

ADDIS ABABA UNIVERSITY
COLLEGE OF HEALTH SCIENCES
SCHOOL OF NURSING AND MIDWIFERY

PERCEPTION OF BREASTFEEDING MOTHERS ON BREAST MILK
DONATION AND ESTABLISHMENT OF HUMAN BREAST MILK BANK IN
GOVERNMENTAL TEACHING HOSPITALS IN ADDIS ABABA, ETHIOPIA,
2018

BY: ZELALEM ABDISSA (BSc).

ADVISORS: 1.GIRM SEBSEBIE (BSc, MSc, PhD FELLOW)

2. ENDALEW GEMECHU (BSc, MSc, PhD FELLOW)

A THESIS SUBMITTED TO THE ADDIS ABABA UNIVERSITY, COLLEGE
OF HEALTH SCIENCES, SCHOOL OF NURSING AND MIDWIFERY IN
PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF PEDIATRICS &CHILD HEALTH.

JUNE, 2018

ADDIS ABABA, ETHIOPIA

ADDIS ABABA UNIVERSITY
COLLEGE OF HEALTH SCIENCES
SCHOOL OF NURSING AND MIDWIFERY

PERCEPTION OF BREASTFEEDING MOTHERS ON BREAST MILK
DONATION AND ESTABLISHMENT OF HUMAN BREAST MILK BANK IN
GOVERNMENTAL TEACHING HOSPITALS IN ADDIS ABABA, ETHIOPIA,
2018

BY: ZELALEM ABDISSA (BSc).

A THESIS SUBMITTED TO THE ADDIS ABABA UNIVERSITY, COLLEGE
OF HEALTH SCIENCES, SCHOOL OF NURSING AND MIDWIFERY IN
PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF PEDIATRICS &CHILD HEALTH.

JUNE, 2018

ADDIS ABABA, ETHIOPIA

STATEMENT OF DECLARATION

By my signature below, I declare and affirm that this thesis is my own work. I have followed all ethical principles of scholarship in the preparation, data collection, data analysis and completion of this thesis. All scholarly matter that is included in the thesis has been given recognition through citation. I affirm that I have cited and referenced all sources used in this document. Every effort has been made to avoid plagiarism in the preparation of this thesis.

This thesis is submitted in partial fulfillment of the requirement for a graduate degree from the Addis Ababa University at College of Health Sciences, School of Allied Health Sciences department of Nursing and Midwifery. The thesis is deposited in the Addis Ababa University Digital Library and is made available to local, national and international scientific community. I solemnly declare that this thesis has not been submitted to any other institution anywhere for the award of any academic degree, diploma or certificate.

Brief quotations from this thesis may be used without special permission provided that accurate and complete acknowledgement of the source is made. Requests for permission for extended quotations from, or reproduction of, this thesis in whole or in part may be granted by the Head of the Department or all advisers of the theses when in his or her judgment the proposed use of the material is in the interest of scholarship and publication. In all other instances, however, permission must be obtained from the author of the thesis.

STUDENT

Name: _____ Signature: _____ Date: _____

RESEARCH ADVISORS:

_____	_____	_____	_____
NAME	RANK	SIGNITURE	DATE

_____	_____	_____	_____
NAME	RANK	SIGNITURE	DATE

APPROVAL BY THE BOARD OF EXAMINATION

This thesis by Zelalem Abdissa is accepted in its present form by the board of examiners as satisfying thesis requirement for the degree of Masters in Pediatric Health Nursing

NAME	RANK	SIGNITURE	DATE

External EXAMINER:

NAME	RANK	SIGNITURE	DATE

RESEARCH ADVISORS:

NAME	RANK	SIGNITURE	DATE

NAME	RANK	SIGNITURE	DATE

DEPARTMENT HEAD

NAME	RANK	SIGNITURE	DATE

ACKNOWLEDGEMENT

My deepest and sincere appreciation goes to my advisors Mr .Girum Sebsibie (BSc MSc, PhD Fellow) and Mr. Endalew Gemechu (BSc MSc, PhD, fellow) for their constructive comment and invaluable help from research proposal up to thesis write-up.

I also thank Addis Ababa University School of Nursing and Midwifery for this financial support and writing letter of support that enabled me to communicate with those study teaching Hospital. My special thanks also goes to Black lion Specialized Hospital, St.Paouls Millennium Hospital and Yekatite 12 Teaching Hospital and Black lion Specialized Hospital to give me sponsorship chance to join Addis Ababa University.

Table of Contents

ACKNOWLEDGEMENT	i
ACRONYMS/ABBREVIATIONS.....	iii
ABSTRACT.....	iv
1. Introduction.....	1
1.1 Back ground	1
1.2. STATEMENT OF THE PROBLEM	3
1.3 Significant of the study	4
1.4 Justification included.....	4
2. LITRETURE REVIEW	5
2.1 Mother’s perception on breast milk donation	5
2.2 Perception of mothers on feeding donated breast milk.....	7
2.3 Mother’s perception on breast bank establishment in government Hospitals.....	9
3. OBJECTIVES	11
3.1 General Objectives:	11
3.2 Specific Objectives:.....	11
4. Materials and Methods.....	12
4.1. Study area.....	12
4.2. Study period: February 1-15, 2018.	12
4.3. Study design:	12
4.4. Source population.....	12
4.5. Study populations.....	13
4.6. Inclusion criteria.....	13
4.7. Exclusion criteria.....	13
4.8. Sampling:	14

4.9. Data Collection Tool	14
4.7.1 Operational definition.....	15
4.8. Data quality assurance.....	16
4.9 Data management procedures	16
4.10. Dissemination of the result.....	17
4.11 Ethical consideration.....	17
5. Result	18
5.1 Socio-demographic characteristics of study participants	18
Theme 2: Willingness of mothers to donate breast milk:	27
2.1 Willingness to donate breast milk to help others:	27
2.2 Do not willing to donate breast milk:.....	29
Theme 3: Willingness to use donated breast milk:	30
3.1 Participants concerns to use donated milk:	30
3.2 Psychologically impact:	31
3.3 Fear of safety problem:	31
6. Discussion.....	32
7. STRENGTHS AND LIMITATION OF THE STUDY	37
7.1 Strength of the Study.....	37
7.2 Limitation of the Study	37
8. CONCLUSION and RECOMMENDATION.....	38
9. RECOMMENDATION	39
Reference	40
ANNEX – I.....	43
Annex II	44
ANNEX-III.....	46

ACRONYMS/ABBREVIATIONS

CDC: Center for Disease Control

DHM: Donated Human Milk

EBF: Exclusive Breast Milk

EDHS: Ethiopian Demographic Health Survey

EGF: Epidemic Growth Factors

IGA: Immunoglobulin A

IRB: International review board

MCH: Maternal and Child Health

USA: United State of America

UNICEF: United Nations Children's Fund

WHO: World Health Organization

ABSTRACT

Background:

Human milk is uniquely appropriate to human infant both in its nutritional composition and non-nutritive bioactive factors that promote survival and healthy development. Now a day several well-established breast milk banks exist worldwide to provide donated breast milk, but now when we come to our country, no official breast milk bank or channel for milk donation has been established.

Objective: *The aim of this study is to explore the perceptions of mothers on breast milk donation and establishment of breast milk banks among breastfeeding mothers*

Methods: *Ethnography, Explorative qualitative study, with in-depth semi-structured interview was conducted. Content analysis was performed for data analysis .Participants were recruited through purposive sampling from those mothers coming to well-baby and postnatal clinic appointment.*

Results: *Most of the interviewees were over twenty One years old, of 20 mothers were interviewed about breast milk donation and bank establishment. All study participant were did not have information about both breast milk donation and establishment of bank ever and majority of mothers positively perceive breast milk donation and its bank establishment but some of them not interested about donation and its bank establishment from religion perspective. Most of mothers who participate in this study were interested to use donated milk to their child and some of them were not interested due to the fear of infection, religion and psychologically difficult to use it.*

Conclusion and recommendation : *This study findings shows that all mothers had no information about breast milk donation and establishment of breast milk bank, but majority of them were perceive positively both to donate and its bank establishment and they were willing to donate and use donated breast milk to their offspring but some mother perceive negatively both donation and utilization of breast milk bank in a country from the point of religion concern .So that over all mothers perception was good and government has its own role and responsibility for the achievement of the bank as blood bank.*

Key terms: *breastfeeding, breast milk donation, breast milk bank*

1. Introduction

1.1 Back ground

Human milk is exceptionally right to human child both in its nutritional content and non-nutritive bioactive aspects that encourage ,endurance and healthy development (1).

Mothers' own milk is well thought-out to be the best source of infant nutrition (2). As many research data shows that mother's breast milk contains varieties of bioactive gents that transform the function of the gastrointestinal tract and the immune system, as well as in brain development. Hence, breast milk is widely recognized as a biological fluid required for optimal infant growth and development. Recently many finding elaborate that mother's milk mitigate infant programming of late metabolic diseases especially protecting against type two diabetes (3).

The first fluid produced by mothers after delivery is colostrum's, which is distinctive in volume, appearance, and composition, it is in rich with immunologic component such as Secretary Immunoglobulin (Ig)A, lactoferrin, leukocytes, and developmental factors such as epidermal growth factor (EGF) (4).

According to World Health Organization indorses that infants should be on exclusively breastfed without any supplementary feeding for first six month (5). The American Academy of Pediatrics also commends breastfeeding for one year of life (6). Recently, the Academy of Nutrition and Dietetics confirms and updates their duty that harmonizing breastfeeding delivers ideal nutrition and health protection for the first six months of life, and that breastfeeding with additional foods from six months forward to one year of age is the perfect feeding form for infants (2). Breast milk is not only nutritional value to the child it also many values which is appropriate, cheap, and also is a connecting experience for the mother and infant. The condition to breast feed the new born is it depends on the personal view to feed or not to feed and inclined by many reasons(7).

Now a day worldwide, only 38% of infants are exclusively breastfeed, in the United States, only 75% of infants initiate breastfeeding from birth; however, by the age of three months, 67%, or 2.7 million, of them rely on infant formula for some portion of their nutrition (8).

On December 10, 1948 the United Nations adopted the universal declaration of human rights, Article 25 states that "Everyone has the right to a standard of living adequate for the health and

well-being of himself and of his family, including food, clothing, housing and medical care "Mothers and children are identified as being entitled to special care and assistance(6).

In the early 1980's World Health Organization(WHO) and United Nations Children's Fund International (UNICEF) established that the first alternative, when the mother cannot breastfeed her own child she should use as an alternative donated breast milk (9). For those mothers who can't feed their infant because of health problems expressed breast milk was the best choice from donated one, expressed own breast milk and breast milk from a healthy wet-nurse or human milk bank(15).

The history of human breast milk donation can be traced back to 1909 and the first human milk bank opened in Vienna, Austria (10).

The donors are healthy women in the first semester of their lactation period with milk production higher than her child needs, to be a donor, the mother should undergo a detailed clinical examination, in order to protect her and the recipient's health. Exclusion criteria are smoking, drinking or exciting substances in large quantities, practice risk of communicable diseases, chronic diseases or current use of any medications (11,12). During the first six months of infant life, providing optimal nutrition is critical as the consequences of inadequate nutrition can be very severe. The purpose of this study was to explore perception of mothers on breast milk donation and establishment of human breast milk bank in Addis Ababa Ethiopia.

1.2. STATEMENT OF THE PROBLEM

As many studies show that, mainly absence of exclusive breast feeding is a greater contribution for infant and child mortality. It contributes 45% of neonatal infection, 30% death related to diarrhea 18%, of acute respiratory death. It is realistic that exclusive breast feeding (EBF) can significantly reduce the burden of under-five death in Africa especially Sub Sahara Africa (SSA) where 41% of global, 67 deaths per 1,000 live births in Ethiopian demographic Health Survey (EDHS) 2016 under five death occur due to inadequate breastfeeding practices in combination with high levels of disease (13,14).

Globally infants in under 6 month of age, only 36% are exclusively breastfed. It rarely exceeds 30% in most regions of the developing world given their greater risk of infection and its consequences (15). However, according to a latest nationwide survey, only 34% of Filipino infants younger than six months are exclusively breastfed and an alarming 36% are fed infant formula, 6% increase since the previous survey(16). In India exclusive breast feeding practices has on progress, with only a small increment being recorded in exclusive breastfeeding rates amongst infants 0-6 months of age, 46.3% (17), but according to EDHS 2016 survey 58% of children less than 6 months old are exclusively breastfed but 5% of infants under age 6 months are not breastfed at all(18).

In Addis Ababa ,Ethiopia according to Finance and Economic Development Bureau Population Affairs Coordination Sub process there are 2.7 million population are living ,Women in Reproductive Age (15 – 49 years) 34.53 % from total Population of these Maternal Mortality Rate 543/100, 000 live births & Infant Mortality Rate (< 1 years) 45/1000 this show how much the burden is high(19).

To the best of my knowledge there is no officially established breast milk donation center and established bank in country Ethiopia and there is limited evidence on the perceptions of breastfeeding mothers regarding breast milk donation and breast milk banks. The purpose of this study is thus to explore the perceptions on breast milk donation and establishment of breast milk banks among breast feeding mothers.

1.3 Significant of the study

As stated above the magnitude of exclusive breast feeding from globally to continental and in our country context this study was important now and so that this study would be used to explore the perception of mothers on breast milk donation and use of donated milk for their babies to fill the gaps on exclusive breast milk feeding.

This study would generate some information from the study participant about breast milk donation and establishment of breast milk bank and also enables academic, policy makers and researchers to use the information as spring board for other related studies and also as a reference in their data banks.

1.4 Justification included

The main aim of this study to explore the perception of mother about breast milk donation and establishment of breast milk bank at government teaching Hospital.

Different study reported that conducted in different part of the world shows that as a whole most of the study participant perceive positively but they have gap of information about the subject matter and this influence their perception one study which was conducted in Nigeria show that before and after having information about it mothers perception was quite different so that when we come to this study let me explore their perception and their awareness about breast milk donation and its bank establishment.

2. LITRETURE REVIEW

2.1 Mother's perception on breast milk donation

According to previous studies conducted in Hong Kong on perception of mothers on breast milk donation and establishment of breast milk bank 2015 all respondent agree on the ideas but they recommend that all stockholder give special attention on promotion of exclusive breast feeding and milk donation, information dissemination, police formulation (15). A study in Turkish stated that majority of the respondent (mothers) 71.3% support the establishment of banks. (20). But those mothers we refuse to donate their milk to others state that the risk of disease and inappropriateness in terms of religion as the reason (7). And 38.4% of the mothers in the other study in Turkish stated that they did not found milk banking suitable and 75.4% did not thought of milk donation positively because of the possibility of marrying with milk sibling and 16.9 % did not thought of milk donation positively because of the possibility of disease transmission by way of milk(21).

Another study conducted in Turkish on women's knowledge and views regarding mothers milk banking,36.3% of the mothers perceived religious reason 28.9% perceived social and ethical reasons as obstacle in milk donation (22).A study conducted in Spain shows that most mothers have positive or good motivation to donate breast milk to others but to do so they expect from health workers good attention about it and things become more pledge for them to do so (23).

A study which was conducted in Australia shows that much of the study focus on clinical safety of donate milk and technical processes and not give attention on mothers perception, despite their vital role in milk banking and donation of breast milk(24).

And also study which was conducted in Benin City, Nigeria, A sizable proportion(74.2%) of mothers interviewed were unaware of milk banking. Milk banking is a form of tissue banking just like blood banking, there for many mothers felt more comfortable with blood transfusion than with the use of human donor milk for infants. This may not be unconnected with the lack of awareness as it concerns human donor milk, the study of also showed that the obstacles to the acceptability of donor milk were mainly stemming from lack of awareness/familiarity with the processes around donor breast milk and that these could be readily addressed through health education; and the more psychological concerns would also likely be reduced over time as these educational efforts progress (25).

Most of the study participant 105 (53.0%) were also unwilling to donate breast milk to be used for other babies due to the fact that they disliked the idea (51.4%) and because of fear of not having enough for their own babies (16.2%). While 79 (39.9%) mothers were willing to donate breast milk for other babies' use, 14 (7.1%) were not sure of what they would do. However, most (59.1%) strongly agreed that human milk banking would help assist working mothers, sick mothers, orphans and abandoned babies(25).

In the same study, the majority of the mothers (68.8%) stated that they could donate their milk, if a milk bank was opened. Similar findings were observed in two studies conducted in Turkey (30).

2.2 Perception of mothers on feeding donated breast milk.

A study conducted in USA on human milk sharing practices show that mother's perception was uncomfortable she had fear on the safety of donated milk(26).A study which was conducted in Turkey shows that , 47.5% of the mothers thought of utilizing milk banking in case a condition hindering nursing occurred, whereas 26.7% stated that they would utilize milk banking even if no condition hindering nursing occurred.

In cases where the mother can't breastfeed her baby, the most ideal and nutritious food for the baby is breastmilk and should be preferred to formula. However, wishing to utilize milk banking when there is no condition hindering nursing can be thought of as a state preventing the baby from receiving his/her own mother's breastmilk. This condition may be related with insufficient knowledge of the mother about nursing and the importance of breastmilk and the mother's social and economic conditions (31). Wet-nursing is approved by Islam when breast milk is totally absent or in situations where breastfeeding is contraindicated. There are some controversies over minor issues regarding the absolute or relative contraindications, but Muslim scholars suggest that a woman's milk transmitted in any mode, including suckling, bottle feeding or pouring in the throat or in the nostrils to the stomach of the infant, institutes kinship and bars marriage (32).

A study conducted in South Africa shows that there is challenge to accept and use of donated breast milk, the reason behind is lack of information about the subject matter on it and they were not familiar and these idea is addressed through continuous education to the community on the subject matters (25). But when we see a study conducted in Turkish shows that mothers consider utilization of donated breast milk has cost effect .In regarding health like minimize and necrotizing enter colitis, late onset sepsis and food intolerance, decrease hospital discharge time and environmental pollution(9,10).

A study conducted in University of Benin Teaching Hospital, Benin City, Nigeria of the mothers they were not interested to give donated milk to their babies because of the fear of disease transmission and some of the mothers prefer formula feeding than donated milk (27).

.In this study finding that tradition was not a major reason for unwillingness of mothers to use donated human milk could possibly be explained by the fact that wet nursing is not new to most traditions in Nigeria and it is accepted by the major religions of Islam and Christianity (10). Some of them prefer infant formula. Whereas 26 (13.1%) of the study participant were give

their babies donated human milk, four (2.0%) of them said they do not know whether or not they would (25). In a study by Can et al. 17% of the Turkish women were wet nursing and 14.7% of the women had another woman breastfeed their babies (33). Eksioğlu et al. reported that 8.2% of the mothers had been a wet nurse before Siera-Kolomina et al. found in their study that 5.8% of the women had donated their milk during their previous lactations (34).

2.3 Mother's perception on breast bank establishment in government Hospitals

Despite growing interest and investment in Human milk bank(HMBs) worldwide, fragmented systems and practices, a lack of alignment among HMBs, lack of government and policy support, and other factors often prevent HMBs from reaching their full potential (37).

Human milk banking is most successful in countries where there is policy support and cooperation between health authorities and the milk banking industry. Fostering environments conducive to HMBs through use of standardized quality-control guidelines, effective communication, evidence generation and policy change is thus an essential component of effective newborn care (35).

The International Islamic Fiqh Academy (IIFA) discussed al-Qaradāwī's fatwa in 1985, surprising many with a contrary ruling: "the establishment of milk banks should be prohibited in the Muslim world... it is prohibited to feed a Muslim child from these banks" (36). In 2004, amid continued questioning around utilizing already established milk banks for Muslims living in the West, the European Council for Fatwa and Research (ECFR) revisited the issue and judged that making use of established milk banks was Islamically permitted stating that such usage does not implicate milk-kinship (37). A study conducted in Australia shows that all research participants agree on establishment of breast milk bank and they put their faith on the safety of the donated milk (28).A study conducted in south Africa shows that all the study participant welcomed the establishment of breast milk bank but their perception is dramatically differ before and after they getting information about breast milk donation, how and who donate it who are the recipient of donated (28).A study conducted in Turkish by Mckenezi et alit was shown that all study participant never heard of milk banking or knew that milk banking was present where they lived but it was observed that the majority of the mothers which accounts (71.3%) supported the milk banking(6). And also study which is conducted in Kenya on a title Integrating Human Milk Banking with Breastfeeding Promotion and Newborn Care in 2016 shows that ,Although breast milk donation and milk banking was a new idea to most (74%) of the women interviewed, the majority of the women were positive about the concept(29). And also the study which was conducted in Benin City, Nigeria shows that most of the study participant the awareness of human milk banking and its acceptance among mothers is poor(19).

Replying to the question ‘What kind of HMBs would you like to be established in Turkey?’ nearly half (42.4%) of the mothers said they would not wish for the establishment of any kind of HMB. Only 80 (7.7%) of the mothers in this study expressed views in favor of the establishment of Western-style HMBs in Turkey (38).

3. OBJECTIVES

3.1 General Objectives:

To explore the perception of breast feeding mothers on breast milk donation and Establishment of breast milk bank in government teaching hospitals in Addis Ababa, Ethiopia 2018

3.2 Specific Objectives:

- Explore mothers' perception about breast milk donation
- Explore the mothers' perception on feeding their infant donated breast milk.
- Explore the mothers' insight on breast milk bank establishment at public teaching hospitals

4. Materials and Methods

4.1. Study area

The study was conducted in Addis Ababa, the capital city of Ethiopia, established in 1887 E.C by Emperor Menilik II. The city is divided in to ten sub-cities. Addis Ababa has a total population of 3,194,999 million of whom 1,679,998 are females and the rest 1,515,001 are male according to Addis Ababa Finance and Economics Bureau 2009. The study was conducted in governmental teaching hospitals because of large number of maternal services are given in these hospitals. In Addis Ababa there are 10 Hospitals , 6 of them were under Addis Ababa Administration and 4 of them were under Federal government of this three of them were teaching hospital. Out of these, three hospitals was selected by using purposively.

4.2. Study period: February 1-15, 2018.

4.3. Study design:

Ethnography, Institution based exploratory qualitative study was conducted in three government Teaching hospitals.

4.4. Source population

The source populations for this study was all mothers who are attending post-delivery MCH and well child clinic at the time of study in the Black Lion Specialized Hospital, St.Pauls Millinm Medical College and Yekatit 12 Hospital

4.5. Study populations

All mothers who are attending postnatal and well baby clinic

4.6. Inclusion criteria

- Those mothers who attended postnatal care in the first 6 months in selected health facilities and living in the study district.
- Mothers who had given birth at least 6 months before data collection
- Mothers whose age range of 18 – 49 years.

4.7. Exclusion criteria

- Those mothers who were physically weak and not interested to participate in the study.
- Women below 18 years of age who were not accompanied by their spouse/parent/guardian to give consent
- Women who had observable psychiatric or substance abuse problem.

4.8. Sampling:

The study participants was recruited from those mothers who came to hospital for postnatal follow up and well -baby clinic in selected hospitals and oral information was given about the subject and oral consent was maintained then after individual in-depth interview offered. All women who attended the postnatal clinics was contacted by the ward in-charge to discuss the purpose of the study and elicit their preparedness to partake in the study. Once the women agreed to participate the information was conveyed to them by data collectors for more discussion and possible interview.

4.9. Data Collection Tool

Data was collected through in-depth interviews, Semi-structured interview guides was used. For In-depth Interviews tool was adopted from different literature and modified as the objective of the study. The questionnaire incorporate socio-demographics characteristic, information about breast milk donation, utilization and establishment of breast milk bank.

The questionnaire was prepared in English and then translated by formal translators in to local language then back to English to check for consistency of meaning. Finally the local language version was used for data collection.

Six data collector was deployed after one and half day training on data collection tool and they collect data until saturation maintained. All data collectors was first-degree holders in nursing or public health with previous experience in qualitative data collection.

Permission to use a tape recorder for the interview was obtained from the participants prior to the interview and it lasts 50 to 60 minutes. Principal investigator could facilitate or arrange for interviewer like place for interview, material like tape recorder note book and the likes.

4.7.1 Operational definition

Perception; defined as what the mothers now and think about breast milk donation or sharing to the others.

Positive perception: those mother who support the idea of breast milk donation and bank establishment.

Negative perception: those mothers who can't support the idea of breast milk donation and bank establishment.

Awareness: those mothers who have information about breast milk donation and bank establishment from any source of information.

Breast milk donation: it is the process of giving or sharing breast milk to those in need of mother's milk due to medical or social problem.

Breast Milk Bank: It is medical institution were donated milk is stored and processed and distributed to those in need of it

Exclusive breastfeeding: refers to when infants are not given any other food or liquid including water during the first six months after delivery.

Altruism: the fact of caring about and the needs & happiness of others people

4.8. Data quality assurance

The open ended questionnaire was translated first into local language and back to English to assure its consistency.

The questionnaire was pre-tested on breast feeding mothers of Adama Referral Hospital on January 1, 2018. To assess for clarity of questions, their sensitiveness as well as understanding of the study subjects about the questions. Discussion was held with advisor, principal investigator and data collectors, based on the result of the pre-test and accordingly, some amendments will be made. Three days training was given to the supervisors and data collectors on the procedure and how they handle sensitive questions. In addition to assure the quality of data: Supervisors and data collectors was selected based on their abilities and skills how to collect qualitative data. All data collectors was encouraged to have a field work diary to put all the notes of the field work for latter consideration.

4.9 Data management procedures

This exploratory qualitative inquiry was analyzed using content analysis. The verbatim transcribed note would be translated from Amharic back to English. Following this, coding was done using different themes and categories and those developed during translating and reading the transcript. After initial identification of themes of each interview, the themes that prerequisite further inquiry were recognized and debated with adviser. These consultations helped to guarantee that the themes were associated to the result trail and facilitated to refine the themes. The themes in each interview were compared to one another, and commonalities and differences were identified.

Researcher was identified and holding in any preconceived beliefs and opinions that might have about the phenomenon being researched. Next to this understanding data coding be done. After this analysis of data that include coding, categorizing and making sense of the essential meanings of the exploration was done. Researcher was come to understand and describe the phenomenon. Results could be written by reorganizing, summarizing and quoting when needed.

Supervision was made by the principal investigator, by observing how data collectors were conducting in-depth-interview. At the end of each day interviewers submitted all audio recorded to principal investigator. The researcher try to recheck over the night recorded data by listening

and transcribing the recorded data whether it address the themes to answer set objective or not and take corrective action for the next day interview.

4.10. Dissemination of the result

At the end of the study, study findings was presented to Addis Ababa University College of health Sciences, department of Nursing and Midwifery and copy of paper submitted to all institution were study was conducted and also Federal Ministry of Health for policy formulation. Then, the research paper to be presented on the national and the international symposium.

4.11 Ethical consideration

Ethical clearance for the study was received from Addis Ababa University, College of Health Sciences, Department of Nursing and Midwifery. A formal letter was written to all concerned authorities and permission was secured at all levels. Consent from the study subjects was taken from the lactating mothers after explaining the purpose and procedure of the study.

Audio tape recording of the in-depth interview was made after getting informed consent from interviewees. Participation in the study could be voluntary and information that was collected from the study subjects were kept confidential starting at the time of data collection by following data collection procedure

5. Result

5.1 Socio-demographic characteristics of study participants

In this study a total of 20 mothers were interviewed about the bank establishment. The participants' age was ranges from 21-37 years. Of the total about 19 mothers were live with their husbands. One mother is divorced with her husband. The participants had 3 children on average. Regarding to the educational back ground it ranges from no to write and read to MSc. Out of the total participants 12 (6 private and 6 government) respondents were formally employed. The majority 8 of participants were house wife. About all of the study participants were followed antenatal care and they gave delivery at health facility.

Table 1: Shows socio-demographic characteristics of study participants in Black Lion Specialized, St. Pauls Millennium Medical Teaching and Yekatite 12 Teaching Hospital, Ethiopia Addis Ababa, 2018

Characteristic	Number (N= 20)	Percent
Age in group		
15-19	0	0
20-24	3	15
25-29	11	55
30-34	5	25
35-39	1	5
40-44	0	0
45-49	0	0
Marital status		
Married	19	95
Divorced	1	5
Educational Level		
Illiterate	2	10
Primary	6	30
Secondary and above	12	60
Number of children		
One	9	45

Two	4	20
More than two	7	35
Prenatal care		
Yes	20	100
No	0	0
Family income		
Less than 3500	14	70
From 4000-10000	5	25
Greater than 10000	1	5
Occupation		
Employed independently	6	30
Employed at government institution	6	30
Not employed	8	40

Table 2. Knowledge (Awareness), Perception and Willingness to donate and to use donated breast milk in Addis Ababa 2018.

Themes	Categories	
<i>Theme 1: Awareness and perception of breast milk bank establishment</i>	1.1 Awareness about breast milk bank 1.2 perception of breast milk bank establishment	
<i>Theme 2: Willingness of mothers to donate breast milk</i>	2.1 willing to donate breast milk to help others <ul style="list-style-type: none"> • Helping one others (Altruism) • Sense of belonging • Excess milk secretion 2.2 Do not willing to donate breast milk <ul style="list-style-type: none"> • It is not enough to donate • Psychologically difficult to donate • Religion concern to donate breast milk for others 	
<i>Theme 3: Willingness to use donated breast milk</i>	3.1 Use freely without any concern 3.2 Psychologically difficulty to use donated milk 3.3 Fear of safety problems	

Thame1: Awareness and Perception of breast milk bank establishment

This explorative study findings shows that all study participants did not have knowledge about breast milk bank. They said “this information is new to us and yet not practiced in our community”. Study revealed that despite poor knowledge about breast milk bank, majority of the study participants had perceive good for the subject matter it if we will have in future in our country about the breast milk bank establishment and donation of breast milk to the bank. Whereas some of Muslim religion follower perceived negatively breast milk donation and utilization of donated one, they reason out relating with Holy Quran. They said that “Quran teach us in case the situation must to use others mother breast milk the donor should be knowns since both children become kin-ship to each other so that it is difficult to accept it. Therefore all participants do not know the idea of breast milk bank at all”.

Category 1.1 Awareness of breast milk bank:

All study participants who were healthy and able to feed breast milk their child during data collection were participated in in-depth interview. They did not get any information from any sources about breast milk bank but almost all of participants surprised about the idea of breast milk bank establishment and they had interest to have the awareness how the bank will perform the activity, some of compare it with blood bank regarding to the implementation in the country .

One participant impressed about it and she asked data collectors “*does milk bank exist?*” P₁₁.

Some of them “*reported that it should not only for graduation purpose, it should be implemented in to practice in our country*” p 7, 15. Participants reported that now a days things are become difficult as the result of the impact of HIV/AIDS on the life of many people. A number of children lost their family due to cross infection and maternal death at the time of delivery. All those children who lost their family due to different factors had no option rather than formula feeding. Interviewees said that “*we are so lucky if we to had breast milk bank so that go forward for its implementation strongly do not do it for graduation only*” P.6, 10.

Participants pointed their fear concerning the culture, religion and social norms since the idea was new. Of the total participants almost all of them pointed that the bank will benefit most of

children and save their healthy life. Majority of respondents had interested to the establishment of breast milk in the country.

Category 1.2 Perception of mothers about breast milk bank establishment:

Out of 20 total participants, majority (19) of them were perceived positively the establishment of breast milk bank, they perceived the idea from different point of view and happy since they got alternative to feed their child if the difficult situation may happen for a mother who give birth to feed their child and unable to feed because of medical condition, death of mother during child birth and many other factors may happen and result in problem of feeding breast milk. *“If one mother lost her life during child birth what will be the fate of offspring survival? The establishment of bank will support those child who can't get breast milk due to different factors. Particularly if the rest of family cannot afford to purchase formula feeding in the case of mother died during giving birth this will end up with poor healthy life of the child and even the death of the child. The tragedy may result in painful psychological trauma to the whole family throughout their life span. Breast milk establishment in our country may solve like this tragedy in the community at all”* interviewee 7, 13, 15 and 19.

Some of participants view the idea as a solution for those mothers who had financial constraint to purchase and feed formula. Interviewees said that *“wegen new lewegen derash”* *“people for people to save the life and make happy child age and healthy life of new comers to this world”* P₈, 15 and 17.

Breast milk establishment may resolve this issue for employed mothers. *“Not only saving the income and time but also it has great advantage for the future healthy life of the child”* p₁, 12 and 14.

Some mothers reported that the establishment of breast milk bank in the country will be play avital importance in the future generation through making healthy life span of the victim and saving the life of many children by giving an alternative option to feed the offspring. *“The establishment of breast milk bank is vital to have happy and healthy generation in the future”* p₆, 17 and 18.

This study revealed that out (20) of the total participants, majority (19) of respondents had positive perception on the establishment of breast milk bank in the country. Even though the majority of respondents had positive idea of the bank establishment, one mother from Muslim religion follower not accept the idea of breast milk bank establishment and breast milk donation

the reason behind was the doctrine of here religion did not support such practice. The interviewee pointed *“her religion does not support such practices. “She stated that child who feed breast milk from one mother considered as kin-ship for each other. For this reason they cannot marry each other in their life. According to our religion children’s who feed milk from one mother considered as close relatives for each other. For this reason, I never accept the establishment of breast milk bank ‘P₁*

Category 1.3 Religion concern on breast milk bank establishment:

The study participant has different concern about religion on breast milk donation and breast milk bank establishment, majority of respondents said that religion does not interfere on the establishment, donation and use of donated milk rather tradition and cultural barrier play it part to exercise it .Since the practice of breast milk sharing was there in our community before but now a day due to flourishing of HIV this practice were not yet practice therefor it may face challenge from the community. Where us others had neutral idea and others pointed that no, religion support or decline the idea of bank establishment directly or indirectly.

Christian religion follower mother perceive positively about both donation and establishment of breast milk. The reason they gave for this was the Holy Bible teach doing good for others is good so that donation of breast milk is doing good for those in need of it. One mother told me about the “history of Moses from the Holy bible he was born in Egypt at that time the ruling government pass declaration throughout the country that if male born kill him immediately but if female leave her but Moses was handsome and it was difficult for them to kill him and they leave it but his mother through it on the river suddenly the Son of the king see him and she was took to her home then she found someone who care of him giving breast milk so that what we understand her is it is possible giving one other breast milk for children was possible in Holy Bible “ therefore we support the establishment and donation of breast milk bank.

The majority (13) of participants said that *“our scripture teach us do good thing for your brother and sister on the daily basis. Since establishing breast milk is doing good thing to make healthy and save life of the victims”*P5, 9&11.

Other respondents stated that breast milk bank provide service to the victimized child without any precondition. Whether the victims are block or white poor or prosperous in their life.

*“So I agree of the establishment. The scripture teach me to do good for human being without considering any base line. Thus religion and the establishment of breast milk bank potentiate each other rather than contradicting to each other. So collecting breast milk from the donor and distribute it for the user and keeping it in a save way is crucial practice to have happy, healthy and save the future generation”*P12.

When we see a numbers of Muslim religion follower mothers were not interested on the donation and establishment of the bank, the reason behind is that breast milk donation in contrary to the Holy Quran.

Quran teach us if two children feed from the some mothers' milk they are sister and brothers to each other so that it is difficult on their marriage, but some of them were perceive it positively and they are willing to donate and utilize donated milk to their children. One participant deny the establishment of the bank due to her religion and she pointed that "*in Muslim religion breast milk bank establishment is against the rule of religion*" P₁. In contrary to this, some of them where from the same religion back ground positively agreed the establishment of breast milk bank. Interviewees said that "*this is "HIRE". This is Arabic word which meant doing well for human being*" P_{10, 11}

Muslim religion doctrine teach their follower about the religion main concept on breast milk shearing, to shear breast milk to others they now each-others since both child kin-ship to each other's. The doctrine said that to be kin-ship they shear fore two year but when we see banked milk not fill this criteria so that they support the donation and establishment of bank in a country.

From this the head of Muslim religion support breast milk donation and establishment of bank and they are interested to teach their follower about donation and utilization of donated one.

Theme 2: Willingness of mothers to donate breast milk:

Regarding to the donation of breast milk participants had responded from perspective, the majority of them felt the idea positively *“No to be see donation as simple as other donation, because I am making somebody healthy, happy and saving the life of his/her. Donating breast milk means helping others whose his/her mother badly victimized by poor medical condition or lost her life”*P16. Doing this practice, the country will be benefited through economically and politically through, producing healthy life of future generation, but one participant strictly disagreed to donate the milk. She said *“I had the religion concern to donate the milk”* P₁.

2.1 Willingness to donate breast milk to help others:

Breast milk donation was not such simple but it is great things to do so but some interviewees were not comfortable to donate it they reason out we are not familiarized before culturally and traditionally not yet practiced. Since the raised issue was new for them all of the respondent impressed about it. When she interviewed about breast milk donation and *“she node her head and she said “hi.....m”* P₅and 17. Other participants said that this is doing well for somebody. She pointed that *“some mothers have sufficient breast milk above enough amount for her offspring. Rather than wasting this sufficient amount donating it and helping other is blessing”* P_{2, 8, 19}and 20.

They showed full willingness to donate the milk for victimized new comers to this world. Other participants concerned with her husband willingness to donate it. *“She said if my husband allowed me to donate I will do it definitely”*P₁₁ and₁₃.

Helping one others (Altruism)

Most of the time, mother faces challenge at the time of birth and even death in such scenario the new born face challenge to get breast milk. So that if there is milk bank I will donate milk to the bank to support them *“She has positive attitude to donate it she said that “wegen new lewegen derash” roughly translated that we are responsible to support each other in any circumstances “P8.*

If that child is my child (sense of belongings):

The respondent was not simply understand breast milk donation as giving of breast milk to the bank rather she put once Owen child in the place of those child and she imagine what will happen to them? So that what I feel about them makes me volunteer to donate breast to the bank.

Another respondent said that when you do something you always do it in order to do for your Owen business not considering it as a rule of give and take you don't know who benefited from it. *“What will happen to my child if the problem face me at the time of delivery? What the fate of my child so I think of it like this”P19.*

Excess milk secretion:

From the study participant some of them consider such option as a good opportunity if the bank established in a country to donate breast milk to the bank since I have excess milk production which was excess to my child ok *“when I feed my child one of it the other one leak out and sock my clothe so it is miss used but if there is bank nearby I will donate and those in need of it used and generation will be saved “P9.*

2.2 Do not willing to donate breast milk:

Different people have different opinion and different point of view when they respond to the question of breast milk donation, majority of them were happy and they are ready physically and psychologically to donate breast milk to the bank if it were available in country but some participants concerned their husband willingness to donate the milk.

It is not enough to donate:

Those respondent who are not willing to donate breast milk to the bank gives their own reason but how much their reason is true or not it is difficult to test other than accepting their reason as it is now she said may breast cant secret enough milk to my child so that I use formula feeding, it is too coasty to buy and to use it but if such bank exists I prefer it on first option and I will advise everybody to use it ok. *“Am not willing to donate milk to the bank because naturally I do not have enough milk for my own child “P16.*

Psychologically difficult to donate:

Some of the mother was not willing to donate breast to the bank, the reason why she was not cooperative to donate it is difficult Psychological since the idea new for me and have no ever experienced yet. To do something psychological preparation needed so that am not ready to do so she said but what she stress here awareness creation with in community is very crucial use mass media written material with in community. *“Am not ready to answer the question the reason is that to donate milk it need psychological preparation“P13.*

Theme 3: Willingness to use donated breast milk:

Breast milk is the first food for children, composed of important nutrients that help to protect the child from disease and support the healthy growth of the child. Providing the child right composition and proper nutritional composition positively had effect on the healthy and growth of the child. Since the child had right to get breast milk, it is not the option rather than obligatory practice. *“Rather than providing formula feeding for my child I prefer breast milk”*P12. Majority of the respondents were interested to use donated milk to their children. Some respondents said that *“she prefer donated breast milk rather than feeding formula when she face less breast milk production naturally”* P₁₆and₁₇. Others preferred donated milk if they face medical problem to feed their child rather than formula feeding alone to make their child happy and healthy life. Interviewees pointed that *“formula feeding alone is not enough for my child rather I preferred to use it as a supplementary food”* P6, 19&20.

3.1 Participants concerns to use donated milk:

Some of the interviewee’s respondents reported that without any concern and confidently use the donated milk. They were not concerned about its safety since they take it from the institution which is responsible for the donated milk safety. *“I do not bothered about the safety since the institution develop the safety procedure of donated milk”* P19.

Majority of the participants preferred donated breast milk feeding to their child for its nutritional content but they have concerned about the practicability and behavior of other community to bring the issues to practice. Other participants concerned about the feeling of their husbands regarding to the breast milk bank. Some of the respondents were concerned about their husband willingness to use the donated breast milk for their child. Participants pointed that this question should address their husbands and want to have discussion with their husbands to decide to use donated breast milk for their child. She said that *“since the child is belongs to me and my husband, to decide to use or not the donated breast milk I should have discussion about it with my husband So I suggest that to initiate about the issue in my home you should entertain my husband with the same questions”* P11&15.

3.2 Psychologically impact:

This explorative finding shows that of the total participants (2) respondents were not interested to use donated breast milk to their child. Respondents said that *“it is difficult to accept it psychologically to practice something which is not familiar with in the community”* P17. One interviewee reported that *“Psychologically it is difficult to feed other mothers breast milk”* P1.

3.3 Fear of safety problem:

From the study respondents about (7) mothers were concerned the safety of donated breast milk to provide it for their child. These participants said that *“I use it but I do not know the health status of the mothers who donated the milk to the bank”*. Now today's there is high HIV rate in the community. HIV can infect my child through this donated milk. She said it is not only her fear but also it is the fear of other mothers. She said to be safe the government should screen the donor's status of HIV before collecting the milk for the bank. If HIV status of the mother who donate the milk is screened and confirmed as she free from HIV I will use the donated milk and advise my friends to use to” interviewee 8. Some other participants concerned that using donated milk is not familiar in the community where they are living. Participants suggested that *“it needs more community awareness and behavioral change in order to use freely without of any fear of safety concerns”* P10.

6. Discussion

The main objective of this study, to explore the perception of breastfeeding mothers on breast milk donation and establishment of human breast milk bank in governmental teaching hospital.

Now when we see the result of current study all mothers who participated in this study were does not have information about the breast milk donation and establishment of breast milk bank ever this shows it is in contrary to other study conducted in different country so that health institution have responsibility in order to create awareness with in community using different methods like mass media ,written materials and social media but before doing all they should have knowledge about the subject through training and short course ,according to the study conducted in Spain Granada most of the study participant got information about breast milk bank from hospital at time when they come to give birth and postnatal ward, use written material and different teaching methods like dream and recorded video, another study conducted in Hong Kong on perception mothers can receive information about breastfeeding and breast milk donation from a total ten breastfeeding mothers and healthcare professionals enriched their own knowledge using qualitative descriptive study mothed (15) ,among the mothers 41.6% were aware of milk banking and the majority (85.7%) learned this from the media (37), Another a study conducted in Austral on mothers Knowledge of and Attitudes toward Human Milk Banking using explorative mothed using twelve breast feeding mothers, some participant never heard about it from any source of information and most of them has, got information from different information source, including social and family networks, the American breast Association (ABA), social media, and midwife those mother got full information all about the bank and donation when they donate, how they donate, for whom they donate and how it proceed the donated milk before it reached to the recipient (6).

A study which was conducted in Turkish women's knowledge and views regarding mother's milk banking using descriptive research mothed of 350 breastfeeding mothers who comes for different health service and volunteer to participate in the study ,it indicates that a majority of women lack information about mother's milk banking. After they have been provided with information about mother's milk banking, most of the women stated that they wanted this application in Turkey (38). In this study, majority of the participants, were perceived positively the establishment of breast milk bank, they perceived the idea from different point of view on the

establishment of the bank in the country. Respondents report that they were very happy to have alternative feeding option to their child if they are unable to feed their child due to different factors but they show their fear regarding to its establishment it may be government become reluctant to implement it therefore this study in line with other study conducted in different country.

According to previous studies which was conducted in Hong Kong on perception, shows that all study participant's expressed highly acceptance of breast milk donation and the establishment of breast milk bank they suggested that its establishment and development should be announced to the public to gain their attention, study which was conducted in Spain Granada shows that Experiences of human milk donation in Andalucía-Spain: descriptive a qualitative study methods using seven breast milk donating mothers and participants was very interested to have breast milk bank and they themselves request the implementation of more HMB units(23). A study conducted in South Australia on Mothers' Knowledge of and Attitudes toward Human Milk Banking, study suggest that the establishment of a milk bank in South Australia would be well received, provided that a range of practicalities is addressed to make donation and receipt as easy as possible for mothers (39).A study which was conducted in Turkish on mothers' views of milk banking, It was observed that the majority of the mothers supported milk banking and another study in Turkish ,It was reported that mothers thought of milk banking positively with the thought that breastmilk was an important food for the baby and it should be preferred to formulas (10).

In the current study participant has different concern about religion on breast milk donation and breast milk bank establishment so that the study inline to other study. Majority of respondents said that religion does not interfere on the establishment of bank and breast milk donation and use of donated milk. Where us others had neutral idea and others pointed that no, religion support or decline the idea of bank establishment directly or indirectly, Christian religion follower mother perceive positively about both donation and establishment of breast milk whereas Muslim religion follower mothers negatively perceive that breast milk donation and establishment of breast milk bank but both of them give their own reason by referring there Holy Bible and Holy Quran teaching doctrine, but some of Muslim religion follower were perceive it positively and they are willing to donate and utilize donated milk to their children this shows that

it need farther and detail study on the area, the International Islamic Fiqh Academy (IIFA) discussed al-Qaradāwī's fatwa in 1985, surprising many with a contrary ruling: "the establishment of milk banks should be prohibited in the Muslim world... it is prohibited to feed a Muslim child from these banks" In 2004, amid continued questioning around utilizing already established milk banks for Muslims living in the West, the European Council for Fatwa and Research (ECFR) revisited the issue and judged that Making use of established milk banks was Islamically permitted stating that such usage does not implicate milk-kinship (36,37). A study conducted by Mohammed Ghaly on milk banks through the lens of Muslim scholars has two concept some of scholar, religious reservations were raised, these reservations were based on the concept that women's milk creates 'milk kinship' believed to impede marriage in Islamic Law, the second context led to accepting this system and thus allowing Muslims living in the West to donate and receive milk from these banks (32). In the current study the participants were support breast milk donation but they give different reason for donating breast milk to the bank some of them it is helping other is so good, some of them if this happen to me what is the fate of my child and some of them since I have excess milk secretion .

A study which was conducted in Spain Granadia support this idea Experiences of human milk donation in Andalucía-Spain: a qualitative study they were willing to donate breast milk to the bank Another issue pointed out by the donors, and that makes them appear more sensitive to donating milk is put themselves in the place of mothers who experience difficulties breastfeeding their children, and even the thinking that this might occur to them in the future and the second most cited reason is excess milk production, when they realize that they can make a good use of the extra milk and avoid loss (23), In studies of Francia and USA mothers who had breast engorgement were led to donate their milk guided by health professionals (23).

In this study some of the respondent were not willing to donate breast milk, they give their own justification why they were not willing to donate therefore the study In line with other study , but how much their reason is true or not it is difficult to test other than accepting their reason as it is now she said may breast cant secret enough milk to my child, others said it is psychologically difficult to do so and my husband not interested to donate it, others due to religion wise, when we see others study the almost they gave similar reason it need farther study what the husband said about it but study in Spain shows that what the study participant put as barrier to donate

breast milk is that, Lack of knowledge of other health professionals, distance from the milk bank and reduction of milk by the process of breastfeeding itself (23), study conducted in Turkey on mothers' views of milk banking shows that, the mothers who did not wish to donate their milk stated the risk of disease risk and inappropriateness in terms of religion as the reasons(30). Similarly mothers in the study of Aykut et al. (31) stated that they did not find milk banking suitable, did not thought of milk donation positively because of the possibility of marrying with milk sibling and did not thought of milk donation positively because of the possibility of transmission of disease by way of milk. According to the study of Gürol et al. (37), of the mothers perceived religious reasons and perceived social and ethical reasons as obstacles in milk donation. In countries in which the majority of the population are Muslims breastmilk banking is not encountered frequently as it is in western countries, probably because of concern of marriages between milk siblings that is forbidden in Islamic religion (32).

In this study the study participants' had different opinion on the utilization of donated milk to their child , breast milk is the first food for children, composed of important nutrients that help to protect the child from disease and support the healthy growth of the child. Providing the child right composition and proper nutritional composition positively had effect on the healthy and growth of the child. Since the child had right to get breast milk, it is not the option rather than obligatory practice, of the total interviewees 8 respondents reported that without any concern and confidently use the donated milk, of the total respondents about 2 of mothers were concerned about their husband willingness to donate and use the donated breast milk for their child, of the total participants 2 respondents were not interested to use donated breast milk to their child, Of the total respondents about 7 mothers were concerned the safety of donated breast milk to provide it for their child, but some of them have fear of cross infection, some of psychologically difficult and only 2 mothers said that we never use due to religion perspective they share the same concern with other study , a study which was conducted in USA on human milk sharing practices show that mother's perception to use donated milk was uncomfortable, their fear is on the safety of donated milk(20,26& 27). A study which was conducted in Turkish shows that use of donated breast milk has cost effect in all regarding health like minimize necrotizing enterocolitis, late onset sepsis and food intolerance, decrease hospital discharge time and environmental pollution(9),10).

A study conducted in Turkey shows that, of the total half of the mothers thought of utilizing milk banking in case a condition hindering nursing occurred, whereas one third of the total study participant stated that they would utilize milk banking even if no condition hindering nursing occurred. In cases where the mother can't breastfeed her baby, the most ideal and nutritious food for the baby is breastmilk and should be preferred to formula. However, wishing to utilize milk banking when there is no condition hindering nursing can be thought of as a state preventing the baby from receiving his/her own mother's breastmilk (30). A study conducted in department of Child Health, University of Benin Teaching Hospital, Benin City, Nigeria to determine perception of mothers about breast milk banking using quantitative research of 198 mothers who brought their babies to Well Baby/Immunization Clinic, only 51 (25.8%) of them had heard of breast milk banking; source of information being mainly from health workers (43.1%) and from friends (27.5%)(39).

7. STRENGTHS AND LIMITATION OF THE STUDY

7.1 Strength of the Study

- ❖ This study put some ground for the others researcher to explore farther on mothers perception on breast milk donation and establishment of bank in country.
- ❖ This study use qualitative research mothed to generate hypothesis about mothers' perception on breast milk donation and bank establishment.

7.2 Limitation of the Study

- ❖ This study uses small number of study participants from a single city.
- ❖ Large sample size with mixed research approaches recommended to explore the perception of mothers and their husband to establish breast milk bank as well as the use and donate the milk to the bank in different cities of Ethiopia
- ❖ This study does not address husbands

8. CONCLUSION and RECOMMENDATION

This finding is promising and could be used to develop some strategies in order to promote and support human milk donation and establishment of bank in Ethiopia in future. Now this study finding shows that the study participant all of them does not have information about breast milk donation and breast milk bank ever from any source of information source so that, as recommend all stockholders have responsibility to deliver information to the community.

Most of the study participant mothers were positively accept the idea but some of them were refuse it .from this we conclude that Cristian religion fallowers were all of them accept the idea positively from the religion point of view it is no contradiction.

Majority of mothers who participate in this study were willing to donate and use donated milk to their child if it is available in country but some of them not due to fear of child kin-ship but some of them donate if their husband willing and some of them not willing to donate milk due to religion concern which is not supported by their religion and am trying to ask the scholar of the religion to be two children become kin-ship they feed the some mother for at least two year and they support breast milk establishment.

They are willing to teach their religion follower about breast milk donation, utilization donated milk and bank establishment in a country.

Finally some of study participant prefer donated milk instead of formula one from economic perspective and nutritional but still fear of safety and unfamiliarity with the idea to accept it. Health professional and professional association have a responsibility to create awareness about the subject especially when mothers come to clinic for ANC care about breast milk donation and utilization donated breast milk to their child.

9. RECOMMENDATION

For policy makers

- ❖ Policy makers have to be consider to set policy that address establishment of breast milk bank
- ❖ In the setting of policy process the women those have financial problem have to be considered to get without payment
- ❖ Policy makers use it to analyze pros and cons of breast milk bank establishment in a country.

Federal Ministry of Health

- ❖ FMOF have to work with government, non-government organizations and religion leaders collaboratively to introduce the bank in the country
- ❖ Public awareness creation of breast milk bank donation and utilization for the community through mass media.

For government

- ❖ The government has responsible on the introduction of breast milk bank in the country.

For health care providers

- ❖ All health care professional have the knowledge of the subject and teach mothers about donation and establishment of bank
- ❖ Health care provider give education at the time of ANC fellow up for those mother about breast milk donation and utilization of donated one.

For researchers

- ❖ Further research using the mixed research approach with large sample size in different cities of Ethiopia could be conducted to explore the perception of breast milk bank establishment of mothers with their husbands.

Reference

1. Oftedal OT. The evolution of milk secretion and its ancient origins. *Animal*. 2012;6 (3):355-68.
2. Lessen R, Kavanagh K. Position of the academy of nutrition and dietetics: promoting and supporting breastfeeding. *Journal of the Academy of Nutrition and Dietetics*. 2015;115 (3):444-9.
3. Savino F, Benetti S, Liguori S, Sorrenti M, Cordero Di Montezemolo L. Advances on human milk hormones and protection against obesity. *Cell Mol Biol*. 2013;59(1):89-98.
4. Khan AM, Kayina P, Agrawal P, Gupta A, Kannan AT. A study on infant and young child feeding practices among mothers attending an urban health center in East Delhi. *Indian journal of public health*. 2012;56(4):301.
5. Martin CR, Ling P-R, Black burn GL. Review of infant feeding: key features of breast milk and infant formula. *Nutrients*. 2016;8(5):279.
6. UN GA. The United Nations Universal Declaration of Human Rights. 2017.
7. Kozhimannil KB, Jou J, Attanasio LB, Joarnt LK, McGovern P. Medically complex pregnancies and early breastfeeding behaviors: a retrospective analysis. *PLoS One*. 2014;9(8):e104820.
8. Kent G. Regulating the Nutritional Adequacy of Infant Formula in the United States. *Clinical Lactation*. 2014;5(4):133-6.
9. Grøvslien AH, Grønn M. Donor milk banking and breastfeeding in Norway. *Journal of Human Lactation*. 2009;25(2):206-10.
10. Mackenzie C, Javanparast S, Newman L. Mothers' knowledge of and attitudes toward human milk banking in South Australia: a qualitative study. *Journal of human lactation*. 2013;29(2):222-9.
11. Chang F-Y, Cheng S-W, Wu T-Z, Fang L-J. Characteristics of the first human milk bank in Taiwan. *Pediatrics & Neonatology*. 2013;54(1):28-33.
12. Román SV, Díaz CA, López CM, Lozano GB, Hidalgo MM, Alonso CP, editors. Puesta en marcha del banco de leche materna donada en una unidad neonatal. *Anales de pediatría*; 2009: Elsevier.
13. Organization WH. Learning from large-scale community-based programmes to improve breastfeeding practices. 2008.

14. organization WH. Global Health Risks-Mortality and burden of disease attributable to selected major risks. *Cancer*. 2017.
15. Alencar LCEd, Seidl EMF. Breast milk donation: women's donor experience. *Revista de saúde pública*. 2009;43(1):70-7.
16. Sobel HL, Iellamo A, Raya RR, Padilla AA, Olivé J-M, Nyunt-U S. Is unimpeded marketing for breast milk substitutes responsible for the decline in breastfeeding in the Philippines? An exploratory survey and focus group analysis. *Social science & medicine*. 2011;73(10):1445-8.
17. Arnold F, Parasuraman S, Arokiasamy P, Kothari M. Nutrition in India. *National Family Health Survey (NFHS-3) India 2005-06*. 2009.
18. Jamro B, Junejo AA, Lal S, Bouk GR, Jamro S. Risk factors for severe acute malnutrition in children under the age of five year in Sukkur. *Pakistan Journal of Medical Research*. 2012;51(4):111.
19. Yohannes A. The effect of School Feeding Program on the school performance of primary public school children in Arada Sub City, Addis Ababa: Addis Ababa University; 2017.
20. Fasterling B, Demuijnck G. Human rights in the void? Due diligence in the UN guiding principles on business and human rights. *Journal of Business Ethics*. 2013;116(4):799-814.
21. Smulders M, Jouanin A, Schaart J, Visser R, Cockram J, Leigh F, et al., editors. Development of wheat varieties with reduced contents of celiac-immunogenic epitopes through conventional and GM strategies. *Proceedings of the 28th meeting of the Working Group on Prolamin Analysis and Toxicity*; 2014.
22. Sobel H, Iellamo A, Raya R, Padilla A, Olivé J, Nyunt-u S. Is unimpeded marketing for breast milk substitutes responsible for the decline in breastfeeding in the Philippines? An exploratory survey and focus group analysis. *Midirs Midwifery Digest*. 2012;22(2):243-4
23. Machado RdS, Campos Calderón CP, Montoya Juárez R, Schmidt RioValle J. Experiencias de donación de leche humana en Andalucía-España: un estudio cualitativo. *Enfermería Global*. 2015;14 (37):114-24.
24. Donath SM, Amir LH. Maternal obesity and initiation and duration of breastfeeding: data from the longitudinal study of Australian children. *Maternal & Child Nutrition*. 2008;4(3):163-70.

25. Abhulimhen-Iyoha B, Okonkwo I, Ideh R, Okolo A. Mothers' perception of the use of banked human milk for feeding of the infants. *Nigerian Journal of Paediatrics*. 2015;42(3):223-7.
26. Coutsoudis I, Petrites A, Coutsoudis A. Acceptability of donated breast milk in a resource limited South African setting. *International breastfeeding journal*. 2011;6(1):3.
27. Bodnar M. Breastfeeding with the Bronson Mothers' Milk Bank. 2015.
28. Carroll K, Herrmann K. Introducing donor human milk to the NICU: lessons for Australia. *Breastfeeding Review*. 2012;20 (3):19.
29. Kimani E, Israel-Ballard K. Integrating human milk banking with breastfeeding promotion and newborn care: is Kenya ready? 2017.
30. Gürol A, Özkan H, Çelebioğlu A. Turkish women's knowledge and views regarding mothers milk banking. 013; 21: CrossRef]
31. Katke RD, Saraogi MR. Socio-economic factors influencing milk donation in milk banks in India: an institutional study. *Int J Reprod Contracept Obstet Gynecol* 2014; 3: 389-9
32. Ghaly M. Milk banks though the lens of Muslim scholars: one text in two contexts. *Bioethics* 2010;26: 117–27
33. Can HO, Yesil Y, Eksioglu A, Turfan EC. Women's views on wet nursing and milk siblinghood: an example from Turkey. *Breastfeed Med* 2014; 9: 559-560.
34. Sierra-Colomina G, García-Lara NR, Escuder-Vieco D, Alonso-Díaz C, Esteban EM, Pallás-Alonso CR. Donor milk volume and characteristics of donors and their children. *Early Human Develop* 2014; 90: 209-212
35. McGuire W, Anthony M. Donor human milk versus formula for preventing necrotising enterocolitis in preterm infants: systematic review. *Arch Dis Child Fetal Neonatal Ed* 2003
36. Al-Khodja, Mohamed Habib Ibn, ed., 2000. "Resolutions and Recommendations of the Council of the Islamic Fiqh Academy," Islamic Development Bank & Islamic Fiqh Academy, Jeddah
37. Gürol A, Özkan H, Çelebioğlu A. Turkish women's knowledge and views regarding mothers milk banking. 013; 21: CrossRef
38. Weaver G. Human milk banking: the case for a national strategy. *MIDIRS Midwifery Digest*. 2001;11(3):381-383
39. Mothers' perception of the use of banked human milk for feeding of the infants, 2015

ANNEX – I

Information sheet

Hello, my name is ----- I am working with Zelalem Abdissa , who is completing her master's Degree in pediatrics Nursing in school of Addis Ababa University College of Health Sciences School of Nursing and Midwifery.

This study is, therefore, part of the requirements for the fulfillment of the MSc, program he is

Enrolled in, perception of breastfeeding mothers on breast milk donation and establishment of human breast milk bank in governmental teaching hospitals. Hence, you are now part of the selected mothers for interview. Hence, I hereby assure you that the responses will be kept strictly confidential for all matters and it will only be used for the purpose of the study mentioned above. Your name will not be mentioned to protect your confidentiality. You have a right to answer or not for questions which might be inconvenient for you.

The study may require ----- Minuit. So please give me only some minutes to complete my questions. If you have any questions about the study, you may raise. For detail information you can contact the investigator through cell phone **0912006431** and e-mail **zeleman430@gmail.com**.

And I thank you in advance for your cooperation to the study.

Annex II

English and Amharic version

SEMI –STRUCTURED IN-DEPTH INTERVIEW GUIDE

Introduction: Today we are going to be talking about requesting or receiving breast milk bank (BMB). Now I would like to ask you some questions. Let me assure you that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question.

Instrument A: Demographic Data

Code of participant _____

1. Age in years _____
2. Current marital status _____
3. Highest level of education that you have completed _____
4. Your religion or denomination _____
5. Your occupation/employment status _____
6. Average Monthly family income _____
7. Parity _____
8. Gravidity _____
9. Prenatal care (Yes/No)
10. Mode of delivery of current child _____
11. Family type (Nuclear/ extended)

PART B: REQUESTING OR RECEIVING BREAST MILK BANK (BMB)

1. Tell me if you have ever heard of breast milk banking. [Probe if it includes the following]
 - ✓ Source of information: Media/ family/ friends/ in schools/ Internet source etc.
2. Tell me if you have ever experienced utilizing breast milk bank in case of a condition hindering breast feeding your baby.

- ✓ In your opinion, what are the possible reason(s) for requesting breast milk bank? (Why someone shouldn't request donor milk?)

3. Share with me your views regarding donating healthy and safe breast milk if there were a milk bank in your area.

- ✓ Tell me your intention or motivation in donating breast milk if there were a milk bank in your area.

- [Probe and see if it includes the following]

- ✓ Anything that would prevent her from donating breast milk (Consent of partner, risk of STI/HIV, Religion issues etc.)
- ✓ Would milk banking create a problem in terms of religion? Please tell me your views.

4. Would you recommend opening of a breast milk bank in our country? Why?

- ✓ In your opinion, what are the challenges/difficulties to donate a breast milk bank?

- [Probe and see if it includes the following]

- ✓ Lack of knowledge of donors/recipient/ HCW, distance from BMB, family support (consent of partner), support from BMB staff etc.)
- ✓ Would you agree to have your blood screened if requested before donating breast milk?

5. Do you have any more things to tell us?

Thank you very much for taking part in this study.

Name of interviewer(s) & Signature: _____

Date and place of interview: _____

ANNEX-III
AMHARIC VERSION QUESTIONNAIRE

መጠይቅ

የጥናቱ አላማ መግለጫ

ጤና ይስጥልኝ ስሜ ----- ይባላል። እኔ ከዘላለም፤ አብዲሳ ጋር እየሰራሁ ሲሆን ይህ ጥናት በአዲስ አበባ ዩኒቨርሲቲ በድህረ ምረቃ ፕሮግራም የሁለተኛ ዲግሪውን በህፃናት ትምህርት መስክ ለመመረቅ ከሚያስፈልጎት መስፈርቶች አንዱና ዋናው ነው።

የጥናቱ ዋና አላማ መግቢያ፡ በዛሬው ቀን የምንያየው ሰሌዳ እናት ወቴት መለገሰ፤ መጠቀሚያ የወቴት ባንኪ በአገራችን መገንባት በሚል ረዕሰ ላይ የእናቶቻችን አመለካከት በምል የተዘጋጀ ጥናት ነው።

በዚህ መረጃ አሰባስብ ላይ የሚሳተፉ እናቶች ሲሆኑ እርሶም የመረጃ አሰባስብ ዘዴን በመጠቀም መስፈርቱን አሟልተው ከተመረጡ እናቶች አንዱ ነዎት። በዚህ ጥናት የሚገኘው መረጃ ለጥናቱ አላማ ብቻ የሚውል ይሆናል። ከእርሶ የሚገኘውን መረጃ ሚስጥራዊነቱን መጠበቅ ዋናው ስራችን ነው። የእርሶ ስም በዚህ መጠይቅ ውስጥ አይጠየቅም። በተጨማሪም የሚጠየቁትን ጥያቄ ሙሉ በሙሉ መተው ወይም በከፊል መመለስ ወይም በፈለጉ ጊዜ ማቋረጥ መብትዎ ነው። መጠይቁ - ----- ደቂቃ ይወስዳል ። ለተጨማሪ መረጃ በስልክ ቁጥር **0912006431** ወይም በኢሜል አድራሻ **zeleman430@gmail.com** መጠቀም ይችላሉ።

በፍቃደኝነት ስለሚያደርጉት አስተዋኦ በቅድሚያ እናመሰግናለን

በከፍል የተዘጋጀ በጥልቀት የመጠየቂያ መጠይቅ:

መግቢያ: በዛሬው ቀን የምናወረወው ሰሌ እናት ወቴት መለገሰ፣ መጠቀሚያ የወቴት ባንኪ መገንባት በሚል ረዕሰ የተዘጋጀ . ስለዚህ አሁን አንዳንድ ጥያቄ እጠይቃለሁ .

ላረጋግጥላቸው የሚፈለገው ለመጠይቅ የሰጡኝ መልሰ ሚስጥረኝነቱ የተጠበቀ ነው . ለሦስተኛ ወገን አይተላለፈማ . በመጠይቃችን ለይ መመለስ የማይፈላገትን ጥያቄካለ ይለፈኝ ማለት ይቻላሉ . ስለዝህ መጠይቅን እንደቀጥሎ እንዲፈቅዱሊኝ እጠይቃለሁ .

የቃለ መጠይቁ መመሪያዎች

1. መጀመሪያ ሰላምታ ማቅረብ
2. የጥናቱን አላማ ማሳወቅ
3. ከተጠያቂዎ የሚወሰደው መረጃ ለዚህ ጥናት አላማ ብቻ የሚውል ስለመሆኑና ሚስጥራዊነቱ የሚጠበቅ መሆኑን መግለጽ
4. መቅረጻ ድምፅ እንደሚጠቀሙ መንገር
5. በመጨረሻም ፍቃደኛ መሆናቸውን ማረጋገጥ

መጠይቁ:1 መሠረታዊ መጠይቁ

የተጠያቂ መለያ-----

1. ዕድመ በአመት-----

2. አሁን የትዳሪ ሁኔታ-----
3. የጨርሱት የትምህርት ደረጃ-----
4. እምነቶች ምን ነበረ-----
5. ሰራዎች ምን ነበረ-----
6. በአማካኝ ወራዊ ገቢዎች ሰንት ነው-----
7. እሰካሁን ሰንት ወሊደዋል-----
8. ሰንተ አርግአዋል-----
9. በእርገዝዎ ጊዜ ክትትሊ ነበር (አዎ/የለም)
10. የአሁኑን የወሊድ ሁኔታ እንደት ነበረ-----
11. የቤተሠብ ሁኔታ (የቂረብ/የሩቅ)

መጠይቁ :2 ስለ የእናት ጡት ወቴት ባንክ መጠየቂያ ሆነ መቀበሊ (BMB)

1. ሊነግሩኝ ይቻላል ከዚህን በፊት የእናት ጡት ወቴት ባንክ ጉዳይ ሰምተዎ ያወቃሉ (አወጠጣ የሚከተሉትን ካካተቱትም)

- ✓ የመሪዎ ምንጭ (መገናኛ ብዙሃን/ቤተሠብ/ ጎደኛ/በትምህርት ቤት/ከእንተርኔት ወ.ዘ.ተ)

2. ነግሩኝ እስት ከዚህን በፊት ተጠቅመዎ ያወቃሉ የጋደኛዎትን ወይም የዘመድን ጡት ወቴት የራዎትን ጡት ማጥባት የምከለክል ሁኔታ ተፈጥሮ?

- ✓ በእረሶ አተያይ ይህንን ወቴት ለመጠየቅ እንደምከናት የምነሳ ጉዳይ ምንድነው? ለምንድነው ለሎቹ የማይጠይቁት በባንክ የተዘጋጅዉን?

3. እስቲ ያካፈሉኝ የእሶን አይታ ጤነኛ እና ንዕህ የእናት ወቴት ሊገሳን በተመለከተ ባንኩ ቢኖሪ በአከባቢዎ?

- ✓ እስቲ ይንገሩኝ የእረሶን ፊላጎቲ ወይም ተነሳሽነት በእናት ወቴት መለገስ ላይ እንበሊና ባንኩ በአከባቢዎ? ቢኖሪ ?
 - ❖ (አወጠጣ የሚከተሉትን ካካተቱትም)
- ✓ እንበሊና እሦን ከመለገስ የምገድቦት ነገሪ ይኖረ ይሆን(የትዳሪ አጋሮት፣ HIV/በግንኘነት የምተላለፊ በሽታ፣ የሐይማኖት ጉዳይ)
- ✓ የባንኩ መቆቃሚ በሐይማኖት ላይ የምየመጣ ቸግረ ይኖር ይሆን ይንገሩኝ እስቲ?

መጠይቁ፤3 እንበሊና የወቴት ባንኩ በአገራችን ቢኖሪ መጠቀሚን በተመለከተ

1. የወቴት ባንኩ በአገራችን ቢኖሪ እሶ ወቴቱን ለልጅ ይሠጣሉ(ይጠቀማሉ)? አዎን/አልጠቀሚም

አክልጠቀሚም የምሉ ከሆነ (አጥብቀህ ጠይቅ)

✓ ለጎደኛዎች /ለሰራ ባለደርባዎስ እንድጠቀሙሰ ይመክራሉ?

መጠይቁ:4:የወቴት ባንኩ በአገራችን እንዲከፈት እሰ ይመክራሉ? ከመከራሰ ምክንያቶሰ ምን ነበር ?

✓ በእረሰ እይታ ምን አይነት ተግዳሮት ሊገጥሞት ይቻላሊ የጡት ወቴት ለመለገሰ ?

አወጣጣ አነኘን መጢቀሳቸዉን

- የለጋሽ ፣የዕዉቀት ማነሰ ወይም የተቀባይ ፣የባለሙያዎቻ ፣
- እንበልና ከመለገሶት በፊት ደሞ ይመረመረ ብባሉ ለመመርመር ፊቃደኛ ይሆናሉ?

መጠይቁ 5:በመጨረሻ ማለት የምፈሊጉት ነገረ ካለ እድል ልሰጡት

የጠያቂዉ ስምና ፈሪማ-----

ቀን ና የመጠይቁ ቦታ-----

በጣም እናመሰግናለን!! !!!! !!

