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Training institutional Factors Influencing Curriculum Implementation on Emergency Obstetrics and Neonatal Care for Faith-Based Diploma Nursing Students in Meru and Tharakanithi County

Mirriam Muendi Kivuva[1], Susan Njuguna[2] & Roselyne A. Odhiambo[3]
[1,3]Department of Nursing, Kenya Methodist University
[2]School of Nursing, Daystar University
Corresponding email: mirriamkivuva94@gmail.com

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Abstract

Purpose: Maternal and newborn healthcare is fundamental to achieving positive health outcomes in a country. The implementation of the curriculum on emergency obstetrics and neonatal care (EmONC) plays a crucial role in preparing skilled birth attendants. This study aimed to assess training institutional factors influencing curriculum implementation on emergency obstetrics and neonatal care for faith-based diploma nursing students in Meru and Tharakanithi County.

Methodology: A total of n=216 (84.7%) responses (second-year and third-year diploma in nursing programs students) were received out of a target population of N=255 (100%) respondents while a total of n=10 (90.9%) responses (nurse educators) were received out of a target population of N=11(100%) respondents. Data was collected through an online-administered questionnaire to nursing students and nurse educators. In addition, key informant interviews were used to collect qualitative data from nurse educators. Data was cleaned coded, and entered into the scientific package for social sciences (SPSS) software vs. 27. Descriptive and inferential statistics were used to interpret findings.

Results: Bivariate correlation, showed a strong positive correlation coefficient of 0.898 and 0.640 for nurse educators and students respectively, and are all statistically significant ($p<0.05$).

Conclusion: This study concluded that training institutional factors positively influence implementation of curriculum on EmONC in Meru and Tharakanithi County. Based on the findings of this study the study recommends several actions to improve curriculum implementation in EmONC. The college administration needs to avail necessary resources in the classroom and skill lab to facilitate learning in EmONC and make arrangements for students to get preservice EmONC if possible before graduation.

Keywords: *Training institutional Factors, Curriculum Implementation, Emergency Obstetrics and Neonatal Care*

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1.0 Introduction

A curriculum comprises a planned order of knowledge, skills, and experiences that learners are expected to demonstrate in a learning institution or a specific course (United Nations Educational, Scientific, and Cultural Organization [UNESCO], 2022). A good curriculum offers suitable subject matter and activities aimed at enhancing students' understanding. It encompasses the resources, material, instructional content, lessons, and clear educational goals essential for a teacher to effectively deliver a specific course (Zamanzadeh et al., 2021). A nursing curriculum comprises the educational content (topics) and the practical learning experiences (such as clinical training and exercises) designed and executed by the faculty across different environments for a specific group of students over a defined duration, all to achieve specific educational goals (Salem et al., 2018). Curriculum implementation is the practical application of officially designated educational content, including courses, syllabi, and subjects. This process revolves around facilitating the learner's acquisition of knowledge and experience. Proper curriculum implementation hinges on the involvement of the learner, making them the pivotal element in this process. Several factors play a significant role in influencing curriculum implementation, including the characteristics of the learners, the availability of resources and facilities, the teacher's role, the school environment, cultural and ideological considerations, as well as instructional oversight and assessment (Gervedink Nijhuis et al., 2013). A robust nursing curriculum is crucial for continuous professional growth, provides nurses with relevant knowledge and skills, promotes safety and ethical conduct, fosters critical thinking, and encourages lifelong learning and evidence-based practice, ultimately ensuring high-quality, midwifery education (Hassmiller & Wakefield, 2022). The third State of the World's Midwifery Report (SoWMY 2021) emphasized the importance of high-quality midwifery education, which is characterized by delivery of exceptional care to mothers and newborns. Additionally, the report highlighted the significance of comprehensive education for midwives, which must be aligned with international standards(Nove et al., 2021a). For this to happen proper nursing curriculum implementation, especially in emergency obstetrics and neonatal care (EmONC) is imperative.

Worldwide, an approximate 295,000 maternal fatalities occurred in the year 2017. Additionally, around 2.5 million infants lost their lives in 2018, while approximately 2.6 million stillbirths transpired in 2015. It is noteworthy that the majority of these unfortunate events, comprising 99 percent of maternal deaths, 77 percent of newborn mortalities, and 98 percent of stillbirths, took place in countries classified as low- and middle-income economies (LMICs) (World Health Organization [WHO],2019). Competent midwives play a critical role worldwide in the global initiatives to reduce maternal and perinatal mortality rates. This can only be accomplished by ensuring widespread utilization of essential midwifery services which include skilled attendance during childbirth, EmONC, and family planning (Nove et al., 2021b). Additionally, the highest risk of maternal death occurs during labor, birth, and the immediate postpartum period due to a lack of skilled birth attendance (Metcalfe & Adegoke, 2013; Nove et al., 2021b). During this critical period, the presence of a competent skilled birth attendant (SBA) is vital as numerous interventions that are recognized to save the lives of both mothers and newborns depend on their involvement and presence (Metcalfe & Adegoke, 2013).

Curriculum implementation in nursing is a complex process influenced by various factors. Effective implementation is crucial to ensuring that nursing students receive a high-quality education that prepares them for their roles as competent healthcare professionals (Zhang & Zhang, 2012). Successful curriculum implementation in nursing requires careful consideration of various factors to ensure that the curriculum is relevant, effective, and responsive to the changing healthcare environment. These factors include nurse educators, training institutions, learners, and training hospital factors (Chi et al., 2015; Zhang & Zhang, 2012). Proper nursing curriculum implementation in EmONC worldwide is impacted by nursing educator factors, ultimately influencing the quality of graduates in nursing programmes (Chi et al., 2015).

Research indicated that midwifery educators tend to have more confidence in teaching theoretical concepts than practical skills additionally training institutions lack adequate nurse educators (Chi et al., 2015; W HO, 2019). Nurse educators additionally, continue to use teacher-dominated instructional strategies in conventional classroom environments, disregarding advancements in teaching methodologies (WHO, 2019). To enhance proper curriculum implementation in EmONC, countries need to recruit and train additional nurse educators (Chi et al., 2015).

In low- and middle-income countries (LMICs), including Kenya, proper nursing curriculum implementation in EmONC is impacted additionally by various institutional, curriculum-related, and student factors. These factors encompass inadequate instructional materials, differences in the content and span of midwifery curriculum, and insufficient opportunities to use practical training sites, resulting in a disconnect between theory and practice (Salem et al., 2018; WHO, 2019). Furthermore, training hospital and institutional factors influence proper curriculum implementation in EmONC. These factors include a lack of proper synchronization and harmonization in training initiatives, and inefficient resource distribution (Chi et al., 2015; Salem et al., 2018; WHO, 2019). To overcome these challenges, strengthening and harmonization of pre-service nursing curricula on EmONC is key, EmONC facilities need to be increased, and monitoring and clinical supervision need to be enhanced (Chi et al., 2015; Salem et al., 2018). Moreover, key attention needs to be given to comprehensive evaluation of the nursing program to produce a highly competent nurse with exceptional nursing abilities in EmONC to meet the changing needs of society(Salem et al., 2018).

Research suggested that incompetency among nurses in EmONC seems to be a common issue affecting countries regionally. A study was done in Benin, Malawi, Tanzania, and Uganda to assess the implementation of nursing curriculum, and how best it prepares pre-service nurses for evidence-based practice. The study revealed gaps in how knowledge and skills were taught in EmONC hence leading to incompetence in clinical practice (Moller et al., n.d.).Similarly, another study done by the Ministry of Health of Zambia, revealed EmONC competency challenges being the main factor leading to high maternal and neonatal mortalities in the country (Mirkuzie, Sisay, & Bedane, 2014a). Additionally, Ethiopia faces nurse EmONC competence challenges due to inadequate preservice preparation of the nurses in EmONC. (Frontline Health Workers, 2023). These regional studies emphasized the urgent need to enhance proper curriculum implementation in EmONC during the pre-service phase. This will aid in ensuring nursing students are adequately prepared for their practical responsibilities in real-world settings. In return, countries will be able to reduce maternal and neonatal mortality rates they are experiencing.

In Kenya, the persistent challenge of maternal and newborn fatalities remains significantly higher than the global sustainable development goals (SDG) benchmarks, which aimed for maternal mortality rates of less than 70 per 100,000 live births and newborn mortality rates of less than 12 per 1,000 live births (United Nations, 2015). Additionally, utilization of skilled health personnel during childbirth is recognized as a highly effective strategy for reducing the risks associated with maternal and perinatal morbidity and mortality. However, the prevalence of this practice among women in Kenya is relatively low, with only 61.8% of births attended by a skilled birth attendant due to a lack of competence in EmONC skills (Lang'at et al., 2019). The first Kenya Confidential Enquiry into Maternal Deaths report (2017) revealed that inadequate care was a factor in 90% of the maternal deaths analyzed. Among these deaths, approximately 75% were linked to deficiencies within the healthcare workforce, primarily involving insufficient expertise and proficiency in EmONC. Notably, the most common workforce-related issues included delays in commencing treatment (32.9%), insufficient EmONC clinical competencies (28.1%), and inadequate supervision (26.9%) (Kenya Ministry of Health, 2017). The country is dedicated to decreasing avoidable maternal and newborn fatalities by incorporating EmONC training into its Health Sector Strategic Plan (Ministry of Health (MOH), 2020).

In the last 15 years, there has been a rise in deliveries attended by skilled birth attendants in Kenya. However, research indicates that health workers continue to face a knowledge and skills gap in EmONC, which hinders their ability to offer quality care. This gap can be attributed to inadequate preparation during the preservice phase of their training due to poor curriculum implementation in EmONC (Shikuku, et al., 2022a; Shikuku, et al., 2022b). In 2019/2020, the pre-service diploma curricula for midwifery and clinical medicine with a reproductive health specialty in Kenya underwent a comprehensive revision and enhancement. This update involved the integration of a competency-based approach to EmONC. The review process utilized the EmONC training for Skilled Health Personnel package developed by the Liverpool School of Tropical Medicine (LSTM). This crucial and sustainable approach guarantees that graduates in pre-service midwifery and reproductive health will possess the necessary skills upon completion of their studies, enabling them to offer life-saving EmONC. As a result, the need for frequent supplementary in-service refresher training in EmONC will be minimized (Shikuku, et al., 2022c). Little information was available on the factors that influence the implementation of the new updated curriculum on EmONC among medical colleges in Kenya especially the faith-based hence forming the basis of this research.

1.1 Problem Statement

Proper implementation of a curriculum in EmONC demands a comprehensive approach with a thorough needs assessment. Qualified educators with expertise in adult learning principles are essential, and hands-on training using simulations is crucial to building practical skills. Additionally, continuing education and quality assurance are vital for keeping nurse educators up to date in EmONC. Good infrastructure and equipment complete the requirements for effective EmONC curriculum implementation, hence ensuring better maternal and neonatal healthcare outcomes (Shikuku et al., 2022). In Kenya, the existing Maternal Mortality Ratio (MMR) stands at 362 maternal deaths per 100,000 live births, while the stillbirth rate is 23 deaths per 1000 live births. These figures are significantly higher than the desired targets of 147 maternal deaths per 100,000 live births and 12 stillbirths per 1000 live births, respectively (WHO, 2019). Effective EmONC is vital for reducing most of this maternal and neonatal

mortality rate. Studies showed that insufficient pre-service training on EmONC, along with inadequate support supervision, are the primary obstacles to delivering high-quality maternal and neonatal care in most LMICs (Mirkuzie, et al., 2014a).

Despite the training of trainers on EmONC that was implemented through arrangements with the Nursing Council of Kenya since 2014, the Maternal mortality ratio is still high and Kenya's skilled attendance at birth falls significantly below international target of 90% (Nyongesa et al., 2018). In addition, the pre-service diploma education and training curriculum is insufficient, leading to graduates having limited essential competencies needed to fulfill their roles due to a lack of sufficient EmONC skills. The absence of an internship period for diploma graduates aggravates this inadequacy, as it hinders the development of crucial skills and experience in EmONC (Shikuku, et al., 2022b). In 2018, key stakeholders such as the Nursing Council of Kenya and the Kenya Medical Training Colleges conducted a comprehensive evaluation of the syllabi to update its content and curriculum. The primary aim was to transition from predominantly theoretical training to a more practical skills-oriented approach, which incorporates EmONC. This transformation ultimately intended to ensure the education and training of competent healthcare professionals in EmONC conforming to both domestic and global benchmarks. Little information is available on challenges being faced in implementation of the same in diploma medical training colleges. Faith-based nursing colleges in Meru and Tharakanithi are instrumental in producing skilled healthcare professionals, yet the successful implementation of the EmONC curriculum within these institutions faces significant obstacles. These challenges include a high tutor-to-student ratio and a lack of mentorship for novice educators (Gitonga, 2013). This study meticulously examined and comprehended the factors that impede or support the implementation of the curriculum on EmONC in diploma nursing programs at faith-based colleges in Meru and Tharakanithi County. In particular, the study aimed to determine training institutional factors that influence curriculum implementation on EmONC for faith-based diploma nursing students in Meru and Tharakanithi County. By addressing these factors, this research aimed to contribute to the reduction of maternal and neonatal mortality rates through improved nursing education and healthcare delivery.

2.0 Literature Review

2.1 Theoretical Review

This research was directed by the curriculum implementation theory by Gross (1971) in his theory he emphasizes the importance of understanding the complex nature of the educational system and the various factors that impact the implementation of a curriculum. Institutions need to have the necessary resources. Teachers' capability, in this case, trainers who are the individuals responsible for implementing the curriculum must stay informed about any modifications or updates in the curriculum. Additionally, institutional support and compatibility with an organizational arrangement and clarity of the implementer on what is to be done are key to proper implementation. According to Gross, the implementation of a curriculum is not just a technical process, but rather a social and political one that involves multiple stakeholders and can be affected by a range of contextual factors, the same applies to proper implementation of the curriculum on EmONC. This theory was key to directing the study in that, the factors that Gross advocated are key to proper curriculum implementation on EmONC among faith-based colleges in Meru and Tharakanithi County.

Gross's theory highlighted several key elements that can be applied to proper curriculum implementation in emergency obstetrics and neonatal care in colleges. He highlighted the

significance of considering the political and social environment in which the curriculum is being implemented. When implementing the curriculum on emergency obstetrics and neonatal care one needs to pay key attention to factors such as the prevailing educational policies, the beliefs and values of the community, and the power dynamics within the educational system. In addition, educators in emergency obstetrics and neonatal care need to be aware of the political and social forces that may impact their ability to implement the curriculum effectively.

Secondly, clarity of innovation to the implementer. To ensure effective implementation, nurse educators, as implementers, need to stay updated and knowledgeable about the curriculum changes made in 2018. It is crucial for them to be aware of these modifications to effectively incorporate them into their training practices. This can be achieved through continuous professional development.

Thirdly he talked about resources in his theory. To facilitate the proper implementation of the curriculum on emergency obstetrics and neonatal care, the necessary resources must be available and applicable to the curriculum's requirements. These resources include skills labs, competent trainers, etc.

Additionally, Gross's theory stresses that implementation of a curriculum is a complex process that involves numerous stages and actors. This includes stages such as planning, adoption, and adaptation, as well as actors such as teachers, administrators, and policymakers. This means that midwifery educators need to be aware of the various stages of the implementation process and the different actors involved in each stage to effectively implement the curriculum.

Moreover, Gross's theory emphasized the importance of effective communication in curriculum implementation. This includes communication between teachers and administrators, communication between teachers and students, and communication with parents and the wider community. This means that midwifery educators need to be skilled in communication and need to be able to effectively communicate the goals and objectives of the curriculum to various stakeholders for successful implementation.

Lastly, the theory emphasizes the importance of ongoing evaluation and feedback in curriculum implementation. This involves assessing the efficacy of the curriculum in achieving its intended objectives, as well as evaluating the process of implementing the curriculum. In the context of curriculum implementation, this means that midwifery educators need to continually evaluate the implementation of the curriculum and make adjustments as necessary. Nurse educators in this research context are the implementors of the curriculum, to implement the curriculum on EmONC effectively they need to be adequately educated and trained. Training institutions and hospitals need to provide the needed resources for proper implementation. Students' factors need to be considered to facilitate learning in EmONC. Generally, Gross's theory of curriculum implementation highlights the complexity of the implementation process and the importance of understanding the various contextual factors that can impact the success of the implementation. By taking into account these factors and using effective communication and ongoing evaluation, midwifery educators can increase the likelihood of successful implementation of the nursing curriculum on emergency obstetrics and neonatal care in faith-based nursing colleges in Meru County.

2.2 Empirical Review

It is important to acknowledge that creating a curriculum is one aspect while ensuring its effective implementation is another challenge altogether. Even with a well-designed curriculum, the availability of resources and infrastructure can pose significant obstacles to the implementation process if the planning is not adequately funded and carefully considered. Availability of resources and facilities, such as simulation labs and clinical training sites, can also impact how EmONC.is taught. Access to appropriate technology, equipment, and clinical settings is essential for providing quality education in this area.

In a survey conducted by WHO in 2018-2019, opinions were gathered from individuals involved in midwifery education in LMICs across five WHO regions (excluding Europe). The survey revealed that all midwifery educators reported deficiencies in resources in classrooms, skills labs, and/or clinical settings, which hindered the effective implementation of EmONC (Nove et al., 2021a). Moreover, within institutional power structures, nurse educators face barriers that prevent them from pursuing further education to enhance their knowledge. Consequently, this hampers their ability to fully utilize their training potential (WHO, 2019). Nursing training institutions must establish mentorship programs aimed at assisting midwifery faculty members in gaining a comprehensive understanding of the entire range of midwifery practice and effectively implementing the midwifery diploma curriculum on EmONC (Erlandsson et al., 2018).

Nursing training institutions should provide well-ventilated and well-lit classrooms with unobstructed views to facilitate an optimal learning environment for students. Furthermore, it is important to have libraries that remain open beyond official hours and during weekends, stocked with all the recommended textbooks for easy access by students. The skills lab needs to have the necessary simulation models and need also to be always accessible for individual/group practice with a full-time skills lab manager to facilitate proper curriculum implementation on emergency obstetrics and neonatal care (Manalai et al., 2022).

Accreditation requirements from governing bodies can influence how emergency obstetrics and neonatal care is taught in nursing schools. Nursing schools must meet the standards set forth by the accrediting bodies to maintain their accreditation (WHO, 2019).

3.0 Methodology

A crossectional research design with both quantitative and qualitative approaches was used in investigating institutional factors affecting implementation of the curriculum on EmONC in faith-based nursing students in Meru County and Tharakanithi County. The research was conducted at Methodist College of Health Sciences, Consolata Nkubu School of Nursing, and PCEA Chogoria Hospital Clive Irvine College of Health Sciences. The three were purposely selected in that they are the only faith-based nursing colleges in Meru and Tharakanithi counties. The study targeted 11 nurse educators involved in curriculum implementation in EmONC, plus 255 second and third-year nursing students in faith-based colleges in Meru and Tharakanithi County. The study population was 216 second-year and third-year diploma in nursing programs students of faith-based colleges in Meru and Tharakanithi County. Additionally, 10 nurse educators who are involved in implementation of the curriculum on EmONC responded to the online questionnaire during the period of data collection.

Due to the small sample size of the nurse educators census method was employed to select all the nurse educators involved in curriculum implementation in EmONC from the three faith-based colleges in Meru and Tharakanithi County. Six nurse educators n=6 (100%) was selected from Methodist College of Health Sciences, three nurse educators from Consolata Nkubu School of Nursing n=3(100%), and two n=2 (100%) from PCEA Chogoria Hospital Clive Irvine College of Health sciences. The raw data was then cleaned for accuracy in preparation for data analysis. Data analysis employed descriptive statistics, including frequencies and percentages, to provide a summary of the questionnaire responses. Qualitative data was thematically analyzed and presented in prose form while quantitative data was presented using tables, charts, and graphs. Additionally, Pearson correlation was utilized to examine the relationship between the dependent variable (implementation of the curriculum on emergency obstetrics and neonatal care) and the independent variables (factors influencing curriculum implementation).

4.0 Results and Discussion

4.1 Response rate

A total of n=216 (84.7%) responses (second-year and third-year diploma in nursing programs students) were received out of a target population of N=255 (100%) responses while a total of n=10 (90.9%) responses (nurse educators) were received out of a target population of N=11 (100%) responses. This was considered good for analysis because according to Mugenda & Mugenda,(2012) response rate of 50% is adequate for analysis and reporting, a response rate of 60% is generally good while a response rate of above 70% is excellent. Based on these recommendations, therefore, it implied that the response rate for this study was adequate and increased confidence for generalization and it formed the basis of the analysis and the results contained in this chapter.

4.2 Descriptive Statistics

4.2.1 Training Institution Factors

To establish the extent to which training institution factors is influencing curriculum implementation on EmONC for faith-based diploma nursing students in Meru and Tharakanithi County, both nurse educators and nursing students were asked at different times to respond on 7 and 13 attributes respectively of training institution factors of the faith-based colleges in Meru and Tharakanithi County they represented. Tables 1 and 2 present these analyzed results of the extent training institution factors is influencing curriculum implementation on EmONC for faith-based diploma nursing students in Meru and Tharakanithi County.

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Table 1: Training Institution Factors from Nurse Educators

Training Institution Factors for Nurse Educators	N	Mean	Std. Deviation
The colleges provide adequate resources in the library to facilitate learning in EmONC	10	3.0000	1.33333
The college has a well-equipped skills lab to facilitate implementation of the curriculum on EmONC	10	3.0000	1.41421
The nursing training institution has well-trained faculty members who can effectively teach EmONC curriculum.	10	3.1000	.99443
The nursing training institution provides opportunities for regular professional development opportunities for faculty members on EmONC.	10	2.4000	1.34990
The nursing training institution has a strong partnership with clinical facilities for clinical practice in EmONC	10	4.0000	.81650
The training institution ensures that the EmONC curriculum aligns with the latest Nursing Council of Kenya requirements.	10	3.9000	.87560
The training institution has policies that ensure quality in the teaching of EmONC across the nursing program.	10	3.5000	.84984
Overall average	**10**	**3.2714**	**1.0905**

The results from Table 1 show that on the question of whether colleges provide adequate resources in the library to facilitate learning in EmONC results showed mixed reactions with a high level of variability. This was evidenced by a mean of 3.0000 and a standard deviation of 1. 33333. This meant that some institutions may have the resources while others lack the resources needed for curriculum implementation in EmONC. This echoed findings in a survey by Nove et al.(2021a), which revealed that all midwifery educators reported deficiencies in resources in classrooms, skills labs, and/or clinical settings, which hindered the effective implementation of EmONC. On the issue of partnership with clinical facilities, the results showed a high level of agreement at a mean of 4.0000 with a high level of consensus among the respondents. This shows that majority of the training institutions have strong partnerships with clinical facilities where students go for EmONC placements. Lastly, the results also showed that the institutions had policies that ensure quality in the teaching of EmONC across the nursing program.

The findings from Table 1 show that *"The nursing training institution has a strong partnership with clinical facilities for clinical practice in EmONC"* is the attribute of nursing training institution factors that received the highest mean [Mean=4.000] with respect to nurse educators. This showed that nurse educators perceived that there is good collaboration between training institutions and training hospitals which enhances proper curriculum implementation in EmONC. On the other hand, *"The nursing training institution provides opportunities for regular professional development opportunities for faculty members on EmONC*" received the lowest mean [Mean=2.400] and a standard deviation of 1.34990. This showed that nurse

educators felt that they lacked opportunities for continuous professional development which hindered proper curriculum implementation in EmONC.

Table 2: Training institution factors from nursing students

Training Institution Factors for Nursing Students	N	Mean	Std. Deviation
The resources available are sufficient for learning EmONC	216	3.8981	.66738
The college administration is supportive of the EmONC curriculum	216	3.9537	.70723
The workload constraints make it difficult to adequately learn about EmONC.	216	3.4630	.95893
Time constraints make it difficult to adequately learn about EmONC	216	3.3843	.93785
The college provides specialized training to nursing students to enhance their competency in EmONC	216	3.7407	1.04655
The college offers opportunities for students to engage in research related to EmONC	216	4.0463	.74564
The college evaluates the effectiveness of its EmONC curriculum in terms of student learning.	216	3.9722	.66763
The college does not provide opportunities for community outreach programs in EmONC.	216	2.8009	1.29837
There is effective communication between students and faculty members regarding any concerns related to the EmONC curriculum.	216	1.9815	1.67044
There is no effective collaboration between students and faculty members regarding any concerns related to the EmONC curriculum	216	4.0741	.73711
The college offers sufficient assistance to enable students to enhance their understanding of EmONC beyond their regular academic coursework.	216	3.6204	.59794
The college fosters a supportive learning environment conducive to the study of EmONC.	216	2.4907	1.17331
The practical training opportunities offered in the college adequately prepare me for handling EmONC scenarios	216	4.0139	.68525
Overall average	**216**	**3.4954**	**0.9149**

The results in Table 2 showed that majority of students agreed to some extent that the necessary resources needed for learning are available this was shown by a mean of 3.8981 and a standard deviation of 0. 66738. Students showed mixed and high levels of variations on the issue of institutions' ability to offer opportunities for community outreach programs in EmONC. This suggested that colleges do not offer adequate outreach opportunities in EmONC. Concerning communication and collaboration between students and faculty the study results in Table 2 showed that their issues with collaboration and communication in relation to issues with curriculum implementation in EmONC, hence training institutions need to address this gap. Lastly, students agreed that the practical training opportunities offered in the college adequately prepare them for handling EmONC scenarios. This implied that skills lab demonstrations improve students' competency in EmONC.

The findings in Table 2 show that *"The faculty members have the necessary skills to teach EmONC effectively"* is the attribute of training institution factors that received the highest mean [Mean=4.0741] in respect of nursing students. This implies that nursing students perceive nurse educators as competent in curriculum implementation. On the other hand, *"The college fosters a supportive learning environment conducive to the study of EmONC"* is the attribute of training institution factors that received the lowest mean [Mean=4.0741] from a student perspective. This suggests that the learning environment provided by the training institutions is not conducive to learning EmONC. The results in Tables 5 and 6 show that majority both of nurse educators and nurse students agreed that to an extent, training institution factors influence curriculum implementation on EmONC for faith-based diploma nursing students in Meru and Tharakanithi County. These results are in line with the sentiment of Erlandsson et al., (2018) who stated that nursing training institutions must establish mentorship programs aimed at assisting midwifery faculty members in gaining a comprehensive understanding of the entire range of midwifery practice and effectively implementing the midwifery diploma curriculum on EmONC. Additionally, a study done by WHO (2014), established that the presence of competent nurse educators is crucial in preparing capable practitioners, leaders, and researchers in the field of nursing. Without adequate nurse educators, it becomes exceedingly challenging to produce the necessary workforce with the required competencies.

4.2.2 Curriculum implementation on EmONC for faith-based Colleges

To investigate the factors influencing curriculum implementation on EmONC for faith-based diploma nursing students in Meru and Tharakanithi County, both nurse educators and nursing students were separately requested to respond on 10 and 10 attributes respectively of curriculum implementation of the faith-based colleges in Meru and Tharakanithi County they represented. Tables 3 and 4 present these analyzed results of the extent of the curriculum implementation in EmONC by nurse educators and nursing students.

Table 3: Curriculum implementation on EmONC from nurse educators

Curriculum Implementation for Nurse Educators	N	Mean	Std. Deviation
I am conversant with the various stages of the curriculum implementation process and the different actors involved	10	3.3000	.67495
I have increased the likelihood of successful implementation of the nursing curriculum on EmONC in faith-based nursing colleges in Meru County	10	4.0000	.94281
I continually evaluate the implementation of the curriculum and make adjustments as necessary	10	3.8000	.91894
I can effectively communicate the goals of the curriculum to various stakeholders for successful implementation	10	3.7000	.82327
I am aware of the importance of understanding the complex nature of the educational system that impacts the implementation of a curriculum	10	2.5000	1.26930
Trainers individuals responsible for implementing the curriculum are always informed about any updates in the curriculum	10	3.5000	1.26930
As a nurse educator, I pay attention to the prevailing educational policies, beliefs, and values of the community	10	3.0000	1.05409

To some extent, I feel that necessary resources are available to facilitate the proper implementation of the curriculum on emergency obstetrics and neonatal care	10	4.2000	.78881
Our training institution and hospitals have provided us with the needed resources for proper curriculum implementation	10	4.1000	.87560
Midwifery educators at Faith-Based Colleges in Meru County have communication skills	10	2.6000	1.17379
Overall average	10	**3.4700**	**0.97910**

The results in Table 3 show that nurse educators showed mixed feelings concerning knowledge of the stages of curriculum implementation with a high degree of consensus. This was evidenced by a mean of 3.3000 and a standard deviation of 0. 67495 from the responses received from nurse educators. Majority of the educators agreed that they continually evaluate the implementation of the curriculum and make adjustments as necessary to facilitate proper curriculum implementation. Moreover, nursing educators had mixed feelings on the question of whether they are informed about any updates in the curriculum in relation to EmONC. This suggests that forums need to be created to ensure every educator is aware of updates in EmONC. Moreover, the results in Table 3 show that *"To some extent, I feel that necessary resources are available to facilitate the proper implementation of the curriculum on emergency obstetrics and neonatal care*" is the attribute of nurse educators' factors that received the highest mean [Mean=4.200]. This meant that some resources were available and others were lacking with respect to curriculum implementation in EmONC. On the other hand, *"I am aware of the importance of understanding the complex nature of the educational system that impacts the implementation of a curriculum"* This meant that nurse educators did not understand well the complex nature of curriculum implementation in EmONC.

Table 4: Curriculum implementation in EmONC from nursing students

Curriculum Implementation for Nursing Students	N	Mean	Std. Deviation
The knowledge and experience I acquired have facilitated proper curriculum implementation	216	1.9769	1.66340
Student-related factors lead to effective implementation of the curriculum on EmONC	216	4.0787	.73346
A supportive learning environment has led to the successful curriculum implementation in EmONC	216	3.6296	.60375
My confidence and performance in EmONC are due to nurse educator encouragement, feedback, and mentorship	216	2.5093	1.18121
Planning, adoption, and adaptation factors is the reasons for the success of curriculum implementation	216	4.0185	.68174
The level of confidence in handling maternal newborn care skills is from nurse educators' mentorship	216	4.0000	.70216
Effective communication among teachers, administrators, teachers, students, parents, and the wider community facilitates curriculum implementation	216	4.0278	.68822
I feel part of implementation because nurse educators involve me in EmONC discussions	216	2.8657	1.19516
Female students exhibit a higher likelihood of having confidence in maternal care skills compared with their male counterparts	216	3.9676	.79174

I have mastery of EmONC competencies due to availability of adequate clinical learning opportunities	216	4.0324	.78584
Overall average	**216**	**3.5107**	**0.90267**

The results in Table 4 show that majority of the nursing students agreed to a high extent that student-related factors and learning environment greatly influence curriculum implementation in EmONC. This was evidenced by a mean of 4.0787 and 3.6296 respectively in the responses received from nursing students. Moreover, nursing students agreed with a high degree of consensus that female students exhibit a higher likelihood of having confidence in maternal care skills compared with their male counterparts. This implied that gender could be one of the student factors that influence implementation of the curriculum in EmONC. Furthermore, nursing students showed a high degree of agreement that availability of adequate clinical learning opportunities facilitates learning in EmONC. This was evidenced by a mean of 4.0324 and a standard deviation of 0.78584 in the responses analyzed. This meant that training hospitals needed to provide good clinical learning opportunities for students to ensure transfer of theory to practice to facilitate learning in EmONC.

The results in Table 4 further show that *"I have mastery of EmONC competencies due to availability of adequate clinical learning opportunities"* is the attribute of nursing students' factors that received the highest mean [Mean=4.0324] in respect of nursing students. This meant that nursing perceived clinical opportunities to be adequate for learning in EmONC.

Generally, the results in Tables 3 and 4 show that majority of nurse educators and nurse students agreed that to an extent, curriculum implementation in EmONC is influenced by several factors. These results correspond with the sentiments of Mirkuzie, et al., (2014b) who stated that effective EmONC is vital for reducing most of this maternal and neonatal mortality rate. Insufficient pre-service training on EmONC, along with inadequate support supervision, are the primary obstacles to delivering high-quality maternal and neonatal care in most LMICs. Similarly, these findings align with the observation by Gemuhay et al. (2019) who noted that clinical practice at placement sites should provide students with the opportunity to put their theoretical understanding into real-world context, enhance nursing skills and clinical judgment, and observe and integrate professional responsibilities. Furthermore, training institutions need to recognize their responsibility in ensuring that their midwifery students receive high-quality clinical practice opportunities that foster competency building in EmONC (Gavine et al., 2019). Additionally, Nyoni et al. (2021) emphasized the importance of having a supportive learning environment, encompassing faculty, peers, and necessary resources being crucial for successful curriculum implementation in EmONC.

4.3 Qualitative analysis of the training institutional factors influencing curriculum implementation on EmONC

Regarding the question of determination of training institutional factors that influence curriculum implementation on EmONC for faith-based diploma nursing students in Meru and Tharakanithi County, the respondents were asked to indicate how they would describe the overall environment and support provided by the nursing training institution for the implementation of the curriculum on EmONC. The results show a mixed reaction whereby some respondents indicated that overall, the environment is well supported while others indicated not well supported in terms of implementation, equipment for practicals, and

educators having no workshop for continuous professional development. Generally, at least each respondent agreed that nursing training institutional factors are an area that needs greater support. The findings align with the findings of a study by WHO (2019) whereby it was noted that institutional power structures prevent, nurse educators from pursuing further education to enhance their knowledge and skills in EmONC. Consequently, this hampers their ability to fully utilize their training potential. Additionally, Erlandsson et al. (2018) emphasized that nursing training institutions must establish mentorship programs aimed at assisting midwifery faculty members in gaining a comprehensive understanding of the entire range of midwifery practice and effectively implementing the midwifery diploma curriculum on EmONC.

"I have worked in several institutions and I can say that some do not offer the necessary support to the learners and the trainers in terms of resources. We are facing a challenge currently in the college and in the training hospitals where we attach our students."

On the aspect of what institutional policies, resources, or structures impact the implementation of the curriculum on EmONC, the respondent indicated that though there are proper working policies the institution has put more emphasis on the theory aspect, and staff/work rotation. The respondents also acknowledged that the institution has policies on availability of books and computers to enhance students' training. On the question of whether there are any collaborative efforts or partnerships between the college and healthcare facilities that contribute to the successful implementation of the curriculum on EmONC, at least the respondents said yes and one of the respondents specifically mentioned Jacaranda Health to be one of the institutions they have a collaboration with. This echoes the findings by Shikuku et al., (2024a) who noted that training institutions need to collaborate with training hospitals for effective learning and assessment in EmONC for students to link theory to practice.

"In the college, I am working on a scale of one to ten I can say six, they are trying but still we have challenges that are beyond the institution. The institution gives us space so that you can organize yourself and implement the curriculum but some resources are available others are not in terms of equipment"

4.4 Correlation Analysis

After the descriptive analysis of data on the study variables was completed, correlation analysis was carried out to test the extent of influence of nursing institution factors on curriculum implementation in EmONC for diploma nursing programs of faith-based colleges in Meru and Tharakanithi County. Table 5 presents bivariate correlation results between variables (nursing institution factors) and curriculum implementation in EmONC for diploma nursing programs of faith-based colleges in Meru and Tharakanithi County.

Table 5: Bivariate Correlation analysis results for nurse educators and students

Nurse Educators correlation		Curriculum implementation	Nursing institution
Curriculum implementation	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	10	
Nursing institution	Pearson Correlation	.898**	1
	Sig. (2-tailed)	.000	
	N	10	10
Students' correlation		Curriculum implementation	Nursing institution
Curriculum implementation	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	216	
Nursing institution	Pearson Correlation	.640**	1
	Sig. (2-tailed)	.000	
	N	216	

The results in Table 5 show a strong positive correlation coefficient of 0.898 and 0.640 for nurse educators and students respectively and are all statistically significant ($p<0.05$). This means that overall, nursing institutions positively influence curriculum implementation on EmONC for faith-based diploma nursing students in Meru and Tharakanithi County.

5.0 Conclusion

This study concluded that training institutional factors positively influence implementation of curriculum on EmONC in Meru and Tharakanithi County.

6.0 Recommendations

Based on the findings of this study the study recommends several actions to improve curriculum implementation in EmONC. The college administration needs to avail necessary resources in classroom and skill lab to facilitate learning in EmONC and make arrangements for students to get preservice EmONC if possible before graduation.

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