

Immediate Care of New Born: Midwives Performances at Two Maternity Hospitals in Khartoum State

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Abstract

Background The practice of nurse midwives has a unique opportunity of closely observing and providing care for the newborn infant after delivery

Objective To study midwives performance during immediate care of new born.

Methodology descriptive cross sectional hospital base study was conducted at two maternity hospitals 65 midwives enrolled in the study, data were taken by observational check list, analyzed by Statistical Package of Social Science and data presented in simple frequency tables.

Results revealed that midwives had good practice in provide clearance air way 89% ,provide cord care 100% but had poor practice 100% in assessing Apgar scoring and poor practice in measuring vital signs and head circumference.

Conclusion, in current study poor practice in Apgar score measuring and good practice in providing care of the cord.

Recommendation: immediate care of new born protocol should be applied to improve participant's practices

Keywords: Immediate care, newborn, performance, midwives.

Introduction

The practice of nurse midwives has a unique opportunity of closely observing and providing care for the newborn infant after delivery. Globally, 2.7 million newborns die each year, largely as a result of birth asphyxia, complications of preterm birth and infections. This burden of death is disproportionately concentrated in low-income and middle-income countries (Shinde, 2015). Despite the impressive efforts undertaken around the Millennium Development Goals four to reduce child mortality, the decline of neonatal mortality has been much slower than for mortality among children aged 1–59 months; consequently, neonatal deaths now contribute to about 45% of total under-5 deaths (Alhassan *et al.*, 2019). Worldwide, out of the total 133 million live births, 3.7 million die in neonatal period. Another 3 million are stillborn, ninety-eight percent of deaths take place in the developing world, The risk of deaths in the neonatal period in developing countries is over 7 times greater than in developed countries (Neogi, *et al.*, 2011). The initial assessment and examination of the newborn is done

at birth and within first hours of life and should include assessing physiological adaptation to extra-uterine life; colour, tone, breathing and heart rate. (Munro, 2019) Evidence suggests that the majority of these deaths can be prevented, particularly those occurring at birth and immediately thereafter, with simple, interventions conducted by skilled providers and supported with available commodities (WHO recommendations on newborn health 2019). These immediate interventions include ensuring that the newborn is kept warm with immediate drying and skin-to-skin contact, giving appropriate stimulation for newborns unable to breathe, providing additional neonatal resuscitation measures as necessary ,and ensuring infection prevention, early initiation of exclusive breast feeding and hygienic cord care (www.researchgate). (6) The gold standard for of quality of newborn care included, observation of essential care of new born by dry baby with towel immediately, discard wet towel and cover with dry towel, place newborn skin-to-skin, tie or clamp cord when pulsations stop or 2–3 min after birth, cut cord with clean blade or scissors, help mother initiate breast

feeding within first hour of birth, and practice infection prevention measures (hand washing and use of sterile gloves (Shinde, 2015). The midwives have an important role at this time. The care they give during this period is critical in helping to prevent complications and ensuring infant survival. The immediate care of a newborn baby after birth includes immediate assessment, establishment and maintenance of respiration, stabilization and maintenance of body temperature, cord care. Breast feeding and prevention of infection and injury. These basic needs indicate that a baby's survival is totally dependent upon her mother and other care givers. Therefore it is important to provide proper care to all the neonates immediately after birth (Keerthi, 2013). . Call out time of birth .Cover the baby and mother with a clean warm cloth. Do not do routine suctioning. During the first 30 seconds: do not suction unless the mouth/nose are blocked, and do not suction meconium unless the baby is not vigorous (www.researchgate). Competence can be described as the combination of training, skills, experience and knowledge that a person has and their ability to apply them to perform a task safely. Other factors, such as attitude and physical ability, can also affect someone's competence. (Cmrc-ccosf.ca. 2020)

Research question:-Do the midwives adopted competence in performing essential care of new born?

Justification; - The rate of neonatal mortality from 99% of all newborn deaths occurs in low and middle income countries, with two-thirds of those occurring in Asia and Africa. It is the poorest of the poor in these countries that bear the brunt of newborn mortality and it is their right to healthy newborn that is not being met. Given the disparity in neonatal outcomes between rich and the poor (both between counties and within countries) improving newborn health should be part of any poverty reduction strategy (Keerthi, 2013).

Objectives:- To study midwives performance to word immediate care of new born

Research Methodology:

Study design:

Descriptive cross-sectional hospital base study

Study settings:

Study was conducted at two maternity hospitals: Omdurman Maternity Teaching Hospital in labor room , had been first and largest specialized maternity hospital in Sudan, situated in the east side of Mourada street .It provides maternity healthcare services to women from different states of the country. Include labour room nursery unit, IC.U Laparoscopic surgical and diagnostic unit, Feto-maternal unit, Antenatal Clinic, Central Blood bank and Laboratory, The Saudi Hospital is specialized hospital in obstetrics and Gynecology. It located in the west side of Omdurman Islamic university. Include labour room Antenatal clinic obstetrics and gynecology.

Study population: All nurses midwives with diploma, bachelor and master degree who working in labor room at two study Hospitals.

Inclusion criteria: Nurse midwives with above criteria. Who willing to participate and available during conducting study.

Excluding criteria: Nurse midwives .less than one year and student nurse midwives.

Sampling technique: Convenience Sampling

Sample size: 65 nurse midwives.

Tools of data collection:

Data was collected by using structure administered questionnaire for demographic data

Observational check list for midwives performance.

Data processing and analysis.

Data were coded, entered, processed, scanned, and analyzed by using Statistic Package for Social Sciences (SPSS) version 16. And presented in tables and figures

Ethical Consideration: Ethical approval from Al Neelain university ethical committee was taken and from Khartoum state Ministry of Health research department. Permission from two maternity hospitals authorities and participants verbal consent was taken. Participants Privacy and confidentiality also were adopted.

Results

Table (1) Demographic data, n=65

participants according to age	frequency	Percent%
20-25 years	6	9%
26-30 years	15	23%
Above 30 years	44	68%
Total	65	100%
Participants according to years of experiences		
1-5years	18	27%
6-10 years	1	1,5%
11-15 years	0	00
More than 15 years	46	71%
Total	65	100
Participants according to qualifications		
Immediate nursing certificate	1	1.5%
Midwifery diploma	44	68%
bachelorette	20	31%
Total	65	100%
Receiving training course about immediate care of new born		
yes	61	94%
No	4	6%
Total	65	100%

Table (2) Participants performance regarding immediate care of newborn (n= 65)

Steps	Done	%	Not done	%
Infection control				
1- The midwife do hand washing-wear gloves and gown	65	100	0	0
2-Before delivery The midwife prepare sterile equipment for the newborn	65	100	0	0
3-Prepare suction machine ready to use	60	92.3	5	7.7
4- Prepare place for receiving newborn	62	95.4	3	4.6
5- Prepare umbilical clamp	65	100	0	0
6- The midwife clean the perennial area before labor	65	100	0	0

Table 3 Participants performance regarding new born care. n=65

Steps	done	%	Not done	%
Dries newborn in warm Place. Under droplight as needed.	50	76.9	15	23.1
Performs and interprets ABGAR Scoring correctly -Immediate after delivery.- after 5minutes.	0	0	65	100
Prepare identification bracelet	65	100	0	0
Measure the height , head circumference of the child and record in his file	0	0	65	100
The midwife check vital sign and document in file	0	0	65	100

Table (4) association between qualifications and neonatal care

Steps of adopted neonatal care	Qualification			Total Count %
	certificate Count %	diploma count %	bachelorette count %	
When the head is delivered, wipe the mouth and nose with gauze				
done	1 1.5%	44 67.7%	13 20.0%	58 89.2%
Not done	0 0%	0 0%	7 7.7%	7 10.8%
Cuts the cord with sterile scissors between the 2 sterile clamps				
done	1 1.5%	44 67.7%	20 30.8%	65 100.0%
Not done	0 0%	0 0%	0 0%	0 0%
Ties the cord firmly about 2 fingers (3 - 4cm)				
done	1 1.5%	44 67.7%	20 30.8%	65 100.0%
Not done	0 0%	0 0%	0 0%	0 0%
Suctions mouth and nose of the newborn gently.				
done	1 1.5%	4 6.2%	0 0%	5 7.7%
Not done	0 0%	40 61.5%	20 30.8%	60 92.3%

P. value =0.00

Discussion

A key strategic element towards reducing neonatal morbidity and mortality levels has been to increase the professional midwifery skills and also access to high quality delivery care, while the rapid development and upgrading of health-care services .in this study the majority of participants has performed good competence of practice during immediate care of new born baby regarding clear the air way and he most of participants adopted infections control measures for prevention newborn from infection most of procedures but there is not practice sectioning when the new born needed they did suction as routine care. An also there practice were poor regarding measuring head and chest circumferences .this similar to study conducted in Ghana Tamale hospital revealed that midwives practices fair (Alhassan *et al.*, 2019) .and similar to other study at Khartoum university by F, Ali revealed that midwives had poor practice regarding immediate care of newborn. (Ali, 2013)

Conclusion: base on study finding the researcher concluded that the midwives performance regarding care of newborn was very good in clearing air way, provide skin to skin contact and initiation of early breast feeding and poor practice regarding doing section when neonate need and poor practice about measuring head and chest circumferences.

Recommendations: Regular training for nurse midwives to provide the level of practice Frequent and schedule training programs should be applied for midwives.

Close supervision should be performed and workshops should encourage the midwives to participate .guideline and essential care protocol should be adopted.

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