared to 1 in 61 for all developing countries and 1 in 29,800 for developed country. PPH is responsible for around 25% of maternal mortality worldwide (2), reaching as high as 60% in some countries. World Health Organization report in 2005 estimated that 14 million women suffer PPH annually. This is not surprising considering that a woman will die within two hours, on average, after the onset of PPH if she does not receive proper treatment (2). Africa has the highest prevalence rate of about 10.5% of maternal mortality (3). PPH is most commonly caused by uterine atony (4) and retained placenta due to mismanagement (5).

Observation during the second and 3rd stages of labor that midwife should be carefully observed includes: .Uterine contraction (strength, length, frequency of contraction).descent, rotation an flexion of the fetal head. Fetal condition: fetal heart sound, fetal movement, Suspicious/ pathological changes in the fetal heart late decelerations, Maternal condition: the midwives observation includes appraisal of mother ability to cope emotionally as well as an assessment of her physical well being. Maternal pulse rate is usually recorded every half an hour and blood pressure every hour.-during the birth both mother and fetus are particularly vulnerable to infection meticulous a septic technique must be observed, preparing sterile equipment such as episiotomy scissors. Surgical gloves should be worn during birth for the protection both mother and midwives (6).

1.2. Problems Statement:

During labor and delivery, the Nurse–Midwives should administer a sensitive and appropriate care, based on the particular needs of the client and her family. They require two fold effort to assess labor progress and use personal skills to assess the client and family's needs during this physically and emotionally stressful time. The aim of the care in normal birth is to achieve a healthy mother and fetus with least possible level of interventions that is compatible with the safety (7).

Human labor is surprisingly hazardous. Evolution ought to favor those mothers who deliver without problems and yet, for those without access to good medical care, the lifetime risk of dying from labor may be 10% or more (8).

Nurses can help the nation to achieve these goals by closely monitoring women during labor and birth and by teaching women as much as possible about labor, so that they are able to use as little analgesia and anesthesia as possible (9).

An estimated 358,000 maternal deaths occurred worldwide in 2008. This means that each day about thousand women die worldwide because of complications related to pregnancy and childbirth. Developing countries account for 99% of the deaths. Two regions, Sub-Saharan Africa and South Asia accounted for 87% of global maternal deaths.[10] In 2008 India had an MMR of 230 and ranked 166th among 171 countries for which estimates were available.[11]

Bleeding after childbirth, postpartum haemorrhage is an important cause of maternal mortality, accounting for nearly one quarter of all maternal deaths worldwide. Atonic postpartum haemorrhage is the most common cause of postpartum haemorrhage and the leading cause of maternal death. One intervention that has been promoted as an effective intervention in preventing atonic Postpartum haemorrhage is the active management of the third stage of labour.[12]

1-3 Justification:

Birth is a risky for the mothers and babies too. The complications that cause the deaths and disabilities for mothers also damage the infants they are carrying. These perinatal and eonatal deaths are largely the result of the same factors that cause the deaths and disabilities for mothers (13). Human birth is a normal physiological process and as such should not be life threatening to the women who experience it. However, in developing countries where

pregnancy is complicated by the harsh realities of malnutrition, poverty and the disease associated with them, giving birth dire consequences for mother and child. As a result of child birth, half a million women worldwide die annually (14).

All women and babies need maternity care in pregnancy, childbirth and after delivery to ensure optimal pregnancy outcomes. Although all women and babies need pregnancy care, care in childbirth is most important for the survival of pregnant women and their babies.[15.] The investigator tries to highlight the Nurse-Midwives role in the delivery room toward Knowledge and practice of the second and third stages of labor.

1-4 Objectives:

1-4-1 General Objective:

- To study nurses midwives knowledge and practice regarding management of second and third stage of labor during 2014-2016 in Ribat University hospital.

1-4-2 specific Objectives:

To assess the Nurse–Midwives' Knowledge throughout the 2nd stage 3rd stage of labor.
To evaluate their Practices during the of procedure in the second and third stage of labor.
To find out the relationship between nurses–midwives' knowledge and practices and certain variables such as age, educational level, marital status, experience in delivery room

Literature Review

Parturition or labor is a physiological process during which the products of conception that is the fetus, membranes, umbilical cord and placenta, are expelled outside of the uterus. Labour is achieved with changes in the biochemical connective tissue and with gradual effacement and dilatation of the uterine cervix as a result of rhythmic uterine contractions of sufficient frequency, intensity, and duration (16).

Labour is divided into four stages. The first stage starts from the onset of true labour pains and ends with full dilatation of the cervix. The second stage starts from the full dilatation of cervix and ends with expulsion of the fetus from the birth canal. The third stage begins after the expulsion of fetus and ends with expulsion of the placenta and membranes. The fourth stage is the stage of early recover; it begins after the expulsion of placenta and membranes and lasts for one hour (17).

The third stage of labour usually lasts between five and 15 minutes, but any duration up to one hour may be within normal limits (18). This period is considered to be the most hazardous stage for the birthing woman due to the risk of profuse hemorrhage (19).

The major complication associated with this stage is postpartum hemorrhage (PPH), PPH is generally defined as blood loss greater than or equal to 500 ml within 24 hours after birth, while in severe condition blood loss is greater than or equal to 1000 ml within 24 hours (20). Postpartum hemorrhage (PPH) is a major cause of maternal mortality and morbidity, particularly in developing countries, where most pregnancy-related deaths are associated with hemorrhage (21). is regarded as secondary PPH. It may result from failure of the uterus to contract adequately (atony This period is considered to be the most hazardous stage for the birthing woman due to the risk of profuse hemorrhage (22).

The major complication associated with this stage is postpartum hemorrhage (PPH), PPH is generally defined as blood loss greater than or equal to 500 ml within 24 hours after birth, while in severe condition blood loss is greater than or equal to 1000 ml within 24 hours (20). Postpartum hemorrhage (PPH) is a major cause of maternal mortality and morbidity, particularly in developing countries, where most pregnancy-related deaths are associated with hemorrhage (21).

Most such deaths occur because of insufficient uterine contraction soon after birth. In most of the cases morbidity and mortality due to PPH occur in the first 24 hours following delivery and these are regarded as primary whereas any abnormal or excessive bleeding from the birth canal occurring between 24 hours and 12 weeks postnatal), Uterine atony is

the most common cause and consequently the leading cause of maternal mortality worldwide (22).

Every year, more than 200 million women become pregnant. Most pregnancies end with the birth of a live baby to a healthy mother. For some, however, childbirth is not the joyous event; it is a time of pain, fear, suffering and even death. Because of difficulties associated with human birth, women often require assistance during delivery. Childbirth may be surrounded by traditions, many of which are beneficial, but others may be harmful (23). Birth is a risky event for babies too. The complications that cause the deaths and disabilities for mothers also damage the infants they are carrying. These perinatal and neonatal deaths are largely the result of the same factors that cause the deaths and disabilities for mothers (2).

The risks of adverse outcome in mother and baby are usually highest during the intrapartum period. Even though health experts have long appreciated this fact, prioritization of this element of safe motherhood is comparatively recent. Much has been written both on this shift in emphasis and on the underlying rational, as well as on what skilled attendance at delivery should comprise (6).

2-1: Definition of the second and third stages of labor

The second stage of labor has been regarded as the phase between full dilatation of the cervical oss and the birth of the baby. The third stage of labour which, starts immediately after the infant is born, includes the separation and detachment of the placenta from the uterine wall, and ends with complete expulsion of the placenta and membrane. This period is considered to be the most hazardous stage for the birthing woman due to the risk of profuse hemorrhage. Severe bleeding is the single most important cause of maternal deaths worldwide. Over 90% of women who die of postpartum hemorrhage, the most important cause is uterine atony, occurrence of hemorrhage caused by uterine atony by 60%. Most midwives an laboring woman area aware of transitional period between dilatation, or it's the time when active maternal pushing effort being. This period is characterize by maternal restlessness, discomfort, desire for pain relief sense that the process is demands to attendant to get the birth as quickly as possible. The onset of the second stage of labor is confirmed by vaginal examination to check for full service dilatation. -Uterine action: in the second stage of labor contraction become strong and longer but may be less frequent allowing both mother and fetus regular recovery period, the membrane often rupture spontaneously towards the end of the first stage ordering transition to second stage (13). The consequent

drainage of liquor allows the hard round fetal head to be directly applied to the vaginal tissue. This presser aids distension our fetal axis pressure increase flexion of the head and result in smaller presenting diameters, more rapid progress and less trauma to both mother and fetus. The contraction become expulsive as fetus descent into the vagina, pressure from the presenting part stimulate nerve receptors in the pelvic floor and women experiences the need to push (3).

2-2 Soft tissue displacement:

As the hard fetal head descends the soft tissue of the pelvis become displaced: and interiorly the bladder is pushed up ward into the abdomen where it is at less risk of injury during fetal descent. This results in the stretching an thinning of the urethra so that its lumen is reduced.

- Posterioly the rectum becomes flattened in to the sacral curve and the pressure of the advancing head expels any residual fecal matter. The lavatory any muscles dilate thin out an are displaced laterally and the perinal body is flattened stretchedan thinned (1).

- The fetal head become visible at the vulva advancing with each contraction and receding between contraction until crowning takes place. The head is then born , the shoulders and body follow with next contraction accompanied by a gush of amniotic fluid andsome time of blood. The second stage culminate in the birth of the baby(1).

2-3 duration of the second stage :

Once a women has reached the transition stage of labour she should not be left without a midwife in attendance, accurate observation of progress and maternal response is vital for the expected can always happen, the time to complete the second stage will vary considerably (2)

2-4. Midwifery care:

Care for parents:-

The couple will now realize that birth of their baby is imminent, they may feel excited and elated but at the same time anxious and frightened by dramatic change in place.

The midwife's calm approach an information about what is happening, can ensure the women stays in control and confident of her ability to birth her baby(3)

Thorough out transition and the second stage of labour the woman and her companion will need frequent explanations of events, the midwife should praiseand recognizing that she is probably under taking the most extreme physical activity she will ever encounter(1).

Also the midwifes should work hard to ensure that privacy and dignity key component of the wonk's birth experience also she needs to support the owner with massage with appropriate nutrition and with suggestion for charge of position and of scenery to each woman and her labor. The midwife should also have regard to well being of woman's partner and other companion as far as possible an recognize that witnessing birth is emotionally taxing. The midwife attitude to labor and to the partner will have a profound effect on labor and is likely to have an effect on family after the birth(3).

2-5. Observation during 2n stage of labor:

Five factor determine whether the second stage of is continuing Optimally an these must be carefully observed:

(i) Uterine contraction: the strength, length and frequency of contraction should be assessed continually by observation the material response an gradually by uterine palpation, they are usually stronger an longer.

(ii) descent, rotation and flexion:

• Initially: descent occurs slowly specially in primigravida.

• But accelerate during the active phase. it may occur very rapidly in multigravid woman. If the descend is progressive it should not be necessary for the midwife to undertake a vaginal examination but if there is delay in progress despite regular strong contraction and active maternal pushing, a vaginal examination may be performed with maternal permission.

• The purpose is to confirmed whether or not internal rotation of the presenting part and to determine a caput succedaneum has formed if the occipit has not rotated anteriorlly(3).

• The head is well flexed and caput succedaneum is not excessive then it is likely progress will continue in the absent of goo rotation an flexion or both then a change of position, nutrition and hydration, or use of optimal fetal positioning technique may be consider consultation with amore experience midwife may provide .

(iii) Fetal condition: the midwife should observe the liquor amini if it is clear where as thin old meconium staining is not always regarded as assign of fetal compromise. Thick fresh meconium is always ominous, as the fetus descents fetal oxygenation may be deficient owning either to cord or head compression or to reduced perfusion at the placental site.

A well - growth, healthy fetus will not be compromise in early decelerations by this transitory Hypoxia, this will tend to manifest in early deceleration of fetal heart with a café return to the normal base line after contraction.(4)

IV) Suspicious / pathological change in fetal heart:

- Late declaration a lack of return to the normal base line, arising base line or diminishing beat to beat variation remain signs of concern if these are heard for the first time in second stage, they may be due to cord compression which may be helped by change in position.

Midwives who are trained an experience episiotomy may' be considered if the birth is imminent.)

(iv) Maternal condition:

The midwife's observation includes an appraisal of mother's ability to cope emotionally as well as assessment of her physical wellbeing maternal pulse rate usually recorded every half hour and blood pressure every hour provided that these remain within normal limits(l) .

2-6. Bladder care:

As the fetus descents into the pelvis the bladder is particularly vulnerable to damage from the pressure of advancing head. The bladder passmay become compressed between the pelvic brim and fetal head, the risk of trauma is greatly increase if the bladder is distended the woman should be encourage to pass urine at beginning of the second stage(4).

2-7. Preparation of the birth:

Once the active pushing phase iS entered into, the midwife makes

Preliminary preparation for the birth:-

- The room in which the birth is take place should be worm with spotlight

a available so that prenium can be easily observed if necessary.

A clean area should be prepared to receive the baby and water proof covers provided to protect the bed and floor. (3)

- Sterile cord clamp, a plastic a porn an sterile rubber gloves are placed to hand. Autertonic agent maybe prepared either in readiness for the active management of the third stage if this is acceptable to the woman or for use during the emergency. The dose and drug should be checked by a second person an it must be kept and separated from any neonatal drugs such as Vitamin K to avoid risk 'of error.
- A warm cot and clothes should be prepare for the baby in hospital a heated matters may be use to at home a worm water bottle can be place in the cot(l).

Neonatal resuscitation equipment must be thoroughly checked readily
accessible an should include portable or pipe oxygen equipment(3).

Maternal birthing positions:

The upright posture for birth was considered normal in most societies.

Women chose to squat, kneel, stand, or sit for birth the recumbent position (lithotomy) become more usual in western world because of the convenience it offers in applying technology. The lithotomy position has thus become the conventional manner in which the American women give birth in hospitals. The woman is typically positioned for birth on be with leg supports in squatting position. If a birthing be the back is elevate 30 to 60 degree, to help the women bear down stirrups if needed an use padded to avoid pressure.(2)

2-8. Position during labor:-

Position	**Advantage**	**disadvantages**
1) Setting on birthing: stool	Gravity aids descent and expulsion of infant. Doesn't compromise venousreturn from lower extremities. Woman can View birth Process	It IS difficult to provide support the woman back
2) Semi fowler's	dose not compromise venous return from lower extremities woman can View birth process	If the leg are positioned wide relaxation of pei tissue decrease
3) Left lateral Sims	doesn't compromise venous return from lower extremities - increase perinea relaxation - decrease need for Episiotomy. Appears to prevent rapid descent.	It is difficult f mother to see process.
4) Setting in birth bed	- Gravity aids decent and expulsion of fetus. - Women can View birth process. -Leg position may be changed as will. Not compromise venousreturn to the lower limb	
5) Han and knee	Increase perineal relaxation -	

	And decrease need for episiotomy. - Increase placental and umbilical blood flow. - decrease fetal distress - improve fetal rotation. - Better able assess the perineum - better access to fetal nose and mouth for suction at birth. - Facilitate birth of infant with shoulder dystocia	

2-9: Cleansing the premium:

After the woman has been positioned for the birth her vulua and pernial area are cleaned to increase her comfort and to remove any bloody discharge. Perineal cleansing method range from use of soapy water to aseptic technique. Once the cleansing complete the woman returns to desired birth position (4)

2-10. Continued labor support:

Both woman's parts and the nurse who has been with the woman. During the labor continue to provide support during contraction, the woman encourage to push with each contraction an as the fetal head emerges is ask to take shallow breaths or top pant to prevent pushing, while supporting the head. Nurse midwife assess whether the umbilical cord around the fetal neck and remove it if it is then suction the mouth and nose with bulb syringe. The mouth is suctioned first to prevent reflex inhalation of mucus, when the nostrils are touched with bulb syringe tip. The woman is encourage to push again as the rest of body new born is born (l).

2-11. the timing of the incision:

An episiotomy involves incision of the four chette the superficial muscle an skin of the perineum and the posterior vaginal wall. It can therefore successfully speed the birth only when presenting part is directly applied to these tissues. If the episiotomy is performed too

early it will fail to release the presenting part and hemorrhage from cut vessels may ensue. In addition the levator and muscles will not have had time to be displace laterally and may be incised as well. If formed too late - there will not be enough time to infiltrate with a local anesthetic there also reason for superimposing an epistomy if a tear has already begun(1).

2-12. Types of incision:

Mediolateral: this begins at the midpoint of the fourchettean is directed at 45° angle to midline to war a point b/w the dschial tuberosity and the anus this line avoids the anger of damage to both the anal sphincterandbartholin's gland but it is the more difficult to repair this is the incision largely use by midwives(3).

Median: this is a midline incision that flows the natural line of insertion of the perineal muscles it is associate with reduced blood loss buta higher incidence of damage to the anal spincter. It is the easier to repair and result in less pain and dyspareunia(l).

2-13. Procedure of episiotomy:

Infiltration of perineum: the perneum should be adequately Anaesthetized prior to incision liodcine is commonly use either 0.5% l0ml or 0.5ml. the advantage of the more concentrate solution is that a smaller volume is needed. It talks 3-4 minutes to have an effect if possible two or three contraction should be allowed to occur b/w infiltration and incision. The timing is not always easy to calculate but it is better to infiltrate and not perform an episiotomy than to incised the perineum without effective local anathetic(2) .

Method of infiltration: the perineum is cleanse with antiseptic solution, two fingers are inserted into the vagina a long the line of the propose incision in order to protect the fetal head. The needle is inserted beneath the skin for 4-5cm following the same line.(1)

The piston of the syringe should be withdrawn prior to injection to check whether the needle is in a blood vessels. If blood is a aspirated the needle should be repositioned and the procedure repeated until no blood iswith drawn. Lidocaine is continuously injected needle is slowly with drown(l). -'

2-14. The incision of episiotomy :-

A straight blaqed, blunt ended pair of Mayo scissor is usually use.

The blades should be sharp to ensure a clean incision. Some practitioners prefer to use a scalpel for this reason. Two finger are inserted into the vagina as before and the open blades are positioned. The incision is best made during a contraction when the tissue arestretched so that there is a clear view of the area and bleeding is less.

Likely be sever. A single deliberate cut 4-5cm long is made at the correct angle. Birth of the head should follow immediately and its advance must controlled in order to avoid extension of the episiotomy. If there is any delay before the head emerges, pressure should be applied to the episiotomy site b/w contraction in order to minimize bleeding. Post hemorrhage can occur from an episiotomy site unless bleeding points are compressed. (2)

2-15. Initial Care of newborn:

Care of the baby in the third stage of labour includes clearing of airway, APGAR rating, birth kangaroo care that is initiation of skin to skin contact of the mother and the baby immediately after birth that helps in early initiation of breastfeeding, early separation of placenta, and mother and infant bonding.

Mothers and babies should be together, in skin to skin contact immediately after birth. The baby is happier, the baby's temperature is more stable, the baby's

heart and breathing rates are more stable and more normal, and the baby's blood sugar is more elevated. Not only that, skin to skin contacts immediately after birth allows the baby to be colonized by the same bacteria as the mother and are thought to be important in the prevention of allergic diseases. When a baby is put into an incubator, his skin and gut are often colonized by bacteria different from his mother's.[24]

Skin to skin contact in the third stage also benefits the mother ,massage of the breast by the baby induces a large oxytocin surge from the mother's pituitary gland into her bloodstream. Close emotional interaction coupled with cutaneous, visual and auditory stimuli from the baby when placed in prone position in skin to skin contact also help oxytocin release. This oxytocin helps to contract the uterus, expelling the placenta and closing off many blood vessels in the uterus, thus reducing blood loss and preventing anaemia. Pressure of the infant's feet on the abdomen may also assist in expelling the placenta.[25]

In third stage the midwives and the mother may be relaxed with the safe arrival of baby and lured to a false sense of security however complications may arise in this stage and hence skilled care must be provided to both the mother and baby to avoid complications.

Care of the baby in the third stage of labour includes clearing of airway, APGAR rating, birth kangaroo care that is initiation of skin to skin contact of the mother and the baby immediately after birth that helps in early initiation of breastfeeding, early separation of placenta, and mother and infant bonding. Mothers and babies should be together, in skin to skin contact immediately after birth. The baby is happier, the baby's temperature is more stable, the baby's heart and breathing rates are more stable and more normal, and the baby's blood sugar is more elevated. Not only that, skin to skin contacts immediately after birth allows the baby to be colonized by the same bacteria as the mother and are thought to be important in the prevention of allergic diseases. When a baby is put into an incubator, his skin and gut are often colonized by bacteria different from his mother's.[25]

Studies have shown that during skin to skin contact immediately after birth, newborns have better temperature regulation , higher blood sugars, lowers breathing rates and less crying ,compared to babies who are separated and wrapped. One study shows that newborns who had enjoyed early skin to skin contact had warmer hands and feet – a sign of lower levels of stress hormones upto two days later. Skin to skin contact also benefits the mother who releases high levels of oxytocin which helps the uterus to contract and heps in preventing excessive bleeding.[26]

A descriptive study was conducted to determine whether breastfeeding behaviors, skin temperature, and blood glucose values could be influenced through the use of kangaroo care at the time of birth in healthy full term infants . Nine full term neonates were given kangaroo care beginning within 1 minute of birth. Infant skin temperature was taken at 1 and 5 minutes after birth and every 15 minutes thereafter. Blood glucose level was taken 60 minutes after birth and breastfeeding behaviour were observed during the first breastfeeding. Skin temperature rose during birth kangaroo care in eight of the nine infants, and temperature remained within neutral thermal zone for all infants. Blood glucose levels varied between 43 and 85 mg/dL for infants who had not already fed and between 43 and 118 mg/dL for those who had fed. Physicians noted that mothers were distracted from episiotomy or laceration repair discomfort during birth kangaroo care[27]

2-17 . Care of Umbilical cord:

- The midwife place some type of cord clamp on the newborn's umbilical cord. Before applying the cord, examine the cut end of the cord for the presence of two arteries and one vein. The umbilical vein is largest vessel, and the arteries are seen as smaller vessels. Record the number of vessel on the birth an newborn records. The cord is clamped. Approximately -: 0,5- 1 inch from the abdomen to allow room between the abdomen an clamp as the cord dries. abdomen skin must not be clamped because this will cause necrosis of tissue. The most common type of cord clamp is the plastic Hollister cord clamp. It is remove in the nursery about 24 hour after the cord has deride (2).

Newborn identification: - Place two identification band on new born- one on the wrist and one on the ankle. The band must fit snugly so, they will not be lost. To ensure a correct identification, while still in the birthing or delivery room, give the mother and her partner

each band that of baby, the bans allow access to the infant care area an must not until the infant is discharge. Some facilitate new use an umbilical cord clamp that includes an infant security alarm, the cord clamp an alarm are left in place until the mother and baby discharge home.

- Additional hospital security measure are now common place in maternity sitting, this includes mandating that all staff wear appropriate identification at all time. Parents are instructed that individuals without appropriate identification should not be allowed toremove their infant under any circumstance. The nurse also advicesthe parent to place the infant on the side of the bed away from the window and to have the baby returned to nursery when ear the mothernaps showers and no other family member is resent (3).

2-18-1 Episiotomy:

As the perineum distends adecision to under take an episiotomy may very occasionally be necessary. This is an incision through the perineal tissues that is designed to enlarge the vulval out let during delivery.

As this is a surgical incision it is essential that the mother givesconsent prior to procedure. Adetailed discussion should be take place during pregnancy so that each woman is aware of the indications for and implication of intervention. She should be assure that it is selective and discretional. 'The mother's personal wishes for care should be clearly documentedan respected. The risks benefits of episiotomy have been well reviewed. The rationale for its use depended largely on the need to minimize the risk of severe spontaneous, maternal trauma and to expedited the birth when there is evidence of fetal compromise(l).

2-19. Separation and descent of the placenta:

The unique characteristic of uterine muscle lies in its pouter of retraction - during the second stage of labour the cavity progressively empties, enable the refraction process to accelerate. Thus by the beginning of the third stage the placenta site has all reading begun to diminish in size – as this occurs the placenta its self become compressed and the blood in intravenous space is forced back into the spongy layer of the deciduas(1).

Refraction of oblique uterine muscle fiber exerts pressure of blood resells so that the blood dose not drain back into the maternal system.

The resells during this process become tense an congested with the next contraction the distended veins burst an a small amount of blood seeps in between the thin septa of the sponge layer an placental surface stripping it is attachment for Separation usually begging

centrally so that retro placenta clot is formed. This may father aid separation of by exerting pressure at the midpoint of placental attachment so that increased weight helps to strips the adherent lateral borders. This increase weight also helps to peel the members off the uterine wall so that the clot thus formed become enclosed in a membranous bag as the placenta descends fetal surface first this process of separation is associate with more complete shearing of both placenta and membranes an less fluid loss (2).

Alternatively the placenta may begin to detach unevenly atone of its lateral border. The blood escapes so that sprat ion is unaided by the formation of a retro placental clot. The placenta descends, slipping sideways maternal surface first this process takes longer an is associate with ragged in complete expulsion of the membranes an a higher fluid blood loss. Once separation has occurred the uterus contracts strongly forcing placenta an membranes to fall into the lower segment an finally into the vagina (l)

2-20. delivery of the placenta:

After birth the nurse midwives prepares for the delivery of placenta the

• following signs suggests placental separation:

1) The uterus rises upward in the abdomen.

2) As placenta moves down word the umbilical cord lengthens.

3) Sudden trickle of blood appear.

4) The shape of the uterus changes from a disk to a globe (3) While waiting for these signs palpate the uterus to check for ballooning cause by uterine relaxation and subsequent bleeding in to the uterine cavity after the placenta has separate the woman may be asked to bear down to aide delivery of placenta (l).

Oxyotocin are frequently given at the time of the delivery of the placenta, so the uterus will contract an bleeding will be minimize, oxytocin 10 to 20 units may be given intravenous (iv) infusion 10uni may be given intramuscular (1).

In addition to assess and record maternal blood pressure before and after administration of oxytocins. After expulsion of placenta the midwife inspect the placental members to make sure they are intact and that all cotyleons are present. If there is a defect or apart missing from the placenta, a manual uterine examination is one, the midwife record the time of the delivery of the placenta. After the expelled inspects the vagina an cervix for laceration an make any necessary repaired. The episiotomy may be repaired if it has not been one previously(3).

2-21. Nursing care of the second and third stage of labor:-

2-22. second stage of labor:

In 1998, the Association of Women's Health, Obstetrics, and Neonatal Nurses (AWHONN) published the Nursing Management of the Second Stage of Labor Evidence-Based Clinical Practice Guideline as an outgrowth of 2 years of research. The guideline is not a standard of care. As a result, management of the second stage of labor has developed into a more open management that requires the woman to be prepared to go through the second stage of labor. For this to occur, the woman should receive the following information: (1) realistic estimation of duration of second-stage labor; (2) variety of sensations the woman may experience; (3) delayed and non directed pushing techniques; (4) positions the woman might assume (sitting, kneeling, squatting, or standing); (5) benefits of support persons present during labor and delivery. The biggest focus during the second stage of labor are on positioning and pushing.

Positioning

During the second stage of labor the upright position is the preferred position with the head of the bed â‰¥ 45 degrees (eg, squatting, standing, upright kneeling, side-lying, knee-chest, and forward lean accompanied by a pelvic tilt). If the woman cannot tolerate or maintain an upright position, a lateral position can be used. Benefits of the upright position include:

Increased pelvic diameter by as much as 30%.

Decreased duration of the second stage of labor.

Reduced intensity of pain and discomfort during the second stage of labor. Decreased perineal trauma (if pelvis and perineum given adequate support). Pushing Techniques

Pushing techniques can be either (1) delayed or (2) nondirected.

Delayed pushing waiting for fetal descent or initiation of Ferguson's reflex before pushing begins (ie, not pushing until the urge is felt even with complete cervical dilatation). The Ferguson's reflex is a physiologic response that is activated when the presenting part of the fetus is at least at a +1 station and is usually accompanied by spontaneous bearing-down efforts. Delayed pushing can be used with epidural anesthesia/analgesia as women cannot feel the urge to push.

Clinical practice recommends assessing women's knowledge of pushing techniques to include presence of Ferguson's reflex.

Also referred to as â€œlaboring down, œpassive pushing, and œrest and descend. • Nondirected pushing â€” use of nontraditional pushing techniques such as open glottis or â€œtug-of-warâ€ • techniques.

Open glottis pushing for 4 to 6 seconds followed by slight exhaling (essentially pushing while exhaling/grunting) and repeating this pattern for 5 or 6 pushes/uterine contraction. There is minimal change in maternal blood pressure, thus minimal, if any, change in the FHR pattern. This method also relaxes the perineum, allowing the gentle delivery of the fetal head. Closed glottis pushing (holding breath for the count of 10) is not recommended.

Nursing Diagnoses

Fear or Anxiety related to impending delivery

Acute Pain related to descent of the fetus

Risk for Infection related to episiotomy and tissue trauma

Nursing Interventions

Minimizing Fear and Anxiety

Monitor maternal vital signs as follows:

Blood pressure every 5 to 15 minutes depending on the woman's status.

Pulse and respirations every 15 to 30 minutes.

Temperature every 1 hour when membranes have ruptured.

Monitor FHR and uterine contractions every 15 minutes in low-risk women and every 5 minutes in high-risk women.

Early decelerations and some fetal bradycardia may occur due to head compression.

There is normally no loss of variability during pushing.

Contractions may become less frequent, but intensity does not decrease.

Explain procedures and equipment during pushing and delivery.

Keep the woman or couple informed of their status.

Provide frequent, positive encouragement.

Use of a mirror usually allows the woman to see her progress.

Assist with positioning and pushing as outlined above.

Promoting Comfort.

Assist the woman to a comfortable position.

Left or right lateral, squatting, hand and knees, or semisitting positions may be used.

Assist the woman with pulling her legs back so her knees are flexed.

Teach the woman to put her chin to her chest so her body forms a shape while pushing.

Evaluate bladder fullness, and encourage voiding or catheterize as needed.

Evaluate effectiveness of anesthesia as indicated.

Preventing Infection and Promoting Safety

Prepare the birthing room or delivery room using aseptic technique, allowing ample time for setup before delivery.

Prepare the infant resuscitation area for delivery.

Prepare necessary items for neonatal care.

Notify necessary personnel to prepare for delivery.

If delivery room is to be used, transfer the primigravida to the delivery room when the fetal head is crowning. The multigravida is taken earlier depending on fetal size and speed of fetal descent.

Place all side rails up before moving. Instruct the woman to keep her hands off the rails, and move from the bed to the delivery table between contractions.

If delivering in LDR (Labor, Delivery, Recovery) or LDRP (Labor, Delivery, Recovery, Postpartum) room, prepare labor bed for delivery in accordance with manufacturer's instructions. Prepare infant warmer and remainder of room for delivery.

Position the woman for delivery using a large cushion for her head, back, and shoulders. Elevate the head of the bed. Stirrups or footrests may be used for foot support. Pad the stirrups. Place both legs in the stirrups at the same time to avoid ligament strain, backache, or injury.

Clean the vulva and perineal areas when the woman is positioned for delivery.

Cleanse from the lower abdomen to the mons.

Then clean the groin to the inner thigh on each side.

Then clean each labia.

Finally, clean the introitus.

Guide the woman step by step during the delivery process.

When the fetal head is encircled by the vulvovaginal ring, an episiotomy may be performed to prevent tearing.

When the head is delivered, mother is instructed to stop pushing. Mucus is wiped from the infant's face, and the mouth and nose are aspirated with a bulb syringe. If thick or particulate meconium amniotic fluid is present, the mouth and nose are suctioned on the perineum with deep suction before the delivery of the body.

If loops of umbilical cord are found around the neonate's neck, they are loosened and slipped from around the neck. If the cord cannot be slipped over the head, it is clamped with two clamps and cut between the two clamps.

After this step, the woman is instructed to give a gentle push so the neonate's body may be quickly delivered.

After delivery of the neonate's body and cutting of the cord, the neonate is shown to the parents and then placed on the maternal abdomen or taken to the radiant warmer for inspection and identification procedures.

Practice standard precautions during labor and delivery.

Evaluation: Expected Outcomes

Verbalizes positive statements about delivery outcome

Reports decreased pain from proper positioning

No infection results

THIRD STAGE OF LABOR

Nursing Diagnosis

Impaired Tissue Integrity related to placental separation

Risk for Injury related to potential hemorrhage

Nursing Interventions

Promoting Tissue Integrity

Ask the woman to bear down gently. Fundal pressure is never applied to facilitate delivery of the fetus or the placenta. Observe for the signs of placental separation

The uterus rises upward in the abdomen.

The umbilical cord lengthens.

Trickle or spurt of blood appears.

The uterus becomes globular in shape.

Evaluate the placenta for size, shape, and cord site implantation. Evaluate placenta for Duncan or Schultze presentation.

Schultze central region of the placenta separates first with the shiny surface of the placenta (fetal side) appearing first. Commonly referred to as shiny Schultze.

Duncan periphery of the placenta separates first with the dull, irregular surface of the placenta (maternal side) appearing first. Commonly referred to as dirty Duncan.

Preventing Hemorrhage

Ensure accurate measurement of intake and output maintained throughout labor and delivery.

Immediately after delivery of the placenta, administer oxytocin (Pitocin 10 to 40 units/L at 100 mU/min) either I.V. piggyback or I.M. as directed by facility policy and provider. Infuse as bolus initially, then titrate to uterus (ie, if uterus is firm, decrease the infusion; if boggy, leave as bolus). Pitocin should never be administered I.V. push as it can cause cardiac dysrhythmia and death.

Immediately after initiating Pitocin, massage uterine fundus until firm. Uterine massage is done with two hands, one anchored at the lower uterine segment above the symphysis pubis and the other hand gently massages the fundus.

Check to see that the placenta and membranes are complete.

Evaluate and massage the uterine fundus until firm.

Evaluate vaginal bleeding. If bleeding continuously and uterus is boggy, prepare Methergine I.M. (0.2 mg every 2 to 4 hours), Hemabate (Prostaglandin F2 Alpha) I.M. (0.25 mg I.M. every 15 to 90 minutes â‰¤ 8 doses), Dinoprostone (Prostin E2) 20 mg per rectum (PR), or Misoprostol (Cytotec) 400 to 1,000 mcg PR.

Administer medications as directed.

Increase I.V. fluids.

Monitor vital signs, especially pulse and blood pressure.

If bleeding continues and uterus is firm, notify health care provider for evaluation of lacerations or retained placental fragments. Inspection and repair of lacerations of the vagina and cervix are made by the health care provider.

If still no relief, notify health care provider and prepare patient for possible surgery (dilation and curettage, B-lynch suture, pelvic pressure packing, and selective arterial embolization). Autotransfusion (transfusion with one's own blood) is also a treatment available and approved for use by Jehovah's Witnesses.

Evaluation: Expected Outcomes

Delivers an intact placenta

Blood loss controlled and hemorrhage prevented

Previous studies:

The descriptive study the results presented a high in nurse-midwives' knowledge regarding the second stage and third stage of labor in all items, such as definition, signs and symptoms, episiotomy and its benefits, conduction of delivery, and cord clamping and cutting It was stated that nurses' knowledge is vital at all levels of nursing practices(15)

3- Materials and methods

3-1. this descriptive, cross-sectional hospital based study was conducted at Ribat University hospital during 2014-2016.

Study area: this study is carried out in labor room in Ribat university hospital. December 2014 to January 2016.

3.4. Sampling and Sample size

The study was conducted among 75 midwives in Alribat Universit HospitL (all midwives working in Alribat University Hospital during study period nurses midwives who were working in the maternity.)

Population and a sample:

i. " **Population**

Population: All nurses midwives work in maternity words and labor room (75) nurses.

ii. Sample

Midwives nurses who fulfill the inclusion criteria were chosen as the sample.

i. Criteria for sample selection

a. Inclusion criteria:

The study included those who were:

- midwives nurses working in alribat University hospitals,
- Midwives nurses who were willing to participate in the study.

b. Exclusion criteria

The study excludes

- Midwives nurses who were not available at the time of data collection.

ii. Sampling technique

Full coverage sampling technique

iii. Tool for data collection

The tool consists of the questionnaire and check list show in following sections:

Section A: demographic Data: A self administered structured questionnaire to assess the demographic data consisting of Age, sex, qualification, working experience

Section B: knowledge A self administered structured questionnaire to assess the knowledge regarding management of 2nd and third stage of labour.

Section C: -observational checklist was used to assess the practice of midwives nurses regarding management of 2nd and 3rd stage of labour.

iv. Method of data collection:

Phase 1: After obtaining the permission from the concerned authorities and informed consent from the samples the investigator was did

Phase 2: Self administered structured questionnaire was administered to assess the knowledge of midwives nurses regarding management of 2nd and third stage of labour.

Phase 3: observational checklist was used to assess the practice of staff nurses regarding management of 2nd and third stage of labour regarding management of 2nd and third stage of labour.

Duration of the study : all study period.

v. Plan for data analysis:

The data was analyzed by using descriptive and inferential statistics:

Descriptive statistics:

- Frequency and percentage distribution was used to study the demographic variables of midwives nurses.
- Mean and standard deviation was used to determine the level of knowledge and practice of staff regarding management of 2nd and 3rd stage of labour.

Inferential statistics :

- Co-rrelation co-efficient was used to determine the correlation between the knowledge and practice of midwives nurses regarding management of2nd and 3rd stage of labour.
- Chi-square test was used to determine the association of knowledge and practice of midwives nurses regarding management of2nd of 3rd stage of labour with the demographic variables.

Results

Table 4.1. Distribution of participants regarding Socio-Demographic Characteristics age

Variables	**Frequency**	**Percent**
1- **Age (years** *18– 22*	**2**	18 **2.7**
23-27	*4*	*5.3*
28 – 32	**9**	**12.0**
33 – 37	**17**	**22.7**
38 – 42	*18*	*24*
More than 43 years	*25*	*33.3*
Total	*75*	*100*

Table (4.1) illustrates that the highest percentage (33.3%) of the nurse-midwives ages was (43) Years and more.

2- **Educational Level**

Table (4-2):

Distribution of study population according to their Education level

Educational status **Variables**	**Frequency**	Percent %
Diploma	25	33.3%
Bsc degree	37	49.4%
Master degree	12	16%
Others	1	1.3%
Total	75	100%

p value 0.3

Table (4.2) illustrates that the highest percentage (49.4%) of the nurse-midwives were Bsc degree graduated.

Table (4-3):

Distribution of study population according to their Marital status

Marital status		
	Number	**Percent %**
Married	57	74.7%
Single	12	17.3%
Widow	4	1.3%
Divorced	2	2.7%%
Total	75	100

P=0.42

Table (4-3): shows The majority of midwives were married, 74.7%

Table (4.4).

Distribution of participants regarding their experience and attendance of Midwifery courses

Variables	-Duration of Nurses experience in Maternity hospital	
	Frequency	**Percent %**
1 - 5 years	14	18.6%
6 – 10 years	21	28.0%
11 – 15 years	21	28%
16 – 20 years	19	25.4%%
	75	100

Table (4.4) presents that the highest percentage (28 %) of participants having experience in maternity hospitals between (6–10) years, and 11-15 .

Table (4.5)

Distribution of participants' according to their knowledge regarding Second and 3rd stages of labor.

Definition **related to 2nd and 3rd stages of labor**	**I know**	**Uncertain**	**Idon't know**	**MS**
1- Definition of 2nd and 3rd stages of labor	51	21	3	2.64
2- Signs and symptoms of 2nd **and 3rd** stage s of labor 1- Increase duration and intensity of Uterine Contraction	74	1	08	2.98
2 Showing	74	1	0	2.98
3- Mother bearing down	75	0	0	3
4. Perineum bulging	75	0	0	3
5- urge to defecation	74	0	1	2.97
3- Episiotomy				
1- Prevent laceration and tear	74	1	0	2.98
2- Widen Perineal opening and facilitate delivery	74	1	0	2.98
3- Easy to repair and healing				
4- Increase probability of infection				

Table (4.5) this table shows high scores of the participants' knowledge regarding second and 3rd stages of labor in all items, definition, signs and symptoms, episiotomy and its benefits.

Table (4.6):

Distribution of participants' practice regarding the second and3rd stages of labor

Items related to 2nd stage of labor	Always	Sometimes	Never	MS
1- Episiotomy				
1- Prepare sterile equipment necessary for this procedure	18	14	43	1.67
2- Inform the woman the need for an episiotomy and what she feels.	1	6	68	1.10
3- Using local anesthesia if available.	2	34	39	1.50
4- Insert two fingers of the left hand in the vagina to protect the fetal head.	10	17	48	1.49
5- Make sure and check the needle that inserted to blood vessels	21	14	40	1.74
6- Wait for 1/ m. to allow the anesthetic to make effect and check if it has worked	20	18	37	1.77

Table (4.6): Shows that there were low mean of scores in most of the items regarding Participants' practices regarding second stage and 3rd atageof labor, while there were high mean of scores in participants' practices in delivering the head between contraction, avoid perinea stretching, encourage woman bearing down, using sharp scissor for cutting the cord, and replace clean pad on incision in case of episiotomy.

Table (4.7):

Association between participants' knowledge regarding second stage of labor and 3rd stages of labour and their socio-demographic characteristics

Variables	***Knowledge Satisfactory***	***Unsatisfactory***	**χ2**	**Sig.**	**P- value**
	0	*2*	4.267	NS	>0.05
Age *23 – 27*	*0*	*4*			
28 – 32	*0*	*9*			
33 – 37	*1*	*16*			
38 – 42	*3*	*15*			
More than 42 years	*1*	*24*			
Total 75	*5*	*70*			**df**=5

Educational status **Variables**	***Knowledge***		**χ^2**	**Sig.**	**P- value**
	Satisfactory	***Unsatisfactory***	0.534	NS	>0.05
Diploma	0	1			
Bsc degree	1	24			
Master degree	1	11			
Others	3	34			
Total	75	5	70		**df**=3
Marital status	***Knowledge***		**χ^2**	**Sig.**	**P- value**
	Satisfactory	***Unsatisfactory***		NS	>0.05
Married	0	5	1.692	NS	>0.05
Single	1	0			
Widow	1	0			
Divorced	3	0			
Total	75	5	70		**df**=3

Table (4.7) shows that there is a highly significant difference between participants'

Practices regarding 2nd and 3rd stages of labor and their educational level and birth number average.

Table (4.8): Distribution of participants' according to their knowledge regarding **Monitor to FHS frequently:**

	Frequency	**Percent%**
YES	50	69.3%
NO	25	30 .7%
TOTAL	75	100%

Table (4.8):. This table shows that two third of midwives were not knowledgeable about the monitoring of FSH

Table (4.9): Distribution of participants' according to their knowledge regarding **The midwife wear gown before delivery**

	Frequency	**Percent%**
YES	56	93%
NO	19	7%
TOTAL	75	100%

Table (4.9):.this table shows that participants' knowledgeable regarding **gown before delivery was 93%**

Table (4.10): Distribution of participants' according to their knowledge regarding **Wear sterile gloves during the P.V.:**

	Frequency	**Percent%**
YES	17	22.6%
NO	58	77.4%
TOTAL	75	100%

Table (4.10): shows those participants' knowledgeable regarding **Wear sterile gloves during the P.V was 22.6% while 77.4% don't were it.**

Table (4.11): Distribution of participants' according to their knowledge regarding
Use separate sterile scissor for cutting umbilical cord:

	Frequency	**Percent%**
YES	32	33%
NO	43	72%
TOTAL	75	100%

Table (4.11):.shows that 72% was not Use separate sterile scissor for cutting umbilical cord while only 33% not used it.

Table (4.12): Distribution of participants' according to their knowledge regarding
Wipe the baby face immediately after delivery of the head:

	Frequency	**Percent%**
YES	15	20%
NO	60	80%
TOTAL	75	100%

Table (4.12): shows that 80% of the participant was not knowledgeable regarding
Wipe the baby face immediately after delivery of the head:

Table (4.13): Distribution of participants' according to their knowledge regarding
Midwife checks the placental lobe:

	Frequency	**Percent%**
YES	58	77.3%
NO	17	22.7%
TOTAL	75	100%

Table (4.13):shows 77.3% of the participants was knowledgeable regarding
checks the placental lobe:

Discussion

Midwives Knowledge and practices regarding 2nd and 3rd stages of lobar was important to prevent maternal mortality and morbidity.

It was revealed from (Table 4.1) that the higher percentage (32%) of participants' ages was (43 years) and over and the lowest percentage (2.7%) of them was in age group (18-22) years, with a mean of (38.9 ± 9.4). Regarding marital status, the majority (74.7%) of the participants was married. This is something that can be expected with such population due to the nature of their profession as female oriented.

It was revealed from (Table 4.2) that the highest percentage (28%) of them was

Employed for (6-10) years. While, (32%) of them spent between (1-5) years of employment in midwifery. This study was in agreement with another one which aimed to assess nurse midwives' practices regarding prolonged labor in Anbara City which reported that (22.8%) of them having between (6-10) years of experience in nursing. While , (40.4%) had spent less than (5) years of their employment in midwifery (13). Regarding training courses in midwifery, the highest percentage (69.4%) of them has the opportunity to be enrolled or participated in training courses ranging between (1-5) courses, with a duration ranging from one week to more than one month. While, one third of them do not have any training courses. The results presented a high in nurse-midwives' knowledge regarding the second and 3rd stages of labor in all items, such as definition, signs and symptoms, episiotomy and its benefits,). It has agreement with **study done by** Cunningham, G., Gant, N. et. Al 2001 which was high in nurse-midwives' knowledge regarding the same items, such as definition, signs and symptoms, (15). it was clear that nurses' knowledge regarding perineal preparation and cleanliness and sterilization was high in This study it was in agreement with study regarding nurse-midwives' practices in nursing interventions in second stage of labor, concerning their performance in perineal preparation and cleanliness and sterilization during actual conduct of delivery (WHO 2005). Knowledge and their impact on interactions with health care of women in delivery room are essential to prevent complications of labor. It was stated that the second stage of labor has led to reconsideration of the influence of maternal bearing down efforts on fetal/newborn status, as well as on maternal pelvic structural integrity.

Majority of Midwives know the signs of the separation of the placenta.

- But there is some deficiency in practice during application of Management in the following. Majority of them do not check the blood pressure of the mother. Majority of them not wear sterile glove during vaginal examination.
- All of them use the same scissor for episiotomy, cutting of umbilical Cord.
- All of midwives do not wipe the baby face immediately when the head is delivered.

It was revealed from the result that there was a high significant association between Nurse-midwives' practices regarding 2nd and 3rd stages of labor and their educational level.

5-1 Conclusion

- All of the study group assesses the uterine contraction and majority of Them know the strength and length of the contraction.

All of the midwives encourage the mother to empty their bladder to allow the fetus descend in pelvic and all of them protect the baby form Hypothermia by receiving babies in a warm sterile towel .

5-2 Recommendation

1- Education programs with efficient training courses to upgrade the techniques necessary to assess, evaluate, and improve the quality of care rendered to laboring woman throughout stages of labor

2. Provide the nurses-midwives with efficient training courses, regarding the proper practices to be hold in delivery room to take care of the laboring women and updating their knowledge.

3- Ensuring of the practice and qualification of the nurse-midwives who conduct the care in delivery room.

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Observation Check List

1) Listen to FHS frequently:

Yes ☐ No ☐

2) Measure the BP Frequently: ---

Yes ☐ No ☐

3) The midwife wear gown before delivery:

Yes ☐ No ☐

4) Wear sterile glove during the Pv: ,/ Yes ☐ No ☐

5) Clean the vulva & perineal area before the delivery:

Yes ☐ No ☐

6) Empty the bladder if not empty in the first stage:

Yes ☐ No ☐

7) Put sterile ropes around the perineaum area:

Yes ☐ No ☐

8) Use sterile separate scissor for episiotomy and recircumsicion :?

Yes ☐ No ☐

9) Use separate scissor for cutting umbilical cord :

Yes ☐ No ☐

10) Wipe the baby face immediately after delivery of the baby head:

Yes ☐ No ☐

11) Clean the perineum after delivery of placenta:

Yes ☐ No ☐

12) After the delivery of placenta the midwife check the placental lobe and Calculate:

Yes ☐ No ☐

13) Wash equipment after soaked and dry it:

Yes ☐ No ☐

Questionnaire Nurse-Midwives' Knowledge, Practices Regarding Second and 3RD Stage of labor.

1st Socio-Demographic Characteristics

1- **Age (years)**
18 -22

23 - 27

28 - 32

33 - 37

38 - 42

43 +

Nurse-

Participants' knowledge regarding Second and 3rd stage of labor

I know Uncertain don't know

Definition of 2nd **and 3RD** stage of labor

2 Signs and symptoms of 2nd **and 3RD** stage of labor

1- Increase duration and intensity of Uterine

Contraction

2-Showing

3- Mother bearing down

4- Perineum bulging

5- urge to defecation

3- Episiotomy

1- Prevent laceration and tear

2- Widen Perineal opening and facilitate delivery

3- Easy to repair and healing

4- Increase probability of infection

4- Conduct of Delivery

1- Fundus pressure lead to uterine rupture
2- Support for perineal area prevent lacerations
3- Slow delivery of head with uterine Contraction prevent lacerations
4- Delivery of anterior then posterior shoulder prevent lacerations

5- Cord clamping and cutting

1- Consist of (1) vein and (2) arteries

2- Early clamping minimize duration of 3rd stage

5- Early clamping decrease Hb in newborn

Items related to 2nd and 3rd stage of labor

1- Episiotomy Always Sometimes Never

1- Prepare sterile equipment necessary for this procedure

2- Inform the woman the need for an episiotomy and what she feels.

3- Using local anesthesia if available.

4- Insert two fingers of the left hand in the vagina to protect the fetal head.

5- Make sure and check the needle that inserted to blood vessels

6- Wait for 1/ m. to allow the anesthetic to make effect and check if it has worked

Items related to 2nd and 3rd stage of labor Always Sometimes Never

2- Cleanliness and sterilization

1- Ensure what the place for delivery is clean

2- Cleaning the perineum with safe water

3- Clean hands using soap and safe water and dry them thoroughly

4- Once the baby is born, cover incision with sterile pad, until baby resuscitated

5- Using sterile sharp scissor cutting the cord.

2- Conduct of actual delivery

3- 1 Encourage women in 2nd stage to bear down as she desire when fetal head is visible

2- Avoid manually stretching the perineum

3- Allow delivery of the head slowly, preferably between contractions

4- Once the head is delivered, allow the shoulders to rotate spontaneously