KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

COLLEGE OF HEALTH SCIENCES

FACULTY OF ALLIED HEALTH SCIENCE

DEPARTMENT OF NURSING

DIPLOMA PROGRAMMES

TOPIC:

KNOWLEDGE AND INCIDENCE ON EXCLUSIVE BREASTFEEDING AMONG NURSING MOTHERS OF BABIES AGED (7-15 MONTHS) AT SENASE COMMUNITY, BEREKUM MUNICIPALITY

SUBMITTED BY:

NIAH-NKANBILA ELSIE	**-**	**6475420**
M-MUYUU M-MOABILA MARGARET	**-**	**6454120**
OSMANU SANDRA	**-**	**6519120**
NYANTAKYIWAA ABIGAIL	**-**	**6486120**

[HOLY FAMILY NURSING AND MIDWIFERY TRAINING COLLEGE, BEREKUM]

AFFILIATED TO KNUST, KUMASI

HOLY FAMILY NURSING AND MIDWIFERY TRAINING COLLEGE, BEREKUM

TOPIC:

KNOWLEDGE AND INCIDENCE ON EXCLUSIVE BREASTFEEDING AMONG NURSING MOTHERS OF BABIES AGED (7-15 MONTHS) AT SENASE COMMUNITY, BEREKUM MUNICIPALITY

SUBMITTED BY:

NIAH-NKANBILA ELSIE	**-**	**6475420**
M-MUYUU M-MOABILA MARGARET	**-**	**6454120**
OSMANU SANDRA	**-**	**6519120**
NYANTAKYIWAA ABIGAIL	**-**	**6486120**

2021

DECLARATION

We hereby declare that this submission is our own work towards the Diploma in General Nursing/Midwifery and that, to the best of our knowledge, it contains no material previously published by another person nor material which has been accepted for the award of diploma of the University, except where due acknowledgement has been made in the text.

Niah-Nkanbila Elsie	…….....	……
6475420	Signature	Date
M-muyuu M-moabila Margaret	...…….....	……
6454120	Signature	Date
Osmanu Sandra	…….…….....	……..……
6519120	Signature	Date
Nyantakyiwaa Abigail	…….…….....	..……
6486120	Signature	Date

Certified by:

Ms. Martha Kyeremaa	……..…….....	……..……
(Supervisor)	Signature	Date
Ms. Monica Nkrumah	…..…….....	…..……

(Principal) Signature Date

ABSTRACT

The aim of the study was to assess the knowledge level and experience among mothers with babies between (7-15 months) at Senase community, Berekum Municipality. A descriptive cross-sectional design was adopted for the study. Simple random sampling was be used. Structured questionnaire was administered to nursing mothers of babies 7-15 months. Data was entered and analyzed using the statistical package for social sciences (version 22; SPSS). The study found that when respondents were asked to indicate the recommended duration of exclusive breastfeeding, 82% (41) of the respondents indicated 6 months. 62% (31) of the respondents knew that breastmilk can be expressed, stored safely and given to the child in times of the mother's absence and the remaining 38%(19) had no idea that breastmilk can be expressed and stored safely in times of the mother`s absence. On factors associated with practice of exclusive breastfeeding among respondents, 74% (37) of the respondents indicated that breastmilk was sufficient for the baby. The study concluded that there was high level of knowledge among breastfeeding mothers on exclusive breastfeeding. However, with experience on exclusive breastfeeding some of the respondents were not able to manage household chores and exclusively breastfeed (52%). Also, on the factors associated with the practice of exclusive breastfeeding, majority (74%) of the respondents had enough breastmilk to breastfeed.

TABLE OF CONTENTS

DECLARATION ..... **I**

ABSTRACT ..... **IV**

TABLE OF CONTENTS ..... **V**

LIST OF TABLES ..... **VIII**

LIST OF FIGURES ..... **IX**

ABBREVIATION ..... **X**

ACKNOWLEDGEMENT ..... **XI**

CHAPTER ONE **1**

INTRODUCTION **1**

1.0 Background of the study 1

1.1 Problem Statement 4

1.2 General objective 5

1.3 Specific objective 5

1.4 Research Questions 5

1.5 Operational definition 1.4 Research Questions 5

CHAPTER TWO **6**

LITERATURE REVIEW **6**

2.0 Introduction 6

2.1 Knowledge on Exclusive Breastfeeding 6

2.2 Prevalence of Exclusive Breastfeeding 9

2.3 Factors Associated with Practice of Exclusive Breastfeeding 10

CHAPTER THREE 13

MATERIALS AND METHODS 13

3.0 Introduction 13

3.1 Study area 13

3.2 The study population 14

3.3 Study design 14

3.4 Sampling technique and Size 14

3.5 Data collection methods and instruments 14

3.6 Data analysis techniques 14

3.7 Ethical consideration 15

3.8 Limitation of the study 15

CHAPTER FOUR 16

DATA ANALYSIS AND RESULTS 16

4.0 Introduction 16

4.2 Knowledge on Exclusive Breastfeeding 18

4.3 Experience on Exclusive Breastfeeding 21

4.4 Factors Associated with Practice of Exclusive Breastfeeding 23

CHAPTER FIVE 26

DISCUSSION, CONCLUSIONS, RECOMMENDATIONS 26

5.0 Introduction 26

5.1 Discussions 26

5.2 Conclusion 27

5.3 Recommendation 27

REFERENCES 29

APPENDICES 33

LIST OF TABLES

Table 1: Respondents Age 16

Table 2: Respondents Marital Status 16

Table 3: Respondents Educational Qualification 17

Table 4: Distribution of Respondents Religion 18

Table 5: Respondents on How Long They Gave Only Breastmilk to the Baby 20

Table 6: Respondents on How Long Breastmilk is Stored 21

Table 7: Respondents on Factors Associated with Practice of Exclusive Breastfeeding 24

Table 8: Respondents Duration of Rest After Delivery 25

LIST OF FIGURES

Figure 1: Respondents' Occupational Status 18

Figure 2: Respondents Practice of Exclusive Breastfeeding 19

Figure 3: Respondents Knowledge on Storage of Breastmilk 20

Figure 4: Rating on Management of Household Chores and Exclusive Breastfeeding 22

Figure 5: Respondents on Whether They Encountered Problem During Breastfeeding 22

Figure 6: Use of other Method Aside from Been Present for Feeding 23

Figure 7: Respondents on How Well Their Baby Sucked Their Breast 25

ABBREVIATION

WHO	World Health Organization
UNICEF	United Nations Children's Fund
EBF	Exclusive Breastfeeding

ACKNOWLEDGEMENT

We would like to extend wholeheartedly my gratitude and praise to the ever loving and merciful God for touching and bringing those people who literally shared their abundant resources, talents, skills, time and effort for the completion of this project.

This project would not have been successful without the directions and constructive criticism of our supervisor, who equipped us with the knowledge and guidelines.

We are grateful to all the respondents in the study for their contributions and efforts. Without them the study would not be possible.

Finally, our appreciation goes to the authors and publishers of various books, journals and publications from which we extracted valuable information for this project.

CHAPTER ONE

INTRODUCTION

1.0 Background of the study

Exclusive breastfeeding (EBF) is defined as feeding infants only breast milk, either directly from the breast or expressed, with no addition of any liquid or solids apart from drops or syrups consisting of vitamins, mineral supplements or medicine, and nothing else (World Health Organization, 2018).

Exclusive breastfeeding without supplementation according to the American College of Obstetricians and Gynecologists is recommended for the first 6 months of life (American College of Obstetricians and Gynecologist, 2017). Breast milk is nutritionally balanced, digests easily, confers immunity and promotes healthy growth (Weimers, Svensson, Dumas, Naver, & Wahlberg, 2016). Breast milk alone provides all of the nutrients, including vitamins and minerals infant needs, meaning that no other liquid or food is needed (Butte, Lopez-Alaracon, & Garza, 2018).

Globally several factors have been found to be associated with infant feeding practices. These include income, education, wealth and employment (Malhatra, 2016). Work has also been found to hinder EBF as mothers stop breastfeeding soon after returning to work especially when the environment at work is not conducive for continued breastfeeding. The lack of EBF has in turn been associated with increasing child malnutrition (Malhatra, 2016).

The World Health Organization and United Nations Children's Fund (WHO/UNICEF) recommends that nursing mothers should practice exclusive breastfeeding (EBF), defined as providing the infant human breastmilk only, and oral rehydration solution, or drops/syrups of vitamins, minerals, or medicines, when required (WHO, 2018). This is because EBF is

strongly correlated with a reduced burden of infant and child morbidity and mortality (Black, et al., 2016). A recently published report on EBF indicated that approximately 12% of deaths among children under five years old could be averted annually in low- and middle-income countries if all neonates were exclusively breastfed. In sub-Saharan Africa, including Economic Community of West African States (ECOWAS), approximately 42% of diarrhoea-related deaths among children younger than five years of age could be attributed to prelacteal foods or unimproved water or liquids provided to newborns (Wardlaw, et al., 2019). Mothers who exclusively breastfeed also have a reduced risk of developing type 2 diabetes mellitus and breast and ovarian cancers (Victoria, et al., 2016).

In low income and developing countries, due to poor sanitation conditions, high disease burden and limitedness in the availability of clean drinking water, it is more necessary to practice exclusive breastfeeding in the initial stages in life (first six months of the child's life). This practice of exclusive breastfeeding is more safe, hygienic and the most economical way of providing food for the newborn (United Nations Children's Fund, 2016). It has been reported in several articles on breastfeeding that proper practice of breastfeeding can save about 800,000 infant lives in the developing world alone (UNICEF, 2016).

In spite of these recommendations, it has been documented over the years that the practice of exclusive breastfeeding has not been adopted universally, most mothers embrace the idea but fail to breastfeed exclusively few weeks after giving birth to their baby. A lot of factors ranging from cultural, social and economic conditions have been identified as possible hindrances to an effective practice of exclusive breastfeeding (Tampah-Naah & Kumi-Kyereme, 2017). Breastfeeding exclusively will be much easier and attractive to mothers if the right health education, support and motivation are given (Mogre, Dery, & Gaa, 2016). Practicing exclusive breastfeeding is not only beneficial to infants but nursing mothers too. Results from a cohort study conducted by colleagues proved that the risk of postpartum

hemorrhage can be lowered through the practice of breastfeeding. Continual breastfeeding postpones the menstrual cycle of a lactating mother hence reducing the risk of pregnancy (Gebreselassie, Rutstein, & Mishra, 2016).

More than 50% of Nigerian infants are fed complementary foods too early, which are often of very poor nutritional value (Federal Ministry of Health, 2017). In Nairobi, Kenya, complementary foods were introduced by 46.4% of the mothers studied, before the child was one month old (Lakati, Binno, & Stevenson, 2018). Often times, these practices are as a result of traditional and modern perceptions of breastfeeding and its benefits, some of which are not based on scientific evidence (Adugene, 2014).

The Ghana Child Health policy on exclusive breastfeeding also stresses on the fact that infants should be breastfed from birth till they are 6 months old (GSS & GDHS, 2014). All children in Ghana (98%) are virtually breastfed at some point in their life. 2014 report of the Ghana Demographic and Health Survey indicated that 52% of children younger than 6 months were exclusively breastfed. is shows an increase from the 46.3% (which represented a significant drop from the country's earlier achievement of 68% of exclusive breastfeeding coverage in 2012) recorded a few years ago (GSS & GDHS, 2009). Odei (2016) reported a 44% of exclusively breastfeeding rate for six months among singleton infants compared to 14% of twins who were EBF for six months in Accra.

Considering the importance of EBF to the health of both mothers and infants, it is crucial that mothers are encouraged to exclusively breastfeed their infants to ensure optimal health. However, this cannot be done effectively without in-depth understanding of the factors that influence EBF. Additionally, lack of information regarding breastfeeding practices among mothers it difficult to address any difficulties faced by such mothers. Hence the present study

is designed to assess the knowledge and incidence associated with exclusive breastfeeding among nursing mothers of infants 7-15 months

1.1 Problem Statement

Globally, Cai, Wardlaw, & Brown (2016) discovered 39% of infants 0-5 months were breastfed exclusively. Also, the regions with high rates of infants exclusively breastfed for less than 6 months were Eastern/Southern Africa (52%), as well as South Asia (47%). Hence Sub-Saharan Africa recorded the lowest coverage of 37% (WHO, 2018).

Although Ghana adopted various WHO strategies to promote exclusive breastfeeding, there has been a slow increase in the rates of exclusive breastfeeding in the country. The 2011 Ghana Multiple Indicator Cluster Survey (MICS) in 2011 reported that less than half (46%) of all infants aged 0–6 months in Ghana were exclusively breastfed (Ghana Statistical Service (GSS), 2011). This level is lower than that recommended by WHO/UNICEF.

In Ghana, 52 % of children younger than 6 months were exclusively breastfed in 2014 (GSS, 2014). According to the 2014 Ghana Demographic and Health Survey (GDHS) the percentage of children aged 0–5 months who were exclusively breastfed has decreased by 17% between 2008 and 2014 (GDHS, 2014). The percentage of children who were bottle fed appears to have increased over the past decade. In 2003 and 2014, 11 and 16% of children under 6 months, respectively, were bottled fed (GDHS, 2014). The 2014 GDHS shows that the country still faces the challenges of high infant mortality of 41 deaths per 1000 live births and 19% of children were stunted ascribable to malnutrition and infections (GDHS, 2014).

Research findings have shown up to a 13% reduction in infant mortality rate can be achieved through the practices of EBF (American Academy of Pediatrics, 2016).

1.2 General objective

To assess the knowledge level and experience among mothers with babies between (7-15 months) at Senase community, Berekum Municipality.

1.3 Specific objective

1. To assess the knowledge level of respondent. (Mothers with babies between 7-15 months)
2. The experience of respondent on exclusive breastfeeding.
3. To assess the factors that affect exclusive breastfeeding

1.4 Research Questions

1. What is the knowledge level of the respondent (mothers with babies between 7-15 months)?
2. What experience do mothers who practiced exclusive breastfeeding have?
3. What are the factors that affect exclusive breastfeeding?

1.5 Operational definition

Breastfeeding: It is defined as a practice of feeding an infant with milk directly from the mother's breast.

Knowledge: What the mothers know about exclusive breastfeeding.

Experience: Practical contact or hands on exposure to a something.

Infants: In this study refer to newborns from 7-15 months.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter reviews topical areas found in current literature to help determine the gaps created on this public health issue.

2.1 Knowledge on Exclusive Breastfeeding

The World Health Organization (WHO) recommends timely initiation of breastfeeding within the first hour of birth, exclusively breastfeeding up to the age of 6 months and continued breastfeeding through to 24 months together with appropriate complementary feeding (WHO, 2020)

El-Khedr and Lamadah (2016) reported that less than one fifth of mothers had poor knowledge about breastfeeding in Makkah Al Mukkaramah in Egypt. They also indicated in their study that older mothers and those who are highly educated had excellent knowledge than younger and low educated mothers. They also reported that there is a statistical significant difference between the mothers' employment and their knowledge about breastfeeding, working women had excellent knowledge than housewives. This finding was attributed to the fact that working women have better chances of contact with more experienced persons and to acquire health and social information.

In a study carried out among female garment workers Dhaka on knowledge of early initiation of breastfeeding was high (89 to 77%) but revealed 88% had very poor knowledge on proper breastfeeding (Tamanna, Antora, & Rahman, 2017). The risk of conditions such as, breast and ovarian cancer is lessened among mothers who adequately practice EBF (WHO, 2019).

According to a study conducted by Chaudhary, Shah, and Raja (2016) all mothers (200/200) captured in their study knew they had to breastfeed. However, only ten per cent (10%) knew

they had to initiate breastfeeding within thirty minutes and one hour after delivery and only twenty-five percent (25%) knew the benefits of colostrum.

Gartner (2019) reported that knowledge of the benefits of exclusive breastfeeding was very poor in a study conducted in Bangladesh. However, majority of them had good knowledge regarding the duration of exclusive breastfeeding and breastfeeding. It was revealed in the study that knowledge on initiation of breastfeeding was very high (89%).

A cross-sectional descriptive study was conducted in Mainland Local Government, Lagos State. A total of 210 mothers were selected using systematic sampling, with a response rate of 95%, so we had 200 respondents. The study showed that all respondents had heard of EBF. More than three-quarters (77.5%) of the respondents knew that babies should be exclusively breastfed for the first 6 months of life while 3.5% were unsure. A large number (89–96%) of respondents were aware of the benefits of EBF to the infant. More than two-thirds (67%) of the respondents believe that breastfeeding should be on demand (Osibogun, Olufunlayo, & Oyibo, 2018).

A cross-sectional descriptive study was carried out among mothers of children less than two years of age, accessing child health services at selected Primary Health Centers in Sagamu Local Government Area, Ogun State, Nigeria. Respondents were selected via multistage sampling technique. A semi-structured, interviewer-administered questionnaire was used for data collection. Data analysis was carried out with the aid of IBM Statistical Package for the Social Sciences (SPSS) version 18.00. The study found that awareness of the benefits of breastfeeding was 93.2% among respondents. The contraceptive benefit of breastfeeding was known to 47.4% of mothers carrying out mixed feeding compared with 54.7% of those practicing exclusive breastfeeding (Sholeye, Abosede, & Salako, 2015).

In a descriptive cross-sectional study, 393 mother-infant pairs attending child welfare clinics from three health facilities in the Tamale Metropolis were surveyed. A structured item questionnaire was used to collect data. The Analysis of the data was done with SPSS version 20. The study found that majority (70.5%) of the participants had heard about EBF, surprisingly most people choose the electronic media (53.2%) as compared to health professionals (34.4%) as their major source of information. Concerning initiation, the majority concorded that EBP should be started immediately after birth (73.8%). It was also noted that majority (87.5%) believed that EBF should be practice for less than 5 months for a child. Majority (88.8%) disagreed that EBF allows child spacing. On knowledge on Time to initiate Breastfeeding; majority (73.8%) said immediately after birth whiles 26.2% said anytime the mother is ready (Nukpezah, Nuvor, & Ninnoni, 2018).

A cross-sectional study was carried out at the Tuna health centre. All data were entered into Microsoft Excel and analysed using SPSS version 20. This study considered all mothers and/or care givers that attended the antenatal clinic of the Tuna Health Centre with apparently healthy infants aged 0–6 months during the study period. In all, 217 mother/care giver-infant pairs were approached in which 200 agreed and consented to participate in the study. The study reported that about 26 % of them were unable to define EBF; 66 % defined EBF as giving the child breastmilk and water and the others did not have an idea. Twenty two percent of the mothers said breastmilk only is not sufficient to meet the nutritional needs of the child. The reasons they offered for holding this view were that the child may not be satisfied and could die if fed with only breastmilk for 6 months. The majority (88.9 %) of the mothers did not know that breastmilk could be expressed, stored safely and given to the child in times of the mother's absence. Regarding how to overcome breastfeeding difficulties, 8.9 % of the mothers said herbs/drugs could be taken to overcome the difficulty; 6.8 % said breastfeeding should be

stopped; 11.1 % said breastfeeding should be continued and 4.2 % did not know what to do (Mogre, Dery, & Gaa, 2016).

2.2 Prevalence of Exclusive Breastfeeding

The study was a facility based cross-sectional survey, which was conducted among mothers with twins 6–23 months in the Tamale Metropolis. This study was conducted at the Tamale Teaching hospital, Tamale West Hospital, Seventh Day Adventist Hospital and Central Reproductive and Child Health Center. A sample size of 185 mothers was used. SPSS version 22.0 software (SPSS Inc. Chicago, IL, USA) was used for data entry and analysis. Mothers were interviewed using a semi-structured questionnaire. This study found an exclusively breastfeeding rate of 17% among mothers with twins in the Tamale metropolis (Tahiru, Agbozo, Garti, & Abubarkari, 2020).

A community based cross-sectional study targeting 428 interviews with mothers with children aged 0–5 months was conducted in Kampala district, Uganda. Sample size was calculated using the Bennet formula for cluster surveys. Analysis was done using modified Poisson regression in Stata version 14. The study found that the prevalence of exclusive breastfeeding was; (42.8%). In total, (30.6%) of the children received pre-lacteal feeds mainly warm water (40.5%) or glucose solution (35.5%). On analysis of the prevalence of EBF by the infants' age. EBF increased slightly from 85.7% at zero months to 87.2% at one month and then rapidly dropped and to its lowest (24.6%) among five months old children. At the time of the study, none of the respondents fed their child expressed breast milk, however (18%) had ever expressed breast milk for their child when critically ill in the past (Nabunya, Mubeezi, & Awor, 2020).

A cross-sectional study was carried out in Mirzapur Upazilla (Sub district) of Tangail district in rural Bangladesh among mothers having infants aged 0–6 months. Data were entered in

SPSS (version 20) and analyzed using SPSS (version 20) and Stata (version 12). The study reported that the prevalence of EBF in the last 24 hours preceding the survey was 36%. Among older infants (3–6 months) EBF prevalence was 35% and among younger infants (0–2 months) it was 50%. Among older infants the prevalence was higher among females (42%) than males (28%) but the difference was not statistically significant (Joshi, et al., 2014).

A descriptive cross-sectional study was conducted among 300 mothers of children 0-6months, visiting the under-five clinics in Makurdi, Benue State comprising Family Support Programme (FSP) Clinic, State Epidemiological Unit, and the Benue State Teaching Hospital. The study used a multi-stage sampling technique. This study found that 47.0% of the infants aged 0-6months were being exclusively breastfed as at the time of the study (Egwuda & Bako, 2018).

2.3 Factors Associated with Practice of Exclusive Breastfeeding

The study was a facility based cross-sectional survey, which was conducted among mothers with twins 6–23 months in the Tamale Metropolis. This study was conducted at the Tamale Teaching hospital, Tamale West Hospital, Seventh Day Adventist Hospital and Central Reproductive and Child Health Center. A sample size of 185 mothers was used. SPSS version 22.0 software (SPSS Inc. Chicago, IL, USA) was used for data entry and analysis. Mothers were interviewed using a semi-structured questionnaire. The study found that most mothers (61.4%) who did not practice exclusive breastfeeding for six months perceived that they could not produce enough breast milk to satisfy their infants until they were six months old (Tahiru, et al., 2020).

A community based cross-sectional study targeting 428 interviews with mothers with children aged 0–5 months was conducted in Kampala district, Uganda. Sample size was calculated using the Bennet formula for cluster surveys. Analysis was done using modified Poisson regression in Stata version 14. This study found that exclusive breastfeeding reduced

with increasing infant's age. This may largely be due to the fact that mothers did not get adequate maternity leave as most got less than 3 months if any. In addition, the work places did not have a conducive environment to support mothers maintain EBF as most mothers either had no leave or did not get sufficient leave time, could not carry their children to work and spent over 8 hours separated from their children (Nabunya, Mubeezi, & Awor, 2020).

A community based quantitative cross-sectional study was conducted in Motta town which is located in the Amhara National Regional State, East Gojjam Zone, Ethiopia. A structured interviewer administered questionnaire was used to collect data from participants. A simple random sampling technique was applied. A total of 423 mothers with infant less than six months old were included in this study. The study reported that the prevalence of exclusive breastfeeding practice one day before the survey was 50.1%. Among mothers who didn't exclusively breastfeed their infant, the main reasons mentioned were; perception of breast milk only being not sufficient for the infant (30.2%), lack of time (22.8%), and decreased breast milk secretion (18.8%). The majority (87.8%) of mothers were supported by their husband to feed their infant exclusively on breast milk. Among employed mothers only (3.7%) were encouraged by their organization/employer to breastfed their infant (Tewabe, et al., 2017).

A cross-sectional study was carried out in Mirzapur Upazilla (Sub district) of Tangail district in rural Bangladesh among mothers having infants aged 0–6 months. Data were entered in SPSS (version 20) and analyzed using SPSS (version 20) and Stata (version 12). The study reported that most of the mothers reported that the main reason for not practicing EBF was inadequate secretion of breast milk (64%). Other reasons were: care taker fed the child with food other than breast milk unknowingly (7%), children were unable to suck the breast (7%), and remaining 23% of the mothers mentioned several other reasons which included: being influenced by a neighbour who does not exclusively breastfeed her child, lack of nutritious

food to the mother causing inadequate secretion of breast milk and illness of the mother (Joshi, et al., 2014).

A cross-sectional descriptive study was carried out among mothers of children less than two years of age, accessing child health services at selected Primary Health Centers in Sagamu Local Government Area, Ogun State, Nigeria. Respondents were selected via multistage sampling technique. A semi-structured, interviewer-administered questionnaire was used for data collection. Data analysis was carried out with the aid of IBM Statistical Package for the Social Sciences (SPSS) version 18.00. The study found that maternal educational status was associated with the practice or otherwise of exclusive breastfeeding. Age, occupation, ethnicity, marital status, partner's support for breastfeeding, experience of mastalgia, a difficult work schedule, availability of maternity leave, were not associated with the practice of exclusive breastfeeding. Practice of exclusive breastfeeding was also associated with certain beliefs among respondents including the conferment of maternal benefits, protection against breast and ovarian cancer and breastfeeding being a cause of nipple retraction (Sholeye, Abosede, & Salako, 2015).

A cross-sectional descriptive study was conducted in Mainland Local Government, Lagos State. A total of 210 mothers were selected using systematic sampling, with a response rate of 95%, so we had 200 respondents. The study found that while about 56% of the respondents practiced EBF, only 28.5% practiced it for up to 6 months. Aquarter of respondents exclusively breastfed because they were aware of its benefits while only 7% exclusively breastfed because they preferred it. Most of the respondents (58.8%) that did not practice EBF attributed it to a busy work schedule (Osibogun, Olufunlayo, & Oyibo, 2018).

A cross-sectional study was carried out at the Tuna health centre. All data were entered into Microsoft Excel and analysed using SPSS version 20. This study considered all mothers

and/or care givers that attended the antenatal clinic of the Tuna Health Centre with apparently healthy infants aged 0–6 months during the study period. In all, 217 mother/care giver-infant pairs were approached in which 200 agreed and consented to participate in the study. The study reported that lack of time and difficulty sleeping were the reasons given by 6.5 % (n = 13) of mothers who said they did not feel good about exclusively breastfeeding for 6 months and 9.5 % (n = 19) said they had difficulty breastfeeding on demand. The majority (81.1 %, n = 154) of the mothers said they were not confident to express and store breastmilk (Mogre, Dery, & Gaa, 2016).

CHAPTER THREE

MATERIALS AND METHODS

3.0 Introduction

This chapter deals with the area of the study, population of study, study design, sampling techniques, data collection method and instrument, data analysis techniques, ethical consideration and the limitations of the study.

3.1 Study area

The study will be conducted at Senase located in the Berekum Municipality. The distance from Berekum to Senase is 1kilometer by road. Berekum is a town in the Bono Region of Ghana. The town is known for the Methodist Secondary Technical School which is a second cycle institution. The native language of the Berekum people is Bono Twi. The municipality comprises of Christians, Muslims and Traditionalist. The population is largely made of Akans. Majority of women in their early thirties are married. It is a youthful population. Farming is predominant among the people of Berekum.

3.2 The study population

The study populations will be the people of Senase community, Berekum Municipality. The target population will be nursing mothers of babies 7-15 months.

3.3 Study design

A descriptive cross-sectional design will be adopted for the study. This design has been chosen because of its appropriateness for the purpose of the study. The descriptive survey design is suitable for describing the way things are.

3.4 Sampling technique and Size

Simple random sampling will be used. This sampling technique would ensure each member of the population has an equal chance of being selected. The study population which were nursing mothers of babies 7-15 months were approached about participating in this study. A total of 50 participants will be used for the study.

3.5 Data collection methods and instruments

Written questionnaires with both open and close ended questions were used in the exercise to collect the information from the respondents. Structured questionnaire will be administered to nursing mothers of babies 7-15 months. Questionnaires will be answered in our presence since some participants may demand clarifications and others will have no formal education. A member of the research team will have to translate the questions to the respondents because some respondents will have no formal education. Respondents will use approximately 20 minutes to answer the questionnaire.

3.6 Data analysis techniques

Data will be entered and analyzed using the statistical package for social sciences (version 22; SPSS) and results will be presented in the form of frequencies and percentages.

3.7 Ethical consideration

The research team believed that maintaining the confidentiality and anonymity of the participants is crucial to this study. Informed consent will be obtained after comprehensive explanation of the purpose and procedure of the study to the participants. Participants will be informed about their right to withdraw or refuse to be part of the study at any point in the course of the interview and will be assured of confidentiality of all information that was obtained. Furthermore, the identities of the participants will not be disclosed, and only aggregate data will be reported. The research team will ensure no form of research misconduct transpires throughout the period of the study.

3.8 Limitation of the study

The research team will have to minimize contact with people as a result of COVID-19. Hence, the study was conducted with a small sample size of 50.

CHAPTER FOUR

DATA ANALYSIS AND RESULTS

4.0 Introduction

This chapter encompasses the analysis of data collected and the outcomes gained after the analysis. The data collected was scrutinized based on demographic features and specific aims of the study.

4.1 Demographic Data

The ages of respondents, 30% (15) of the respondents were aged 26 to 30 years, 38% (19) of them were aged 31 to 35 years, 18% (9) were aged 15 to 20 years and 14% (7) of respondent were 21to 25 years. As indicated in the table below:

Table 1: Respondents Age

Variable	Frequency (n)	Percentage (%)
15-20	9	18
21-25	7	14
26-30	15	30
31-35	19	38

The respondents' marital status, 52% (26) were married followed by separated/divorced 30% (15), single 10% (5) and 8% (4) were widowed. As shown in Table 2 below;

Table 2: Respondents Marital Status

Variable	Frequency (n)	Percentage (%)
Married	26	52

Single	5	10
Widowed	4	8
Separated/Divorced	15	30

The educational qualification of respondents, 56% (28) of them had no formal education followed by 18% (9) primary level), 12% (6) secondary level and 14% (7) tertiary level. As indicated in the table below;

Table 3: Respondents Educational Qualification

Variable	Frequency (n)	Percentage (%)
No formal education	28	56
Primary education	9	18
Secondary education	6	12
Tertiary	7	14

The occupational status of respondents, 50% (25) of them were employed followed by 40% (20) no employment and 10% (5) of them who were students. As illustrated in the diagram below;

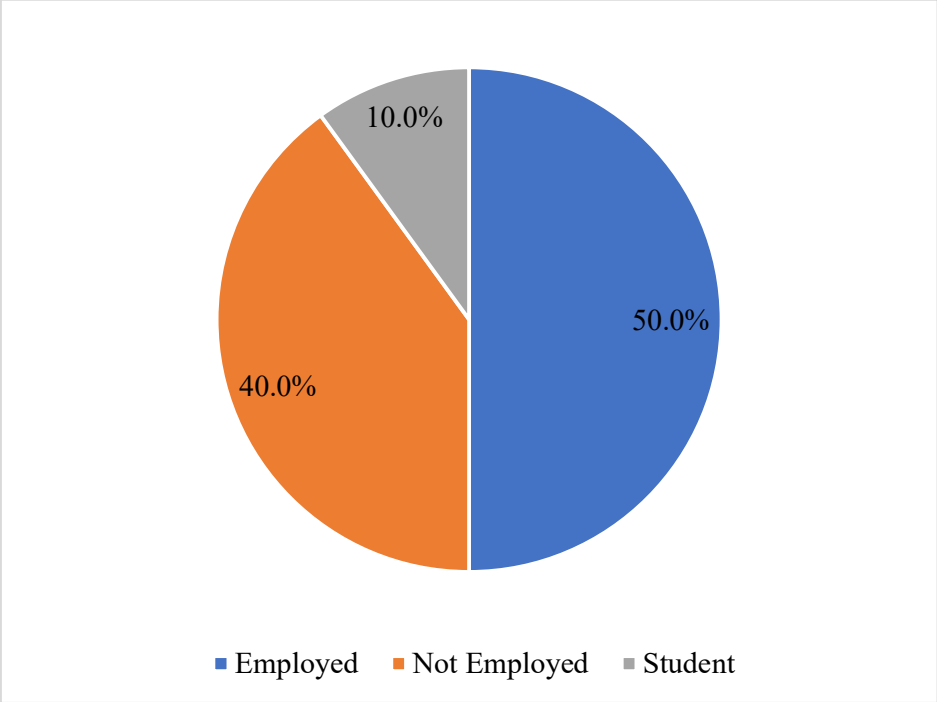

Figure 1: Respondents' Occupational Status

The religion of respondents, most 62% (31) of them were Christians whiles the remaining 38% (19) belonged to the Islamic religion. It is illustrated on the table below;

Table 4: Distribution of Respondents Religion

Variable	Frequency (n)	Percentage (%)
Christian	31	62
Islam	19	38
African Traditional Religion	0	0
Other	0	0

4.2 Knowledge on Exclusive Breastfeeding

When respondents were asked to indicate the recommended duration of exclusive breastfeeding, 82% (41) of the respondents indicated 6 months. Other responses were 6% (3) 5 months, 10% (5) 8 months and 2% (1) 24months.

Respondents were asked to indicate when breastfeeding is initiated, 62% (31) of the respondents indicated after birth or delivery. 24% (12) of the respondents indicated one hour after birth or delivery. 8% (4) of the respondents indicated they had no idea as to when breastfeeding is initiated. The remaining 6% gave responses such as 22hours after delivery, two days after delivery and one week after delivery

practice of exclusive breastfeeding, 56% (28) of the respondents said they practiced exclusive breastfeeding and the remaining 44% (22) did not practice exclusive breastfeeding. It is illustrated in the diagram below;

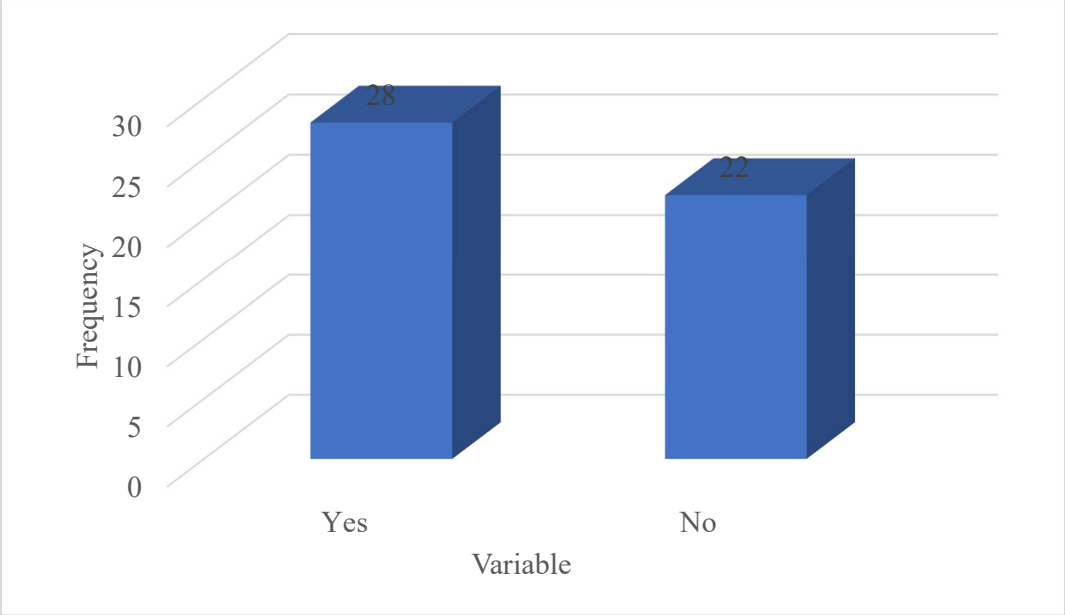

Figure 2: Respondents Practice of Exclusive Breastfeeding

How long respondents gave only breastmilk to the baby, above 19 months 24% (12), 15 to 18 months 34% (17), 10 to 14 months 12% (6), 5 to 9 months 22% (11), and 0 to 4 months 8% (4). It is represented on the table below;

Table 5: Respondents on How Long They Gave Only Breastmilk to the Baby

Variable	Frequency (n)	Percentage (%)
0-4 months	4	8
5-9 months	11	22
10-14 months	6	12
15-18 months	17	34
Above 19 months	12	24

62% (31) of the respondents knew that breastmilk can be expressed, stored safely and given to the child in times of the mother's absence and the remaining 38% (19) had no idea that breastmilk can be expressed and stored safely in times of the mother`s absence. As illustrated in the diagram below;

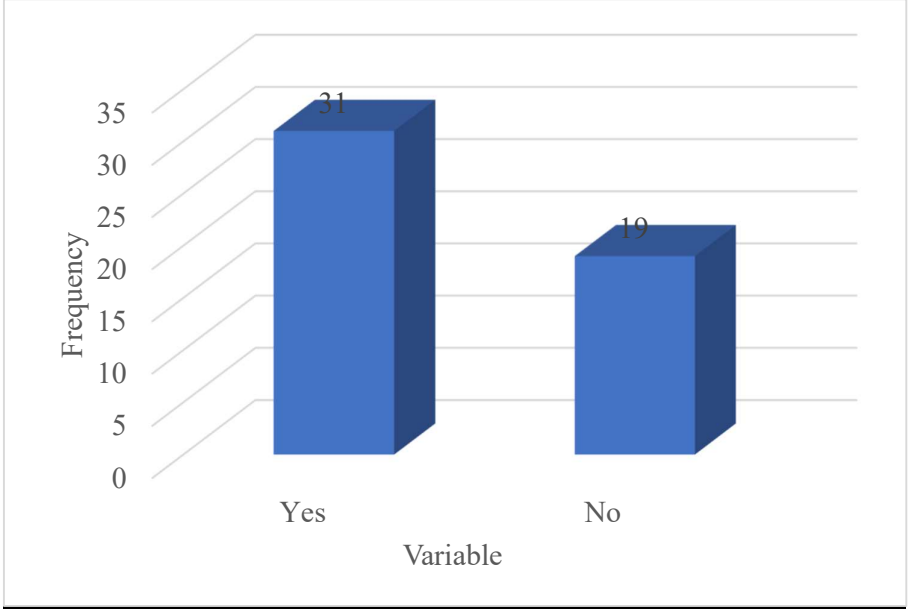

Figure 3: Respondents Knowledge on Storage of Breastmilk

In trying to find out the benefit of exclusive breastfeeding, the data gathered revealed that 56% (28) of the total respondents cited some of the benefits of exclusive breastfeeding. 44% (22) of the respondents had no idea regarding the benefits of exclusive breastfeeding. From several themes regarding the benefits of exclusive breastfeeding were; less expensive (88%), saves time (82%), breastmilk is of good quality (78%), prevent infections and diseases (68%).

4.3 Experience on Exclusive Breastfeeding

Duration on how long breastmilk is stored safely at room temperature, 52% (26) of the respondents indicated 3 to 4 hours followed by 1 to 2 hours 30% (15), and 5 to 6hours 18% (9). It is shown on Table 6 below;

Table 6: Respondents on How Long Breastmilk is Stored

Variable4	Frequency (n)	Percentage (%)
1-2 hours	15	30
3-4 hours	26	52
5-6hours	9	18
Others	0	0

The respondent rating on management of household chores and exclusive breastfeeding, 48% (24) of the respondents chose a rating of good followed by 38% (19) average and 14% (7) poor. It is shown on Figure 4 below;

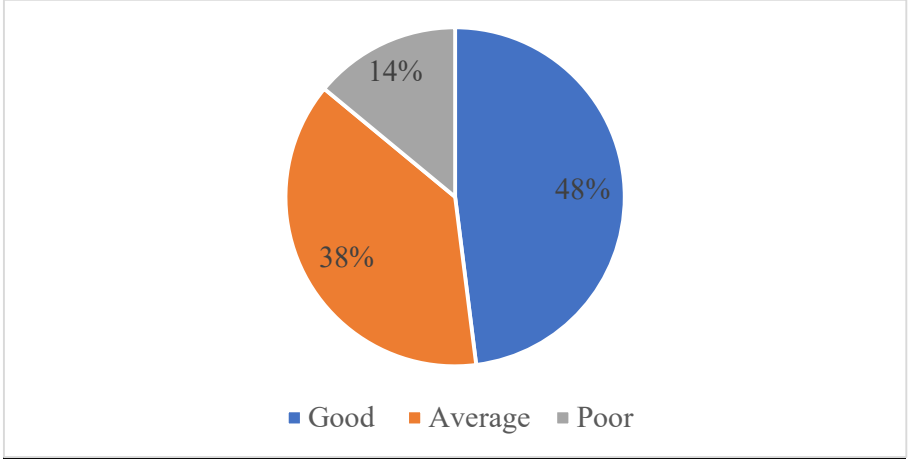

Figure 4: Rating on Management of Household Chores and Exclusive Breastfeeding

An illustration of whether respondents encountered problem during breastfeeding, 86% (43) of the respondents did not encounter any problem during breastfeeding whiles 14% (7) of them encountered problems during breastfeeding. It is shown on figure 5 below.

Among the respondents who encountered problems, some of the problems encountered were breast engorgement (2%), sore nipple (2%) and insufficient breastmilk production (10%).

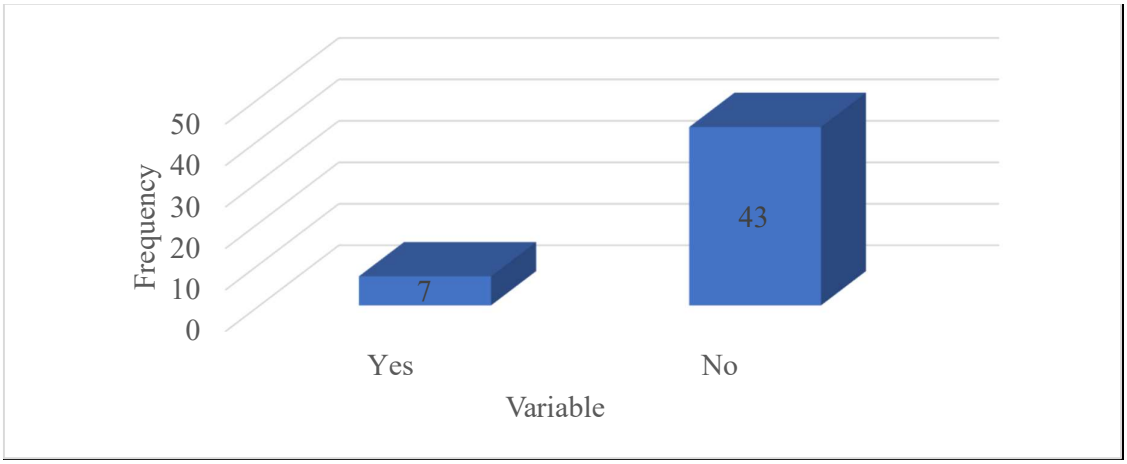

Figure 5: Respondents on Whether They Encountered Problem During Breastfeeding

whether respondents had to adopt any other method aside from been present to feed their baby, 86% (43) of the respondents indicated they did not adopt any other method aside from been present to feed their baby whiles 14% (7) said they adopted other method aside from been present to feed their baby. It is shown on Figure 6 below;

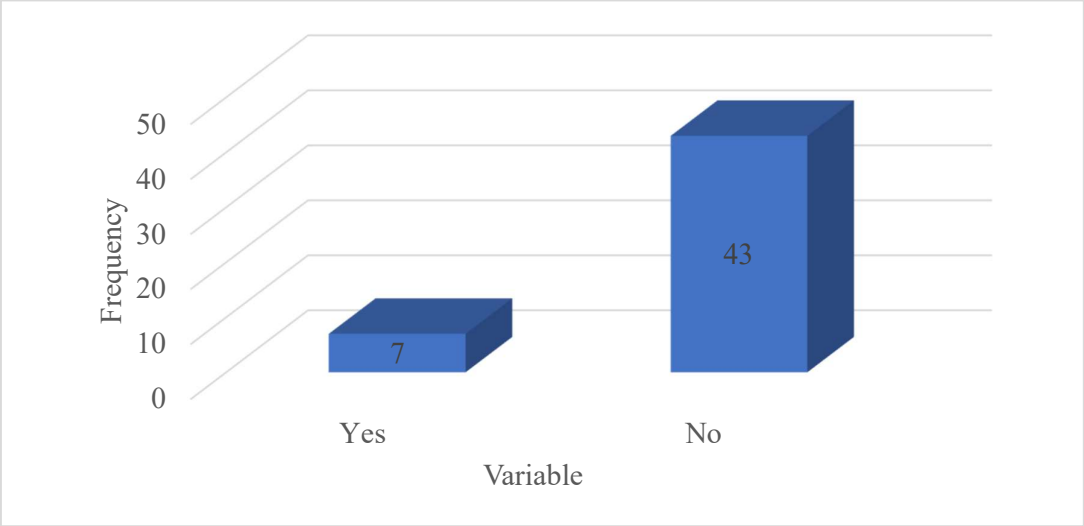

Figure 6: Use of other Method Aside from Been Present for Feeding

4.4 Factors Associated with Practice of Exclusive Breastfeeding

On factors associated with practice of exclusive breastfeeding among respondents, 74% (37) of the respondents indicated that breastmilk was sufficient for the baby. 78% (38) of the respondents indicated they did not receive support from other family members. 86% (43) of the respondents cited that they were not on any medication. 8% (4) of the respondents experienced mastalgia during breastfeeding whiles 92% (46) of the breastfeeding mothers did not. 52% (26) of the respondents said they were able to produce enough breast milk to satisfy the baby. 56% (28) of the respondents indicated short maternal leave affected their chances of exclusively breastfeeding their baby. 96% (48) of the respondents did not have any condition that prevented them from exclusively breastfeeding their baby. 86% (43) of the respondents indicated they were not influenced by a neighbor who did not practice exclusive breastfeeding. It is illustrated in Table 7 below;

Table 7: Respondents on Factors Associated with Practice of Exclusive Breastfeeding

		Yes	No
Was breastmilk sufficient for the baby?	n	37	13
	%	74	26
Did you receive support from other family members?	n	12	38
	%	24	76
Were you on any medication?	n	7	43
	%	14	86
Did you experience mastalgia during breastfeeding?	n	4	46
	%	8	92
Were you able to produce enough breast milk to satisfy your baby?	n	26	24
	%	52	48
Does short maternal leave affect your chances of exclusively breastfeeding your baby?	n	28	22
	%	56	44
Did you have any condition that prevents you from exclusively breastfeeding your baby?	n	2	48
	%	4	96
Were you influenced by a neighbor who does not practice exclusive breastfeeding?	n	7	43
	%	14	86

The respondents duration of rest after delivery, 54% (27) of the respondents could not remember or had no idea regarding how long they rested after delivery followed by respondents who indicated one to two hours of rest 32% (16), three to four hours of rest 10% (5) and more than four hours of rest 4% (2). It is indicated in Table 8 below;

Table 8: Respondents Duration of Rest After Delivery

Variable	Frequency (n)	Percentage (%)
One to Two hours	16	32
Three to Four hours	5	10
More than Four hours	2	4
Do not remember	27	54

On how well baby sucked breast, 52% (26) indicated a rating of good followed by very well 28% (14), average 14% (7) and poor 6% (3). As shown in the diagram below;

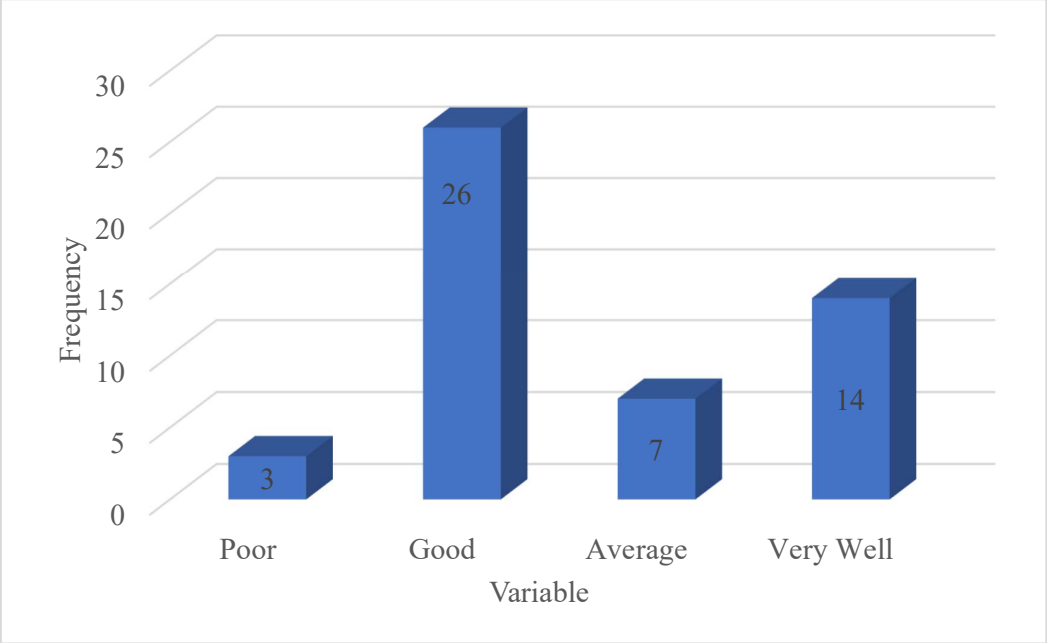

Figure 7: Respondents on How Well Their Baby Sucked Their Breast

CHAPTER FIVE

DISCUSSION, CONCLUSIONS, RECOMMENDATIONS

5.0 Introduction

The findings are briefly discussed with references to support the study. The chapter also includes the conclusions drawn from the various findings of the study and finally makes recommendations.

5.1 Discussions

5.1.1 Knowledge on Exclusive Breastfeeding

In the current study, the respondents knowledge level was assessed on recommended duration of exclusive breastfeeding, initiation of breastfeeding, storage of breastmilk. Now it came out clearly that, almost all the respondents (82%) knew the duration exclusive breastfeeding to be 6 months. However, a little above half (62%)of the respondents indicated that breastfeeding should be initiated as early as possible after birth. Similarly, Gartner (2019) reported that majority of the respondents had good knowledge regarding the duration of exclusive breastfeeding in a study conducted in Bangladesh. The World Health Organization (WHO) recommends timely initiation of breastfeeding within the first hour of birth, exclusively breastfeeding up to the age of 6 months and continued breastfeeding through to 24 months together with appropriate complementary feeding (WHO, 2020). This high knowledge level might have been as a result of good antenatal services and health education couple with the educational background of the respondents. Close to half of the respondents have some level of education.

5.1.2 Experience on Exclusive Breastfeeding

Regarding experience on exclusive breastfeeding, management of household chores with feeding and problems encountered were discussed. Majority 86% claimed did not encounter

any problem yet 52% couldn't manage household chores and exclusively breastfeed. Similarly, a study by Tampah-Naah et al. (2019) reported that the work schedules of mothers interfered with the practice of exclusive breastfeeding. Handling children and carrying out household chores affects how they exclusively breastfeed. This might be as result that nearly half of the respondents were either single or widowed and didn't have support.

5.1.3 Factors Associated with Practice of Exclusive Breastfeeding

In relation to factors affecting exclusive breastfeeding, majority 86% (43) of the respondents indicated they were not influenced by a neighbor who did not practice exclusive breastfeeding. Also, 74% (37) of the respondents indicated that breastmilk was sufficient for the baby. Correspondingly, a study by Tahiru et al. (2020) found that 61.4% of mothers who did not practice exclusive breastfeeding for six months perceived that they could not produce enough breast milk to satisfy their infants until they were six months old. This might be related to the fact that majority of the respondents we.re married and nearest neighbor might be the husband who may promote breastfeeding between the ages of 25 to 40 years who have given birth to more children and are experienced.

5.2 Conclusion

1. The study found some high level of knowledge among breastfeeding mothers on exclusive breastfeeding.
2. However, with experience on exclusive breastfeeding some of the respondents were not able to manage household chores and exclusively breastfeed (52%).
3. Also, on the factors associated with the practice of exclusive breastfeeding, majority (74%) of the respondents had enough breastmilk to breastfeed

5.3 Recommendation

Based on the findings of the study the following recommendations were made;

1. There should be breastfeeding support groups or written material encouraging mothers to breastfeed soon after birth.
2. Family and husbands should be encouraged to give support to the nursing mothers especially during the first year of the infant`s life.
3. There could be further research carried on management of household chores and breastfeeding among exclusive breastfeeding mothers.

REFERENCES

Adugene, D. T. (2014). Women's perception and risk factors for delayed initiation of breastfeeding in Arba Minch Zuria, southern Ethiopia. *International Breastfeed Journal, 9*(8), 77-85.

American Academy of Pediatrics. (2016). Breastfeeding and the use of human Milk. *Pediatrics, 129*(3), 827-841.

American College of Obstetricians and Gynecologist. (2017). Breastfeeding: maternal and infant aspects. *International Journal of Gynaecology and Obstetrics, 74*(1), 217-232.

Black, R. E., Victora, C. G., Walker, S. P., Bhutta, Z. A., Christian, P., de Onis, M., & Ezzati, M. (2016). Maternal and child undernutrition and overweight in low-income and middle-income countries. *Lancet, 382*, 427-451.

Butte, N., Lopez-Alaracon, M., & Garza, C. (2018). *Nutrient adequacy of exclusive breastfeeding for the term infant during the first six months of life.* Geneva: World Health Organization.

Cai, X., Wardlaw, T., & Brown, D. W. (2016). Global trends in exclusive breastfeeding. *International Breastfeeding Journal, 7*(1), 456-462.

Chaudhary, R. N., Shah, T., & Raja, S. (2016). Knowledge and Practice of Breastfeeding. *Pediatrics, 9*(3), 194-200.

Egwuda, L., & Bako, I. A. (2018). Prevalence of exclusive breastfeeding among mothers of infants aged 0-6 moths in Makurdi, Nigeria. *Journal of Biomedical Research and Clinical Practice*, 1-9.

El-Khedr , F., & Lamadah, A. (2016). Biological and sociocultural determinants of successful lactation among women in Eastern Connecticut. *J Am Diet Assoc, 87*, 316-321.

Federal Ministry of Health. (2017). *National policy on infant and young child feeding in Nigeria.* Abuja: Nutrition Division, Federal Ministry of Health.

Gartner, L. M. (2019). Breastfeeding mothers and health practitioners, in the context of privatemedical care in Bangladesh. *Journal of interdisciplinary Health Science, 14*(1), 558-564.

Gebreselassie, T., Rutstein, S. O., & Mishra, V. (2016). *Contraceptive Use, Breastfeeding, Amenorrhea and Abstinance During the Postpartum Period: An Analysis of four countries.* Calvarton, Maryland, USA: Macro International Inc.

Ghana Statistical Service (GSS). (2011). *Ghana Multiple Indicator Cluster Survey with an enhanced Malaria Module and Biomarker 2011.* Accra: Ghana Statistical Service.

Ghana Statistical Service. (2015). *Ghana Demographic and Health Survey 2014.* Accra: Ghana Statistical Service.

Ghana Statistical Service, & Ghana Demographic and Health Survey. (2014). Hyderabad: GSS, GHS, USAID, UNFPA, UNDP, UNICEF.

Joshi, P. C., Agdenmbe, M. R., Das, S. K., Ahmed, S., Faruque, A. S., & Ahmed, T. (2014). Prevalence of exclusive breastfeeding and associated factors among mothers in rural Bangladesh: a cross-sectional study. *International Breastfeeding Journal, 9*(7), 1-8. Retrieved from http://www.internationalbreastfeedingjournal.com/content/9/1/7

Lakati, A., Binno, C., & Stevenson, M. (2018). The effect of work status on exclusive breastfeeding in Nairobi. *Asia Pac J Public Health, 14*(2), 85-90.

Malhatra, N. (2016). Inadequate feeding of infant and young children in India: lack of nutritional information orfood affordability? *Public health nutrition, 16*(10), 1723-1731.

Mogre, V., Dery, M., & Gaa, P. K. (2016). Knowledge, attitudes and determinants of exclusive breastfeeding practice among Ghanaian rural lactating mothers. *International Breastfeeding Journal, 11*(12), 1-8. doi:10.1186/s13006-016-0071-z

Nabunya, P., Mubeezi, R., & Awor, P. (2020). Prevalence of exclusive breastfeeding among mothers in the informal sector, Kampala Uganda. *PLoS ONE, 15*(9). doi:10.1371/journal.pone.0239062

Nukpezah, R. N., Nuvor, S. V., & Ninnoni, J. (2018). Knowledge and practice of exclusive breastfeeding among mothers in the tamale metropolis of Ghana. *Reproductive Health, 15*(140), 1-9.

Odei, J. A. (2016). *Factors associated with exclusive breastfeeding of Ghanaian twins.* Accra: University of Ghana.

Osibogun, O. O., Olufunlayo, T. F., & Oyibo, S. O. (2018). Knowledge, attitude and support for exclusive breastfeeding among bankers in Mainland Local Government in Lagos State, Nigeria. *International Breastfeeding Journa*, 1-7. doi:10.1186/s13006-018-0182-9

Sholeye, O. O., Abosede, O. A., & Salako, A. A. (2015). Exclusive breastfeeding and Its associated factors among mothers in Sagamu, Southwest Nigeria. *Journal of Health Science, 5*(2), 25-31. doi:10.5923/j.health.20150502.01

Tahiru, R., Agbozo, F., Garti, H., & Abubarkari, A. (2020). Exclusive breastfeeding and associated factors among mothers with twins in the Tamale Metropolis. *International Journal of Pediatrics*, 1-9. doi:10.1155/2020/5605437

Tamanna, T., Antora, H. A., & Rahman, A. (2017). *Relationship between child nutritional status with diarrhoea and feeding practice.* Dhaka: University of Dhaka.

Tampah-Naah, M. A., & Kumi-Kyereme, A. (2017). Determinants of exclusive breastfeeding among mothers in Ghana: a cross sectional study. *International Breastfeeding Journal, 8*(13), 88-99.

Tewabe, T., Mandesh, A., Guala, T., Alem, G., Mekuria, G., & Zeleke, H. (2017). Exclusive breastfeeding practice and associated factors among mothers in Motta town, East Gojjam zone, Amhara Regional State, Ethiopia, 2015: a cross-sectional study. *International Breastfeeding Journal, 12*(12), 1-7. doi:10.1186/s13006-017-0103-3

United Nations Children's Fund. (2016). *Seventy years for every child*. Retrieved July 26, 2021, from http://www.unicef.org/nutrition/index_24824.html

Victoria, C. G., Bahl, R., Barros, A. D., Franca, G. V., Horton, S., Kraseves, J., . . . Rollins, N. C. (2016). Breastfeeding in the 21st century: Epidemiology, mechanisms, and lifelong effect. *Lancet, 387*, 475-490.

Wardlaw, T., Salama, P., Brocklehurst, C., Chopra, M., Mason, M., & Lamberti, L. M. (2019). Diarrhoea: Why children are still dying and what can be done. *Lancet, 375*(3), 870-872.

Weimers, L., Svensson, K., Dumas, L., Naver, L., & Wahlberg, V. (2016). Hands-on approach during breastfeeding support in a neonatal intensive care unit: a qualitative study of Swedish mothers experiences. *International Breastfeeding Journal, 1*(1), 224-242.

WHO. (2020). *International code of marketing of breast-milk substitutes.* Geneva: World Health Organization.

World Health Organization. (2018). *Indicators for assessing infant and young child feeding practice.* Geneva: World Health Organization.

APPENDICES

Approval letter

QUESTIONAIRE

Dear Respondent,

We are students of the Holy Family Nursing and Midwifery Training College, Berekum, conducting research on the topic knowledge and incidence on exclusive breastfeeding among nursing mothers of babies aged (7-15 months) at Senase Community, Berekum Municipality Kindly answer the under listed questions by ticking (√**)** the appropriate box or write in the spaces provided. Any information provided is confidential. Your opinion is neither considered right nor wrong. You can choose to withdraw your participation at any time. It will take you approximately 20 minutes to answer the questionnaire

Thank you.

PLEASE TICK [√] THE APPROPRIATE BOX WHERE APPLICABLE.

SECTION A: RESPONDENTS DEMOGRAPHIC DATA

1. Indicate your age …….in years at last birthday
2. What is your marital status? a. Single [] b. Married [] c. Widowed [] d. Separated/divorced []
3. What is your level of education? a. No formal education [] b. primary education [] c. secondary education [] d. tertiary []
4. What is your occupational status? a. Employed [] b. Not Employed [] c. Student []
5. What is your religion? a. Christianity [] b. Islam [] c. African Traditional []

SECTION B: KNOWLEDGE ON EXCLUSIVE BREASTFEEDING

6. What is the recommended duration of exclusive breastfeeding?

   ……..

7. When is breastfeeding initiated?

   ……..

8. Did you practice exclusive breastfeeding?

   ……..

9. How long did you give only breastmilk to the baby?

   ……

10. Can breastmilk be expressed, stored safely and given to the child in times of the mother's absence

    ……

11. What benefit will you get from exclusive breast feeding?

    a. …….

    b. …….

    c. …….

    d. …….

SECTION C: EXPERIENCE OF EXCLUSIVE BREASTFEEDING

12. How long can expressed breastmilk be stored safely at room temperature?

    a. 1-2hour [] b. 2-3hours [] c. 3-4hours [] d. Specify.…….

13. Rate how you were able to mange household chores and exclusive breastfeeding

    a. Good [] b. Average [] c. Poor []

14. Did you encounter any problem during your breastfeeding experience?

    a. Yes [] b. No []

15. If yes, state some of the problems you experienced

    ……

    ……

16. Did you have to adopt any other method aside from been present to feed your baby?

    a. Yes [] b. No []

SECTION D: FACTORS ASSOCIATED WITH PRACTICE OF EXCLUSIVE BREASTFEEDING

17. Was breastmilk sufficient for the baby?

    ……

18. Did you receive support from other family members?

    ……

19. Were you on any medication?

    ……

20. Did you experience mastalgia during breastfeeding?

    ……

21. How long did you rest after delivery?

    ……

22. Were you able to produce enough breast milk to satisfy your baby?

    ……

23. Does short maternal leave affect your chances of exclusively breastfeeding your baby?

    ……

24. Did you have any condition that prevents you from exclusively breastfeeding your baby?

    ……

25. How well did your baby suck your breast?

    ……

26. Were you influenced by a neighbor who does not practice exclusive breastfeeding?

    ……