



Implementation of Basic Emergency Maternal Obstetric Newborn Care Program

DOI: <https://doi.org/10.5281/zenodo.13207707>

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Abstract:

Basic Emergency Obstetrics and Newborn Care (BEMONC) program is one program of the Department of Health addressed on the policy on responsible parenthood and reproductive health, providing as the lifesaving services for emergency maternal and newborn conditions/complications being provided by a health facility or professional. This study was conducted to determine the extent of implementation of the Basic Emergency Maternal Obstetric Newborn Care Program in the area of prenatal, delivery and newborn. Descriptive research design is applied in the study. The finding shows that there were younger than older, majority of the respondents were married, receive grade 10 salary and above and render short term in service. The extent of Implementation of the Basic Maternal Obstetric Newborn Care Program in the areas of prenatal was "great extent" and "very great extent" in the area of delivery and newborn. Likewise, the extent of implementation of the BEMONC providers according to age, civil status, position and length of service was "great extent" in the area of prenatal and in the areas of delivery and newborn was "very great extent". Furthermore, there is no significant difference in the extent of implementation of the Basic Emergency Maternal Obstetric Newborn Care Program when respondents are grouped and compared in the area of prenatal, delivery and newborn according to aforementioned variables. Researcher concluded that assessment of the pregnant women in pregnancy status were great extent in services given by the health care provider. Moreover the results showed that there is a lack of health education and awareness of updated policies and practices during prenatal visit.

Keywords: Emergency maternal obstetric, newborn care, prenatal, delivery

Introduction:

Nature of Problem

Republic (RA) 10354, otherwise known as "An Act Providing for a National Policy on Responsible Parenthood And Reproductive Health" or more popularly addressed as the "RH Law" defines the Basic Emergency Obstetrics and Newborn Care (BEMONC) as the lifesaving services for emergency maternal and newborn conditions/complications being provided by a health facility or professional. A set of seven key obstetric services, or "signal functions," has been identified as critical to basic emergency obstetric and newborn care (BEMONC): administration of parenteral antibiotics; administration of parenteral anticonvulsants; administration of parenteral uterotonics; removal of retained products (manual vacuum aspiration); assisted vaginal delivery; manual removal of the placenta; and resuscitation of the newborn (Murryet, al., 2018).

The Philippines is struggling to avert maternal and neonatal mortality and morbidity due to childbirth complications requiring emergency obstetric and neonatal care. The conduct of BEMONC training for health providers is a strategy towards this end. In the past 5 years, there is a gradual increase in number of maternal deaths from 25 to 39 per 100,000 live births in the Province of Negros Occidental. To address this problem, the Department of Health (DOH) has allocated budget for Basic Emergency Obstetrics and Newborn Care (BEMONC) training designed to enhance the skills of municipal health care providers in assessing and managing conditions related to pregnancy, childbirth, postpartum and newborn care. These trained facilities are subsequently evaluated to ensure compliance (Bulado, 2018).

The hospital caters pregnant woman from far flung places without any prenatal check-up. These are the reasons of increased in complications and causes morbidity. The statistical report dated 2019 in Ignacio L. Arroyo Sr. Memorial District Hospital, 800 pregnancy deliveries safely, with 100 referrals to tertiary hospital due to complications such as pre-eclampsia and premature labor.



The researcher being a staff nurse believes that her interest stems from her personal observations and experiences with mother-newborn whose lives dangers during pregnancy to delivery, and thereafter because of the absence of prenatal check-up, lack of awareness during delivery to newborn care, lack of support from significant others, or even concealment of their conditions due to fear of rejection and condemnation, are issues too evidently pressing to be disregarded and be left unattended.

Current State of Knowledge

Maternal healthcare service is the care given for the woman during her gestation, delivery and postpartum period. The Maternal Mortality Ratio (MMR) was remains high and a public health problem in Ethiopia. Sub-Saharan African (SSA) countries account two-thirds of the total global maternal deaths. To curb such high burden related with child births, comprehensive emergency management obstetric and newborn care is designed as one of the strategies for maternal healthcare services. The implementation status of CEmONC program service at University of Gondar comprehensive specialized hospital was good as per the preset judgment parameter. Unavailability of resources such as delivery couch, operational table, maternity and labor ward beds, glove, gauze, blood, vital sign instruments, and essential drugs including methyldopa, nifedipine, gentamycin, and vitamin K were stocked out and the challenges to provide CEmONC services. Healthcare providers' compliance with the implementation protocol were also fairly affected. Moreover, acceptability CEmONC service was also judged as good as per the judgmental evaluation parameter. Hospital had better to fulfil the necessary equipment and drugs to enhance the implementation status of the hospitals. Capacity building of healthcare providers might also a better strategy to improve the compliance. Strengthening awareness creation for women and their husbands had a paramount importance to enhance the acceptability of the services, (Jejaw, M., Debie, A., Yazachew, L., & Teshale, G., 2023).

The health of pregnant women and neonates are closely aligned, and there is growing emphasis on the promotion of integrated delivery of services across the continuum of care for maternal, newborn and child health. Health systems are weaker and resource limitations are more pronounced in LMIC settings which has considerable implications for the efficient delivery of quality health services. It is now well accepted that training alone may not be enough to bring lasting improvements to the quality of care without improving wider health systems issues such as availability of equipment and supplies, human resources, clinical governance mechanisms and environments. However, trainings of health workers, either individually or in combination, are generally the first step undertaken by any program aiming to improve maternal and newborn health services, (Sharma, G. et.al, 2021).

According to Respati, T., Suwarsi, S., Dasman, H., & Yanis, A. (2024), the success of medical services at a hospital depends on the performance of the HCWs involved. The performance of employees is an indicator of the quality of the services they provide and could impact patient satisfaction. Furthermore, a high level of performance in delivering hospital services could develop a positive patient safety culture so that adverse medical events could be prevented. Many factors affect performance, including the personal characteristics, quality, quantity, commitment, effectiveness, timeliness, and teamwork of HCWs in their workplace. However, there is no previous study concerning the factors affecting the performance of HCWs in providing CEmONC services in tertiary referral hospitals in Indonesia. Therefore, this study aimed to analyze the factors that influence the performance of HCWs in providing CEmONC services in a tertiary hospital.

The findings of the study of Komolafe, A. O., et.al (2024) showed low adherence to EmONC guidelines in state and tertiary hospitals in the study setting. Although adherence to EmONC guidelines was higher in tertiary hospitals, the perinatal outcomes such as maternal mortality and morbidity, and newborn mortality were lower in state hospitals compared with tertiary hospitals. This may be because of several unnecessary referrals of obstetric complications, which should have been treated in state hospitals to tertiary hospitals, thus transferring maternal and newborn morbidities and mortalities to tertiary hospitals. Again, the numerous unnecessary referrals of cases in state hospitals shows that EmONC has not been successfully implemented in state hospitals. The study pointed to the need to intensify efforts in adherence to EmONC guidelines and the implementation of EmONC to ensure women and newborns with obstetric complications get adequate and appropriate care when they arrive at the state and tertiary hospitals.

Theoretical Underpinnings

In consideration with the variables of the extent of implementation of the Basic Emergency Maternal Obstetric Newborn Care Program, the researcher had utilized the implementation theory for the study.

According to Wood and Wagenaar (2015), implementation theory is foundationally important because of its intrinsic value and singular contribution to human functioning. Health has a special meaning and importance to individuals and the community as a whole. Health is necessary for much of the joy, creativity, and productivity that a person derives from life. Individuals with physical and mental health recreate, socialize, work, and engage in family and social activities that bring meaning and happiness to their lives. The public's health is so instinctively essential that human rights norms embrace health as a basic right. A safe and healthy population builds strong roots for a country's governmental structures, social organizations, cultural endowment, economic prosperity, and national defense. Population health becomes a transcendent value because a certain level of human functioning is a



prerequisite for activities that are critical to the public's welfare social, political, and economic. The government has an enduring obligation to protect and promote the public's health. The government's role in matters of population health. People form governments for their common defense, security, and welfare—goods that can be achieved only through collective action and explains that public health is a classic case of a general communal provision because public funds are expended to benefit all or most of the population without any specific distribution to individuals. The community as a whole has a stake in environmental protection, hygiene and sanitation, clean air and surface water, uncontaminated food and drinking water, safe roads and products, and control of infectious disease. These collective goods, and many more, are essential conditions for health. Yet these benefits can be secured only through organized action on behalf of the people.

Accordingly, the conduct of this study focused in assessing how effective the Basis Emergency Maternal Obstetric Newborn Care has been since it began in helping to decrease mortality and morbidity among mothers and newborn. The Basis Emergency Maternal Obstetric Newborn Care provides a helping hand and caters areas of Prenatal, Delivery and Newborn, the health skilled provider as the implementers will be equipped with new skills and techniques in saving lives thereby decreasing mortality and morbidity rate.

The Implementation Theory is applicable to health care provider who must be knowledgeable of Basic emergency Maternal Obstetric Newborn Care Program policies and regulation. In the context of this study it is assumed that respondents will seek knowledge and learning from the policies and procedure of the hospital and the Department of Health.

Objectives

This study aimed to determine the extent of implementation of the Basic Emergency Maternal Obstetric Newborn Care Program. Specifically, this study sought to answer the following questions: 1) the extent of implementation of the Basic Emergency Maternal Obstetric Newborn Care Program according to the area of prenatal, delivery and newborn care; and 2) the significant difference in the extent of implementation of Basic Emergency Maternal Obstetric Newborn Care Program when the respondents are grouped and compared according to the aforementioned variables.

Research Methodology:

This section discusses the type of research used in the investigation, the research design, setting, the study subjects and population, the research instrument, its validity and reliability, the data gathering procedure and the statistical tools that were used for analyzing the data gathered for the study.

Research Design

This study determined the extent of implementation of the basic emergency obstetric newborn care program at Ignacio L. Arroyo Sr. Memorial District Hospital, Negros Occidental. It aimed to describe the particular situation or condition existed and specified. Descriptive research design was used in this study. The design utilized and described the data that have been gathered and can be used for both qualitative and quantitative research studies (Bueno, 2016). Through descriptive research design, the researcher's objective was to gain more information about occurrences with a particular field of study. Furthermore, descriptive research design helps depicts the participants in an accurate way. It is used to describe the people involved in the study and can be done using observational, case study or survey (Kowalczyk, 2015).

Respondents

The respondents of the study were the 60 implementers consisted of doctors, nurses and midwives of ILASMDH and conducted during the last quarter of 2019. The total implementers were 60 in which total enumeration was used to gather the needed respondents. Mostly of the respondents were the Nurses constituting 35 or 58.33 %, 20 or 33.34% midwives and 5 or 8.33% doctors, who submitted themselves to answer the survey questionnaire.

Instruments

The instrument that was used in collecting the needed data in the extent of implementation of the Basic Emergency Maternal Obstetric Newborn Care Program was the questionnaire. It was subjected to validity (4.87-excellent) and reliability (0.861-excellent). All of them were interpreted as worthy and good; respectively. The instrument was divided into two parts: Part I shows the profile of the respondents. The respondents filled. Part 1 deals with the profile of the respondents in terms of age, civil status, position and length service. Part II of the questionnaire used to measure the extent of implementation of the Basic Emergency Maternal Obstetric Newborn Care Program according to the following areas: Prenatal, Delivery and Newborn care. To measure the extent of implementation of the Basic Emergency Maternal Obstetric Newborn Care Program at Ignacio L. Arroyo sr. Memorial District Hospital, Isabela, Negros Occidental, the respondents were given five numerical ratings to choose from, 1 being the lowest and five being the highest.



Data Gathering Procedure

After establishing the validity and reliability of the instruments, the researcher was asked the permission of the Chief of Hospital to conduct the study. After the approval, the researcher explained to the respondents the purpose of the study and gave instructions on how to accomplish the questionnaire in an objective and honest manner. The responses of the respondents served as the basis in determining the level of extent Implementation Basic Emergency Maternal Obstetric Newborn Care Program at ILASMDH, Isabela, Negros Occidental. Respondents were assured of the confidentiality of the data.

Data Analysis and Statistical Treatment

Objective No. 1, used descriptive analytical scheme and mean to determine the extent of Basic Emergency Maternal Obstetric Newborn Care Program according to the following areas of prenatal, delivery and newborn care

Objective No. 2, used the comparative analytical scheme and Mann Whitney U-Test to determine if there is a significant difference in the extent of implementation of Basic Emergency Maternal Obstetric Newborn Care Program when respondents are grouped and compared according to the aforementioned variables.

Ethical Considerations

Participants' identities must be kept secret or anonymous, and they must also be guaranteed that self-identifying statements and information are not included. Anonymity and confidentiality are essential because they safeguard the privacy of persons who willingly consent to participate in research. The possible harm to the participants, the researcher, the larger community, and the institution must be considered in the study. The harm can be in the form of distress, shame, and worry, which are difficult to anticipate or manage, as well as bodily harm, resource loss, emotional harm, and reputational impairment.

Results and Discussion:

This section presents the data gathered in connection with the objectives of the study and analyses of these data facilitated by the identified appropriate statistical tools. It interprets the results derived from the analyses.

Table 1

Extent of Implementation of the Basic Emergency Maternal Obstetric Newborn Care Program in the Area of Prenatal

	Items	Mean	Interpretation
1	Assess the pregnant woman: pregnancy status, birth and emergency plan and check for pre eclampsia, anemia and HIV status.	2.90	Moderate Extent
2	Respond to observed signs and volunteered problems like fetal movement, ruptured membranes and no labor, and vaginal discharges.	4.85	Very Extent High
3	Give preventive measures like tetanus immunization, prescribed dose of iron/folate and check when the last dose of mebendazole and anti-malarial.	3.12	Moderate Extent
4	Advice and counsel on nutrition and self-care.	4.92	Very Extent High
5	Develop a birth and emergency plan such as facility delivery, advice on labour and danger signs and discuss how to prepare for an emergency in pregnancy.	4.82	Very Extent High
6	Advice and counsel on family planning, special consideration for family planning counseling during pregnancy.	4.90	Very Extent High
7	Advise on routine and follow-up visits by encouraging the woman to bring partner or family member to at least 1 visit.	4.78	Very Extent High
8	Inform to above the "No Home Birthing Policy".	4.78	Very Extent High
9	Screening for gestational diabetes like asking for family history of diabetes and assess for signs of maternal overweight or obesity.	3.23	Moderate Extent
10	Coordinate with the support group such as LGU's skilled health providers and significant others.	4.77	Very Extent High
	Overall Mean	4.31	High Extent

Table 1 illustrates the Extent of Implementation of the Basic Maternal Obstetric Newborn Care Program in the Prenatal Area.



As revealed in the table, when respondents were asked, item 4, "Advice and counsel in nutrition and self-care", obtained the highest mean score of 4.92, interpreted as "very high extent" of implementation in terms of prenatal.. This means that the implementers were aware on the policy promulgated for the prenatal visit in the hospitals. Perhaps implementers particularly license professionals like doctor, nurses, and midwives were familiar on the program implemented by the Department of Health on BEMONC as to achieve the millennium development goal which the reduction of mortality and morbidity rate of newborn and mother.

According to Dishman, (2016) a woman's health is essential to the good health of her baby. Women who eat well and exercise regularly along with regular prenatal care are less likely to have complications during pregnancy. They're also more likely to successfully give birth to a healthy baby. Maintaining good nutrition and a healthy diet during pregnancy is critical for the health of the mother and unborn child. Further he stated that nutrition education and counseling is a widely used strategy to improve the nutritional status of women during pregnancy. Counseling about healthy eating and keeping physically active during pregnancy is recommended for pregnant women to stay healthy and to prevent excessive weight gain during pregnancy.

According to World Health Organization , (2016) says that a healthy diet during pregnancy contains adequate energy, protein, vitamins and minerals, obtained through the consumption of a variety of foods, including green and orange vegetables, meat, fish, beans, nuts, pasteurized dairy products and fruit.

On the other hand, the lowest mean score 2.90, was obtained in item 1, "Assess the pregnant woman: pregnancy status, birth and emergency plan and check for pre-eclampsia, anemia and HIV status. "Interpreted as in moderate extent. This would imply that the implementers of the said program need to exert extra time and effort to educate the mother and family the factors and complication during pregnancy.

According to Lincetto, et al, (2017), antenatal care (ANC) coverage is a success story in Africa, since over two-thirds of pregnant women (69 percent) have at least one ANC contact. However, to achieve the full life-saving potential that ANC promises for women and babies, four visits providing essential evidence based interventions – a package often called focused antenatal care – are required. Essential interventions in ANC include identification and management of obstetric complications such as preeclampsia, tetanus toxoid immunization, intermittent preventive treatment for malaria during pregnancy (IPTp), and identification and management of infections including HIV, syphilis and other sexually transmitted infections (STIs).

From these results, the overall mean score of 4.31, which shows that the extent of implementation of the Basic Emergency Maternal Obstetric Newborn Care program in the area of prenatal was "high extent" of implementation?

Table 2

Extent of Implementation of the Basic Emergency Maternal Obstetric Newborn Care Program in the Area of Delivery

Items	Mean	Interpretation
1 Ensure all delivery equipment and supplies, including newborn resuscitation equipment, are available, and place of delivery is clean and warm.	4.97	Very High Extent
2 Assist pregnant woman into a comfortable position of her choice, as upright as possible.	4.67	Very High Extent
3 Stay with her and offer emotional and physical support.	4.78	Very High Extent
4 Allow her to push as she wishes with contractions; wait until head and perineum distending.	4.80	Very High Extent
5 Wash hands with clean water and soap. Put on gloves just before delivery/	4.73	Very High Extent
6 Ensure controlled delivery of the head: keep one hand gently on the head as it advances with contractions, leave the perineum visible (between thumb and first finger), ask mother to breathe steadily and encourage rapid breathing with mouth open.	4.85	Very High Extent
7 Awaits of spontaneous rotation of shoulders and delivery of top shoulder, lift baby up towards the mother's abdomen to deliver lower shoulder, place baby on the abdomen and note time of delivery.	4.77	Very High Extent
8 Thoroughly dry the baby immediately, wipe eyes, assess and observed breathing note for sign of gasping and chest rising.	4.72	Very High Extent



9	Palpate mother's abdomen, oxytocin 10 units given intramuscular and watch for profuse vaginal bleeding.	4.70	Very Extent	High
10	Place baby's on mother's chest for skin to skin contact, place identification label and cover the head with cap, and encourage initiation of breastfeeding.	4.83	Very Extent	High
Overall Mean		4.78	Very Extent	High

Table 2 shows the Extent of Implementation of the Basic Emergency Maternal Obstetric Newborn Care Program in the Area of Delivery.

Data revealed that the highest mean was taken by item 1, "Ensure all delivery equipment and supplies, including newborn resuscitation equipment, are available, and place of delivery is clean and warm", captured the numerical mean score of 4.97 and interpreted as "very high extent" of implementation. This would mean that implementers of BEMONC program were committed and assures that all the equipment are complete during delivery. Perhaps, the encouragement particularly strong support of health skilled provider during delivery and accurate practices were supportive by implementers with advocacy.

Packard (2018), stated that the birth of a baby is one of life's most wondrous moments. Newborn babies have amazing abilities, yet they are dependent on others for feeding, warmth, and comfort. A newborn baby is wet from the amniotic fluid and can easily become cold. Drying the baby and using warm blankets and heat lamps can help prevent heat loss. Often a knitted hat is placed on the baby's head. Placing a baby skin-to-skin on your chest or abdomen also helps to keep the baby warm. This early skin-to-skin contact also reduces crying, improves your interaction with your baby, and helps you to breastfeed successfully.

Whereas, the lowest scores among the mean was obtained by item 2, "Assist pregnant woman into a comfortable position of her choice, as upright as possible", took the mean score of 4.67, interpreted as "very high extent" of implementation. This implies that even though implementers received very high level there is need to support pregnant woman comfortable position of her choice to prevent delayed of care.

According to Gupta et al. (2017), giving birth in an upright position can benefit the mother and baby for several *physiologic* reasons. Physiologic refers to a healthy body's normal function. In an upright position, gravity can help bring the baby down and out. Also, when someone is upright to give birth, there is less risk of compressing the mother's aorta, which means there is a better oxygen supply to the baby. Upright positioning also helps the uterus contract more strongly and efficiently and helps the baby get in a better position to pass through the pelvis. Magnetic resonance imaging (MRI) studies have shown that compared to the back-lying position, the dimensions of the pelvic outlet become wider in the squatting and kneeling or hands-and-knees positions. Finally, research has shown that upright birthing positions may increase maternal satisfaction and lead to more positive birth experiences (Thies-Lagergren, 2017).

As shown in the same table, the overall mean score of 4.78. This shows that the extent of implementation of basic emergency maternal obstetric newborn care program in the area of delivery considered as "very high extent".

Table 3

Extent of Implementation of the Basic Emergency Maternal Obstetric Newborn Care Program in the Area of Newborn Care

	Items	Mean	Interpretation
1	Examine the newborn: check if preterm, birth weight less than 2500 grams, assess breastfeeding, check for special treatment needs and look for signs of jaundice and local infection.	4.93	Very High Extent
2	Care of the newborn such as anthropometric measurement, check for anal patency, give Vitamin K, hepatitis B and erythromycin eye ointment.	4.77	Very High Extent
3	Counsel on importance of exclusive breastfeeding, help mother to initiate breastfeeding and teach proper positioning and attachment.	4.87	Very High Extent
4	Alternative breastfeeding methods like express breast milk, hand express breast milk directly into baby's mouth, cup feeding expressed milk, quantity to feed by cup and signs that the baby is receiving adequate amount of milk.	4.87	Very High Extent
5	Teach the mother how to take care for the baby: keep the baby warm, cord care and ensure hygiene.	4.80	Very High Extent
6	Assess breastfeeding in every baby before planning for discharge.	4.78	Very High Extent
7	Ask the mother and companion to watch the baby for fever, breathing difficulty, any signs of bleeding and refer for any untoward signs and symptoms.	4.70	Very High Extent
8	Immunize the newborn and give proper treatment as prescribed.	4.95	Very High Extent
9	Submit the baby for newborn screening after 24 hours of exclusive breastfeeding.	4.73	Very High Extent
10	Advise mother to continue breastfeeding six months and beyond and collaborate with the support grouped and significant others upon discharged.	4.80	Very High Extent



Overall Mean	4.82	Very Extent	High
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Table 3 shows the Extent of Implementation of Basic Emergency Maternal Obstetric Newborn Care program in the area of Newborn.

Data revealed that the topmost among the item was obtained by item 8, "Immunize the newborn and give proper treatment", garnered the numerical mean score of 4.95 and interpreted as "very high extent" of implementation. This would mean that ILASMDH health care provider personnel were very mindful in giving priority to those newborn in giving immunization after hour of birth to save and prevent further complications.

According to Women health (2018), right after birth, babies need many important tests and procedures to ensure their health. Some of these are even required by law. But as long as the baby is healthy, everything but the Apgar test can wait for at least an hour. Delaying further medical care will preserve the precious first moments of life for you, your partner, and the baby. A baby who has not been poked and prodded may be more willing to nurse and cuddle. So before delivery, talk to your doctor or midwife about delaying shots, medicine, and tests. At the same time, please don't assume "everything is being taken care of." As a parent, it's your job to make sure your newborn gets all the necessary and appropriate vaccines and tests in a timely manner.

As illustrated in the same table, the lowest mean was obtained by item 7, "Ask the mother and companion to watch the baby for fever, breathing difficulty, and any signs of bleeding and refer for any untoward signs and symptoms", garnered the mean score of 4.70, and described as "very high extent" of implementation. From this data, it implies that ILASMDH health care provider personnel as perceived showed reasonable results, however, need extra time for rapid assessment. Perhaps, ILASMDH health care provider personnel loaded with too many clients in the workplace, thus, unable them to provide full potential in serving the needs of newborn and mother after hour of delivery.

According to McCloskey and Buleckek, (2015), all new born babies require immediate care after delivery. New born baby must initiate respirations and accommodate a circulatory system to extra uterine oxygenation within 24 hours, neurological, renal, endocrine, gastrointestinal and metabolic functions must be operating competently for life to be sustained.

As shown in the same table, the overall mean score was 4.82, indicating that the Extent of implantation of the basic emergency maternal obstetric newborn care Program in the area of newborn was "very high extent".

Table 4

Comparative Analysis on the Extent of Implementation of the Basic Emergency Maternal Obstetric Newborn Care Program in the Area of Prenatal According to Variables

Variable	Category	Mean	Mann Whitney U test	p-value	Sig level	Interpretation
Age	Younger	4.28	373.0	0.274		Not Significant
	Older	4.33				
Civil Status	Single	4.27	361.5	0.323	0.05	Not Significant
	Married	4.32				
Position	Lower	4.34	327.5	0.248		Not Significant
	Higher	4.29				
Length of Service	Shorter	4.29	301.5	0.156		Not Significant
	Longer	4.35				



The objective of the study is to determine whether or not the extent of implementation of the basic emergency maternal obstetric newborn care program in the area of prenatal when grouped and compared according to the following variables: age, civil status, position and length of service.

Tables reveals shows in the area of prenatal, as to age it has p -value of 0.274 which was higher than at 0.05 level of significant which mean that the age is not significant. In terms of civil status it has a p -value = 0.323 which is also higher than at 0.05 level of significant which meant that the civil status is not significant whether the it is single or married. The position had a p -value = 0.248 and the length of service had a p -value = 0.156, which are higher than the significant level of 0.05. These mean that there are no significant differences between the implementers who rendered services occupying lower and higher position and for those who stay shorter and longer in the service. As reflected in the results of the study, it can be said that the null hypothesis stating that "There is no significant difference in the extent of implementation of the basic emergency maternal obstetric newborn care program when grouped and compared according to age, civil status, position and length of service", is therefore, accepted. This would implies that the variables of age, civil status, position and length of service with its categories who are younger and older, married and single, lower and higher and shorter and longer do not influence their implementation of the basic emergency maternal obstetric newborn care program in the area of prenatal. This implies that neither one of them could not influence the other.

These data also supported in the study of Liu et. al,. (2017), entitled "Prenatal care and child growth and schooling in four low- and medium-income countries", among 7203 individuals in the analysis, 68.9% (Philippines) to 96.7% (South Africa) had at least one prenatal care visit, with most having at least four visits. Over 40% of Brazilians and Guatemalans had their first prenatal visit in the first trimester, but fewer Filipinos (13.9%) and South Africans (19.8%) did so. Prenatal care utilization was not significantly associated with birth weight ($p > 0.05$ in pooled data). Each unit increase in the prenatal care utilization index was associated with 0.09 (95% CI= 0.04 to 0.15) higher height-for-age z-score at 24 months and with 0.26 (95% CI= 0.17 to 0.35) higher schooling grades attained. Although there was some heterogeneity and greater imprecision across sites, the results were qualitatively similar among the four different populations.

The said study was concluded that to birth weight, prenatal care utilization was associated with important outcomes later in life, specifically higher height-for-age at 24 months and higher attained school grades. These results suggest the relevance of prenatal care visits for human capital outcomes important over the lifecycles.

Table 5

Comparative Analysis on the Extent of Implementation of the Basic Emergency Maternal Obstetric Newborn Care Program in the Area of Delivery According to Variables

Variable	Category	Mean	Mann Whitney U test	p-value	Sig level	Interpretation
Age	Younger	4.78	434.5	0.867	0.05	Not Significant
	Older	4.78				
Civil Status	Single	4.79	409.0	0.797		Not Significant
	Married	4.78				
Position	Lower	4.74	303.0	0.118		Not Significant
	Higher	4.80				
Length of Service	Shorter	4.76	287.5	0.096		Not Significant
	Longer	4.83				

Table 5 shows Extent of Implementation of the Basic Emergency Maternal Obstetric Newborn Care Program in the Area of Delivery According to age, civil status, position and length of service.

Finding shown that as to age it has a p -value = 0.867, civil status p -value = 0.797, position (p -value = 0.118 and length of service had p -value = 0.096, in which the p -value are higher than the significant level of 0.05. Hypothesis stating that "There is no significant difference in the extent of implementation of the basic emergency maternal obstetric newborn care program in the area of delivery when grouped and compared according to age, civil status, position and length of service", is therefore, accepted. This implies that the variables of age, civil status, position and length of service with its categories who are younger and older, married and single, lower and



higher and shorter and longer do not influence their implementation of the basic emergency maternal obstetric newborn care program in the area of delivery .

According to Panth et, al., (2018) in the study entitled ,“Maternal Satisfaction on Delivery Service among Postnatal Mothers in a Government Hospital, Mid-Western Nepal”, the study shows that majority (89.88%) of the mothers were satisfied with the delivery service. The level of satisfaction was higher in interpersonal and technical aspects (93.82%) of care than in informative aspects (91.57%) and health facility-related statements (91.01%). There was no statistically significant association between socio-demographic and obstetric characteristics and maternal satisfaction. Although insignificant, postnatal mothers who were illiterate were 2.710 times more likely to be satisfied than who were literate ($p = 0.475$; OR = 2.710; CI = 0.343–21.4), also postnatal mothers up to primary level were 2.850 times more likely to be satisfied than secondary level and above ($p = 0.241$; OR=2.850; CI 0.622–13.056). Also, in this study, postnatal mothers who were multiparous were 2.352 times more likely to be satisfied with the delivery service than primiparous ($p = 0.111$; OR= 2.352; CI = 0.801–6.907). Majority (87.1%) of the mothers would like to receive delivery service next time in the same hospital.

The said study was concluded that majority of mothers were satisfied by the delivery service. Care givers need to fully understand the expectations the mothers have and provide care that is consistent with those expectations. The health system should be devised to increase maternal satisfaction in the health institution and provide maternal-friendly service.

Table 6

Comparative Analysis on the Extent of Implementation of the Basic Emergency Maternal Obstetric Newborn Care Program in the Area of Newborn According to Variables

Variable	Category	Mean	Mann Whitney U test	p- value	Sig level	Interpretation
Age	Younger	4.85	329.5	0.077		Not Significant
	Older	4.79				
Civil Status	Single	4.84	334.5	0.156	0.05	Not Significant
	Married	4.81				
Position	Lower	4.81	352.0	0.440		Not Significant
	Higher	4.83				
Length of Service	Shorter	4.83	334.0	0.365		Not Significant
	Longer	4.80				

Table 6 shows The Extent of Implementation of the Basic Emergency Maternal Obstetric Newborn Care Program in the Area of New born according to age, civil status, position and length of service.

Finding shown that as to age it has a p -value = 0.077, civil status obtained a p -value = 0.156 In terms of position it has a p -value = 0.440 and length of service had a p -value = 0.365 the results shows that the p -value of all the variables had the p -value higher than 0.05 significant level. Hypotheses stating that “There is no significant difference in the extent of implementation of the basic emergency maternal obstetric newborn care program in the area of new born when grouped and compared according to age, civil status, position and length of service”, is therefore , accepted. This implies that the variables of age, civil status, position and length of service with its categories who are younger and older, married and single, lower and higher and shorter and longer do not influence their perception on the implementation of the basic emergency maternal obstetric newborn care program in the area of newborn.

According to Yemaneh et. al., (2017) in the study entitled “Knowledge and Practice of Immediate New Born Care (Inc.) among Health Professionals in Governmental Health Facilities of Bahir Dar City, North Ethiopia,”among the total participants (134), 56% have general good knowledge on immediate new-born care and 13.4% have poor knowledge. Regarding immediate new-born care practice 59.7% health professional practiced Immediate new-born



care properly but the remaining 40.3% of respondents did not practiced. Out of the study participants 131 (97.8%) of health professionals had given vit k to immediately born baby. Out of 141 conveniently selected health professionals 134 participated in the study which gives a response rate of 95%, of which respondents 76 (56.8%) were from hospital and 58 (43.2%) were from health center.

The immediate care of new-born is performed for saving the newborn life so 62.7% of respondents had received in service training courses on immediate care of newborn, in spite of this; the study populations of this survey had poor knowledge regarding care of new-born at birth (13.4%). Similar study done in Tigray regional state shows that 126 (85.7%) received in-service training regarding immediate newborn care but 25.2% had poor knowledge and in Sudan study shows that 93% of study population had training but 56.6% of them got poor knowledge.

Conclusion:

Results of the study shows that the extent of Implementation of the Basic Emergency Maternal Obstetric Newborn Care Program in the Area of Prenatal has a great extent while in the area of delivery and newborn care shows a very high extent. Furthermore, there is no significant difference in the extent of implementation of the Basic Emergency Maternal Obstetric Newborn Care Program when respondents are grouped and compared in the area of prenatal, delivery and newborn according to aforementioned variables. Therefore, the study concluded that that implementers should be well train and perform their duties and responsibilities; and motivated and very professionals in dealing quality of care to all pregnant women. This study calls for the BEMONC coordinator to facilitate rapid assessment and management for program implementation especially in the area of pre natal; a continuous training program in partnership with government officials should be follow to enhance the knowledge, skills and attitude of the implementers; the doctors, nurses and midwives to educate and counsel mother to give birth to hospital facility to prevent further complication; and suspected mother with HIV Infection should be advice to proceed in tertiary hospital for confirmatory result.

Acknowledgement

The researcher is wholeheartedly grateful to all people who contributed and extended their valuable knowledge and precious time in the preparation and completion of this study. To the researcher's family, friends and workmates, for their support, understanding, never failing love, comfort and encouragement.

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