

Knowledge, Attitudes, and Challenges of Mothers on Exclusive Breastfeeding

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Abstract — This study determined the knowledge, attitudes, and challenges encountered by mothers regarding exclusive breastfeeding. It dealt with the personal profile of the mothers which includes their age, gender, civil status, highest educational attainment, number of children, and number of breastfed children.

The Descriptive research design was used in the study utilizing different statistical tools like frequency and percentage, t-test, weighted mean, and analysis of variance (ANOVA).

The respondents were young adults, who had families, were secondary education graduates, without jobs, earning a low income, who had 2 - 3 children that were breastfed, and in a day they breastfeed 10 - 14 times.

The mothers' were aware of exclusive breastfeeding and some benefits of breast milk for their babies and children. The respondents had the right attitude in observing exclusive breastfeeding however, some have to be improved on the indicators rated low.

The mothers encountered challenges more on inadequate breast milk supply and the manifestations like swelling of the breast which causes pain. Mothers who have finished their bachelor's degree have shown a higher level of positive attitude towards exclusive breastfeeding as compared to those who are elementary graduates. Employed mothers have a higher extent of knowledge of exclusive breastfeeding than their unemployed counterparts. The higher the monthly family income, the higher also is the extent of knowledge the mother has on exclusive breastfeeding.

The respondents at their age must continue to use exclusive breastfeeding since they are still young and in their reproductive age, which can have more pregnancies to occur. They must intensify their knowledge of the benefits of breast milk because of its nutritive value which will contribute to a happier family since practicing breastfeeding is more economical for the family.

The mothers must attend lectures or mothers classes conducted in the community to understand fully exclusive breastfeeding. They can also consult their obstetrician or pediatrician for further questions on breastfeeding. Further studies must be conducted using other variables from a wider perspective.

Keywords — **Knowledge, Attitude, Challengers Mother, Exclusive Breastfeeding**

I. Introduction

Exclusive breastfeeding (EBF) is the practice of providing a baby with only breast milk during the first six months of life, except for any supplements, vitamins, or medications. In addition to adequate complementary foods, the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) recommend starting breastfeeding within the first hour after birth, exclusively breastfeeding for the first six months, and continuing breastfeeding for up to two years or longer. Mothers' knowledge and positive attitudes play critical roles in the breastfeeding process. (Dukuzumuremyi et al, 2020).

Adequate nutrition during early childhood promotes children's growth and development, and breast milk is superior to any other product given to a child. Human milk is the optimal food for infant survival, growth, and development. However, especially in unsanitary conditions, breast milk substitutes pose a high risk of infection and can be fatal to infants. Breast milk provides all the nutrients an infant requires during the first six months of life.

The infant receives only breast milk when exclusively breastfed. Breastfeeding exclusively for the first six months of life boosts babies' immune systems and protects them from diarrhea and acute respiratory infections. Today, it is acknowledged as a global public health objective to exclusively breastfeed infants for the first six months of life to reduce infant morbidity and death, especially in developing nations.

The World Health Organization (WHO) recommends exclusive breastfeeding (EBF) for the first six months of life, followed by adequate and safe complementary foods for the next two years and beyond. EBF is still rare in most countries, including those with high rates of breastfeeding beginning (both developed and developing). EBF rates in infants under six months of age ranged from 20% in Central and Eastern Europe to 44% in South Asia.

Currently, more than 95% of infants in Africa are breastfed, and although feeding methods are frequently subpar, it is standard practice to give breastfed infants water and other liquids. When a child is exclusively breastfed, the risk of morbidity is reduced by nearly 70%. Breastfeeding exclusively during a baby's first six months of life protects against serious morbidities. According to research conducted in Ibadan, Nigeria, mothers' knowledge of EBF is still low, accounting for approximately 36.2%, and the same is true in Ethiopia, accounting for about 34.7%. The knowledge and attitudes of women about exclusive breastfeeding are the subjects of research in various regions of Ethiopia. Still, none is carried out at Dabat Health Center or in the immediate vicinity. As a result, the purpose of this study is to evaluate participants' knowledge of and attitudes toward exclusive breastfeeding among mothers attending antenatal care and immunization clinics in Dabat Health Center, North Gondar zone, Northwest Ethiopia. (Allamirew et al., 2017)

The World Health Organization and the American Academy of Pediatrics recommend six months of exclusive breastfeeding. Following this, nursing should continue as complementary foods are introduced, and should continue until the kid is two years old or older, as desired by the mother and the newborn.

It is generally accepted that a woman's decision to use suggested breastfeeding methods depends on her socio-demographic characteristics, amount of motivation, and degree of willpower. However, doctors, midwives, and general practitioners are heavily responsible for promoting breastfeeding (Cascone, 2019).

Exclusive breastfeeding (EBF) is the best feeding method for promoting infant growth and development. One way to improve children's nutritional status and growth is through this strategy. With EBF, infant deaths from sepsis, acute respiratory infections, meningitis, and diarrhea can all

be prevented. Furthermore, breastfeeding postpones a woman's return to fertility and lowers the risks of postpartum hemorrhage, premenopausal breast cancer, and ovarian cancer.

Given the preceding, suboptimal breastfeeding, particularly nonexclusive breastfeeding, results in 1.4 million child deaths and 10% of the disease burden in children under five. According to a global risk assessment of suboptimal breastfeeding, 96% of all infant deaths in developing countries are caused by inappropriate feeding during the first six months of life. 2011 Ethiopian Demographic and Health Survey (EDHS) found that 52% of infants under six months old are breastfed exclusively. Stunting is more common (52%) in the Amhara region than in the rest of the country, and it is mainly brought on by inadequate neonatal nutrition.

Poor nutrition causes morbidity, mortality, and delayed mental and motor development in children aged 0 to 6 months. Early nutritional inadequacies are progressively associated with abnormalities in cognitive function, occupational ability, reproductive outcomes, and general health during adolescence and adulthood. (Arage and Gedamu, 2016)

Only 59.3% of mothers believed that EBF was sufficient for up to 6 months, according to Tadele et al., 2016's study. However, the majority of mothers (89.5%) preferred to exclusively breastfeed their infants, which could be attributed to recommendations and enforcements made by health extension workers, the Health Development Army, and other health professionals in some cases.

Furthermore, most mothers polled could not afford to buy extra food. This result was comparable to those obtained in Bedele, Ethiopia, where the majority of mothers (87.3%) had a favorable attitude and strongly agreed that EBF is advantageous for infants younger than six months, and in Debre Birhan, Ethiopia, where 97.5% of mothers had a favorable attitude toward EBF.

The findings of this study revealed a higher number of mothers with a favorable attitude toward EBF than in Southern Ethiopia (56.7% of mothers had an optimistic attitude toward EBF) and Nigeria (50% of women had a positive attitude toward breastfeeding). Differences in the socio-demographic characteristics of the study samples, including ethnicity, socioeconomic standing, employment status, and level of education, as well as variations in the study period and study area, may help to explain this variation.

Six months of EBF is beneficial to both infant and maternal health. In both affluent and developing nations, infants who are not exclusively breastfed are more likely to have gastrointestinal illnesses. Infants partially or wholly breastfed are at a much higher risk of death from diarrhea and other infections. Infants not breastfed are nearly six times more likely to die from infectious diseases than breastfed infants during the first two months of life; between 2 and 3 months, non-breastfed infants are four times more likely to die compared to breastfed infants. (Tadele et al., 2016)

Mohammed et al. (2014) conducted a study on mothers' breastfeeding knowledge, attitudes, and practices. They discovered that rural women had adequate knowledge about the benefits of breastfeeding for both children and mothers. However, some of the mothers' attitudes and practices were suboptimal. Lack of education may be the cause of this. As a result, it is advised that effective baby-feeding strategies aiming at enhancing general newborn health be created. These strategies can profit from understanding these BF patterns. Their findings also support healthcare system interventions, family interventions, and public health education campaigns to promote optimal BF practices, particularly among low-income women. There is a need to improve maternal care strategies during the antenatal and postnatal periods. Staff at private clinics and traditional birth attendants may require additional training. This study also suggests more research on mothers' breastfeeding attitudes and practices in a large sample size at the community level.

Alnasser (2018) conducted a study on the knowledge and attitudes of mothers toward breastfeeding and discovered that while most expecting mothers (67%) indicated some awareness of breastfeeding, only 46.1% intended to initiate exclusive breastfeeding early in life before the intervention. Furthermore, only 53.7% thought breastfeeding was the best healthy option. Breastfeeding was deemed equal to the formula by 39.5% of participants. Most working mothers complained about a lack of breastfeeding support at their workplaces. They were also uncomfortable breastfeeding in front of anyone except their spouse.

In addition, most participants thought poorly of nurses and the media as information providers. There is evidence to support the benefits of using the internet and social media resources. Following viewing the educational video, the majority (80.8%) expressed a positive intention to breastfeed exclusively. Positive choices were associated with advanced age, prior breastfeeding knowledge, and a willingness to hear expert opinions.

The prevalence of exclusive breastfeeding (EBF) in the first six months of an infant's life in Bangladesh was 35.90%, according to a study conducted by Hossain et al., 2018. The binary multivariable logic introgression model revealed that mothers with less education were more likely to exclusively breastfeed their children than mothers with greater education. EBF was more common in housewife mothers than in their counterparts. Mothers who lived in the Sylhet division were between the ages of 35 and 49, had access to mass media, had more than four children, gave birth at home or by cesarean section, got prenatal and postnatal care, and received breastfeeding counseling had higher rate of EBF.

They concluded that the Stepwise regression model revealed that the most crucial predictors of exclusive breastfeeding were modifiable factors. Authorities should coordinate more extensive EBF initiatives while providing primary EBF education to educated women.

II. Methodology

Research Design

The descriptive research method was used, with a questionnaire as the data collection tool, to determine mothers' knowledge, attitudes, and practices regarding exclusive breastfeeding. Descriptive research, according to Best (2006), is a process that goes beyond data collection and tabulation. It includes an element of interpretation of the meaning and significance of what is described. This description is frequently combined with comparison and contrast involving measurements, classifications, understanding, and evaluation.

Population and Locale of the Study

This study focused on mothers admitted and catered from the OB ward of Rosario District Hospital in Rosario, La Union. It consisted 60 mothers who had two or more children and are exclusively breastfed. Purposive sampling was employed since the researcher opted to include moms who were hospitalized during the data-gathering procedure.

Data Collection Instruments

The questionnaire served as the study's data-gathering technique. The survey questions were created using data from earlier studies and relevant literature. The questionnaire was translated from English to Filipino and then back to English to verify data quality.

Part I focused on the mothers' demographics, including their age, civil status, highest educational attainment, occupation, monthly family income, number of breastfed children, and number of breastfeeding sessions per day. Part II focused on the mothers' knowledge of exclusive breastfeeding, Part III on the mothers' attitudes toward exclusive breastfeeding, and Part IV on the challenges mothers face when exclusively breastfeeding.

Table 1 Distribution of the Respondents in terms of their Profile Variables

Profile Variables	Frequency	Percentage
Age (in years)		
20 – 30	37	52.9
31 – 40	24	34.3
41 – 50	9	12.9
Civil Status		
Single	38	54.3
Married	25	35.7
Widow	3	4.3
Separated	4	5.7
Highest Educational Attainment		
Elementary graduate	11	15.7
High School graduate	31	44.3
Bachelor's Degree	24	34.3

Profile Variables	Frequency	Percentage
With Masters units	2	2.9
MA/MS graduate	2	2.9
Monthly Family Income		
Php10,000 and below	34	48.6
Php 10,001 – Php 15,000	26	37.1
Php 15,001 – Php 20,000	2	2.9
Php 20,001 and above	8	11.4
Occupation		
Unemployed	46	65.7
Employed	24	34.3
Number of Children Breastfed		
0 – 1	27	38.6
2 – 3	35	50.0
4 – 5	6	8.6
6 – 7	2	2.9
Number of Breastfeeding per Day		
0 – 4	3	4.3
5 – 9	21	30.0
10 – 14	27	38.6
15 – 19	14	20.0
20 and above	5	7.1

Table 1 shows the demographics of the respondents, including their age, civil status, highest educational attainment, monthly family income, occupation, number of children breastfed, and number of breastfed per day.

Age. Most respondents are between the ages of 20 and 30, with a frequency of 37 or 52.9%, 31-40, 24 or 34.3%, and 41-50, with a frequency of 9 or 12.9%. It implies that most respondents are young adults in their reproductive years. According to Erickon (2009), young adulthood occurs between 18 and 40. The central conflict at this stage is forming intimate, loving relationships with other people.

Civil Status. Most respondents are single, with a frequency of 38, or 54.3%, married, with a frequency of 25, or 35.7%, separated, with a frequency of 3, or 5.7%, and widowed, with a frequency of 3, or 4.3%. It implies that the respondents had families but had not yet married.

The highest level of education. Most respondents are high school graduates, accounting for 31 or 44.3%, bachelor's degree holders, accounting for 24 or 34.3%, elementary graduates, accounting for 11 or 15.7%, and master units and MA/MS graduates, accounting for 2 or 2.9%. It implies that the respondents did not pursue further education.

Monthly Family Income. Most respondents had a monthly family income of P10,000 or less, as reported by 34 or 48.2%, P10,000-P15,000, as reported by 26 or 37.1%, P20,000 or more, as reported by 8 or 11.4%, and P15,001-20,000, as reported by 2 or 2.9%. It implies that most respondents had a low income for their families.

Occupation. Most respondents (46 or 65.7%) were unemployed, with 24 or 34.3% working. It implies that most respondents are unemployed and caring for their children and families.

The number of breastfed children. The majority of responders (35 or 50%) nursed their children, followed by those aged 0 to 1, 27 or 38.6%, 4-5, and 6-7, at rates of 6, 6, 6, and 2, respectively. It implies that the majority of respondents breastfed their children.

The number of breastfeeding per day. Most respondents nursed their baby 10-14 times per day (27 or 38.6%), 5-9 times per day (21 or 30%), 15-19 times per day (14 or 20%), 20 and above times per day (5 or 7.1%), and 1-4 times per day (3 or 4.3%). It implies that the respondents breastfed their children several times per day.

Table 2 The Extent of Knowledge of Mothers on Exclusive Breastfeeding

Indicators	Weighted Mean	Descriptive Equivalent
1. Lowers the incidence of many childhood illnesses	4.50	HK
2. Breast milk contains live immunity. When a baby consumes breast milk, he or she receives both immediate and lifelong immunities	4.43	K
3. Fosters mother and child bonding experience	4.41	K
4. Effective intervention for preventing early childhood death	4.27	K
5. Reduces the risk of overweight and obesity in childhood and adolescence	4.10	K
6. Contains colostrum nutritionally beneficial to the child	4.44	K
7. Creates a bowel movement not smelly	4.16	K
8. Decreases the frequency of hemorrhage, post-partum depression, breast cancer, ovarian and endometrial cancer among mothers	4.17	K
9. Breast milk is better than milk formula	4.39	K
10. Less to experience diarrhea and constipation as well	4.24	K
11. Breastfeeding is more economical	4.37	K
12. Breastfeeding is convenient and with the right temperature	4.23	K
13. Is a natural family planning method	4.10	K
14. Breastfeeding can reduce your baby's risk of developing diabetes since breast milk contains no artificial sugar	4.10	K
15. Breastfeeding can reduce your baby's risk of sudden infant death syndrome	4.19	K
Average Weighted Mean	4.27	K

Legend:

Statistical Range	Descriptive Equivalent (DE)	Transmuted Rating
4.50 – 5.00	Always	Highly Knowledgeable (HK)
3.50 – 4.49	Often	Knowledgeable (K)
2.50 – 3.49	Sometimes	Moderately Knowledgeable (MK)
1.50 – 2.49	Seldom	Slightly Knowledgeable (SK)
1.00 – 1.49	Never	Not Knowledgeable (NK)

Table 2 shows the extent to which mothers are knowledgeable about exclusive breastfeeding.

With a weighted mean of 4.50 or "Highly Knowledgeable," item number 1, "Lowers the incidence of many childhood illnesses," revealed that respondents were aware of the benefits of practicing exclusive breastfeeding with their babies. According to Dukuzumuremyi et al., 2020, mothers' sound knowledge and positive attitude play essential roles in the breastfeeding process.

The remaining indicators were rated as "knowledgeable," but the lowest had a weighted average of 4.10, with scores of 5 and 14, "reduces the risk of childhood overweight and obesity" and "breastfeeding." can protect your baby from developing diabetes. This is because breast milk contains no artificial sugars. Respondents were found to be aware of the reduction in the development of diabetes in youngsters, although their knowledge was inadequate.

As stated in the Rooming-In and Breastfeeding Act of 1992, breastfeeding has distinct advantages that benefit both the infant and the mother, the hospital, and the country that practice it. It is the first preventive health measure given to a child at birth. Breastfeeding also improves the mother-infant relationship. Additionally, breastfeeding can save the state money that would otherwise be spent on importing milk.

Overall, the extent of mothers' knowledge of exclusive breastfeeding received an average weighted mean of 4.27 or "Knowledgeable," indicating that the respondents were aware of exclusive breastfeeding but were insufficient. They need to learn more about exclusive breastfeeding. It contradicts the findings of Allamirew et al., 2017, who reported that the prevalence of mothers' awareness of EBF remains low, accounting for roughly 36.2%, and the same is true in Ethiopia, accounting for approximately 34.7%.

Table 3 Attitudes of Mothers towards Exclusive Breastfeeding

Indicators	Weighted Mean	Descriptive Equivalent
1. I breastfeed my baby because it saves time and money.	4.39	A
2. I believe that breastfeeding is best for my baby.	3.87	Ag
3. I felt that breastfeeding is the perfect nutrition for my child.	4.23	A
4. I stop breastfeeding when I am sick.	3.81	A
	4.19	A
	3.79	A
5. I believe that breast milk is better than formula feeding.	4.01	A
6. I stop breastfeeding when my child suffers from diarrheal episodes.	4.20	A
7. Sitting comfortably, preferably in a chair where she can lean backward.	3.63	A
8. There is no negative effect of breastfeeding on my marital status.	4.09	A
9. I pump my breast every time breast milk flows from my breast even after feeding my baby.	4.10	A
10. I breastfeed to reduce my family's expenses on milk formula.	4.31	A
11. I wash my nipples with water well before feeding my baby.	4.31	A
12. I burp my baby every after feeding/ I use a brassiere to support my breast.	3.99	A
13. I breastfed for 15 minutes on each breast.	3.99	A
14. Health and hygiene are done before breastfeeding.	3.83	A
15. Health and hygiene are done before breastfeeding.	3.83	A
Average Weighted Mean	4.01	A

Legend:

Statistical Range	Descriptive Equivalent (DE)	Transmuted Rating
4.50 – 5.00	Always	Highly Agree (HA)
3.50 – 4.49	Often	Agree (A)
2.50 – 3.49	Sometimes	Moderately Agree (MA)
1.50 – 2.49	Seldom	Slightly Agree (SA)
1.00 – 1.49	Never	Disagree (D)

Table 3 displays the mothers' perspectives on exclusive breastfeeding.

All indicators were rated as “agree”, but items 1 and 12 had the highest weighted averages, with “breastfeeding because it saves time and money” and “breastfeeding after every breastfeeding”. I'm burping/holding a bra to support my breasts", with weighted average scores of 4.31 and 4.39 respectively, or "I agree". It implied that respondents favored exclusive breastfeeding primarily for economic reasons and to save time on feeding. Healthcare practitioners encouraged them to exclusive breastfeeding, which affected their opinions regarding breastfeeding practice. According to Dukuzumuremyi et al, 2020, mothers' sound knowledge and positive attitude play critical roles in the breastfeeding process.

The lowest indicators are items numbers 9 and 13, "I pump my breast every time breast milk flows from my breast even after feeding my baby," and "I breastfed 15 minutes on each

breast," with a weighted mean of 3.63 and 3.69 or "Agree." It revealed that the respondents were aware of doing breast pumps and the feeding duration, but they sometimes practice doing it.

Overall, the mothers' attitudes toward exclusive breastfeeding received a weighted mean of 4.01, or "Agree." Respondents were found to be in favor of exclusive breastfeeding. This finding was similar to a study conducted in Bedele, Ethiopia, which discovered that most mothers (87.3%) had a positive attitude toward EBF and strongly agreed that it is beneficial. (Tadele et al., 2016)

Table 4 Challenges Encountered by Mothers on Exclusive Breastfeeding

Indicators	Weighted Mean	Descriptive Equivalent
1. There is no negative effect of breastfeeding on my marital status.	2.33	SE
2. I fear that my breast milk is not enough for my child.	2.40	SE
3. Inverted, flat, and big nipples.	2.51	ME
4. Sore nipple and plugged ducts, nipple vasospasm or constriction.	2.87	ME
5. Have my work during the daytime.	2.69	ME
6. Deficient breast milk supply.	2.63	ME
7. Presence of breast pain or infection.	2.86	ME
8. Persistent pain and nipple soreness.	2.39	SE
9. I need to take medications for my disease condition/ concern for taking medicines while BF.	2.33	SE
10. I use a brassiere to support my breast.	2.63	ME
11. Frequent feedings leave me feeling like I don't have any time for myself.	2.87	ME
12. Low milk supply.	2.90	ME
13. Feeling of sadness or depression.	2.83	ME
14. Hard and painful breast swelling.	2.93	ME
15. The baby is gassy and fussy after each feeding.	2.73	ME
Average Weighted Mean	2.66	ME

Legend:

Statistical Range	Descriptive Equivalent (DE)	Transmuted Rating
4.50 – 5.00	Always	Highly Encountered (HE)
3.50 – 4.49	Often	Encountered (E)
2.50 – 3.49	Sometimes	Moderately Encountered (ME)
1.50 – 2.49	Seldom	Slightly Encountered (SE)
1.00 – 1.49	Never	Not Encountered (NE)

Table 4 details the difficulties that mothers face when exclusively breastfeeding.

The challenges encountered were highest on items 12 and 14, "Low milk supply," and "Hard and painful breast swelling," with a weighted mean of 2.90 and 2.93, or "Moderately Agree," indicating that these were the most common that the mothers encountered. This result is in line with Al-2017 Binali's study on mothers' breastfeeding knowledge, attitudes, and practices, which found that inadequate amounts of breast milk and unfavorable workplace-related issues were the

main causes of the low rate of exclusive breastfeeding among female school teachers in Saudi Arabia's Abha female educational district.

The statements "There is no detrimental impact of lactating on my marital status," "Persistent pain and nipple soreness," and "I need to take medications for my disease condition/concern for taking medications while breastfeeding" had the lowest weighted means, or "Slightly Agree," correspondingly.

Overall, the challenges faced by mothers during exclusive breastfeeding received an average weighted mean of 2.66, or "Moderately Encountered," indicating that the mothers had fewer problems with exclusive breastfeeding.

Table 5 Knowledge, Attitudes, and Challenges Encountered by Mothers on Exclusive Breastfeeding

Indicators	Weighted Mean	Descriptive Equivalent
Knowledge	4.27	Knowledgeable
Attitudes	4.01	Agree
Challenges Encountered	2.66	Moderately Encountered

The three variables with the highest weighted implication were "Knowledge," with a weighted mean of 4.27 or "Knowledgeable," "Attitude," with a weighted mean of "Agree," and "Challenges Encountered," with a weighted mean of "Moderately Encountered." These results showed that respondents had a sufficient level of understanding about exclusive breastfeeding, a positive attitude toward breastfeeding, and encountered moderately comparatively fewer while purely breastfeeding.

Breastfeeding has distinct advantages that benefit both the infant and the mother, the hospital, and the country that practice it, as stated in the Rooming-In and Breastfeeding Act of 2002. It is the first step in providing a kid with preventative health care after birth. It also improves the mother-infant relationship. A mother can also conserve expenses by breastfeeding rather than procuring milk from outside.

Altamimi and co. et al., (2016) conducted a study to assess breastfeeding knowledge and attitudes among South Jordan working mothers. The participants demonstrated adequate breastfeeding knowledge and had favorable attitudes toward breastfeeding. Their findings are comparable to those of this study.

The promotion of breastfeeding knowledge leads to the advancement of attitudes, which leads to the improvement of breastfeeding practices (Devake, 2017).

Table 6 ANOVA Results on the Difference in the Knowledge, Attitudes, and Challenges Encountered by Mothers on Exclusive Breastfeeding across Age

Aspect	Source of Variation	Sum of Squares	Df	Mean Squares	F-value	Sig	Remarks
Knowledge	Between Groups	0.067	2	0.033	0.075	0.928	Not Significant
	Within Groups	29.812	67	0.445			
	Total	29.878	69				
Attitude	Between Groups	0.754	2	0.377	1.057	0.353	Not Significant
	Within Groups	23.895	67	0.357			
	Total	24.649	69				
Challenges Encountered	Between Groups	0.401	2	0.201	0.286	0.752	Not Significant
	Within Groups	47.053	67	0.702			
	Total	47.454	69				

The generated F-values and corresponding significance values are all higher than the set 0.05 level of significance, suggesting that the findings from the research data analysis were not significant. It implies that when it comes to difficulties with exclusive breastfeeding, moms of all ages have equivalent levels of knowledge, attitudes, and problems. In his study, Cascone (2019) found that women's socio-demographic traits and degree of motivation are crucial in their decision to adhere to proper breastfeeding practices.

Table 7 shows the results of a test to see if there is a difference in mothers' knowledge, attitudes, and challenges with exclusive breastfeeding across civil statuses.

Table 7 ANOVA Results on the Difference in the Knowledge, Attitudes, and Challenges Encountered by Mothers on Exclusive Breastfeeding across Civil Status

Aspect	Source of Variation	Sum of Squares	Df	Mean Squares	F-value	Sig	Remarks
Knowledge	Between Groups	1.041	3	0.347	0.794	0.502	Not Significant
	Within Groups	28.838	66	0.437			
	Total	29.878	69				
Attitude	Between Groups	2.327	3	0.776	2.294	0.086	Not Significant
	Within Groups	22.322	66	0.338			
	Total	24.649	69				
Challenges Encountered	Between Groups	3.667	3	1.222	1.842	0.148	Not Significant
	Within Groups	43.787	66	0.663			
	Total	47.454	69				

The computed F-values with significance values are more remarkable than the set.05 level of significance indicates that the results are insignificant. As a result, there are no appreciable differences in the respondents' levels of knowledge, attitudes, and problems when they are categorized according to their civil status. Their knowledge of and worries regarding exclusive breastfeeding are the same regardless of their marital status.

Table 8 shows the findings of the analysis of variance on the differences in mothers' knowledge, attitudes, and challenges with exclusive breastfeeding across the highest educational attainment levels.

Table 8 ANOVA Results on the Difference in the Knowledge, Attitudes, and Challenges Encountered by Mothers on Exclusive Breastfeeding Across Highest Educational Attainment

Aspect	Source of Variation	Sum of Squares	Df	Mean Squares	F-value	Sig	Remarks
Knowledge	Between Groups	3.066	4	0.797	1.858	0.128	Not Significant
	Within Groups	26.812	65	0.412			
	Total	29.878	69				
Attitudes	Between Groups	4.897	4	1.224	4.029	0.006	Significant
	Within Groups	19.752	65	0.304			
	Total	24.649	69				
Challenges Encountered	Between Groups	3.322	4	0.831	1.223	0.310	Not Significant
	Within Groups	44.132	65	0.679			
	Total	47.454	69				

The findings of the Tadele et al., 2016 study revealed a higher number of mothers with a good attitude towards EBF than in Southern Ethiopia (56.7% of mothers had a favorable attitude toward EBF) and Nigeria (50% of women had a positive attitude towards breastfeeding). This discrepancy may be explained by variations in the socio-demographic features of the study samples, such as racial origin, socioeconomic standing, job position, and level of education, as well as variations in the study time and region.

The mothers' educational attainment did not affect their knowledge about exclusive breastfeeding or the difficulties they encountered. They have calculated F-values with significance levels over the set.05 level of significance serves as an example of this.

However, it is essential to note that there is a significant difference in attitudes toward exclusive breastfeeding across educational backgrounds, as revealed by the F-value of 4.029 with a significance value of 0.006. The results of the Scheffe test are shown in the table below so that it is possible to distinguish the groups that vary markedly.

Table 9 displays the findings from the Scheffe test on the substantial difference in the mother's attitude toward exclusive breastfeeding throughout the most outstanding educational attainment.

Table 9 Scheffe Test Results on the Significant Difference in the Attitudes of Mothers on Exclusive Breastfeeding across Highest Educational Attainment

Aspect	Compared Groups	Mean Difference	Sig. Value
Attitudes	Bachelor's Degree	0.745	0.013
	vs Elementary graduate		

Mothers with a bachelor's degree have a very different attitude than those with only an elementary education. The positive mean difference of 0.745 with a significance value of 0.013 is an example of this. The significant positive mean difference indicates that mothers with a bachelor's degree have a more positive attitude toward exclusive breastfeeding than those with only an elementary education.

Table 10 shows the ANOVA results for the difference in knowledge, attitudes, and challenges experienced by mothers regarding exclusive breastfeeding based on monthly family income.

Table 10 ANOVA Results on the Difference in the Knowledge, Attitudes, and Challenges Encountered by Mothers on Exclusive Breastfeeding Across Monthly Family Income

Aspect	Source of Variation	Sum of Squares	Df	Mean Squares	F-value	Sig	Remarks
Knowledge	Between Groups	4.195	3	1.398	3.594	0.018	Significant
	Within Groups	25.683	66	0.389			
	Total	29.878	69				
Attitude	Between Groups	2.107	3	0.702	2.056	0.115	Not Significant
	Within Groups	22.543	66	0.342			
	Total	24.649	69				
Challenges Encountered	Between Groups	0.841	3	0.280	0.397	0.758	Not Significant
	Within Groups	46.613	66	0.706			
	Total	47.454	69				

Data indicate no discernible difference in mothers' attitudes or difficulties when they are classified according to monthly family income. However, the computed F-value of 3.594 with a significance value of 0.018, combined with the knowledge, suggests significant results. As a result, a second test is needed to discover whether groups have statistically significant differences. The Scheffe test results are presented in the table below.

Table 11 shows the results of the Scheffe test on the significant difference in mothers' knowledge of exclusive breastfeeding based on monthly family income.

Table 11 Scheffe Test Results on the Significant Difference in the Extent of Knowledge of Mothers on Exclusive Breastfeeding across Monthly Family Income

Aspect	Compared Groups	Mean Difference	Sig. Value
Knowledge	10K and below vs 10K-15K	-0.410	0.106
	10K and below vs 15K-20K	-0.961	0.224
	10K and below vs above 20K	-0.477	0.294
	10K-15K vs 15K-20K	-0.552	0.695
	10K-15K vs above 20K	-0.068	0.995
	15K-20K vs above 20K	0.484	0.810

As shown in the table, none of the generated significance values have values less than the .05 levels of significance, indicating insignificant results. The supplemental test determined that there is no substantial distinction in the scope of the women's knowledge of exclusive breastfeeding once they are split into different depending on their monthly income.

Table 12 displays the t-test results for the differences in mothers' knowledge, attitudes, and challenges with exclusive breastfeeding across occupations.

Table 12 t -Test Results on the Difference in the Knowledge, Attitudes, and Challenges Encountered by Mothers on Exclusive Breastfeeding across Occupation

Aspect	Occupation	N	Mean	Mean Difference	Standard Error Difference	df	t-value	Sig	Remarks	
Knowledge	Unemployed	46	4.09	-0.526	0.154	68	-	3.411	0.001	Significant
	Employed	24	4.62							
Attitude	Unemployed	46	3.86	-0.432	0.142	68	-	3.037	0.003	Significant
	Employed	24	4.29							
Challenges Encountered	Unemployed	46	2.74	0.255	0.209	68	1.079	0.284	Not Significant	
	Employed	24	2.51							

Significant findings are produced when knowledge and attitude are combined with the computed t-values. The significant negative mean differences in learning and philosophy suggest that employed mothers have significantly higher mean values than unemployed mothers. It implies that employed mothers are more knowledgeable about exclusive breastfeeding than their unemployed counterparts. Also, it suggests that employed respondents have significantly more positive attitudes toward exclusive breastfeeding than unemployed respondents. Meanwhile, the mothers' occupation status did not affect the difficulties they encountered during exclusive breastfeeding.

Table 13 shows the test results for differences in mothers' knowledge, attitudes, and challenges with exclusive breastfeeding based on the number of children breastfed.

Table 13 ANOVA Results on the Difference in the Knowledge, Attitudes, and Challenges Encountered by Mothers on Exclusive Breastfeeding Across Number of Children Breastfed

Aspect	Source of Variation	Sum of Squares	Df	Mean Squares	F-value	Sig	Remarks
Knowledge	Between Groups	2.288	3	0.763	1.824	0.151	Not Significant
	Within Groups	27.591	66	0.418			
	Total	29.878	69				
Attitude	Between Groups	2.438	3	0.813	2.414	0.074	Not Significant
	Within Groups	22.212	66	0.337			
	Total	24.649	69				
Challenges Encountered	Between Groups	2.421	3	0.807	1.183	0.323	Not Significant
	Within Groups	45.033	66	0.682			
	Total	47.454	69				

Results that are not statistically significant are denoted by obtained F-values with correlating significance values higher than the set.05 level of significance. It means that the number of children the mothers breastfed did not affect their knowledge of exclusive breastfeeding. Their perspectives on exclusive breastfeeding and the hardships they have encountered demonstrated a similar pattern.

The Rooming-In Ad Breastfeeding Act of 2002 declared that it is a mother's right to breastfeed her kid and that the infant also has a right to receive her breast milk. Bottle feeding is permitted only after the mother has been informed by the attending health personnel of the benefits of breastfeeding and the proper techniques of infant formula feeding. The mother has opted in writing to adopt formula feeding for her infant.

Table 14 displays the results of the analysis of variance on the difference in mothers' knowledge, attitudes, and challenges with exclusive breastfeeding based on the number of breastfeeds per day.

Table 14 ANOVA Results on the Difference in the Knowledge, Attitudes, and Challenges Encountered by Mothers on Exclusive Breastfeeding Across Number of Breastfeed per Day

Aspect	Source of Variation	Sum of Squares	Df	Mean Squares	F-value	Sig	Remarks
Knowledge	Between Groups	1.311	4	0.328	0.746	0.564	Not Significant
	Within Groups	28.567	65	0.439			
	Total	29.878	69				
Attitude	Between Groups	0.596	4	0.149	0.403	0.806	Not Significant
	Within Groups	24.053	65	0.370			
	Total	24.649	69				
Challenges Encountered	Between Groups	2.873	4	0.718	1.047	0.390	Not Significant
	Within Groups	44.582	65	0.686			
	Total	47.454	69				

The calculated F-values show significance levels greater than the .05 levels of significance. It implies that the findings are insignificant. It signifies that a mother's level of knowledge about exclusive breastfeeding, her attitudes towards her obstacles, or the regularity of her feeding times each day are unaffected.

Table 15 summarizes the relationship between mothers' exclusive breastfeeding knowledge, attitudes, challenges, and their profile variables.

Table 15 Relationship between the Knowledge, Attitudes, and Challenges Encountered by Mothers on Exclusive Breastfeeding and their Profile variables

Profile Variable	Knowledge		Attitude		Challenges Encountered	
	r-value	sig	r-value	Sig	r-value	sig
Age	-0.041	0.733	-0.159	0.188	0.054	0.655
Civil Status	0.065	0.590	0.196	0.103	0.191	0.114
Highest Educational Attainment	0.314*	0.008	0.287*	0.016	-0.098	0.422
Monthly Family Income	0.304*	0.011	0.080	0.509	-0.077	0.526
Occupation	0.382*	0.001	0.346*	0.003	-0.130	0.284
Number of Children Breastfed	-0.243*	0.043	-0.293*	0.014	0.045	0.710
Number of Breastfeed per Day	0.037	0.762	0.019	0.876	0.133	0.271

***Significant at 0.05 level**

There is no significant relationship between the extent of knowledge, attitude, and challenges mothers face and their age, civil status, or the number of breastfeeding per day.

There is an effective link between knowledge and attitudes toward exclusive breastfeeding and the highest level of education. The significant positive R-values indicate that the higher the mother's educational attainment, the greater her knowledge and attitude toward exclusive breastfeeding.

Besides knowledge and monthly family income, the positive computed R-value of 0.304 with a significance value of 0.011 indicates a significant relationship. It means that the greater the monthly family income, the greater the mother's knowledge of exclusive breastfeeding.

There is also a significant relationship between occupation and the extent of knowledge and attitude of mothers toward exclusive breastfeeding. The significant positive R-values indicate that as long as mothers are employed, it is expected that they will have a high level of knowledge and attitude toward exclusive breastfeeding.

Finally, the significant negative R-values on the number of children breastfed and knowledge and attitude toward exclusive breastfeeding indicate an indirect relationship. This means that the greater the number of children breastfed by mothers, the lower their level of knowledge and attitude toward exclusive breastfeeding.

III. Conclusion

The respondents were young adults with families, secondary school graduates, unemployed, who earned a low income, had 2 - 3 breastfed children and breastfed 10-14 times per day.

The mothers knew of the benefits of exclusive breastfeeding and breast milk for their babies and children.

The respondents had the right attitudes toward exclusive breastfeeding. However several of the low-rated factors still need to be improved.

The women had difficulties due to insufficient breast milk production and symptoms such as breast enlargement that caused discomfort. The respondents had favorable opinions regarding exclusive breastfeeding, although several low-scoring characteristics could be modified.

Mothers who have completed their bachelor's degree have a more positive attitude toward exclusive breastfeeding than those who have only completed their elementary education. Employed mothers are more knowledgeable about exclusive breastfeeding than unemployed mothers.

The mother's family's monthly income increases in direct proportion to her level of nursing expertise.

IV. Recommendations

Following are some recommendations made in light of the conclusion:

Respondents of their age must continue to use exclusive breastfeeding because they are still young and of reproductive age, which may result in more pregnancies. They must increase their understanding of the nutritional value of breast milk, which will contribute to a happier family because breastfeeding is more cost-effective for the family.

To fully understand exclusive breastfeeding, mothers must attend community lectures or classes. If they have any more queries regarding nursing, they can also consult their obstetrician or pediatrician.

Future research incorporating multiple aspects must embrace a more significant standpoint. Further analysis must be undertaken utilizing other elements from a broader perspective.

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