

Practices of essential newborn care and associated factors among final year nursing and midwifery students in Lira city, a cross-sectional study.

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ABSTRACT

Page | 1 **Background:**

Neonatal mortality is a significant public health issue since 7,000 infants perish daily from avoidable causes. In Sub-Saharan Africa, 1 in 38 newborns die before their first month of life. Essential newborn care (ENC) seeks to lower this mortality in wealthy and developing nations. This study aimed to evaluate the practice of ENC and associated factors among Lira City's final-year nursing and midwifery students.

Methodology:

A cross-sectional study was employed involving 275 final year student nurses and midwives. Institutions and participants were randomly sampled, and data were collected using self-administered questionnaires. Multivariable logistic regression was used to identify factors associated with the practice of Essential Newborn Care.

Results:

The study involved more females, 57.1%, than males, 42.9%, % majority of whom were 22-26 years, and (80.0%) of the participants were single. Findings revealed that Education Students at certificate and Diploma levels were 31.289 [AOR= 31.289; P= 0.001; 95%CI; 4.262- 259.986] and 217.929 [AOR= 217.929; P< 0.001; 95%CI; 19.312-2459.259] times respectively, more likely to have good practice than those at Bachelor's. Married students were 0.186 [Adjusted Odds ratio (AOR) = 0.186; P= 0.007; 95%CI; 0.055-0.625] times less likely to have good practice than those who were single. Additionally, students taught from lecture rooms were 0.200 [AOR= 0.200; P= 0.010; 95%CI; 0.059-0.680] times less likely to have good practice than those who were taught from the ward. Students who had continued support supervision were 0.368 [AOR= 0.368; P= 0.044; 95%CI; 0.630-2.217] times less likely to have good practice than those who did not have continued support supervision.

Conclusion:

There was generally good practice of Essential Newborn Care. The education level of the students highly determined their practice of ENC.

Recommendation:

Implement continued support supervision to ensure good practices on essential newborn Care.

Key words: Practices, Essential Newborn care, Nursing and Midwifery, Lira City.

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BACKGROUND OF THE STUDY

Globally, newborn mortality and morbidity remain one of the main public health concerns and an important indicator of child health, development, and well-being (WHO, 2022a). Nearly 7000 newborns die every day from preventable causes like prematurity, birth asphyxia, and neonatal sepsis (Abebe et al., 2021). The majority (80%) of these deaths occurred in Low and middle-income countries (LMICs) (Tiruye et al., 2022). Notably, Sub-Saharan Africa (SSA) had the highest burden, with one in every 38 newborns dying before the first month of life (Mangu et al., 2021), with an estimated neonatal mortality rate of 27/1000 live births (Tiruye et al., 2022). Uganda, in comparison to Ethiopia, DRC, and Tanzania, with 97, 96, and 43 deaths per 1000 live births, respectively, about 27 neonates die per 1,000 live births (Asiime et al., 2020; WHO, 2022b), about half of these deaths were due to birth

asphyxia (Komakech et al., 2023). Lira district in 2020 had a perinatal mortality of 43/1000 live births (Anna Agnes Ojok Arach et al., 2021). The majority of these deaths were preventable with proper practice of essential newborn care (A. A. O. Arach et al., 2021).

Essential newborn care (ENC) refers to a set of measures that every baby requires regardless of their age and size (Komakech et al., 2020; Nampijja et al., 2023). The essential elements of newborn care include: warmth, breastfeeding initiation within 1 hour after birth, cord care, routine eye care – application of tetracycline eye ointment, and vitamin K administration (WHO, 2023). Essential newborn care aims to reduce newborn mortality and morbidity through interventions done during delivery and the postpartum period in developing and developed countries (Ayele Alemu Degu et al., 2022). Most of the neonatal mortality cases that occur in developing

countries are related to conditions of poor immediate newborn care being given to newborns (Tekelab et al., 2019).

Newborns are at high risk of death during the delivery process; problems during childbirth and the first few days after giving birth have been linked to the majority of newborn deaths (Bhattacharya et al., 2019). The majority of newborn mortality in LMICs has been linked to improper newborn care, with regard to safe cord care, ideal thermal care, and the early commencement and maintenance of exclusive breastfeeding (Ayete-Nyampong & Udofia, 2020).

In collaboration with health ministries and other partners, WHO is working to: enhance and invest in care, especially in the first week of life and the period immediately following birth, since it is when the majority of newborns die. Enhance the quality of care for mothers and newborns from pregnancy through the entire postnatal period, including bolstering midwifery and increasing access to high-quality services for small and sick newborns, strengthening neonatal nursing, and lessening disparities in line with the principles of universal health coverage. Also attending to the needs of newborns in fragile and humanitarian situations; encourage and empower mothers, families, and communities to engage in and demand quality newborn care (WHO, 2022b).

A number of studies have been conducted in different parts of the world on practices of ENC and associated factors among nurses and midwives, but in Uganda, there are limited research studies that have been conducted among nursing and midwifery students. Additionally, the existing studies focused on qualified healthcare workers, and most have been conducted in urban centers as opposed to peri-urban centers like Lira. Understanding the practices of essential newborn care and associated factors can offer recommendations for filling in the gaps to administrators of health facilities, managers of health systems, managers of programs, and implementers of health programs (Arba & Zana, 2020b). This study, therefore, aimed to assess the practices and associated factors on ENC among final year student nurses and midwives.

METHODOLOGY

Study design

A descriptive and cross-sectional study utilizing quantitative data collection techniques. This is because cross section design enables collection of data at a specific point in time and descriptive statistics was used to better understand the variables, it is descriptive.

Study site

This study was conducted in four health-training institutions in Lira City (one university and three other nursing and midwifery health training institutes).

Study setting

Lira University was the only training institution at the bachelor's level, so it got an automatic first slot. One of the public universities in the northern part of Uganda is Lira University, located in Lira City. It is 326 kilometers from Kampala and 12 kilometers west of Lira City. The six faculties of Lira University are the following: the faculties of public health, medicine, education, computing and information sciences, nursing and midwifery, and management science. However, this study involved the Faculty of Nursing and Midwifery, focusing on final year students pursuing a Bachelor of Science in Midwifery.

Three training institutions within Lira City have diploma and certificate level training that were selected using simple random sampling at the time of data collection, and only for the final year.

Study Population.

All final year nursing and midwifery students in health training institutions in Lira City. There are nine nursing and midwifery training institutions in Lira City, with one university and eight institutions. That is Lira University, Lira School of Comprehensive Nursing- Lira City, Daf School of Nursing - Lira City, Uganda Christian Institute- Lira City, Jerusalem School of Nursing- Lira City, King James Nursing School- Lira City, Victoria School of Nursing and Midwifery- Lira City, John Fisher School of Nursing and Midwifery- Lira City, Good Samaritan school of nursing and midwifery- Lira City (MoES, 2022). Three institutions were selected.

Target Population.

Final year nursing and midwifery students in Lira City.

Accessible population.

Final year nursing and midwifery students in the four selected institutions were available at the time of data collection.

Eligibility criteria

Inclusion criteria

All final year student nurses and midwives from the selected institutions who were present at the time of data collection and were willing to participate in the study were included.

Exclusion criteria.

Final year student nurses and midwives from the selected institutions who were ill on the day of data collection and could not give the required information were excluded from the study.

Sample size determination

The sample size calculation was adopted from the Krejcie and Morgan method of sample size estimation of 1970, which is $Sample\ size\ (S) = N * Z^2 / (d^2 * (N-1) + Z^2)$. The estimated population of final year Nursing and Midwifery students in the four selected institutions

Final year students in Lira University at bachelor's level are 67, and the estimated number of final year students at diploma and certificate levels in the three institutions is 902

Sample size (S) = $N * Z^2 / (d^2 * (N-1) + Z^2)$

N = 969 students

At a 95% confidence level (Z = 1.96),

10% margin of error (d = 0.1)

$S = 969 * 1.96^2 / (0.1^2 * (969-1) + 1.96^2) \approx 275$

Rounded sample size = 275 students

With a 95% confidence level (Z = 1.96), a 10% margin of error (d = 0.1), and a finite population of 969 students in Lira City, your estimated sample size using the Krejcie and Morgan formula was approximately 275 students.

Sampling technique and procedure

A random sample method was utilized, since the study only needs one random selection and minimal prior information about the study population. Until the desired sample size of 275 was attained, the initial participants were selected at random, and the remaining participants were selected in accordance with their availability and willingness to participate. With an average of 91 individuals per day, the researcher needed three working days to get the necessary sample size of 275 persons.

Recruitment of participants

Participants who fitted the inclusion criteria for the study, or potential participants, were contacted and asked for their written informed consent. The study recruited those who provided their consent. Emails, social media, and physical interpersonal encounters recruited study participants.

Study Variables

Dependent Variable

Practices of essential newborn care

Independent Variable

Associated factors

Social demographic factors

Moderating factors

Tradition/culture

Data collection procedures, methods, and tools

Data Collection Procedure

The Research Ethics Committee of Lira University was requested to approve the study to be conducted in the university by the researcher. The three principals of the nominated nursing and midwifery institutions received a request letter seeking permission to conduct the study in their health training institutions, which was obtained from the Research Ethics Committee of Lira University. The final year nursing and midwifery students in the selected health training institutions were asked for their informed consent before giving their permission to participate. Those who gave approval and matched the inclusion

requirements were included in the study. Questionnaires that are self-administered were used to gather data. Participants received a thanks message for taking part in the study upon completion.

Data Collection Method and Tool

The methodology for gathering data was quantitative. Self-administered questionnaires were used. It entailed employing multiple-choice or closed-ended questions to gather numerical data. This methodology contributed to the production of high-quality data that was utilized to interpret numerical data. The researcher created self-administered questionnaires that were typed in English and used as the data collection instrument. The questionnaire was created by consulting earlier research on nursing and midwifery students' understanding of critical infant care and related characteristics. Three sections made up the questionnaire: section a) asked about socio-demographics (institution and level of education, age, sex, gender, resilience, marital status, religion, ethnic group, and education level); section b) asked about practice on ENC; section c) asked about moderating factors affecting the need for essential newborn care. To minimize data loss, the gathered data was verified twice for accuracy and completeness, and any inaccuracies or incompleteness were instantly fixed.

Data Management

Data Entry and Cleaning

After creating data entry screens with checks, the data was duplicated and entered into the EPI-DATA software version 3.0 before being cleaned and moved to the SPSS version 23 analytical software.

Data Analysis

The statistical software for social sciences (SPSS) (version 23) was used to analyze the data collected using questionnaires. Tables, graphs, and charts were used to display the gathered data. While categorical variables were analyzed and shown as percentages and frequencies in the pertinent tables and diagrams. The relationship between the final year Nursing and Midwifery students' practices on ENC and the associated factors was tested at the 95% confidence level, and as an odds ratio, logistic regression was employed.

Quality control

Pre-test

The validity and reliability of the data collection instrument were ascertained by pre-testing. To increase the validity of the questionnaire in this study, it was pre-tested before data collection. The purpose of the pretest was to ascertain whether they can extract the necessary information and whether there's any room for interpretation. The research tool was modified in light of the pilot study's findings after the questionnaire was given to a small number of Lira University participants (10% of

the sample size), from whom responses were collected for a single day.

Validity

Validity refers to the extent to which an instrument measures what it intends to measure. A key person in nursing and midwifery, to ensure it covered all aspects of essential newborn care and associated factors, reviewed the designed questionnaire. It was pre-tested before data collection among 28 participants at Lira University, and their answers were collected over the day to assess the questions' readability, capacity to extract the necessary information, and clarity.

Reliability

Reliability refers to the extent to which an instrument produces consistent results under similar and different conditions. The questionnaire was pretested on 10% of the total participants at Lira University to guarantee that the research tools would produce consistent findings.

Ethical Considerations

Ethical approval

The study received ethical approval and administrative clearance from the Research Ethics Committee of Lira University.

Informed consent

Consent was sought from the final year students following a detailed explanation of the advantages and goals of the study; participants were free to consent from the four selected institutions with no coercion.

Privacy

Privacy of the participants was observed by using questionnaires with anonymous identity in private, quiet, and comfortable places for the participants without recording their names.

Confidentiality

To preserve the privacy of the participants, identifiers like personal addresses, names, or phone numbers were not provided in the questionnaires. Participants were identified by code numbers.

COVID-19 mitigation plan

Strict standard operating protocols (SOPS) were followed while in the field, and only participants who complied with them were interviewed. Keeping a social distance, cleaning hands with soap and water, donning face masks, and hand sanitizing were all part of these SOPS.

RESULTS

Socio-demographic characteristics of the participants.

The majority (57.1%) of the participants were females. Most (56.7%) of the participants belonged to the 22-26 age category. Almost all (80.0%) of the participants were single. Concerning religion, the majority (40.7%) of the participants were Protestants. Regarding Ethnic groups, nearly half (51.6%) of the participants were Luo. Most (58.2%) of the participants were from urban areas. The majority (79.3%) of the participant were on direct entry into their learning institutions. Certificate level of education (59.3%) had the highest number of students who participated in the study.

Table 1: Showing Sociodemographic characteristics.

Socio demographic	Frequency (N=275)	Percentage (%)
Gender		
Male	118	42.9
Female	157	57.1
Age		
17 – 21	76	27.6
22- 26	156	56.7
27- 31	33	12.0
> 31	10	3.6
Marital status		
Married	40	14.5
Divorced/ separated	15	5.5
Single	220	80.0
Religion		
Catholic	94	34.2
Muslim	25	9.1
Protestant	112	40.7
Born again	38	13.8
SDA	6	2.2
Ethnic group		
Bantu	75	27.3
Luo	142	51.6
Plain Nilotic	36	13.1

Hamites	22	8.0
Residence		
Village	115	41.8
Town	160	58.2
Entry level		
Extension	57	20.7
Direct	218	79.3
Study year		
2	51	18.5
3	181	65.8
4	43	15.6
Education level		
Certificate	163	59.3
Diploma	69	25.1
Bachelor	43	15.6

Source: Primary data 2024

Practice of ENC

Overall, all the practices of essential newborn care were good at 53.09% (shown in Figure 3 below)

Table 2: Practice of ENC

Practice of ENC	Frequency (N=275)	Percentage (%)
Advise the mother to initiate breastfeeding.		
Yes	132	48.0
No	143	52.0
Administering TEO and vitamin K		
Yes	148	53.8
No	127	46.2
Helped an asphyxiated baby breathe		
Yes	164	59.6
No	111	40.4
Educated mother and caregiver		
Yes	123	44.7
No	152	55.3

Source: Primary data 2024

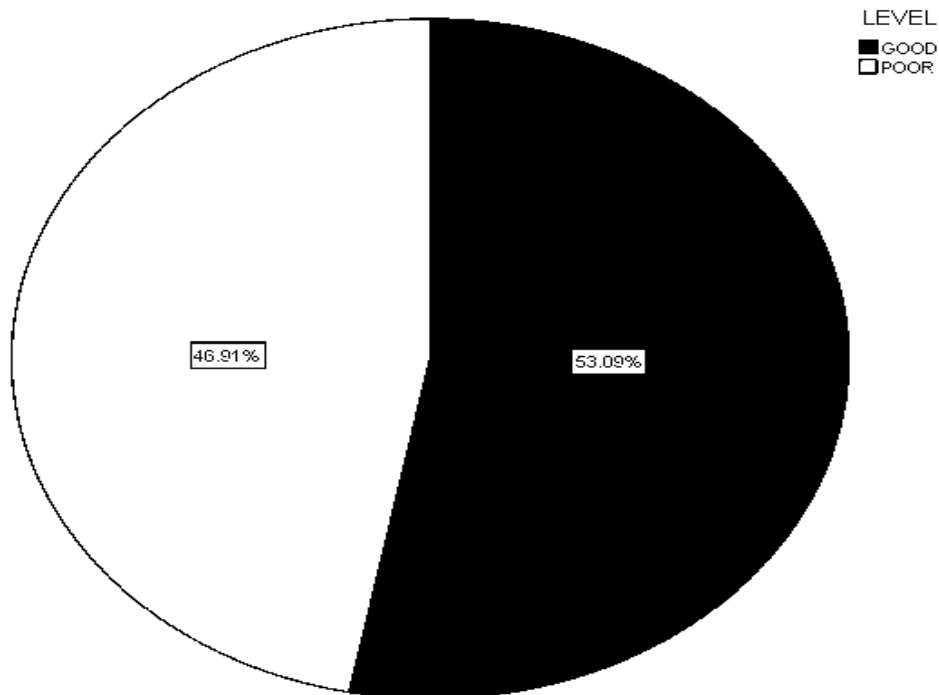


Figure 1: Showing the overall Level of practice of Essential Newborn Care.

Bivariate analysis of associated factors on Essential Newborn Care and the relationship between socio-demographics with the practice of essential newborn care among nursing and midwifery students in Lira City.

The socio-demographic characteristics that were found statistically associated with the practice of essential newborn care included: marital status ($P=0.002$), entry level ($P=0.031$), study year $P<0.001$, and education level ($P<0.001$).

Table 3: Showing the bivariate analysis on the factors associated with the practice of essential newborn care among nursing and midwifery students in Lira City

Socio demographic	Practice		Crude odds ratio 95% CI	P-value
	Good	Poor		
Gender				
Male	59(50.0%)	59(50.0%)	0.805 (0.498-1.299)	0.373
Female	87(55.4%)	70(44.6%)	Ref	
Age				
17 – 21	46(60.5%)	30(39.5%)	2.609(0.518-13.133)	0.102
22- 26	71(48.1%)	81(51.9%)	4.320(0.889-20.994)	
27- 31	17(51.5%)	61(48.5%)	3.765(0.692-20.468)	
> 31	8(80.0%)	2(20.0%)	Ref	
Marital status				
Married	18(45.0%)	22(55.0%)	1.638(0.832-3.227)	0.002*
Divorced/ separated	2(13.3%)	13(86.7%)	8.713(1.920-39.538)	
Single	126(57.3%)	94(42.7%)	Ref	
Religion				
Catholic	49(52.1%)	45(47.9%)	1483586949.196*0.000)	0.230
Muslim	12(48.0%)	13(52.0%)	1750083123.403(0.000)	
Protestant	59(52.7%)	53(47.3%)	1451177140.136(0.000)	
Born again	20(52.6%)	18(47.4%)	1453915210.212(0.000)	
SDA	6(100.0%)	0(0.0%)	Ref	
Ethnic group				
Bantu	40(53.3%)	35(46.7%)	0.408(0.149-1.116)	0.125

Luo	82(57.7%)	60(42.3%)	.0341(0.131-0.889)	
Plain Nilotic	17(47.2%)	19(52.8%)	0.522(0.172-1.583)	
Hamites	7(31.8%)	15(68.2%)	Ref	
Residence				
Village	61(53.0%)	54(47.0%)	0.997(0.617-01.611)	0.989
Town	85(53.1%)	75(46.9%)	Ref	
Entry level				
Extension	23(40.4%)	34(59.6%)	0.522(0.289-0.945)	0.031*
Direct	123(56.4%)	95(43.6%)	Ref	
Study year				
2	17(33.3%)	34(66.7%)	41.000(8.842-190.118)	<0.001*
3	88(48.6%)	93(51.4%)	21.665(5.087-92.260)	
4	41(95.3%)	2(4.7%)	Ref	
Education level				
Certificate	86(52.8%)	77(47.2%)	18.355(4.296-78.423)	<0.001*
Diploma	19(27.5%)	50(72.5%)	53.947(11.865-245.284)	
Bachelor	41(95.3%)	2(4.7%)	Ref	

Bivariate analysis of the other factors associated with the practice of essential newborn care among nursing and midwifery students in Lira City

Other factors that were found statistically associated with the practice of essential newborn care at a 95% CI and at a P-value of <0.05 included: who taught you ENC (P<0.001), where you were taught from (P<0.001), and continued support supervision p=0.033).

Table 4: Showing the bivariate analysis of other factors associated with the practice of essential newborn care

Variable	Practice		Crude odds ratio 95%CI	P-value
	Good	Poor		
Have you ever been taught ENC?				
Yes	131(53.5%)	114(46.5%)	1.149(0.538-2.453)	0.719
No	15(50.0%)	15(50.0%)	Ref	
If yes, who taught you ENC				
Lecturer	90(64.3%)	50(35.7%)	0.514(0.270-0.980)	<0.001*
Fellow student	16(36.4%)	28(63.6%)	1.620(0.713-3.681)	
Doctor	0(0.0%)	9(100.0%)	1495810059.554(0.000)	
Nurse/ midwife	25(48.1%)	27(51.9%)	Ref	
Where were you taught from				
Lecture room	97(67.8%)	46(32.2%)	4.217(2.455-7.244)	<0.001*
Ward	34(33.3%)	68(66.7%)	Ref	
Continued support and supervision are essential for ensuring the quality of nursing education.				
True	131(55.7%)	104(44.3%)	2.099(1.053-4.185)	0.033*
False	15(37.5%)	25(62.5%)	Ref	
Smaller class sizes typically have higher ENC satisfaction rates.				
True	87(54.4%)	73(45.6%)	1.131(0.700-1.828)	0.615
False	59(51.3%)	56(48.7%)	Ref	
Government funding for ENC programs has been declining in recent years.				
True	73(47.1%)	82(52.9%)	0.573(0.353-0.930)	0.024*
False	73(60.8%)	47(39.2%)	Ref	

Multivariate Analysis on the factors associated with the practice of Essential Newborn Care among nursing and midwifery students in Lira City

In order to identify the parameters linked to the practice of essential newborn care among student nurses and midwives in Lira City, a binary logistic regression was

used in multivariate analysis. At a 95% confidence interval (CI), the following variables were found to be statistically significant at a p-value of less than 0.05. When it came to the practice of essential newborn care: education level (P=0.001), diploma (P<0.001), marital status (0.007), who taught you ENC (P=0.022), where you received your instruction (P=0.010), and continued support supervision (P=0.044).

Table 5: Showing the Multivariate Analysis on the factors associated with the practice of Essential Newborn Care among nursing and midwifery students in Lira City

Variable	Practice		Adjusted odds ratio 95% CI	P-value
	Good	Poor		
Study year				
2	17(33.3%)	34(66.7%)	1.065(0.087-13.029)	0.961
3	88(48.6%)	93(51.4%)	0.293(0.069-1.243)	0.096
4	41(95.3%)	2(4.7%)	Ref	
Education level				
Certificate	86(52.8%)	77(47.2%)	31.289(4.262-259.986)	0.001*
Diploma	19(27.5%)	50(72.5%)	217.929(19.312-2459.259)	<0.001*
Bachelor	41(95.3%)	2(4.7%)	Ref	
Entry level				
Extension	23(40.4%)	34(59.6%)	0.293(0.069-1.243)	0.096
Direct	123(56.4%)	95(43.6%)	Ref	
Marital status				
Married	18(45.0%)	22(55.0%)	0.186(0.055-0.625)	0.007*
Divorced/ separated	2(13.3%)	13(86.7%)	4.206(0.823-21.490)	0.084
Single	126(57.3%)	94(42.7%)	Ref	
Taught enc				
Lecturer	90(64.3%)	50(35.7%)	4.885(1.255-19.012)	0.022*
Fellow student	16(36.4%)	28(63.6%)	1.622(0.611-4.303)	0.331
Doctor	0(0.0%)	9(100.0%)	21742332(0.000)	0.999
Nurse/ midwife	25(48.1%)	27(51.9%)	Ref	
Taught from				
Lecture room	97(67.8%)	46(32.2%)	0.200(0.059-0.680)	0.010*
Ward	34(33.3%)	68(66.7%)	Ref	
Continued support supervision				
True	131(55.7%)	104(44.3%)	0.368(0.139-0.975)	0.044*
False	15(37.5%)	25(62.5%)	Ref	
Government funding				
True	73(47.1%)	82(52.9%)	1.182(0.630-2.217)	0.602
False	73(60.8%)	47(39.2%)	Ref	

DISCUSSION

Practices of essential newborn care among final year nursing and midwifery students in Lira City

Overall, the practice of essential newborn care was 53.09% whereby the majority of the study participants had good practice, and this could have been due to the availability of the practicing areas, such as the skills laboratory, where they can have simulation training. However, this finding is lower than that in a similar study carried out on the practice of essential newborn care in La Dade Kotopon Municipality, Ghana, whereby almost three-quarters 72.80% of the study participants had good practice (Ayete-Nyampong & Udofia, 2020). The variation in the practice could be due to the availability of improved technology in Ghana, which fosters the practice of essential newborn care compared to that in this study area.

This finding was higher than the study conducted in Assosa Zone Governmental Health Facilities in Western Ethiopia among nurses and midwives. This could be due to the poor working conditions in government facilities,

which could have resulted in poor practice (Bayisa et al., 2022).

Factors associated with essential newborn care among final year student nurses and midwives in Lira City

The socio-demographic characteristics that were found statistically associated with the practice of essential newborn care at the bivariate level included: marital status, entry level, study year, and education level. Other factors that were found statistically associated with the practice of essential newborn care at the bivariate level included: who taught the student about ENC, where he/she was taught from, and continued support and supervision of the students about ENC. In order to identify the parameters linked to the practice of essential newborn care among student nurses and midwives in Lira City, a binary logistic regression was used in multivariate analysis at a 95% confidence interval (CI), and the following variables were found to be statistically significant when it came to the practice of essential newborn care.

In this study, marital status was one of the predictors of good Essential Newborn care practice, whereby students who were married were 0.186 [Adjusted Odds ratio (AOR)= 0.186; P 0.007; 95%CI; 0.055-0.625] times less likely to have good practice than those who were single. A possible justification for this could be due to the fatigue from their home places, which could hinder them from practicing good Essential Newborn Care. However, a study conducted in Assosa Zone Governmental Health Facilities in Western Ethiopia among nurses and midwives revealed that married individuals had better practices (Bayisa et al., 2022). This could be because most of them were parents and hence had that parental care and love.

The study findings indicated that educational level was significantly associated with good Essential Newborn care practice. Students who were at certificate and Diploma were 31.289 [AOR= 31.289; P= 0.001; 95%CI; 4.262- 259.986] and 217.929 [AOR= 217.929; P< 0.001; 95%CI; 19.312-2459.259] times respectively more likely to have good practice than those at Bachelor's. This is in line with a study carried out in public facilities, Awi zone, and Amhara regional state in Ethiopia that revealed that educational level, in-service training, field of study, availability of drugs, and availability of medical equipment were significantly associated with the practice of essential newborn care (Ayenew et al., 2020). The slight difference could be due to the difference in the study population, as this study focused on students, not qualified staff.

The study findings further indicated that the person who taught the students Essential Newborn care was another predictor for good practice in that students who were taught by lecturers were 4.885 [AOR= 4.885; p= 0.022; 95%CI; 1.255-19.012] times more likely to have good practice than those who were taught by nurses/ midwives. A possible justification for this could be variation in teaching skills by the different people in that lecturers could have better skills than other people could.

The study findings further indicated that the place where students were taught about Essential Newborn care was another predictor of good Essential Newborn care practice in that those who were taught from lecture rooms were 0.200 [AOR= 0.200; P= 0.010; 95%CI; 0.059-0.680] times less likely to have good practice than those who were taught from the ward. This is because students taught from wards have evidence-based teaching and hence ensure good practices.

In this study, continued support supervision was another predictor of good Essential Newborn care practice in that those who had continued support supervision were 0.368 [AOR= 0.368; P= 0.044; 95%CI; 0.630-2.217] times less likely to have good practice than those who did not have continued support supervision. This could be due to fear of supervision, which makes students uncomfortable, hence poor practice.

However, a study conducted in Northeast Ethiopia revealed that continued support supervision was significantly associated with good practice (Ashenef et al.,

2021). This could be attributed to the fact that supervision fosters good practice of Essential Newborn Care due to fear of job loss.

CONCLUSION

The majority, 53.09% of the participants, had good practice of Essential Newborn Care.

Education level, marital status, who taught the student about ENC, where the person was taught from, and continued support and supervision were the factors associated with the practice of Essential Newborn Care.

RECOMMENDATION

Incorporate hands-on simulation training that helps students develop practical skills and promote interdisciplinary collaboration. Emphasizing evidence-based practices, cultural sensitivity, and family-centered care prepares students to communicate effectively with families and respect ethical considerations. Diverse clinical placements and reflective practices help students gain practical experience and emotional resilience, supported by ongoing professional development and mentorship for comprehensive skill development.

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LIST OF ABBREVIATIONS

ENC	Essential Newborn Care
LMIC:	Low and Middle-income countries
SSA	Sub-Saharan Africa
WHO	World Health Organization
SPSS	Statistical Package for Social Sciences
SDA	Seventh Day Adventist
EBF	Exclusive breastfeeding
BCG	Bacilli Calmette-Guérin
OPV	Oral Polio Vaccine
KMC	kangaroo mother care
CPR	Cardiopulmonary resuscitation
MoES	Ministry of Education and Sports
DRC	Democratic Republic of Congo

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CONFLICT OF INTEREST

The author declares no conflict of interest.

AUTHOR CONTRIBUTIONS

JA- Study developer, Data collector, and analyzer
EM- Supervised the Study

DATA AVAILABILITY

Data is available upon request.

ETHICAL APPROVAL

The study received ethical approval and administrative clearance from the Research Ethics Committee of Lira University.

INFORMED CONSENT

There was full disclosure; full comprehension, and respondents voluntarily consented to participate in the study. Consent was sought from the final year students following a detailed explanation of the advantages and goals of the study; participants were free to consent from four selected institutions with no coercion.

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