

KIBOGORA POLYTECHNIC

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ASSESSMENT OF KNOWLEDGE, ATTITUDES, AND PRACTICES OF EARLY INITIATION OF BREASTFEEDING AMONG MOTHERS ATTENDING KIBOGORA LEVEL II TEACHING HOSPITAL IN NYAMASHEKE, RWANDA.

Undergraduate dissertation presented in partial fulfillment of the requirements for the Bachelor's degree with honor in Nursing.

PREPARED BY:

NAME: Jackson BYIRINGIRO

REG. 2000681

NAME: Hamidah UWASE

REG. 2000787

SUPERVISOR: Dr. Eleazar NDABARORA

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DECLARATION

Declaration by the Candidate

We, Hamidah UWASE and Jackson BYIRINGIRO, hereby declare that this is our own original work and not a duplication of any similar academic work. It has therefore not been previously or concurrently submitted for any other degree, diploma or other qualification to Kibogora Polytechnic or any other institution. All materials cited in this paper which are not our own have been duly acknowledged.

Hamidah UWASE

Signature.....

Date.....

Jackson BYIRINGIRO

Signature.....

Date.....

Declaration by the Supervisor

I declare that this work has been submitted for examination with my approval as KP Supervisor

Supervisor's name: Dr. Eleazar NDABARORA

Signature.....

Date.....

ABSTRACT

This study aimed to assess the knowledge, attitudes, and practices of early initiation of breastfeeding among mothers attending kibogora level II teaching hospital in Nyamasheke, Rwanda. Specific objectives were: (1) to assess knowledge of early initiation of breastfeeding among mothers attending Kibogora Level Two Teaching hospital in Nyamasheke, Rwanda. (2) To describe the attitudes of early initiation of breastfeeding among mothers attending Kibogora Level Two Teaching hospitals in Nyamasheke, Rwanda. (3) To examine the practices of early initiation of breastfeeding among mothers attending Kibogora Level Two Teaching hospitals in Nyamasheke, Rwanda. Methods: The study adopted cross sectional study design with quantitative approach. The study includes the target population of 180 mothers and the sample size of 124. A questionnaire was administered to collect data on knowledge, attitudes, and practices of EIBF among mothers attending kibogora level two teaching hospitals. Results: In this study the knowledge of mothers was 89.2%, attitudes were 77.40% and practices of mothers were 83.0%. A chi-squared analysis reveals key factors influencing breastfeeding practices. There was no significant association of age, marital status, religion, or residence on breastfeeding initiation or skin-to-skin contact ($p > 0.05$). However, maternal education affects breastfeeding timing (chi-squared = 12.706^a, $p = 0.005$) and skin-to-skin contact (chi-squared = 11.089^a, $p = 0.011$), as does socio-economic status (breastfeeding initiation: chi-squared = 17.226^a, $p = 0.001$; skin-to-skin contact: chi-squared = 15.764^a, $p = 0.001$). It also finds no link between EIBF awareness, ANC visits, or pre-delivery knowledge and these practices ($p > 0.05$), but mode of delivery significantly affects both (breastfeeding initiation: chi-squared = 88.855^a, $p = 0.000$; skin-to-skin contact: chi-squared = 1.101E2^a, $p = 0.000^*$). It also shows that the belief in EIBF's importance significantly affects both breastfeeding timing (chi-squared = 7.815^a, $p = 0.020$) and skin-to-skin contact (chi-squared = 10.290^a, $p = 0.006$), while other beliefs and post-delivery challenges significantly influence both practices (breastfeeding initiation: chi-squared = 1.240E0^a, $p = 0.000$; skin-to-skin contact: chi-squared = 1.001E2^a, $p = 0.000$). Policy support, advocacy, and healthcare provider training are needed to promote early breastfeeding, support mothers, and facilitate the practice of breastfeeding.

DEDICATION

To the almighty God,

To our parents,

To our lecturers,

To our supervisor,

To our sisters and brothers,

Lastly to our friends and classmate.

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LIST OF ABBREVIATION AND ACRONYMS

ANC	ANTENATAL CARE
BFHI	BABY FRIENDLY HOSPITAL INITIATIVE
EIBF	EARLY INITIATION OF BREASTFEEDING
HBF	HEALTH BELIEF MODEL
MDGs	MILLENIUM DEVELOPMENT GOALS
NICU	NEONATAL INTENSIVE CARE UNIT
PMTCT	PREVENTION OF MOTHER-TO-CHILD TRANSMISSION
RDHS	RWANDA DEMOGRAPHIC AND HEALTH SURVEY
SPSS	STATISTICAL PACKAGE FOR SOCIAL SCIENCES
UNICEF	UNITED NATIONS CHILDREN'S FUND
WHO	WORLD HEALTH ORGANIZATION

CHAPTER ONE: GENERAL INTRODUCTION

1.0.INTRODUCTION

Early initiation of breastfeeding refers to newborn's breastfeeding within 1 hour after birth (Friedrich, 2018). Early initiation of breastfeeding within first hour after birth has shown to have very big nutritional impact and immunological benefit and has been found to reduce neonatal mortality (Khanal, 2015). This chapter contains background of the study, problem statement, study objectives, study questions, significance, limitations, and the scope of study.

1.1.BACKGROUND OF THE STUDY

Early initiation of breastfeeding (EIB) is defined as “the provision of mother's breast milk to infants within the first hour of birth and ensures that the newborn receives colostrum”. Colostrum is high in nutrients and antibodies, which help protect the newborn from a variety of infections. The key to successful breastfeeding is education, information, and communication strategies aimed at behavior change, for such a promotional campaign to be effective, the attitudes and practices of health workers must be improved (Moffat, 2021). Early initiation of breastfeeding will be much easier and attractive to mothers if timely health education, support, and counseling are applied. To strengthen breastfeeding practices, raising awareness and the social support network available to mothers must be reinforced (Jiayou Luo, 2021).

Early breastfeeding is beneficial for infants because colostrum contains a variety of protective components against infections and positively impacts their immune systems. It is rich in proteins, vitamins, and minerals, which infants can absorb effectively. Early breastfeeding is also crucial for establishing exclusive breastfeeding later on and enhancing mothers' confidence at home. In developing countries, early initiation of breastfeeding reduces infant death. Skin-to-skin contact and early breastfeeding increase the frequency of breastfeeding, and prevent hypoglycemia (Hakala). Globally, only 2 out of 5 newborns began breastfeeding within an hour of birth in 2017, leaving an estimated 78 million newborns to wait over 1 hour to be put to the breast, according to a new report from the United Nations Children's Fund and the World Health

Organization. Delaying the initiation of breastfeeding can increase the risk of neonatal infection (Friedrich, 2018).

In turkey a study that was conducted on compliance of mother's breastfeeding and complementary feeding practices with WHO recommendations in 2020 found that majority of mothers (97.2%) breastfeed their babies immediately after birth (Demir, 2020). The results of a study conducted on motherhood in Europe examining parental leave regulations and breastfeeding policy influences on EIBF shows has high rate of EIBF in Denmark and Poland , (94.67%)and (91.27%) respectively while Spain shows (76.67%), and Ireland with low rate of EIBF (32.12%) (Vanderlinden, 2020). In South Asia, merely 41 % of newborns are breastfed within 1 h of birth. Several South Asian countries have some of the worst early initiation of breastfeeding practices in the world; the rates in Pakistan, India, Bangladesh and Nepal are only 29, 41, 47 and 45 % respectively (Ameyaw, 2023). Insufficient attention is afforded to the public health issue of early or timely initiation of breastfeeding, and the causes of poor practice, even though this preventive intervention is highly cost-effective (Sharma, 2016).

In Africa, Current evidence suggests that EIBF has the ability to prevent 22% of neonatal deaths if all neonates were breastfed within 1 hour after delivery (Birhan, 2022). Since the prevalence of EIBF, particularly in sub-Saharan African countries is still low, it could potentially be improved to reduce infant mortality. The previous study indicated that the prevalence of EIBF varies in many sub-Saharan African countries, with the WHO's EIBF guideline for the rating categorizing most as having a "fair" prevalence, equating to a coverage of 30%-49%. The coverage was reported to be 40% in West and Central Africa and 65% in Eastern and Southern Africa. The prevalence of EIBF in Central Africa is particularly low, at 37.84% (Shimizu, 2023). In Ethiopia, a study conducted on the same topic shows that 79.23% mothers were knowledgeable about EIBF, 59.6% of mothers supports EIBF, and 62.5% of mothers practices EIBF (Feleke, 2020). In a study conducted in Nigeria on breastfeeding practices of mothers shows that only 44.5% of mothers initiated breastfeeding within one hour. The time it took to start breastfeeding varied from right after birth up to 14 days. The longest delay of 14 days occurred due to complications from surgery that the mother had undergone (Atimati, 2020). In Ghana, slightly more than half (56%) of children are breastfed within an hour of birth (Seidu, 2020).

In Sudan, a study conducted on assessment of initiation of breastfeeding practices, shows that 87.2% initiated breastfeeding within 1hr of delivery and 58.4% of mothers had received breastfeeding education provided by healthcare professionals during pregnancy and/or after the delivery (Bruno Tongun, 2018). In Uganda, nearly all children 99% are breastfed at some point after birth. However, the timing of this breastfeeding often starts later than recommended. Only 42% of children who have ever been breastfed begin within the first hour of birth, and 14.5% do not begin breastfeeding until more than 24 hours after birth (Kalisa, 2015). A study done in Democratic Republic of Congo, shows that around 50% of newborns do not begin breastfeeding within the first hour after birth (Kambale, 2018). The prevalence of early initiation of breastfeeding (EIBF) was 83%. While women generally demonstrated strong knowledge about colostrum (94%), the timing of breastfeeding initiation (71%), only 54% received counseling on breastfeeding during antenatal care. Awareness about the appropriate timing for breastfeeding initiation during pregnancy and vaginal delivery was linked to higher rates of EIBF (Lyellu, 2020).

In Rwanda, 81% of newborns are breastfed within one hour of life, however little is known about rates among small and sick newborns (Gato, 2022). Rwandan mothers practicing early breastfeeding are currently at 81% according to the most recent published demographic and health survey (DHS, 2019-20) which is still below the WHO target of 90% (Nyirahirwa, 2023).

1.2. PROBLEM STATEMENT

The early or timely initiation of breastfeeding, particularly within the first hour after birth, aligns with the WHO's optimal practice guideline (Mukashyaka, 2019). According to a recent report from the United Nations Children's Fund (UNICEF) and the World Health Organization (WHO), globally, only 2 out of 5 infants were breastfed within an hour of birth in 2017. This delay affected approximately 78 million newborns, which had to wait over an hour to start breastfeeding. (Friedrich., 2018). The early initiation of breastfeeding is still a problematic issue to the delivered mothers. A recent systematic review and meta-analysis revealed that breastfeeding initiation after the first hour of birth doubles the risk of neonatal mortality (RDHS, 2014). In some European countries like Turkey, Poland, Denmark has high rate of EIBF, 97.2%, 91.27%, and 94.67% respectively while Ireland shows a low rate, where only 32.12% initiated

breastfeeding within 1hr after birth (Vanderlinden, 2020). In sub Saharan Africa region, different study conducted on initiation of breastfeeding shows that it is still low (Shimizu, 2023).

In 2017, 2.5 million neonates died during the first month after birth. Meanwhile, early initiation of breastfeeding is the most effective low-cost intervention and best practice to reduce neonatal morbidity and mortality, especially in developing countries. Coverage of early initiation of breastfeeding (EIBF) is 40% in West and Central Africa and 65% in Eastern and Southern Africa. In Central Africa, EIBF prevalence is particularly low at 37.84% (Shimizu, 2023). In Ethiopia, 79.23% of mothers are knowledgeable about EIBF, 59.6% support it, and 62.5% practice it (Feleke, 2020). In Nigeria, only 44.5% of mothers start breastfeeding within one hour. In Sudan, 87.2% of mothers initiate breastfeeding within the first hour, and 58.4% receive breastfeeding education from healthcare professionals (Bruno Tongun, 2018). In Uganda, while 99% of children are breastfed at some point, only 42% start within the first hour, and 14.5% begin after more than 24 hours (Kalisa, 2015). In the Democratic Republic of Congo, about 50% of newborns do not start breastfeeding within the first hour (Kambale, 2018).

Breastfeeding within the first hour after birth is crucial for newborn survival and Breastfeeding establishment over the long term (Habumugisha, 2020). In Rwanda, 81% of newborns are breastfed within one hour of life, however little is known about rates among small and sick newborns (Gato, 2022). Initiating breastfeeding within the first hour after birth, known as early initiation, is crucial for a healthy start to life. It can save lives and offers lasting health advantages. Postponing breastfeeding initiation can heighten the risk of neonatal infections and fatalities. Considering the big Rwandan effort in improving breastfeeding, we still have what to do by making aware the knowledge, Attitudes, and practices of early initiation of breastfeeding and their scientific information with evidence based in Rwanda specifically in our study area.

1.3.PURPOSE OF THE STUDY

The purpose of the study was to assess the knowledge, attitude, and practices of early initiation of breastfeeding among mothers attending Kibogora Level Two Teaching hospital in Nyamasheke, Rwanda.

1.4.STUDY OBJECTIVES

1.4.1. General objective

To assess knowledge, attitude, and practices of early initiation of breastfeeding among mothers attending Kibogora Level Two Teaching hospital in Nyamasheke, Rwanda.

1.4.2. Specific objectives

1. To assess knowledge of early initiation of breastfeeding among mothers attending Kibogora Level Two Teaching hospital in Nyamasheke, Rwanda.
2. To describe the attitudes on early initiation of breastfeeding among mothers attending Kibogora Level Two Teaching hospital in Nyamasheke, Rwanda.
3. To examine the practices of early initiation of breastfeeding among mothers attending Kibogora Level Two Teaching hospital in Nyamasheke, Rwanda.

1.5.STUDY QUESTIONS

1.5.1. General question

What is the knowledge, attitude, and practices of early initiation of breastfeeding among mothers attending Kibogora Level Two Teaching hospital in Nyamasheke, Rwanda?

1.5.2. Specific questions

1. What is the knowledge of early initiation of breastfeeding among mothers attending Kibogora Level Two Teaching hospital in Nyamasheke, Rwanda?
2. What are the attitudes on early initiation of breastfeeding among mothers attending Kibogora Level Two Teaching hospital in Nyamasheke, Rwanda?
3. What are the practices of early initiation of breastfeeding among mothers attending Kibogora Level Two Teaching hospital in Nyamasheke, Rwanda?

1.6.SIGNIFICANCE OF STUDY

The study on assessing the knowledge, attitude, and practices of early initiation of breastfeeding among mothers attending Kibogora Level Two Teaching hospital is crucial for improving maternal and child health by promoting early breastfeeding, which reduces neonatal mortality

and provides essential nutrients and immune protection. This study will identify educational gaps, cultural practices, and misconceptions, which will guide formulations of targeted educational programs and improved healthcare support.

The findings will also inform hospital policies, empowering mothers to make informed decisions. Additionally, the study has significant public health implications by promoting long-term health benefits and aiding efficient resource allocation to improve breastfeeding practices at the community and national levels.

1.7.LIMITATION OF THE STUDY

Limitation of this study is that, if the sample size is small, it may not be representative of the entire population of mothers at the hospital and this may affect the generalizability of the findings. The study also uses a cross-sectional design and is limited to one hospital, which may not provide a comprehensive view of the knowledge, attitudes, and practices of early initiation of breastfeeding among mothers in other settings or regions.

1.8.SCOPE OF THE STUDY

The study was conducted at Kibogora Level Two Teaching Hospital, which is located in the Kanjongo sector of Nyamasheke District, Western Province of Rwanda. The study conducted during the period of July 2024; it was carried out in obstetrics and gynecology department at Kibogora level two teaching hospital, on assessment of knowledge, attitude, and practices of early initiation of breastfeeding among mothers attending Kibogora Level Two Teaching hospital.

CHAPTER TWO: LITERATURE REVIEW

2.0. INTRODUCTION

This chapter presents review of existing literature on the knowledge, attitude, and practices of early initiation of breastfeeding among mothers.

2.1. DEFINITIONS OF KEY CONCEPTS/TERMS

Early initiation of breastfeeding (EIBF): is defined as the provision of mother's breast milk to newborn within the first hour of birth and ensures that the newborn receives colostrum (Ulfa, 2023).

Knowledge: is defined as the information, facts and skills acquired by education or experience (Lemos, 2020).

Attitude: is a psychological construct that represents an individual's degree of like or dislike for an item. It is a complex mental state involving beliefs, feelings, values, and dispositions to act in certain ways (Gomme, 2022).

Practices: is doing something regularly to improve your skill or ability in it. It is about the repeated exercise of an activity to get better at it (Van Manen, 2023).

2.2. LITERATURE RELATED TO KNOWLEDGE OF EIBF AMONG MOTHERS.

Early initiation of breastfeeding right after birth is crucial for a baby's well-being. Unfortunately, many pregnant women, families, and communities lack awareness about its importance. Early initiation of breastfeeding (EIB) aligns perfectly with the Millennium Development Goals (MDGs) to fight poverty, hunger, and child mortality. In fact, EIBF is estimated to prevent two-thirds of child deaths. Additional benefits include providing the baby with colostrum (the first milk), boosting milk production, and strengthening the mother-child bond (Ariyani, 2019). According to a study by Smith, there is a substantial variation in maternal knowledge across different regions and socio-economic backgrounds. Only 60% of mothers in rural areas of Sub-Saharan Africa were aware that early breastfeeding could prevent neonatal infections and support

immune system development (Smith, 2021). In contrast, urban areas showed higher awareness rates, with up to 85% of mothers acknowledging these benefits (Jones, 2021). Furthermore, the benefits of early breastfeeding initiation extend beyond immune support. A study carried out in Southeast Asia and South America, underscores that mothers' knowledge were 70% and 75% respectively knew that early breastfeeding aids in reducing postpartum hemorrhage and facilitates uterine involution (Johnson, 2019).

Cultural norms and beliefs play a crucial role in shaping maternal knowledge and practices regarding early breastfeeding initiation. In the Middle East and North Africa, cultural beliefs often undermine timely breastfeeding practices, with only 40% of mothers recognizing its immediate benefits (Lee, 2021). In contrast, Scandinavian countries demonstrate high awareness rates, with reporting 90% awareness among mothers in Norway and Sweden. These findings underscore the need for culturally sensitive breastfeeding education programs tailored to local beliefs and practices (Nielsen, 2021). Policy interventions also influence maternal knowledge globally. Countries with robust breastfeeding policies, such as Australia and Canada, have significantly higher levels of maternal awareness. A study done in 2023 reported that nearly 80% of mothers in these regions are knowledgeable about the benefits of early breastfeeding initiation (Thomas, 2023). In contrast, other study noted that in parts of South Asia and Africa, where policy frameworks are inadequate, awareness levels remain low, with less than 50% of mothers informed about these benefits (Kumar, 2020) but a study done at Masaka district hospital in Rwanda show that 86.0% of all total respondents replied that breast milk should be started immediately after birth within an hour, about 87.6% understand the importance of the first breast milk or colostrum, 41.5% know the right time to start complementary feeding (Luo, 2021).

Barriers to maternal knowledge of breastfeeding benefits include misinformation, lack of support from healthcare providers, and cultural taboos. Misinformation spread through social media identified as a significant challenge in urban areas of South Asia, where myths about breastfeeding continue to prevail despite efforts to educate mothers (Lee, 2021). Additionally, cultural taboos surrounding breastfeeding in public and workplace policies that do not support breastfeeding mothers contribute to lower rates of early initiation (Gomez, 2022). Global health initiatives and advocacy efforts have focused on addressing these barriers and promoting breastfeeding as a public health priority. The World Health Organization (WHO) and UNICEF's

Baby-Friendly Hospital Initiative, for example, has been instrumental in promoting breastfeeding-friendly healthcare practices worldwide (Organization, 2020). These initiatives emphasize the importance of early breastfeeding initiation and provide guidelines for healthcare facilities to support and educate mothers effectively.

2.3. LITERATURE RELATED TO THE ATTITUDES OF EIBF AMONG MOTHERS.

Maternal attitudes and perceptions towards EIBF vary significantly across different regions globally, influenced by cultural, socioeconomic, and healthcare factors. Understanding these nuances is essential for promoting optimal breastfeeding practices. Globally, attitudes towards EIBF reflect diverse cultural norms and healthcare practices. Research indicates that in many high-income countries, a majority of mothers (>80%) initiate breastfeeding within the first hour, driven by strong healthcare provider support and awareness campaigns (Organization., 2021). In contrast, low-income countries face challenges due to limited healthcare access and cultural practices that may delay initiation (Garcia, 2022).

In Africa, attitudes towards EIBF are shaped by cultural beliefs and healthcare infrastructure. Studies show that while there is a high awareness of the benefits of EIBF, actual practice rates vary. In countries like Nigeria and Kenya, over 70% of mothers initiate breastfeeding early, influenced by healthcare provider encouragement and cultural acceptance (Brown, 2022). However, in regions with lower healthcare access, such as rural areas, initiation rates may be lower due to logistical challenges (Das, 2020). Cultural beliefs significantly influence maternal attitudes towards EIBF across Africa. In many communities, colostrum is traditionally perceived as harmful or unclean, leading to delayed initiation despite health benefits (Khan, 2022). Efforts to address these beliefs through culturally sensitive health education have shown promise in improving early breastfeeding practices (Ahmed, 2020).

EIBF promotion in Sub-Saharan Africa is particularly challenging due to disparities in socioeconomic status and cultural diversity. Studies show that despite a strong cultural tradition of breastfeeding, obstacles such as a lack of maternal education and healthcare infrastructure hinder early initiation rates (Nguyen, 2021). Successful interventions in countries like Ghana and Tanzania have been implemented to enhance EIBF practices through community health

programs and policy assistance (Organization, 2020). Maternal education is linked to positive EIBF practices, with research indicating that mothers with higher levels of education are more likely to start breastfeeding early. This underscores the significance of health literacy in promoting optimal breastfeeding behaviors (Wang, 2022). Educational campaigns and community outreach programs have been effective in improving awareness and attitudes towards EIBF in several African countries (Clark, 2021). Religious beliefs and social norms influence maternal attitudes towards breastfeeding initiation. In predominantly Muslim countries like Senegal and Niger, religious teachings emphasize the importance of breastfeeding early, leading to higher initiation rates among mothers (Khan., 2022). Social support networks, including family and peers, also play a crucial role in encouraging mothers to initiate breastfeeding within the recommended timeframe (Nguyen., 2023).

Rwanda has made significant strides in promoting EIBF through national policies and healthcare reforms. Studies indicate that over 90% of mothers in urban areas initiate breastfeeding early, facilitated by supportive hospital practices and community health workers (Patel, 2023). However, challenges persist in rural areas, where access to healthcare and cultural beliefs may influence breastfeeding practices differently (Jones., 2023). Socioeconomic status plays a critical role in EIBF practices in Africa. Studies indicate that mothers from wealthier households are more likely to initiate breastfeeding early, attributed to better access to healthcare and education (Garcia., 2023). Conversely, poverty and lack of resources contribute to lower initiation rates in marginalized communities (Patel., 2022). Policy interventions have played a crucial role in promoting EIBF in Africa. Countries like Rwanda have implemented national breastfeeding policies and initiatives, resulting in significant improvements in early breastfeeding initiation rates (Rwanda., 2022). Despite progress, challenges persist in promoting EIBF across Africa. Barriers such as inadequate breastfeeding support in workplaces, lack of skilled healthcare providers, and cultural taboos continue to hinder widespread adoption of early breastfeeding practices (Das., 2020).

2.4. LITERATURE RELATED TO PRACTICES OF EIBF AMONG MOTHERS.

Early breastfeeding within the first hour after birth is recognized globally as crucial for the well-being of both mothers and infants. According to UNICEF, approximately 43% of mothers around the world initiated breastfeeding within the first hour (UNICEF, 2020). This early initiation is associated with reduced neonatal mortality rates, strengthening immune function in infants, and promotes better mother-infant bonding (WHO, 2019). Typically, high-income countries show higher rates of early breastfeeding due to strong healthcare systems, supportive maternity leave policies, and cultural practices that promote breastfeeding (Rollins., 2021). In contrast, low- and middle-income countries face challenges such as limited access to skilled birth attendants, strong marketing of formula milk, and cultural attitudes that can make it harder to start breastfeeding early (Smith., 2023).

Global efforts, including the WHO Global Strategy for Infant and Young Child Feeding, aim to promote early initiation of breastfeeding through advocacy, policy support, and healthcare provider training (WHO, 2019). Recent study shows that early initiation of breastfeeding varies widely across regions. Northern African countries tend to have higher rates, influenced by cultural practices that prioritize breastfeeding soon after birth (Goga, 2020). In contrast, Sub-Saharan Africa faces challenges such as high maternal mortality rates and healthcare infrastructure limitations, impacting breastfeeding initiation rates. Studies highlight that in countries like Nigeria and Ethiopia, rates of early initiation can be as low as 30%, reflecting barriers such as rural-urban disparities and inadequate maternal healthcare services (Matanda, 2023). Efforts to improve early breastfeeding practices in the region include community-based interventions, training of healthcare providers, and advocacy for supportive breastfeeding policies (Smith., 2023). A study in Bangladesh found that 67% of mothers started breastfeeding within the first hour of birth at healthcare facilities. Similarly, research in Brazil on breastfeeding and complementary feeding indicated that 65% of mothers began breastfeeding shortly after delivery (Feleke, 2020). Additionally, a quasi-experimental study in England with 108 mothers showed that 87.4% of them were well informed about how to initiate breastfeeding promptly (Mukarubayiza, 2020).

In African countries including Rwanda, Tanzania, and Kenya, demonstrates varying trends in early initiation of breastfeeding influenced by national policies, cultural norms, and healthcare accessibility. A study in Kasarani, Kenya showed that 64.3% of mothers (n=220) were able to practice EIBF after birth (Habumugisha, 2020). Rwanda has made significant strides in promoting early breastfeeding initiation through initiatives like the Baby-Friendly Hospital Initiative (health., 2021). This has contributed to high rates of early breastfeeding initiation exceeding 80%, supported by community health worker programs and maternity leave policies. Despite these achievements, challenges remain, particularly in rural areas where access to healthcare services and information may be limited (RDHS, 2020).

Cultural beliefs and traditional practices also influence breastfeeding behaviors, although national campaigns and educational programs have helped dispel myths surrounding colostrum and early breastfeeding (health., 2021). Continued investment in healthcare infrastructure and sustained community engagement are essential to maintaining high rates of early breastfeeding initiation and ensuring equitable access to maternal and child health services across Rwanda. In contrast, neighboring countries like Tanzania and Kenya face challenges such as limited healthcare infrastructure and disparities in maternal education, influencing early breastfeeding practices (Health, 2023). Efforts to improve early initiation rates in these countries include expanding access to skilled birth attendants, promoting breastfeeding education, and integrating breastfeeding support into maternal healthcare services (Survey., 2020). Common barriers to early initiation of breastfeeding globally include inadequate maternity leave policies, aggressive marketing of breast milk substitutes, and cultural beliefs surrounding colostrum. Addressing these barriers requires comprehensive strategies that involve healthcare providers, policymakers, and community stakeholders to promote breastfeeding as a cornerstone of maternal and child health (Rollins., 2021).

2.5. OTHER RELATED LITERATURE.

Factors associated with early initiation of breastfeeding.

Maternal knowledge significantly influences the early initiation of breastfeeding. Women who are well-informed about the benefits and techniques of breastfeeding are more likely to start

breastfeeding within the first hour of birth. Knowledge about the nutritional and immunological benefits of colostrum, the first milk produced, encourages mothers to initiate breastfeeding promptly (Massey, 2022). Educational interventions, such as prenatal classes and breastfeeding workshops, play a crucial role in enhancing maternal knowledge. Studies have shown that mothers who attend such sessions are more likely to initiate breastfeeding early compared to those who do not (Johnson., 2021). Healthcare providers are pivotal in educating mothers about breastfeeding. Consistent advice and support from nurses, midwives, and doctors during prenatal visits and immediately postpartum can significantly improve early initiation rates. Training healthcare providers to deliver effective breastfeeding education is essential for better maternal outcomes (Poag., 2020).

Cultural beliefs and practices can either promote or hinder early initiation of breastfeeding. In some cultures, colostrum is perceived as harmful, leading to delayed breastfeeding initiation (Ayele, 2021). Understanding and addressing these cultural misconceptions are crucial for improving breastfeeding practices. Support from family and community members is critical in the early initiation of breastfeeding. In many cultures, the advice and support of older women, such as grandmothers and mothers-in-law, play a significant role in a mother's decision to breastfeed (Mukunya, 2020). Community-based programs that engage these influential figures can promote positive breastfeeding practices. Societal norms and peer influence also affect breastfeeding initiation. Mothers who see their peer's breastfeeding are more likely to follow suit. Social acceptance and encouragement of breastfeeding in public spaces contribute to higher rates of early initiation (Negin, 2016).

Hospital policies and practices, such as the Baby-Friendly Hospital Initiative (BFHI), have a profound impact on early breastfeeding initiation. Hospitals that implement BFHI protocols, includes rooming-in and immediate skin-to-skin contact, report higher rates of early initiation (organization, 2017). Supportive practices in labor and delivery rooms, such as allowing immediate and uninterrupted skin-to-skin contact between mother and newborn, facilitate early breastfeeding initiation (Moore, 2016). Delayed cord clamping and minimizing unnecessary medical interventions also promote early breastfeeding. Training healthcare workers in breastfeeding support is crucial for improving early initiation rates. Continuous education and

practical training programs equip nurses and midwives with the skills to assist mothers effectively (Rollins, 2016).

The physical health of the mother can affect breastfeeding initiation. Mothers who experience complications during delivery, such as cesarean sections or prolonged labor, may face delays in initiating breastfeeding (Cattaneo, 2018). Providing additional support to mothers with health complications is important. Maternal mental health also plays a role in breastfeeding initiation. Mothers experiencing postpartum depression or anxiety may find it challenging to initiate breastfeeding early (Dennis, 2009). Emotional support from family, friends and healthcare providers can help improve breastfeeding outcomes. Postpartum care and follow-up are crucial for sustaining early breastfeeding initiation. Regular follow-up visits by healthcare providers, including lactation consultants, can provide the necessary support and guidance to mothers (Castrucci, 2006).

2.6. RESEARCH GAP

Based to the information obtained to the literature review, it is visible that there is a gap of current information related to our study specifically in the area of the study.

2.7. THEORETICAL UNDERPINNING

The Health Belief Model (HBM) is a theory used to understand and predict health-related behaviors, particularly in how people use health services. Developed in the 1950s by psychologists Irwin M. Rosenstock, Godfrey M. Hochbaum, S. Stephen Kegels, and Howard Leventhal at the U.S. Public Health Service, it remains a key theory in health behavior research. The HBM helps explain why mothers may choose to start breastfeeding early. According to the model, mothers are more likely to begin breastfeeding soon after birth if they believe their baby is at risk of health problems without it (perceived susceptibility), think the risks of not breastfeeding early are serious (perceived severity), understand the benefits of breastfeeding early (perceived benefits), and feel that there are few obstacles to starting early (perceived barriers). Supportive cues, such as advice from healthcare providers or encouragement from others, can also encourage early breastfeeding. Additionally, a mother's confidence in her ability

to breastfeed successfully (self-efficacy) plays a significant role in her decision to start breastfeeding early (Editia, 2022).

2.8. CONCEPTUAL FRAMEWORK

The following conceptual framework based on the research objectives guided this research. All the listed variables were connected to each other.

Figure Below shows the relationship between independent variables, dependent variables and intervening variables.

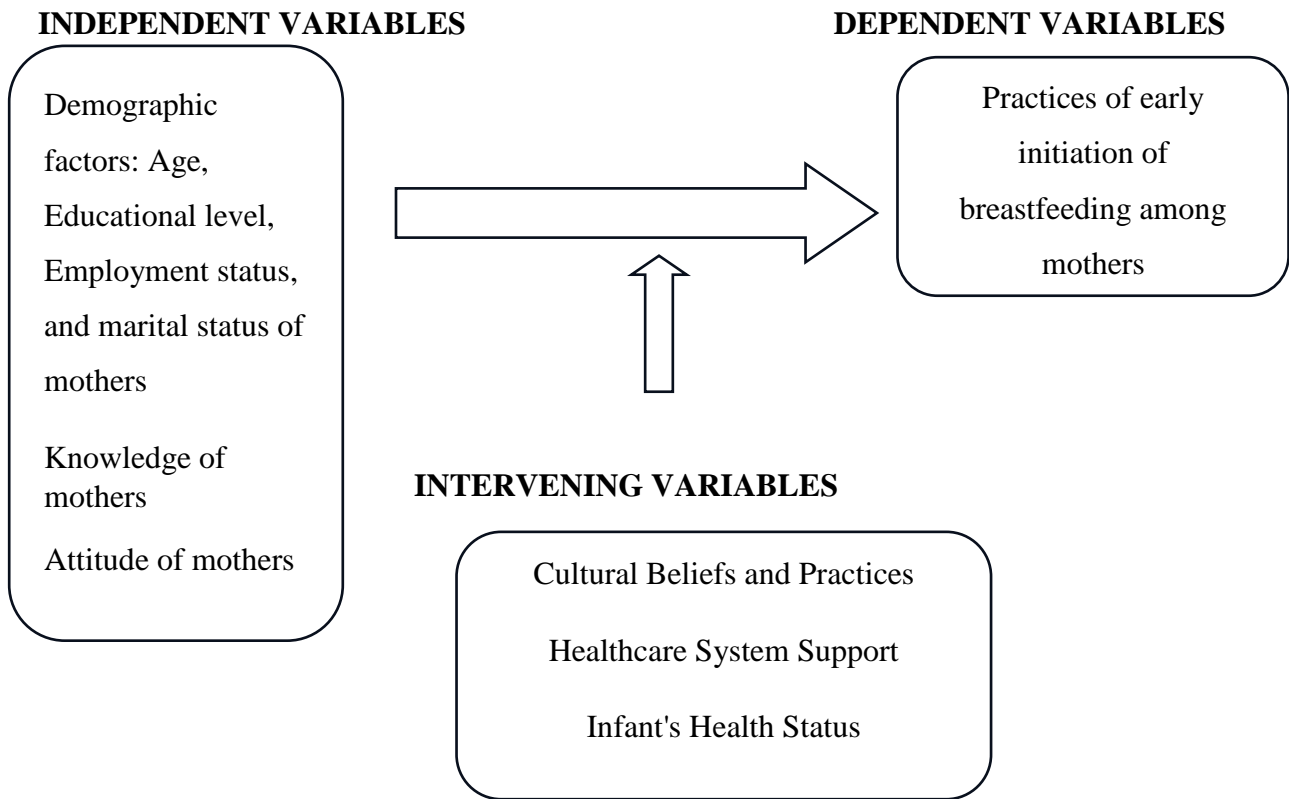


Figure 1: Conceptual framework (Mukarubayiza, 2020).

CHAPTER THREE: RESEARCH METHODOLOGY

3.0. INTRODUCTION

This chapter is composed by study approach, study design, sampling procedures, study instrument, and data collection procedures, ethical issues, data analysis and validity and reliability measurements.

3.1. RESEARCH APPROACH AND DESIGN

3.1.1 Research approach

To achieve the research objectives, a quantitative research method was employed. This approach is centered on quantifying data collection and analysis, utilizing statistical, mathematical, or computational techniques to investigate and interpret various phenomena.

3.1.2. Research design

The study adopted a cross sectional study to assess the knowledge, attitude, and practice of early initiation of breastfeeding among mothers in obstetric and gynecology department at kibogora level two teaching hospital in Nyamasheke, Rwanda.

3.2. TARGET POPULATION, SAMPLING PROCEDURES AND SAMPLE SIZE

3.2.1. Target population

The study population is the sub-set of target population available for study. It is as well a group of individuals whose share a common characteristic such age, sex, health condition or profession. The study population was 180 mothers in childbearing ages attending obstetric and gynecology department at kibogora level two teaching hospital.

Inclusion criteria

Mothers who delivered a live baby, either vaginally or via caesarean section, and whose babies were given to them during the immediate postpartum period, were cared for in the Obstetrics and Gynecology Department at Kibogora Level Two Teaching Hospital.

Exclusion Criteria

- ✓ Mothers with health conditions including untreated active Tuberculosis, Psychosis, and Cancer.
- ✓ Mothers with Baby having Gross Congenital anomaly.
- ✓ Mothers who delivered IUD fetus.
- ✓ Mothers with baby who required neonatal resuscitation and NICU admission.

3.2.2. Sampling procedures

The sampling procedure is the method of choosing a group of subjects for a study to ensure that each one reflects the characteristics of the larger group they selected from. In our study, non-probability convenient sampling technique was used.

3.2.3. Sample size

The sample size for this particular study was calculated using formula single standard proportion considering the following assumptions. A 95% confidence interval, margin of error (0.05), Yamane formula was used to find sample size and calculated as follow:

$$n = \frac{N}{1 + N(e)^2}$$

N represents target population

n represents sample size

e: in small letter represented Margin of error 5%.

$$n = \frac{180}{1 + (180 * 0.05^2)}$$

$$n = \frac{180}{1.45} = 124.41 \approx 124$$

One hundred twenty -four (124) respondents were selected from the total population used.

3.3. DATA COLLECTION TOOLS, PROCEDURES, AND DATA MANAGEMENT

3.3.1. Data collection tools

In this research, a modified questionnaire was employed as the primary data collection instrument to assess knowledge, attitudes, and practices of early initiation of breastfeeding among mothers. The questionnaire, which consists of 28 questions divided into four sections, was designed for use at Kibogora Level Two Teaching Hospital. The first section gathers socio-demographic information with 9 questions, while the second section focuses on knowledge with 11 questions. The third section addresses attitudes with 4 questions, and the fourth section examines practices with 4 questions. Respondents provided their answers by marking (√) in the boxes provided for each question. This structured approach allowed for comprehensive data collection on the subject.

3.3.2. Data collection procedure

Before starting the study, we asked approval from the ethical committee at Kibogora Polytechnic and we also requested permission from the ethical committee at Kibogora Level two teaching hospital to collect data and obtain participant consent. After securing approval from Kibogora level two teaching hospital, we proceeded with the data collection process.

3.3.3. Data management

Research data management involves the systematic organization, documentation, storage, and preservation of data generated from research activities. This data, which supports research findings, can encompass various forms such as numerical data (quantitative), qualitative data, documents, images, audio, and video. So, in this study our data have been kept through Microsoft word document, on emails, and printed book (Borghini J, 2024).

3.4. DATA ANALYSIS TECHNIQUES AND PROCEDURES

Data was checked, and analyzed using Statistical package for social sciences (SPSS) version 16. All data was analyzed using descriptive statistics of the frequencies, percentages for categorical variables and results are presented on table. The strength of statistical association was measured using bivariate analysis with chi- square statistical test using statistical significance less than 0.05 at 95% CI. The study results were presented using frequency tables and cross tabulations.

3.5. RELIABILITY AND VALIDITY MEASURES

3.5.1. Validity

Validity of an instrument concerns the extent to which the research measures what it aims to measure without bias or distortion (Gerrish, 2015). To assess the validity of the instrument, a copy of the questionnaire was provided to the study supervisor to determine if the items' quantity and type accurately measure the intended concept or construct (content validity). The questions in the tool were formulated based on insights from previous studies and the reviewed literature.

3.5.2. Reliability

Reliability is the extent to which an instrument would give the same results if the measurement were to be taken again under the same conditions: its consistency. To ensure the instrument's reliability for this study, a pilot study was carried out. Prior to the main study, the validity of the tools was checked by pre-testing the questionnaire with 20 mothers at Kibogora Level Two Teaching Hospital.

3.6. ETHICAL CONSIDERATION

To ensure participants' safety and privacy and to prevent any misuse, we obtained permission from Kibogora Polytechnic and the ethical committee at Kibogora level two teaching hospital administrations before starting the research. Regarding the informed consent process, we will make sure it is thorough and easily comprehensible for participants by clearly explaining the study's purpose, benefits, voluntary nature of participation, and the right to withdraw at any time without repercussions.

CHAPTER FOUR: DATA PRESENTATION, ANALYSIS, DISCUSSION AND INTERPRETATION

4.0. INTRODUCTION

This chapter focuses on the presentation, analysis and interpretation of data collected by providing a summary of the results related to the assessment of knowledge, attitude and practices of early initiation of breastfeeding among mothers attending Kibogora level two teaching hospital in Nyamasheke, Rwanda..

4.1. PRESENTATION OF FINDINGS AND INTERPRETATIONS

4.1.1. Socio-demographic characteristics of respondents

In this study, 124 mothers were surveyed. Most participants, 59 (47.6%), were between 25 and 35 years old. In terms of marital status, 102 (82.3%) were married, 2 (1.6%) were divorced, and 19 (15.3%) were single mothers. The predominant religion among the respondents was Protestant, with 81(65.3%) identifying as such, while 34 (27.4%) were Catholics. Regarding education level, 58 (46.8%) had a secondary education, 38 (30.6%) had primary education, 16 (12.9%) had no formal education, and 12 (9.7%) had higher education.

Most respondents, 116 (93.5%), lived in rural areas, while 8 (6.5%) resided in urban areas. The majority were classified under socioeconomic category three 83 (66.9%) and about 29 (23.4%) were in category two. In terms of number of children, 47 (37.9%) had two, 39 (31.5%) had three, and 10 (8.1%) had more than three. Most respondents were female 77(62.1%) and 47 (37.9%) had children aged between 3 and 4 years as in table below.

Table 1: Mother's socio-demographic characteristics (n=124).

Variables	Ranges	Frequency	Percentage %
age	Less than 18	7	5.6
	18-24 years	38	30.6
	25- 35 years	59	47.6
	36 and above	20	16.1
	Total	124	100.0
Marital status	Single	19	15.3
	Married	102	82.3
	Divorced	2	1.6
	Widowed	1	.8
	Total	124	100.0
Religion	protestant	81	65.3
	Muslim	7	5.6
	catholic	34	27.4
	others	2	1.6
	Total	124	100.0
Educational level	no formal education	16	12.9
	primary education	38	30.6
	secondary education	58	46.8
	higher education	12	9.7
	Total	124	100.0
Residence	rural	116	93.5
	urban	8	6.5
	Total	124	100.0
Socioeconomic category	category 1	10	8.1
	category 2	29	23.4
	category 3	83	66.9
	category 4	2	1.6
	Total	124	100.0
Number of child	one	28	22.6
	two	47	37.9
	three	39	31.5
	more than 3	10	8.1
	Total	124	100.0
Age of last child	less than 1	28	22.6
	1-2	17	13.7
	3-4	47	37.9
	5 and above	32	25.8
	Total	124	100.0
Sex of last child	female	77	62.1
	male	47	37.9
	Total	124	100.0

4.1.2. Knowledge of early initiation of breastfeeding among Mothers attending Kibogora level two teaching hospital.

Among all respondents, 119 (96%) were aware of the benefits of starting breastfeeding early. Of these, 87 (73.1%) received this information from health professionals, 19 (15.9%) from community health workers, 7 (5.8%) from peers, and 6 (5.0%) from the media. Additionally, 123 (99.2%) attended health facilities for antenatal care, with 69 (56.0%) attending more than five times, 27 (21.9%) attending 3 to 4 times, 14 (11.3%) attending fewer than two times, and 13 (10.5%) unsure of the number of visits. Regarding delivery methods, 105 (84.7%) of the mothers had vaginal deliveries, while 19 (15.3%) had cesarean sections. When it comes to the importance of early initiation of breastfeeding (EIBF), 114 (91.9%) recognized that breast milk is crucial for providing essential nutrients to the newborn. About 100 (80.6%) understood that it helps regulate the baby's body temperature, and 120 (96.8%) were aware that EIBF supports the development of a strong immune system. Furthermore, 117 (94.4%) knew that EIBF enhances bonding between mother and baby, and 80 (64.5%) knew there is a connection between breast size and milk production, while 7 (5.6%) were unsure about this relationship as shown in table 2.

Table 2: knowledge of early initiation of breastfeeding among Mothers attending Kibogora level two teaching hospital (n=124).

Variables	Ranges	Frequency	Percentage %
Do you know early initiation of breastfeeding?	yes	119	96.0
	no	5	4.0
	Total	124	100.0
Where did you get information on breastfeeding?	health professionals	87	73.1
	CHW	19	15.9
	media	6	5.0
	peers	7	5.8
	Total	119	100.0
Were you aware of the benefits of early initiation of breastfeeding before giving birth?	yes	119	96.0
	no	5	4.0
	Total	124	100.0
IF YES, Do you know that early breastfeeding provides essential nutrients to the newborn?	yes	114	91.9
	no	10	8.1
	Total	124	100.0
Do you know that early breastfeeding helps in regulating the baby's body temperature?	yes	100	80.6
	no	24	19.4
	Total	124	100.0
Do you know that early breastfeeding helps in the development of a strong immune system in the baby?	yes	120	96.8
	no	4	3.2
	Total	124	100.0
Do you know that early breastfeeding promote bonding between the mother and the baby?	yes	117	94.4
	no	7	5.6
	Total	124	100.0
Did you visit health facility for antenatal care during pregnancy for this child?	yes	123	99.2
	no	1	.8
	Total	124	100.0
If yes, how many times?	1-2	14	11.3
	3-4	27	21.9
	above 5	69	56.0
	don't know	13	10.5
	Total	123	100.0
Mode of delivery of last child	vaginal delivery	105	84.7
	cesarean section	19	15.3
	Total	124	100.0
Is there any relation between the size of breast and milk production?	yes	80	64.5
	no	37	29.8
	don't know	7	5.6
	Total	124	100.0

4.1.3. Attitudes of early initiation of breastfeeding among Mothers attending Kibogora level two teaching hospital.

Based on the collected data, table 3 shows that 90 (72.6%) believe that early initiation of breastfeeding (EIBF) is important even if the baby seems healthy, while 28 (22.6%) think it is not necessary, and 6 (4.8%) are unsure. Additionally, 86 (69.4%) believe that breastfeeding within the first hour after birth is important, 29 (23.4%) do not, and 9 (7.3%) are uncertain. Most respondents, 106 (85.5%), feel that EIBF does not restrict their activities, whereas 18 (14.5%) believe it does. Regarding the connection between breastfeeding and pain or breast cancer, 18 (14.5%) think there is a link, 102 (82.3%) do not, and 4 (3.2%) are unsure.

Table 3: Attitude of early initiation of breastfeeding among Mothers attending Kibogora level two teaching hospital (n=124).

Variables	Ranges	Frequency	Percentage %
Do you believe that early initiation of breastfeeding is not necessary if the baby appears healthy?	yes	28	22.6
	no	90	72.6
	don't know	6	4.8
	Total	124	100.0
Do you believe that breastfeeding within the first hour after birth is important for your baby's health?	yes	86	69.4
	no	29	23.4
	don't know	9	7.3
	Total	124	100.0
Do you think breastfeeding limits activity?	yes	18	14.5
	no	106	85.5
	Total	124	100.0
Do you think breastfeeding has relation with pain and breast cancer?	yes	18	14.5
	no	102	82.3
	don't know	4	3.2
	Total	124	100.0

4.1.4. Practices of early initiation of breastfeeding among Mothers attending Kibogora level two teaching hospital.

According to the respondents, 107 (86.3%) were advised by healthcare professionals to begin breastfeeding right after birth, while 17 (13.7%) were not. Among all respondents, 99 (79.8%) started breastfeeding within the first hour, 25 (20.2%) began breastfeeding between 1 and 24

hours after birth, and no mothers initiated breastfeeding after 2 days. Among the total respondents 25(20.2%) faced different challenges that prevented them from starting breastfeeding within the first hour. Additionally, 103 (83.1%) of the respondents had skin-to-skin contact with their babies immediately after birth to support early breastfeeding, while 21 (16.9%) did not as shown in table 4.

Table 4: Practices of early initiation of breastfeeding among Mothers attending Kibogora level two teaching hospital (n=124).

Variables	Ranges	Frequency	Percentage %
Were you encouraged by healthcare professionals to start breastfeeding immediately after birth?	yes	107	86.3
	no	17	13.7
	Total	124	100.0
When do you start breastfeeding after birth?	within 1hour	99	79.8
	between 1-24hours	25	20.2
	after 2day	0	.0
	Total	124	100.0
Did you face challenges that prevented you from breastfeeding within the first hour after birth?	Yes	25	20.2
	No	99	79.8
	Total	124	100.0
Have you had skin-to-skin contact with your baby immediately after birth to facilitate early breastfeeding?	yes	103	83.1
	no	21	16.9
	Total	124	100.0

4.2. FACTORS ASSOCIATED WITH MOTHER’S BREASTFEEDING PRACTICES

As summarized in Table 5, the findings of the survey showed that timing of breastfeeding initiation was associated with educational level (chi-squared = 12.706^a, p = 0.005), socio-economic category (chi-squared = 17.226^a, p = 0.001), mode of delivery (chi-squared = 88.855^a, p = 0.000), belief that EIBF is important for the baby’s health (chi-squared = 7.815^a, p = 0.020) and post-delivery challenges (chi-squared = 1.240E2^a, p = 0.000). Skin-to-skin contact practices among mothers was associated with educational level (chi-squared = 11.089^a, p = 0.011), socio-economic category (chi-squared = 15.764^a, p = 0.001), mode of (chi-squared = 1.101E2^a, p = 0.000), belief that EIBF is important for the baby’s health (chi-squared = 10.290^a, p = 0.006), and post-delivery challenges (chi-squared = 1.001E2^a, p = 0.000).

Table 5: Bivariate analysis of the factors associated with mother’s breastfeeding practices.

	When did you start breastfeeding after birth?		Have you had skin-to-skin contact with your baby immediately after birth to facilitate early breastfeeding?	
	X ² value	p-value	X ² value	p-value
Level of education	12.706 ^a	.005*	11.089 ^a	.011*
Socio-economic category	17.226 ^a	.001*	15.764 ^a	.001*
Mode of delivery of last child	88.855 ^a	.000*	1.101E2 ^a	.000*
Do you believe that breastfeeding within the first hour after birth is important for your baby’s health?	7.815 ^a	.020*	10.290 ^a	.006*
Did you face challenges that prevented you from breastfeeding within the first hour after birth?	1.240E2 ^a	.000*	1.001E2 ^a	.000*

* indicates the statistically significant values. Significance was set at p<.05 at 95.

Source: primary data

4.3. DISCUSSIONS OF FINDINGS

Early initiation of breastfeeding (EIBF) is defined as the provision of mother's breast milk to newborn within the first hour of birth and ensures that the newborn receives colostrum. The aim of this study was to assess mother's knowledge, attitudes, and practices toward early initiation of breastfeeding where It found that most participants, 59 (47.6%), were between 25 and 35 years old where 102 (82.3%) were married, 2 (1.6%) were divorced, and 19 (15.3%) were single mothers. Majority of respondents 58 (46.8%) had a secondary education level, and 38 (30.6%) had primary education.

Mothers were asked about their knowledge about early initiation of breast-feeding in terms of benefits at Kibogora level two teaching hospitals. Most of the respondent 111(89.5%) know what EIBF mean and benefits of it to the newborn, 120 (96.8%) were aware that EIBF supports the development of a strong immune system, and 117 (94.4%) knew that EIBF enhances bonding between mother and baby. This result was consistent when compared to study conducted in Masaka district hospital in Rwanda shows that 86.0% of all total respondents knew that breast milk should be started immediately after birth within an hour, about 87.6% understand the importance of the first breast milk or colostrum (Luo, 2021). A study done in 2023 reported that nearly 80% of mothers in these regions are knowledgeable about the benefits of early breastfeeding initiation (Thomas, 2023). More than 55% of mothers in rural areas of sub-Saharan Africa were knowledgeable that EIBF prevent neonatal infections and support immune system (Smith, 2021) while in urban areas showed higher awareness rates, with up to 85% of mothers acknowledging these benefits (Jones, 2021). A study carried out in Southeast Asia and South America, underscores that mothers' knowledge were above 68% and 73% respectively knew that early breastfeeding aids in reducing postpartum hemorrhage and facilitates uterine involution (Johnson, 2019). In the Middle East and North Africa, cultural beliefs play a crucial role in shaping maternal knowledge and breastfeeding practices, with only 40% of mothers recognizing its immediate benefits (Lee, 2021). In contrast, Scandinavian countries demonstrate high awareness rates, with reporting 90% awareness among mothers in Norway and Sweden (Nielsen, 2021).

Mothers having such knowledge are encouraging which contributes much to reduce morbidity and mortality among infants and children. According to our study, 96(77.4%) of mothers show a positive attitude and perceptions regarding early initiation of breastfeeding. Another study conducted on the same topic in Saudi Arabia revealed 67.85 % of the mothers had positive attitude for the EIBF. Additionally from our study, 86 (69.4%) believe that breastfeeding within the first hour after birth is important, 106 (85.5%) feel that EIBF does not restrict their activities, and 102 (82.3%) do not think there is the connection between breastfeeding and pain or breast cancer. Globally many studies shows that attitudes towards EIBF reflect diverse cultural norms and healthcare practices. Research indicates that in many high-income countries, a majority of mothers more than 80% initiate breastfeeding within the first hour, driven by strong healthcare provider support and awareness campaigns (Organization., 2021). In same study conducted in countries like Nigeria and Kenya, shows that more than 70% of mothers who practiced early initiation of breastfeeding were influenced by healthcare provider and cultural acceptance (Brown, 2022). In addition, study shows that in predominantly Muslim countries like Senegal and Niger, religious teachings emphasize the importance of breastfeeding early, leading to higher initiation rates among mothers (Khan., 2022). Conversely, poverty and lack of resources contribute to lower initiation rates in marginalized communities (Patel., 2022).

Furthermore, our findings of this study show that the majority 103(83.0%) had good practices towards early initiation of breastfeeding. Among all respondents, 99 (79.8%) started breastfeeding within the first hour, 25 (20.2%) began breastfeeding between 1 and 24 hours after birth. This result was consistent when compared to a study in Kasarani, Kenya showed that 64.3% of mothers (n=220) were able to practice EIBF after birth (Habumugisha, 2020). A study conducted in Bangladesh revealed that 67% initiated breastfeeding within one hour of birth at health facilities and the study conducted in Brazil on breast-feeding, complementary feeding showed that 65% of the mothers practice breast feeding soon after delivery ((Feleke, 2020). A quasi-experimental study was conducted in England among 108 mothers to assess knowledge and practices of initiation of breast-feeding among mothers explicated that 87.4% of the mothers knew properly how to initiate breast-feeding early (Mukarubayiza, 2020).

4.4. SUMMARY OF FINDINGS

Among this study, Most participants, 59 (47.6%), were between 25 and 35 years old, 102 (82.3%) of total respondents were married, predominant religion was Protestant, with 81(65.3%) identifying as such, while 34 (27.4%) were Catholics, about 83(66.8%) were classified under socio category 3. All mothers enrolled in the study shows a level of knowledge at 89.2% regarding importance of breastfeeding, 120 (96.8%) were aware that EIBF supports the development of a strong immune system, about 77.4% presents a positive attitude towards early initiation of breastfeeding, where 86 (69.4%) believe that breastfeeding within the first hour after birth is important. Among all respondents, 99 (79.8%) started breastfeeding within the first hour, and 103 (83.1%) of the respondents had skin-to-skin contact with their babies immediately after birth to support early breastfeeding. As summarized in Table 5, the survey findings reveal several key associations. The timing of breastfeeding initiation was significantly linked to various factors: educational level ($\chi^2 = 12.706$, $p = 0.005$), socio-economic category ($\chi^2 = 17.226$, $p = 0.001$), mode of delivery ($\chi^2 = 88.855$, $p = 0.000$), belief in the importance of early initiation of breastfeeding (EIBF) for the baby's health ($\chi^2 = 7.815$, $p = 0.020$), and post-delivery challenges ($\chi^2 = 1.240E2^a$, $p = 0.000$). Similarly, skin-to-skin contact practices among mothers were associated with educational level ($\chi^2 = 11.089$, $p = 0.011$), socio-economic category ($\chi^2 = 15.764$, $p = 0.001$), mode of delivery ($\chi^2 = 1.101E2^a$, $p = 0.000$), belief in the importance of EIBF ($\chi^2 = 10.290$, $p = 0.006$), and post-delivery challenges ($\chi^2 = 1.001E2^a$, $p = 0.000$).

CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS

5.0.INTRODUCTION

This chapter provides the conclusion of the study, recommendation, and suggestion for further studies. It covers a summary on assessment of knowledge, attitudes and practices of early initiation of breastfeeding among mothers attending at Kibogora level two teaching hospitals.

5.1.CONCLUSION

From the findings of this study, Most participants, 59 (47.6%), were between 25 and 35 years old, 102 (82.3%) were married, predominant religion among the respondents was Protestant, with 81(65.3%) identifying as such, education level majority was secondary education with 58 (46.8%), and 83 (66.9%) were classified under socioeconomic category three. Regarding the knowledge 119 (96%) were aware of the benefits of starting breastfeeding early, where 87 (73.1%) received this information from health professionals, 123 (99.2%) attended health facilities for antenatal care, Regarding delivery methods 105 (84.7%) of the mothers had vaginal deliveries, 114 (91.9%) recognized that breast milk is crucial for providing essential nutrients to the newborn and 100 (80.6%) understood that it helps regulate the baby's body temperature.

Based on the collected data, 90 (72.6%) believes that early initiation of breastfeeding (EIBF) is important even if the baby seems healthy, 86 (69.4%) believe that breastfeeding within the first hour after birth is important, 106 (85.5%), and 102 (82.3%) thinks there is no connection between breastfeeding and pain or breast cancer. About 107 (86.3%) were advised by healthcare professionals to begin breastfeeding right after birth, 99 (79.8%) started breastfeeding within the first hour, 25(20.2%) faced different challenges that prevented them from starting breastfeeding within the first hour, and 103 (83.1%) of the respondents had skin-to-skin contact with their babies immediately after birth. Special attention needs to focus on mothers who deliver via cesarean, so neonates born via surgical intervention do not miss the benefits of early breastfeeding. A program aiming to promote, protect, and support EIBF is urgently needed. ANC visits sensitization is the single best low-cost, effective intervention for promoting and ensuring the EIBF to Rwandan specifically to our study area.

5.2. RECOMMENDATIONS

5.2.1. To the mothers

- To attend health facilities for antenatal care education.
- To attending regular assessment of breastfeeding pattern.
- To start breastfeeding within the first hour after birth maximize the benefits of colostrum and establish a strong feeding routine.
- To engage in skin-to-skin contact with baby immediately after delivery.
- To actively seek out information and support from healthcare providers and lactation consultants regarding breastfeeding techniques, benefits, and overcoming potential challenges.

5.2.2. To Kibogora level two teaching hospital

- To mobilize the nurses and midwives working in maternity to provide health education to the mothers about EIBF before giving them service.
- To improve hospital practices regarding early initiation of breastfeeding.
- Community health education using mass media or mother support groups that emphasize the importance of early initiation of breastfeeding.

5.2.3. To the Rwanda ministry of health

- ❖ To Design policies in order to promote early breastfeeding, support mothers, and facilitate the practice of breastfeeding.
- ❖ To Develop and implement comprehensive antenatal care programs that emphasize the importance of EIBF.
- ❖ To Support Health Facilities in the development of protocols and training programs for healthcare providers.
- ❖ To establish guidelines and monitoring systems to improve hospital practices related to EIBF.

5.3. SUGGESTION FOR FURTHER STUDIES

We suggest further researcher that will contain larger population size, with enough time and funds, therefore exploratory research is needed to assess the knowledge, attitudes and practices of EIBF and its associated factors among mothers.

REFERENCES

- Ahmed, R. &. (2020). Cultural influences on early initiation of breastfeeding in Nigeria and Kenya. *African Journal of Maternal Health*.
- Ameyaw, E. K. (2023). *Health facility delivery and early initiation of breastfeeding*.
- Ariyani, D. F. (2019). Contribution factors on early initiation of breastfeeding. International Journal of Public Health Science. *International Journal of Public Health Science*.
- Atimati, A. O. (2020). Breastfeeding practices among mothers of children aged 1–24 months in Egor Local Government Area of Edo State, Nigeria. . *South African Journal of Clinical Nutrition*.
- Ayele, G. B. (2021). Mothers' perception of colostrum and early initiation of breastfeeding in Ethiopia.
- Birhan, T. Y. (2022). Magnitude and determinants of breastfeeding initiation within one hour among reproductive women in Sub-Saharan Africa.
- Birungi, A. K. (2023). Behavioural drivers of suboptimal maternal and child feeding practices in Rwanda. *Maternal & Child Nutrition*.
- Borghji J, A. e. (2024). *pathophysiology and primary prevention*. Addis Abbaba: National Institute of Health.
- Brown. (2022). Challenges in early initiation of breastfeeding in low-income countries. *Journal of Global Health*.
- Bruno Tongun, J. S. (2018). Factors associated with delayed initiation of breastfeeding. *International breastfeeding journal* .
- Castrucci, B. C. (2006). A comparison of breastfeeding rates in an urban birth cohort. *Journal of Human Lactation*.
- Cattaneo, A. B. (2018). *Effect of delivery mode on initiation of breastfeeding*.
- Clark, J. A. (2021). Educational campaigns and community outreach programs promoting early initiation of breastfeeding in African contexts. *Journal of Community Health*.
- Das. (2020). Logistical challenges affecting early breastfeeding initiation rates in rural Africa. *Journal of Rural Health*.

- Das. (2020). Logistical challenges affecting early breastfeeding initiation rates in rural Africa. *Journal of Rural Health*.
- Demir, G. Y. (2020). Compliance of mothers' breastfeeding and complementary feeding practices with WHO recommendations in Turkey. *Nutrition Research and Practice*.
- Dennis, C. L. (2009). *The relationship between infant-feeding outcomes and postpartum depression*.
- Editia, Y. V. (2022). *Exclusive Breastfeeding Behavior Analysis Based on Health Belief Model*.
- Feleke. (2020). *Assessment of Knowledge, Attitude and Practice of mothers on early breast feeding initiation after delivery*.
- Feleke. (2020). *Assessment of Knowledge, Attitude and Practice of mothers on early breast feeding initiation after delivery in Debre Tabor Referral Hospital, and South West Ethiopia 2019*.
- Friedrich. (2018). *Early initiation of breastfeeding*.
- Friedrich. (2018). *Early initiation of breastfeeding*.
- Garcia. (2022). Early initiation of breastfeeding. *Journal of Global Health*.
- Garcia. (2023). Impact of socioeconomic status on early initiation of breastfeeding in African countries. *Journal of Socioeconomic Health*.
- Gato. (2022). *Promotion of early and exclusive breastfeeding in neonatal care units in rural Rwanda*.
- Gato, S. B. (2020). *Promotion of Early and Exclusive Breastfeeding in Neonatal Care Units in Rural Rwanda*.
- Gerrish, K. (2015). *The development of a framework for evaluating the impact of nurse consultant roles in the UK*. *Journal of Advanced Nursing* 69(10).
- Goga, A. E. (2020). Infant feeding practices at routine PMTCT sites, South Africa. *Journal of the International AIDS Society*.
- Gomez, S. R. (2022). Workplace policies and maternal knowledge of breastfeeding benefits. *Journal of Workplace Health*.
- Gomme, A. W. (2022). *The Greek attitude to poetry and history*.

- GÜNGÖR SATILMIŞ, İ. L. (2022). Attitudes and practices of postnatal mothers and their accompanying relatives to breastfeeding in public at a university hospital in Turkey. . *Eastern Mediterranean Health Journal*.
- Habumugisha. (2020). *Early initiation of breastfeeding among postpartum mothers at two Rwandan hospital*.
- Hakala, M. K. (n.d.). *THE REALIZATION OF BABY-FRIENDLY HOSPITAL INITIATIVE (BFHI) STEP 4 IN FINLAND—EARLY INITIAL BREASTFEEDING AND SKIN-TO-SKIN CONTACT ACCORDING TO MOTHERS AND MIDWIVES*.
- Health, K. M. (2023). *Kenya Health Sector Strategic and Investment Plan 2023-2027*.
- health., R. M. (2021). *Annual Health Report 2021*.
- Jiayou Luo, D. C. (2021). *Knowledge, Attitude, and Practice of Exclusive Breastfeeding Among Mothers Attending Masaka District Hospital Kigali/Rwanda*.
- Johnson, E. &. (2019). Understanding maternal knowledge of breastfeeding benefits in Southeast Asia and South America.
- Johnson. (2021). The effect of prenatal education on breastfeeding initiation and continuation. *Journal of Midwifery & Women's Health*.
- Jones. (2021). Early initiation of breastfeeding and neonatal mortality in sub-Saharan Africa. *African Journal of Pediatrics*.
- Jones. (2022). Cultural influences on breastfeeding practices in sub-Saharan Africa. *International Journal of Nursing Studies*.
- Jones. (2023). Challenges in promoting early breastfeeding initiation in rural Rwanda. *African Health Sciences*.
- Kalisa, R. M. (2015). Magnitude and factors associated with delayed initiation of breastfeeding among mothers who deliver in Mulago hospital, Uganda. . *African health sciences*.
- Kambale, R. M. (2018). Delayed initiation of breastfeeding in Bukavu, south Kivu, eastern Democratic Republic of the Congo: a cross-sectional study. *nternational breastfeeding journal*.
- Khan. (2022). Cultural beliefs about colostrum and their influence on early breastfeeding practices in Africa. *Journal of Cultural Health*.

- Khan. (2022). Religious influences on early initiation of breastfeeding.
- Khanal, V. S. (2015). Factors associated with early initiation of breastfeeding in Western Nepal. *International journal of environmental research and public health*.
- Kumar, R. P. (2020). Policy frameworks and maternal knowledge of breastfeeding benefits in South Asia and Africa.
- Lee, S. P. (2021). Misinformation and maternal knowledge of breastfeeding benefits in urban South Asia. *Journal of Global Health*.
- Lemos, N. (. (2020). *An introduction to the theory of knowledge*.
- Luo, J. P. (2021). *Knowledge, Attitude, and Practice of Exclusive Breastfeeding Among Mothers Attending Masaka District Hospital Kigali/Rwanda*.
- Lyellu, H. Y.-P. (2020). Prevalence and factors associated with early initiation of breastfeeding among women in Moshi municipal, northern Tanzania. *BMC pregnancy and childbirth*.
- Massey. (2022). The impact of maternal education on breastfeeding initiation and duration. *Journal of Human Lactation*.
- Matanda, D. J. (2023). Socioeconomic disparities in breastfeeding among adolescent mothers in Nairobi, Kenya. .
- Moffat, R. C. (2021). Effect of a national nutrition communications campaign on stunting awareness and promotion of exclusive breastfeeding behavior among rural Indonesian mothers.
- Moore, E. R. (2016). *Early skin-to-skin contact for mothers and their healthy newborn infants*.
- Mukarubayiza, R. H. (2020). Early initiation of breastfeeding among postpartum mothers at two Rwandan hospitals. *Rwanda Journal of Medicine and Health Sciences*.
- Mukashyaka. (2019). *Early breastfeeding initiation among mothers in post-partum at selected Rwandan Hospitals*.
- Mukunya, D. T. (2020). Factors associated with delayed initiation of breastfeeding.
- Negin, J. C. (2016). The influence of grandmothers on breastfeeding rates.
- Nguyen. (2021). Socioeconomic disparities in early initiation of breastfeeding in Sub-Saharan Africa. *International Journal of Health Economics*.

- Nguyen. (2023). Social support networks and their role in promoting early initiation of breastfeeding in Sub-Saharan Africa.
- Nielsen, K. (. (2021). Breastfeeding practices and maternal knowledge in Scandinavian countries. *Scandinavian Journal of Health*.
- Nyirahirwa, F. T. (2023). Prevalence of Exclusive Breastfeeding and Associated Factors among Mothers in Karongi District, Rwanda. *Rwanda Journal of Medicine and Health Sciences*.
- organization, W. H. (2017). *Ten steps to successful breastfeeding*.
- Organization, W. H. (2020). *Baby-Friendly Hospital Initiative*.
- Organization., W. H. (2021). *Initiating breastfeeding within the first hour of birth*.
- Patel. (2023). Impact of supportive hospital practices on early breastfeeding initiation in urban Rwanda. *East African Journal of Health*.
- Patel. (2022). Challenges of inadequate healthcare infrastructure on early breastfeeding initiation rates in Sub-Saharan Africa.
- Poag. (2020). Exploring large hospital health care professionals' attitudes and knowledge about breastfeeding.
- RDHS. (2020). *Rwanda Demographic and Health Survey 2020*.
- Rollins. (2016). *Why invest, and what it will take to improve breastfeeding practices?*
- Rollins, N. C. (2021 & 2019). Why invest, and what it will take to improve breastfeeding practices? Infant and young child feeding.
- Rollins. (2021). Why invest, and what it will take to improve breastfeeding practices?
- Rosenstock, I. M. (1988). Social learning theory and the health belief model. .
- Rubagumya, D. A. (2021). *Barriers to early initiation of breastfeeding in healthy neonates in an urban hospital setting*.
- Rwanda., M. o. (2022). National policies and healthcare reforms promoting early initiation of breastfeeding in Rwanda.

- Seidu, A. A. (2020). Determinants of early initiation of breastfeeding in Ghana: a population-based cross-sectional study using the 2014 Demographic and Health Survey data. *BMC pregnancy and childbirth*.
- Sharma, I. K. (2016). *Early initiation of breastfeeding: a systematic literature review of factors and barriers in South Asia*.
- Shimizu, M. N. (2023). *Current findings and gaps in early initiation of breastfeeding practices in sub-Saharan African countries*.
- Shobo, O. G. (2020). Factors influencing the early initiation of breast feeding in public primary healthcare facilities in Northeast Nigeria.
- Smith. (2021). Early initiation of breastfeeding and neonatal mortality in sub-Saharan Africa. *African Journal of Pediatrics*.
- Smith, J. &. (2022). Cultural influences on breastfeeding practices in sub-Saharan Africa. *International Journal of Nursing Studies*.
- Smith. (2023). Maternal health and breastfeeding practices in sub-Saharan Africa. *African Journal of Reproductive Health*.
- Survey., T. H. (2020). *Maternal and child health indicators report*.
- Thomas, L. R. (2023). Impact of policy interventions on maternal awareness of breastfeeding benefits in Australia and Canada.
- Tie. (2019). rounded theory research: A design framework for novice researchers. *ResearchGate* , 1-2.
- Ulfa, Y. M. (2023). *Early initiation of breastfeeding up to six months among mothers after cesarean section or vaginal birth*.
- UNICEF. (2020). Breastfeeding initiation rates globally.
- Van Manen, M. (. (2023). *Phenomenology of practice*.
- Vanderlinden, K. B. (2020). Motherhood in Europe: An examination of parental leave regulations and breastfeeding policy influences on breastfeeding initiation and duration. . *Social Sciences*.
- Wang, Y. &. (2022). Maternal education and early initiation of breastfeeding. *Journal of Maternal Education*.
- WHO. (2019). Infant and young child feeding.

APPENDICES

APPENDIX 1: INFORMED CONSENT

TITLE OF THE STUDY: ASSESSMENT OF KNOWLEDGE, ATTITUDE, AND PRACTICES OF EARLY INITIATION OF BREASTFEEDING AMONG MOTHERS ATTENDING KIBOGORA LEVEL II TEACHING HOSPITAL IN NYAMASHEKE, RWANDA.

We, UWASE Hamidah and BYIRINGIRO Jackson; we are students at KIBOGORA POLYTECHNIC, studying Bachelor of Science in Nursing. We are conducting this study in partial fulfillments of the requirements for the Bachelor with honors in Science of Nursing. The purpose of the study is to assess knowledge, attitude and practices of early initiation of breastfeeding among mothers attending Kibogora level two teaching hospitals. You have been selected to take part in activity of this research. Your involvement is willingly, and you have the right not to participate. The feedback from you and other participants will provide information regarding knowledge, attitude and practices of early initiation of breastfeeding among mothers attending Kibogora level two teaching hospitals.

This research focuses on mothers in childbearing age, especially those who attend maternity services at Kibogora level two teaching hospitals. Your participation is willingly, if you agree to participate, you shall indicate your signature or thumbprint and your names shall not be published in any form. If you have problems concerning this research, you should ask the researcher to the following addresses.

UWASE Hamidah: (+250)788513947

BYIRINGIRO Jackson :(+250)780152519

Email: ellahamidah55@gmail.com

Email : jacksobyiringiro2002@gmail.com

I have read this consent Form, and I voluntarily want to participate in this study

Code of participant Date.....

Signature...

APPENDIX 2: QUESTIONNAIRE

Instructions:

- Attempt all questions
- Choose and tick number with V corresponding to your choice
- EIBF stand for **E**arly **I**nitiation of **B**reast **F**eeding

SECTION I: SOCIO-DEMOGRAPHIC CHARACTERISTICS

1. Age
 1. Less than 18
 2. 18-24 years
 3. 25- 35 years
 4. 36 and above
2. Marital status
 1. Single
 2. Married
 3. Divorced
 4. Widowed
3. Religion
 1. Protestant
 2. Muslim
 3. Catholic
 4. Others
4. Educational level
 1. No formal education
 2. Primary education
 3. Secondary education
 4. Higher education
5. Residence
 1. Rural
 2. Urban
6. Socioeconomic category
 1. Category 1
 2. Category 2
 3. Category 3
 4. Category 4
7. Number of children

- 1. One
 - 2. Two
 - 3. Three
 - 4. >Three
8. Age of last child
- 1. Less than 1year
 - 2. 1-2 years
 - 3. 3- 4years
 - 4. 5 and above
9. Gender of last child
- 1. Female
 - 2. Male

SECTION II: KNOWLEDGE OF EIBF AMONG MOTHERS

10. Do you know early initiation of breastfeeding?
- 1. Yes
 - 2. No
11. Where did get information on breastfeeding from?
- 1. Healthcare professional
 - 2. CHWs
 - 3. Media
 - 4. Peers
12. Were you aware of the benefits of early initiation of breastfeeding before giving birth?
- 1.Yes
 - 2.No

IF YES

13. Do you know that early initiation of breastfeeding provides essential nutrients to the newborn?
- 1. Yes
 - 2. No
14. Do you know that early breastfeeding helps in regulating the baby's body temperature?
- 1. Yes
 - 2. No
15. Do you know that early breastfeeding helps in the development of a strong immune system in the baby?
- 1. Yes
 - 2. No
 - 3. Don't know
16. Do you know that early breastfeeding promote bonding between the mother and the baby?
- 1. Yes
 - 2. No

17. Did you visit health facility for antenatal care during pregnancy for this child?

1. Yes

2. No

18. If yes, how many times?

1. 1-2

2. 3-5

3. Above 5

4. Don't know

19. Mode of delivery of last child

1. Vaginal delivery

2. Cesarean section

3. No

20. Is there any relation between the size of breast and milk production?

1. Yes

2. No

3. Don't know

SECTION III: ATTITUDES OF EIBF AMONG MOTHERS

21. Do you believe that early initiation of breastfeeding is not necessary if the baby appears healthy?

1. Yes

2. No

3. Don't know

22. Do you believe that breastfeeding within the first hour after birth is important for your baby's health?

1. Yes

2. No

3. Don't know

23. Do you think breastfeeding limits activity?

1. Yes

2. No

3. Don't know

24. Do you think breastfeeding has relation with pain and breast cancer?

1. Yes

2. No

3. Don't know

SECTION IV: PRACTICES OF EIBF AMONG MOTHERS

25. Were you encouraged by healthcare professionals to start breastfeeding immediately after birth?

1. Yes

2. No

26. When do you start breastfeeding after birth?

1. Within 1hr

2. After 1- 24hr

3. After 2day

27. Did you face challenges that prevented you from breastfeeding within the first hour after birth?

1. Yes

2. No

28. Have you had skin-to-skin contact with your baby immediately after birth to facilitate early breastfeeding?

1. Yes

2. No

APPENDIX 3: INFORMED CONSENT (KINYARWANDA)

IFISHI ITANGA UBURENGANZIRA

UMUTWE W'UBUSHAKASHATSI: GUSUZUMA UBUMENYI, IMYIFATIRE N'IMIKORERE Y'ABABYEYI MUGUTANGIZA HAKIRI KARE KONSA KU BITARO BYA KABIRI BYIGISHA BYAKIBOGORA.

Twebwe, BYIRINGIRO Jackson na UWASE Hamidah; Abanyeshuli bo muri kaminuza ya KIBORA POLYTECHNIC, biga mu cyiciro cya kabiri cya kaminuza mu ishami ry igiforomo rusange, Turi gukora ubushakashatsi muri gahunda yo kugira ngo twuzuze ibisabwa kugira ngo tubashe guhabwa impamyabumenyi yo mu cyiciro cya kabiri cya kaminuza mu ishami ry' igiforomo rusange. Intego yubushakashatsi ni ugusuzuma ubumenyi, imyifatire n'ibikorwa by'ababyeyi mugutangiza hakiri kare konsa ku bitaro bya kabiri byigisha bya kibogora. Mwatoranyijwe mu kugira uruhare muri ubu bushakashatsi. Uruhare rwanyu ni ubushake, kandi mufite uburenganzira bwo kuva muri iki gikorwa igihe cyose bibaye ngombwa. Amakuru uributange n'andi aributangwe nabandi azibanda kubijyanye n'ubumenyi, imyifatire n'imikorere y'ababyeyi mugutangiza hakiri kare konsa ku bitaro bya kabiri byigisha bya kibogora.

Ubu bushakashatsi buzibanda kubabyeyi bari mu myaka yo kubyara bari ku bitaro byigisha kurwego rwa kabiri bya kibogora by'umwihariko munzu y'ababyeyi (maternity). Niwemera kugira uruhare muri iri bazwa, uragaragaza amazina yawe, umukono cyangwa igikumwe byawe. Amakuru uributange aragirwa ibanga kandi amazina yawe ntazatangazwa mu buryo ubwo aribwo bwose. Uramutse ufite ibibazo kuri ubu bushakashatsi, wabaza Abashakashatsi kuri aderesi zikurikira.

Telefoni: (+250)788513947

Imeyili: ellahamidah55@gmail.com

Telefoni:(+250)780152519

Imeyili: jacksobyiringiro2002@gmail.com

Nyuma yo gusobanurirwa impamvu n' intego yubu bushakashatsi, nemeye kubugiramo uruhare kubushaje.

Kode y'uwitabiriye..... Itariki.....

Umukono.....

APPENDIX 4: QUESTIONNAIRE (KINYARWANDA)

IBIBAZO BIBAZWA ABABYEYI

Amabwiriza:

- Subiza ibibazo byose
- Hitamo umubare ujyanye nibyo wahisemo ukoresheje aka kamenyetso (√)

IGICE CYA I: AMAKURU AJYANYE N'IMITURIRE

1. Ufite Imyaka ingahe?

1. Minsi ya 18
2. Imyaka 18-24
3. Imyaka 25-35
4. Imyaka 36 no hejuru yayo

2. Irangamimerere

1. Ingaragu
2. Warashatse/ muracyari kumwe
3. Mwaratandukanye
4. Uri umupfakazi

3. Iyobokamana

1. Abaporotesitanti
2. Abayisilamu
3. Gatolika
4. Abandi

4. Wize amashuri angahe?

1. Ntayo
2. Amashuri abanza
3. Amashuri yisumbuye
4. Amashuri makuru

5. Utuye he?

1. Icyaro
2. Umujyi

6. icyiciro cy'ubudehe?
1. icyiciro cya I
 2. icyiciro cya II
 3. icyiciro cya III
 4. icyiciro cya IV
7. Ufite abana bangahe?
1. Umwe
 2. Babiri
 3. Batatu
 4. Barenze Batatu
8. Imyaka yumwana wanyuma ningahe?
1. Minsi cyangwa afite amezi 6
 2. Ukwezi 6-11
 3. imyaka 1-5
 4. imyaka hejuru 5
9. igitsina cy'umwana wanyuma?
1. Gore
 2. Gabo

IGICE CYA II: UBUMENYI BWA MAMA KU NYUNGU ZO GUTANGIZA HAKIRI KARE KONSA

10. Waba uzi gutangira hakiri kare konsa?
1. Yego
 2. Oya
11. Niba ari yego, wabimenye binyuze mubuho buryo?
1. Abaganga
 2. Abajyanama b'ubuzima
 3. Itangazamakuru

4. Bagenzi banjye
12. Wari uzi ibyiza byo gutangira hakiri kare konsa mbere yo kubyara?
1. Yego
2. Oya

NIBA ARI YEGO

13. Waba uzi ko Gutangira hakiri kare konsa bitanga intungamubiri zingenzi kubana bavutse?
1. Yego
2. Oya
14. Waba uzi ko konsa hakiri kare bifasha mukugenzura ubushyuhe bwumubiri?
1. Yego
2. Oya
15. Waba uzi ko konsa mu isaha ya mbere nyuma yo kuvuka bifasha umubiri w'umwana kugira ubudahangarwa bukomeye?
1. Yego
2. Oya
3. simbizi
16. Waba uzi ko konsa mu isaha ya mbere biteza imbere ubumwe hagati y'umubyeyi n'umwana?
1. Yego
2. Oya
17. Wasuye ikigo nderabuzima kugirango usuzumishye inda utwite uyu mwana?
1. Yego
2. Oya
18. Niba ari yego, ni kangahe wasuzumishije?
1. Hagati 1-2
2. Hagati 3-5
3. Hejuru ya 5
4. simbizi

19. Uburyo bwo kubyara?

1. Kubyara neza
2. Kubyara ubazwe

20. Hari isano iri hagati y'ubunini bw'amabere n'amashereka?

1. Yego
2. Oya
3. simbizi

IGICE CYA III: IMYIFATIRE Y'ABABYEYI MUGUTANGIZA HAKIRI KARE KONSA

21. Wizera ko gutangira hakiri kare konsa bidakenewe niba umwana agaragara neza?

1. Yego
2. Oya
3. simbizi

22. Wizera ko konsa mu isaha ya mbere nyuma yo kuvuka ari ngombwa kubuzima bwumwana wawe?

1. Yego
2. Oya
3. simbizi

23. Uratekereza ko konsa bigabanya ibikorwa?

1. Yego
2. Oya
3. simbizi

24. Uratekereza ko konsa bifitanye isano n'ububabare na kanseri y'ibere?

1. Yego
2. Oya

3. simbizi

IGICE CYA IV: IBIKORWA BY'ABABYEYI MUGUTANGIZA HAKIRI KARE KONSA

25. Washishikarijwe ninzobere mu buzima gutangira konsa ukimara kubyara?

1. Yego

2. Oya

26. Ni ryari utangira konsa nyuma yo kuvuka k'umwana?

1. Mu isaha 1

2. umunsi 1

3. Nyuma y'iminsi 2

27. Wigeze uhura nibibazo byakubujije konsa mwisaha yambere nyuma yo kubyara?

1. yego

2. oya

28. Wigeze uhura nuruhu rw'umwana wawe ukimara kubyara kugirango woroshye konsa hakiri kare?

1. Yego

2. Oya

APPENDIX 5: INTRODUCTION LETTER OF AUTHORITY

374 A
12/24

KIBOGORA POLYTECHNIC
TEACHING HOSPITAL
RECEPTION

DATE 25 JUL 2024

NAME: _____
SIGNATURE: _____

RESEARCH LETTER

Date: 02.17.2024
Ref: Nr. 01/GN/KP-IRB/2024

TO WHOM IT MAY CONCERN,

We write this letter to humbly request you to allow:

1. Mr/Ms. BYI. BINGIRA Jackson Reg Num. 2000681
2. Mr/Ms. D. WASE Horrodat Reg Num. 2000787

To conduct research in your Organization/Institution/Territorial entity

The above mentioned are students at Kibogora Polytechnic pursuing Bachelor's degree in

1. General Nursing


The candidate are conducting research entitled:

Assessment of Knowledge, Attitudes and Practices of mothers on early initiation of breastfeeding at KIBOGORA level Two teaching Hospital

We are convinced that your Organization/Institution/Territorial entity will constitute a valuable source of information pertaining to their research. The purpose of this letter is to humbly requesting you to avail them with the pertinent information they may need. We pledge to ensure that all provided information will be used in the strict academic purpose.

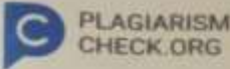
For any inquiries, please contact Dr. Gabriel Janvier TUGIRINSHUTI, Director of Research, Consultancy, and Innovation through email: _____ or Tel: 0788793509

Yours sincerely,



Dr. NDABARORA Eleazar
Dean of faculty of Health Sciences-Kibogora Polytechnic
Email: eleazarndaba@gmail.com
Tel: 0785371340

APPENDIX 6: PLAGIARISM APPROVAL



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Report #22553577

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KIBOGORA POLYTECHNIC FACULTY OF HEALTH SCIENCES DEPARTMENT OF GENERAL NURSING Undergraduate dissertation presented in partial fulfillment of the requirements for the Bachelor's degree with honor in Nursing.

PAPER PREPARED BY: NAME: Hamidah UWASE REG. 2000787 NAME: Jackson BYIRINGIRO REG. 2000681 SUPERVISOR: Dr. Eleazar NDABARORA Kibogora, July 2024

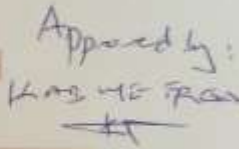
ASSESSMENT OF KNOWLEDGE, ATTITUDES, AND PRACTICES OF EARLY INITIATION OF BREASTFEEDING AMONG MOTHERS ATTENDING KIBOGORA LEVEL II TEACHING HOSPITAL IN NYAMASHEKE, RWANDA. 15 DECLARATION Declaration by the Candidate We, Hamidah UWASE and Jackson BYIRINGIRO, hereby declare that this is our own original work and not a duplication of any similar academic work.

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