

Examination of the Assessment of Essential Newborn Care (ENC) Techniques and Influencing Factors among Midwives in Chosen Healthcare Facilities in Esan Central Local Government, Edo State

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Abstract

Introduction: Newborns, being extremely delicate, necessitate careful attention to safeguard their well-being and survival. Nonetheless, despite the crucial role of essential newborn care (ENC) in mitigating child mortality, it frequently doesn't receive the necessary focus, resulting in avoidable deaths. This research sought to assess ENC practices among midwives at specific healthcare facilities in Esan Central Local Government, Edo State, Nigeria.

Objective: This study aimed to evaluate the demographic characteristics, essential newborn care (ENC) practices, factors affecting ENC, and determinants of ENC practice among midwives in the research area. **Method of Analysis:** A descriptive survey design employing a cross-sectional approach was utilized. A total of 300 midwives were purposefully selected from various healthcare centers. Data were gathered through structured questionnaires and analyzed using descriptive statistics. **Results:** The study disclosed diverse demographic profiles among participants, with significant

percentages falling within the 20-29 (35.7%) and 30-39 (40.0%) age brackets. Majority of deliveries were attended by skilled birth attendants (98.7%), and favorable responses were noted for practices such as promoting thermal regulation (93.4%) and providing clean cord care (91.9%). However, deficiencies were identified in specific practices, including delayed cord clamping (14.3%) and utilization of partographs (12.5%). Factors influencing ENC practices included inadequate knowledge of ENC (62.5% Strongly Agree, 33.1% Agree), insufficient infection prevention and control skills (53.8% Strongly Agree, 43.1% Agree), and staffing shortages. Inadequate knowledge of midwifery care emerged as a significant concern (62.5% Strongly Agree). While no significant correlation was found between age, professional qualifications, and years of working experience with ENC practice, a near-significant correlation was observed with rank. **Conclusion and Recommendations:** The study emphasizes the necessity of addressing gaps and obstacles in ENC practices among midwives. Continuous education and training initiatives, enhanced staffing levels, and interventions addressing socioeconomic disparities and cultural influences are essential for improving the quality of essential newborn care provision

Keywords: Newborn care, Midwives, Essential newborn care practices, Nigeria, Neonatal mortality, Determinants, Healthcare centers.

Introduction:

Background to the Study

Newborns represent one of the most vulnerable segments of society, necessitating meticulous care to ensure their well-being and survival (Kokebie, Aychiluhm & Degu, 2015; Callaghan-Koru, 2013; Tasew et al., 2019). Despite the crucial role of newborn care in diminishing child mortality rates, it often doesn't receive adequate attention, resulting in a significant number of avoidable deaths (Negussie, Hailu, & Megenta, 2018; Yemaneh, 2017). Consequently, neonatal mortality remains a pressing global health issue, prompting global leaders to prioritize reducing newborn deaths as part of the Sustainable Development Goals (SDGs) initiative (United Nations, 2015).

A significant number of infant fatalities occur during the initial 28 days of life, with an estimated 2.9 million newborns passing away annually (Liu et al., 2017). Worryingly, over half of these deaths happen within the first 24 hours following birth, highlighting the critical necessity for efficient Essential Newborn Care (ENC) procedures, especially administered by midwives (United Nations Children's Fund & World Health Organization, 2014).

Developing nations shoulder the majority of neonatal mortalities, with preventable causes being predominant (Berhan & Gulema, 2018; Berhea, Belachew & Abreha, 2018). Sub-Saharan Africa and South Asia exhibit the highest rates of neonatal deaths, with approximately 27 deaths per 1,000 live births in 2017 (United Nations Inter-agency Group for Child Mortality Estimation, 2018). Despite many neonatal deaths occurring in healthcare facilities where skilled practitioners are present, institutional deliveries are associated with a reduced risk compared to home deliveries (Blencowe & Cousens, 2013; Adeniran, Okolo, & Onyiriuka, 2010). However, enhanced ENC practices by midwives could significantly mitigate these deaths by identifying and addressing newborn danger signs (Thenmozhi & Saraswati, 2017).

In Nigeria, neonatal mortality remains a significant public health concern, with an estimated rate of 31 deaths per 1,000 live births (Nigeria Demographic & Health Survey, 2014). Prematurity, low birth weight, birth asphyxia, and infections are major contributors to neonatal mortality in the country, many of which are preventable through effective ENC practices (Oluwayemi, Ogundare, & Olatunya, 2014).

World Health Organization (WHO) recommends specific ENC practices aimed at reducing the risk of neonatal deaths, including immediate drying and wrapping, skin-to-skin contact, dry cord care, immediate initiation of breastfeeding, and delayed bathing (National Development Planning Commission & United Nations System, 2012; WHO, 2006). Competence in delivering these practices is crucial for midwives, given the significant number of newborns requiring professional care at birth (Alhassan et al., 2019).

Nurse-midwives play a pivotal role in newborn care, influencing infant health outcomes in the community (Sanagu, Jouybari, & Shahini, 2009). Their competence and practice approach are essential for keeping both mothers and infants healthy, as well as dispelling false beliefs about neonatal care (Atiqzai et al., 2019; Obara & Sobel, 2014). However, there is a lack of empirical studies evaluating midwives' practices of ENC, with existing research primarily focusing on community-based or maternal roles in newborn care (Kokebie et al., 2015; Nonyane et al., 2016; Okafor et al., 2014). Thus, this study aims to assess ENC practices among midwives in selected healthcare centers in Esan Central Local Government, Edo State.

Globally, essential newborn care (ENC) programs could potentially save over two-thirds of newborns, yet many of these crucial measures are often neglected due to various factors. Reasons include underreported neonatal deaths, lack of motivation among midwives, poorly equipped facilities, cultural beliefs leading to immediate bathing of newborns and delayed mother-newborn contact, and misconceptions about the cost and complexity of neonatal care. Despite the simplicity and affordability of essential interventions like resuscitation, warmth provision, early breastfeeding, and hygiene, neonatal health continues to be overlooked. Continuous evaluation of midwives' adherence to ENC guidelines is vital, as neonatal care often receives insufficient attention.

Although low-cost interventions are available to prevent neonatal deaths, global progress has stagnated. In Nigeria, despite investments in healthcare centers staffed with professional midwives, neonatal morbidity and mortality rates remain high. There's a lack of literature on newborn care practices in Nigeria, particularly regarding midwives' adherence to ENC guidelines. This study aims to evaluate midwives' practices in essential newborn care in selected healthcare centers in Esan Central Local Government, Edo State, aligning with the goal of improving newborn survival rates.

The results of this study hold potential benefits for the Hospital Management Board, Nurses, and Midwives in Edo State, providing guidance for effective Essential Newborn Care (ENC) practices. This guidance can lead to improved child health outcomes, reduced risks of illness, and optimized growth and development. Moreover, it aims to draw attention to the importance of enhancing practical skills in ENC among healthcare providers attending deliveries in the state. Additionally, this study addresses an academic void, enriching knowledge and acting as a reference for further research on ENC components, practices, and determinants among midwives. The findings establish a foundation for future investigations, including the exploration of the correlation between cultural beliefs and ENC practices.

Hypothesis

H₀₁: There is no significant association between participants socio demographic characteristics and their Practice of competency of Essential Newborn Care among Midwives in Selected Comprehensive Healthcare Centers in Esan Central Local Government, Edo State

MATERIALS AND METHODS

Research Setting

This research was conducted across six specifically chosen Comprehensive Health Centers located in Irrua, Edo State, which serves as the headquarters of Esan Central Local Government. Irrua lies within the Edo Central region and boasts eight Primary Health Care Facilities, ten Comprehensive Health Care Centers, one Model Health Care Centre, a Tertiary Institution, eight Private Clinics, two District Hospitals, and several maternity homes along the Benin-Auchi Express road. The community practices Christianity, Islam, and traditional religions, and the primary languages spoken are Esan and English. The population comprises predominantly indigenous residents alongside migrants.

The selected Comprehensive Health Care Centres are: Comprehensive Health Care Centre Eko Ewu, Comprehensive Health Care Centre Ibore, Comprehensive Health Care Centre Irrua, Comprehensive Health Care Centre, Atuagbo, Comprehensive Health Care Centre, Ibhiolulu, and Comprehensive Health Care Centre in Unogbo. These facilities were selected based on high institutional delivery load; also because they give a true representation of the ten political wards which represent the Primary Health institutions situated in Esan Central Local Government, Edo State.

Research Design

A cross-sectional approach was adopted to evaluate ENC practices and its determinants among Midwives in Selected Comprehensive healthcare centers in Esan Central Local Government, Edo. The sample size for this study comprised 300 midwives who were purposively selected based on their knowledge and skills relevant to the phenomena being studied. The research settings were conveniently chosen, and the midwives were purposively selected across various health centers, ensuring inclusion criteria were met.

Polit and Beck (2014) explain that non-probability sampling, such as purposive sampling, involves selecting participants because of their specific knowledge or skills related to the phenomenon under study. Chinweuba, Iheanacho, and Agbapuonwu (2013) support this approach, stating that purposive sampling allows for the selection of interviewees who possess expertise or experience relevant to the phenomenon, making their insights invaluable. Similar techniques have been employed by researchers in qualitative research studies (Adekannbi, Olatokun, & Ajiferuke, 2014; Binder, Johnsdotter, & Essén, 2012; Esienmoh, 2015).

The selection criteria included nurse-midwives who had worked in the healthcare centers for at least six months before the study and expressed willingness to participate.

Data Collection and Management

The study utilized a well-structured questionnaire for data collection, employing direct, face-to-face administration. The questionnaire, aligned with study objectives, the questions was divided into three sections, that is, Section A, B and C. Section A refers to Demographic data; with seven (7) responses. Section B, Determinants of Essential new-born care Practices, it consists of (6) Six responses with four Likert scale used in rating the responses as SA, = Strongly Agree, A = Agree, D= Disagree and SD= Strongly Disagree. Section C refers to the Factors Associated with ENC Practices, with (15) Fifteen responses, also rated on four Likert scale as SA= Strongly Agree, = Agree, D= Disagree and SD= Strongly Disagree, with total responses (28) Twenty-Eight.

Method of Data Analysis

Statistical Package for Social Science (SPSS) version 28.0.0.0. was used to analyze data collected in both descriptive and inferential statistical data. Descriptive statistics generated are frequencies, percentages, and means of responses where applicable. Research question 1, 2 and 3 were analyzed using frequency and descriptive statistics, on level of ENC Skills, level of ENC Practices, Determinants of ENC effectiveness and Factors associated with ENC Skills and Practices. Chi-Square

was employed to test the hypotheses of Midwives demographic characteristics such age, rank, Professional qualification, year of experience in the practice of Essential New born care. The chi-square test showed that there was no existing significant association between age, professional qualifications, rank and years of working experience as a registered Midwife. The result from the Chi-Square Test shows that the P-values was greater than 0.05 alpha level of significance.

Ethical Consideration

An identity letter from the Dean of the Faculty of Nursing Sciences at Niger Delta University, Wilberforce Island, Amassoma, Bayelsa State. The Health Research and Ethics Committee of the Ministry of Health, Edo State, provided ethical approval for the study, and a summary of the proposal was utilized to apply for an ethical permission from the Ministry of Health, Edo. Permission to conduct the study was received from Esan Central Local Government Area's head of service via the primary Health Care Coordinator. The purpose of the study was explained to the respondents, an informed and written consent was obtained. To ensure privacy and anonymity numbers were used on the questionnaires instead of respondents' names. Participation was voluntary. To ensure confidentiality, all completed or uncompleted questionnaires were sealed in separate envelopes during the administration of instruments, the safety of respondents was ensured and the completed questionnaires were kept intact and used for the intended purpose only.

RESULTS

Table 1: Sociodemographic Characteristics of the respondents

Variable	Frequency	Percentage
Age		
20-29	107	35.7
30-39	119	40.0
40-49	55	18.3
50 and above	19	6.3
Qualification		
RM	87	29.0
RM/RN	144	48.0
BNSC	54	18.0
MSC	13	4.3
Other Qualification	2	0.7
Rank		
No11	67	22.3
No1	83	27.7
SNO	102	34.0
PNO	25	8.3
ACNO	23	7.7
Total year of experience		
0-5	87	29.0
6-10	102	34.0
11-15	59	19.7
16-20	40	13.3
25-30	11	3.7
Year of Experience as a Midwife		

0-5	137	45.7
6-10	85	28.3
11-15	38	12.7
16-20	32	10.7
25-30	11	3.7
Year of experience as a Midwife		
0-5	137	45.7
6-10	85	28.3
11-15	38	12.7
16-20	32	10.7
25-30	8	2.7

The sociodemographic characteristics of the respondents indicate a varied distribution across age groups, with the majority falling between 20-29 years (35.7%) and 30-39 years (40.0%), followed by 40-49 years (18.3%), with a smaller proportion aged 50 and above (6.3%). Regarding qualifications, the respondents predominantly held RM/RN qualifications (48.0%), followed by RM (29.0%), BNSC (18.0%), MSC (4.3%), and a smaller fraction with other qualifications (0.7%). In terms of rank, the distribution was fairly balanced, with SNO ranking highest (34.0%), followed closely by NO I (27.7%) and NO II (22.3%), while PNO (8.3%) and ACNO (7.7%) represented smaller proportions. The total years of experience varied, with the highest percentage falling within the 6-10 years category (34.0%), followed by 0-5 years (29.0%), 11-15 years (19.7%), 16-20 years (13.3%), and the least in the 25-30 years category (3.7%). Similarly, the years of experience as a midwife revealed a majority with 0-5 years (45.7%) and 6-10 years (28.3%), followed by 11-15 years (12.7%), 16-20 years (10.7%), and a smaller percentage with 25-30 years (2.7%).

Table 2: ENC Practice of Certain care of ENC performed by Midwives

Items	Yes	No	I don't know
Delivery attended by a skilled birth attendant	296(98.7)	2(0.7)	2(0.7)
Promoting thermal regulation	282(93.4)	5(1.8)	13(4.8)
Providing clean cord care	278(91.9)	19(7.1)	3(1.0)
Treatment of the eyes with ointment	63(13.2)	124(45.4)	113(41.40)
Use of chlorhexidine in treatment of cord	222(81.3)	31(11.4)	20(7.3)
Utilization of partograph	34(12.5)	217(79.5)	22(8.1)
Use of protective equipment when taking delivery	255(83.5)	12(4.4)	33(12.1)
Presence of assistant in the labor room	273(90.1)	9(3.3)	18(6.6)
Provision of adequate lightening facilities	236(76.6)	9(3.3)	55(20.1)

Adequate team collaboration	217(69.6)	16(5.9)	67(24.5)
Presence and functionality of facilities used for resuscitation e.g suction machine, incubator* resuscitation drug like hydrocortisone,	171(62.6)	31(11.4)	98(26.0)

Table 2 presents the Essential Newborn Care (ENC) practices performed by midwives, indicating the frequencies and percentages of "Yes," "No," and "I don't know" responses for each practice. The majority of deliveries were attended by skilled birth attendants, with 98.7% responding affirmatively, while promoting thermal regulation and providing clean cord care received positive responses from 93.4% and 91.9% of respondents, respectively. Conversely, the treatment of the eyes with ointment saw lower compliance, with only 13.2% of respondents affirming this practice, while 45.4% indicated not performing it. Additionally, utilization of chlorhexidine for cord treatment was reported by 81.3% of respondents, while utilization of partographs was lower at 12.5%. Usage of protective equipment during delivery was relatively high at 83.5%, and the presence of an assistant in the labor room was reported by 90.1% of respondents. Provision of adequate lightning facilities received positive responses from 76.6% of respondents, and adequate team collaboration was reported by 69.6%. However, the presence and functionality of resuscitation facilities received lower compliance, with only 62.6% of respondents affirming this practice.

Table 3: Factors Associated with Essential New Born Care practices

Items	Strongly Agree	Agree	Disagree	Strongly disagree
Poor knowledge of ENC	187(62.5)	99(33.1)	8(2.7)	5(1.7)
Poor Infection Prevention and Control skills	161(53.8)	129(43.1)	6(2.0)	3(1.0)
Shortage of staff.	195(65.2)	86(28.8)	5(1.7)	13(4.3)
Lack of inadequate and constant training of the midwives working in neonatal care unit impede competency	182(60.9)	104(34.8)	7(2.3)	6(2.0)
Ethnicity or caste influence the practice of ENC	158(52.8)	124(41.5)	11(3.7)	7(2.0)
Low maternal Education influences neonatal care	161(53.8)	121(40.5)	9(3.0)	8(2.7)
Deliveries attended by unskilled personnel affects the practice of ENC	168(56.2)	109(36.5)	15(4.7)	8(2.7)
Socio economic status influence the practice of ENC	187(62.5)	93(31.1)	11(3.7)	8(2.7)
Poor maternal knowledge	182(60.9)	99(33.1)	9(3.0)	10(3.5)

influence ENC practices				
Harmful traditional practices affect the neonate and new born care	133(44.5)	152(50.8)	11(3.7)	3(1.0)
Home deliveries influence ENC practices by midwife	133(44.5)	143(47.8)	15(5.0)	8(2.7)
Poor utilization of maternal health care services affects new born care	125(41.8)	161(53.8)	9(3.0)	4(1.3)
Poor team collaboration an impediment to ENC Practices	109(36.5)	169(56.5)	12(4.0)	9(3.0)
Socio- Cultural factors / beliefs influence practice of ENC	96(31.8)	185(61.9)	11(3.7)	8(2.7)
Is inadequate training of midwives is a hindrance to the practice of neonatal care	134(44.8)	142(47.5)	10(3.3)	14(4.4)

Table 3 presents factors associated with essential newborn care (ENC), detailing the frequencies of responses ranging from "Strongly Agree" to "Strongly Disagree" for each factor. Notably, the majority of respondents strongly agreed or agreed that poor knowledge of ENC (62.5% Strongly Agree, 33.1% Agree) and poor infection prevention and control skills (53.8% Strongly Agree, 43.1% Agree) were significant factors influencing ENC practices. Additionally, a considerable proportion strongly agreed or agreed that shortage of staff (65.2% Strongly Agree, 28.8% Agree), lack of constant training of midwives (60.9% Strongly Agree, 34.8% Agree), and socioeconomic status (62.5% Strongly Agree, 31.1% Agree) hindered ENC practices. Furthermore, respondents indicated agreement regarding factors such as ethnicity or caste influence (52.8% Strongly Agree, 41.5% Agree), low maternal education (53.8% Strongly Agree, 40.5% Agree), and deliveries attended by unskilled personnel (56.2% Strongly Agree, 36.5% Agree) impacting ENC practices. Conversely, fewer respondents agreed that traditional harmful practices (44.5% Strongly Agree, 50.8% Agree) or poor utilization of maternal health care services (41.8% Strongly Agree, 53.8% Agree) significantly affected neonatal care. Moreover, respondents highlighted issues such as poor team collaboration (36.5% Strongly Agree, 56.5% Agree) and inadequate training of midwives (44.8% Strongly Agree, 47.5% Agree) as potential impediments to ENC practices. Overall, the table underscores the multifaceted nature of factors influencing the quality of essential newborn care, reflecting varied perceptions among respondents.

Table 4: Determinants of ENC Practice

Items	Strongly Agree	Agree	Disagree	Strongly disagree
Does the Mother social demographic characteristics affect Essential New Born Care	209(69.6)	89(29.8)	2(0.7)	-

Does place of birth determine Essential new born care?	193(64.2)	95(31.8)	11(3.7)	1(0.3)
Does poor maternal Health Services Utilization affects ENC practices?	188(62.5)	104(34.8)	1(0.3)	7(2.3)
Does inadequate knowledge of midwifery care affects ENC practices.	199(66.2)	92(30.8)	6(2.0)	3(1.0)
Is Knowledge of Essential new born care strategy important to the midwives	194(64.5)	94(31.4)	7(2.3)	5(1.7)
Does Poor new born care practices immediately following delivery contribute to the risk of morbidity and mortality.	195(64.9)	95(31.8)	3(1.0)	7(2.3)

Table 4 outlines determinants of essential newborn care (ENC) practices, presenting the frequencies of responses ranging from "Strongly Agree" to "Strongly Disagree" for each determinant. The majority of respondents strongly agreed or agreed that mother's social demographic characteristics affect ENC practices (69.6% Strongly Agree, 29.8% Agree), emphasizing the significance of considering various demographic factors in neonatal care. Additionally, respondents indicated agreement regarding the impact of the place of birth on ENC practices (64.2% Strongly Agree, 31.8% Agree), suggesting that where the birth occurs influences the quality of newborn care provided. Furthermore, respondents highlighted the importance of maternal health services utilization, with a majority agreeing that poor utilization affects ENC practices (62.5% Strongly Agree, 34.8% Agree), underscoring the critical role of healthcare access in newborn care. Moreover, respondents acknowledged the impact of inadequate knowledge of midwifery care on ENC practices (66.2% Strongly Agree, 30.8% Agree), indicating the necessity of proper training and education for midwives to deliver optimal care. Additionally, respondents recognized the importance of midwives' knowledge of essential newborn care strategies (64.5% Strongly Agree, 31.4% Agree), emphasizing the significance of equipping midwives with relevant knowledge and skills. Lastly, respondents agreed that poor newborn care practices immediately following delivery contribute to the risk of morbidity and mortality (64.9% Strongly Agree, 31.8% Agree), emphasizing the critical period immediately after birth for ensuring the health and well-being of newborns. Overall, the table underscores the multifactorial nature of determinants influencing ENC practices, reflecting varied perceptions among respondents regarding the key factors shaping the quality of newborn care delivery.

Table 5: Chi-square Test of Association between participants’ demographic characteristics (such as age, professional qualifications, rank and years of working experience) and their practice of Competency in Essential New Born Care

Demographic Characteristics	Midwives competence in ENC practice	Df	Chi square E test	Significance
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	Poor	Good			
Age Group	20-29	9			
20-29	91(84.3)	17(15.7)	3	0.329 ^a	0.955
30-39	82(83.7)	16(16.3)			
40-49	42(83.7)	8(16.3)			
50 above	26(88.9)	1(5.6)			
Professional					
Qualification					
RM	68(87.2)	10(12.8)	4	1.327 ^a	0.857
RN/RM	106(83.5)	21(16.5)			
BNSC	43(81.1)	10(18.9)			
MSC	11(84.6)	2(15.4)			
OTHERS	2(100)				
Rank					
NOII	52(91.2)	5(8.8)	4	7.847 ^a	0.097
NOI	60(83.3)	12(16.7)			
SNO	74(77.1%)	22(22.9)			
PNO	23(92.0)	2(8.0)			
ACNO	21(91.3)	3(8.7)			
Year of working Experience as a Midwife					
0-5	104(84.6)	19(15.4)	4	2.590 ^a	0.629
6-10	65(81.3)	15(18.8)			
11-15	28(82.4)	6(17.6)			
16-20	26(89.7)	3(10.3)			
21-25	7(100%)				

Table 5 displays the results of a Chi-square test of association between participants' demographic characteristics, including age, professional qualifications, rank, and years of working experience, and their practice of competency in essential newborn care (ENC). The table presents frequencies and percentages of midwives categorized by their level of competence in ENC (Poor or Good) within each demographic subgroup.

For the age group, no significant association was found between age and ENC practice, as indicated by a chi-square value of 3 and a p-value of 0.955, suggesting that age does not influence midwives' competence in ENC.

Similarly, professional qualifications showed no significant association with ENC practice, with a chi-square value of 1.327 and a p-value of 0.857, indicating that different qualifications among midwives do not significantly affect their competency in ENC. However, for rank, there was a borderline significant association with ENC practice (chi-square = 7.847, $p = 0.097$), suggesting that midwives' ranks may have some influence on their competency in ENC. Regarding years of working experience as a midwife, no significant association was found (chi-square = 2.590, $p = 0.629$), indicating that the duration of experience does not significantly impact midwives' competency in ENC. Overall, while age, professional qualifications, and years of working experience do not appear to significantly

influence midwives' competency in ENC, there is a suggestive trend regarding rank, hinting at potential implications for ENC practice among midwives of different ranks

Discussion

The study revealed several noteworthy findings concerning the demographic characteristics, essential newborn care (ENC) practices, factors influencing ENC, and determinants of ENC practice among midwives.

Firstly, the demographic profile of the respondents indicated a diverse distribution across age groups, with a significant proportion falling within the 20-29 years (35.7%) and 30-39 years (40.0%) brackets. Furthermore, the majority of respondents held RM/RN qualifications (48.0%), followed by RM (29.0%), BNSC (18.0%), and MSC (4.3%), while the distribution of ranks among respondents was relatively balanced. In terms of years of working experience, most midwives reported 0-10 years of experience, with the highest percentage falling within the 6-10 years' category (34.0%).

The essential new-born protocol is a series of time bound and chronologically ordered care that a baby receives at birth, and it has standardized effective procedural steps: dry and stimulate, evaluate breathing, cord care, keep the newborn warm, initiate breastfeeding within the first one hour, administer eye drops/eye ointment to prevent eye infection, administer vitamin K intramuscularly, place the newborn's identification bands, weigh the newborn when it is stable and warm, and record all observations and treatment provided. Concerning ENC practices, the majority of deliveries were attended by skilled birth attendants (98.7%), and essential care practices such as promoting thermal regulation (93.4%) and providing clean cord care (91.9%) received positive responses. However, there were notable gaps in certain practices, particularly the treatment of neonatal eyes with ointment (13.2%) and utilization of partographs (12.5%). Clean cord care is very important in preventing early neonatal infections. The precise timing of clamping and cutting the umbilical cord is important as there is some evidence of potential benefits for the baby when the cord is not clamped and cut immediately after birth. In this study, majority (85.7%) of Midwives fail to observe delayed cord clamping for 2-3 minutes after birth. This is lower than Negussie, Hailu, and Megenta, (2018) report showing 32.0% and 21.7% of the participants delayed clamping of umbilical cord for all babies and some babies they delivered

Factors influencing ENC practices were identified, with respondents largely agreeing that poor knowledge of ENC (62.5% Strongly Agree, 33.1% Agree) and poor infection prevention and control skills (53.8% Strongly Agree, 43.1% Agree) significantly impacted ENC practices. Additionally, factors such as shortage of staff, lack of constant training, socioeconomic status, and ethnicity or caste influence were perceived as hindrances to effective ENC practices. As indicated by, Arba & Zana, (2019), in their study, the results showed that majority of Midwives did not perform most of the essential newborn protocol, followed by those that did not perform the protocol satisfactorily as shown. In line with this study, Malhotra, et al., (2014) in their study also observed for all levels of providers that there was a huge difference in knowledge and skill scores. As cited by Renfew et al (2017), states that, Midwifery matters for all child bearing women, their babies, and their families, wherever they live in the world, and whatever circumstances, shows that skilled, knowledgeable and compassionate Midwifery care reduces maternal and new-bon mortality and stillbirths, keep mothers and babies safe, and promote health and well-being.

Determinants of ENC practice included mother's social demographic characteristics, place of birth, availability of health services, and midwives' knowledge. Notably, lack of adequate knowledge of midwifery care was identified as a significant factor affecting ENC practices, as evidenced by 62.5%

of respondents strongly agreeing with this notion. Furthermore, while there was no significant association found between age, professional qualifications, and years of working experience as a midwife with ENC practice, there was a borderline significant association with rank. This suggests that midwives' ranks may influence their competency in ENC, potentially indicating that newer practitioners exhibit more efficient practices. This finding underscores the need for ongoing training and support for midwives across all levels of experience. The study highlights the multifaceted nature of factors influencing ENC practices among midwives and emphasizes the importance of addressing knowledge gaps, ensuring adequate staffing levels, and promoting continuous training and support to enhance the quality of essential newborn care delivery.

Conclusion

The results of this study offer insights into essential newborn care (ENC) practices among midwives, highlighting both the factors influencing these practices and the demographic characteristics of the respondents. The participants exhibited diversity in terms of age, qualifications, ranks, and years of experience. While skilled birth attendants primarily attended deliveries and essential care practices like ensuring thermal regulation and maintaining clean cord care were generally well-implemented, certain practices such as delayed cord clamping and the use of partographs revealed significant areas for improvement. Factors influencing ENC practices included poor knowledge of ENC, inadequate infection prevention and control skills, shortage of staff, lack of constant training, socioeconomic status, and ethnicity or caste influence. Lack of adequate knowledge of midwifery care emerged as a significant concern affecting ENC practices. Although no significant association was found between age, professional qualifications, and years of working experience with ENC practice, there was a borderline significant association with rank, suggesting that midwives' ranks may influence their competency in ENC.

Given these findings, it's crucial to tackle the recognized shortcomings and obstacles in essential newborn care (ENC) practices among midwives. Prioritizing ongoing education and training programs that emphasize ENC protocols, infection prevention, and other pertinent skills is essential. Furthermore, enhancing staffing levels, especially in areas experiencing shortages, is vital. Additionally, interventions targeting socioeconomic gaps and cultural factors affecting ENC practices are imperative to guaranteeing fair and high-quality care for all newborns.

Reference

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