Volume 5, Issue 2, 2022 (pp. 33-54)



ASSESSMENT OF KNOWLEDGE AND PRACTICE REGARDING BREAST FEEDING AMONG WORKING AND NON-WORKING MOTHERS

Aya Rabee Abd Alfataha¹, Shaimaa Hassan Mohamady²

and Doaa Shehta Said Farg³

¹Bechlor of Nursing - Menofia University, Egypt

²Assisstant Professor of Maternal and Newborn Health Nursing- Faculty of Nursing Helwan University, Egypt

³Lecturer of Maternal and Newborn Health Nursing- Faculty of Nursing Helwan University, Egypt

Cite this article:

Aya R.A.A., Shaimaa H.M., Doaa S.S.F. (2022), Assessment of Knowledge and Practice Regarding Breast Feeding among Working and Non-Working Mothers. African Journal of Health, Nursing and Midwifery 5(2), 33-54. DOI: 10.52589/AJHNM-JY8FPCWM.

Manuscript History

Received: 25 Feb 2022 Accepted: 21 March 2022 Published: 21 April 2022

Copyright © 2022 The Author(s). This is an Open Access article distributed under the terms of Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0), which permits anyone to share, use, reproduce and redistribute in any medium, provided the original author and source are credited.

ABSTRACT: *Background: Breastfeeding is widely acknowledged as* the ideal method of providing optimal infant nutrition. Breast milk is the most complete food for babies and provides all of the nutrients needed for the first 6 months. Aim: assess the knowledge and practices regarding breastfeeding among working and non-working mothers. Design: Descriptive design was used for conducting the study. Sampling: A Purposive sample of 90 breast feeding mother. Setting: The study was carried out at El-Khosos central hospital Egypt. Tools: Two tools used for data collection: Tool I: A Structured interview questionnaire consist of demographic characteristics, obstetric history and knowledge assessment sheet. Tool II: Mother observational practice checklist regarding breast feeding. **Results:**the study showed that more than half of working mothers group was good knowledge regarding to breastfeeding. While non-working mothers' total Knowledge toward breastfeeding were poor knowledge. Regarding to non-working mothers' total practice toward breastfeeding the study results showed that majority of non-working mothers had inadequate practice. While study results show that more than half of working mothers had adequate practice regarding breastfeeding. Conclusion: There was highly significant difference between working mothers and non-working mothers according knowledge and practice regarding breastfeeding there were significant differences between working mothers and non-working mothers according to total mean score of knowledge and practice. Also there were highly significant relation between knowledge and practice in working mothers. Study also shows that there were highly significant correlation between knowledge and practice in working mothers and significant correlation between knowledge and practice.Recommendations: Mothers should be taught on how to breastfeed and maintain exclusive breastfeeding through breast feeding booklet.

KEYWORDS: Breastfeeding, Working Mothers, Knowledge,

Practice

Volume 5, Issue 2, 2022 (pp. 33-54)



INTRODUCTION

Breastfeeding virtually important to health and well-being of infant and mother and topic of global concern, particularly in developing countries. Human milk recommended as the exclusive nutrient source for feeding term infants for the first six months of life and should be continued with the addition of solid foods after six months age .Breastfeeding for all infants is strongly supported by both governmental and medical professional organization because of acknowledged benefits with respect to nutrition, gastrointestinal function, host defense and psychological well—being, (Tahiruetal., 2020).

Breast milk considers the ideal food for human infant. Beyond the nutritional value, breastfeeding reduces infection susceptibility and neonatal mortality through active protection against infections. Breastfeeding has been shown to have a positive correlation in reducing diseases in an infant life. Effects of breastfeeding in infants help prevent adverse health outcomes for the entirety of lifespan. In addition, breastfeeding establishes a unique bond between mother and infant, which supports maternal role, (Lackey etal., 2021).

Unfortunately, not every mother aware about the benefits of breastfeeding to infants as well as to mothers. Breastfeeding consider optimal method of infant nutrition. Short-term and long-term health benefits of breastfeeding for both mother and infant well established. Improvement in the infant's immune system and protection against infections of the gastrointestinal and respiratory systems. Breastfeeding linked to improved cognitive development in infant, research even suggested that the emotional development and attachment demonstrate improved psychosocial stability as an adult, (Granger etal., 2021).

Breastfeeding also found to associated with various positive impact on maternal health, including decreased postpartum bleeding, facilitated postpartum weight loss, and decreased risk of postpartum depression and osteoporosis, breast cancer, ovarian cancer and endometrial cancer in later life. Breastfeeding 'yields' health care saving by reducing illness events, (UvnäsMoberg etal., 2020). As well as Breastfeeding can be successful in different ways, but support that a mother receives can be essential to success. Support from a spouse, family members, clinician support, social support and employer support can be crucial in determining the duration of breastfeeding. the support of a breastfeeding mother is crucial in the initiation and duration of breastfeeding, (Cazorla-Ortiz etal., 2020).

Significant of the study: according to the latest grim statistics on the proportion of breastfeeding in children aged 4 to 5 months amounted to only 13.3% in Egypt. So assess mothers' knowledge and practice toward breast feeding to enhance breastfeeding process According to UNICEF statistics, every year, about 9 million children die before reach the age of 5 months. Breastfeeding is one of the most effective ways to reduce these deaths. 77 million newborns, do not receive a breastfeeding within an hour of birth, depriving them of essential nutrients, antibodies and direct contact with the mother (UNICEF, 2018).

Aim of the Study

Assess knowledge and practice regarding breastfeeding among working and non-working mothers.



Research questions of the study:

- 1- Do mothers have a sufficient knowledge about breast feeding and its benefits?
- 2-Are mothers breastfeed infant with right practice?
- 3-Are there difference in knowledge and practice regarding breastfeeding between working and non-working mothers?

Subject and Methods

Research design:

A descriptive research design was used to conduct this study.

Setting:

The study was conducted at family planning clinic Al khosos central hospital at Alkhosos Region at Qalyubia Governorate -Egypt.

Subject: purposive sample of 90 healthy breastfeeding mothers visits the pre mention setting

Tools for data collection:

Two tools was used for data collection in the present study:

Tool I: A Structured interviewing questionnaire designed by the researcher after reviewing literature review AM,et al.,2018). Part I: demographic characteristics aimed to assess studied mothers personal data such as age, educational level, age of the infant, occupation status, work status and work hours/day. Part II: obstetric history aimed to assess studied mothers obstetric history such as number of gravida, number of parity, number of living children and mode of delivery. Part III: Knowledge assessment sheet aimed to assess studied mothers knowledge regarding breast feeding questions aimed to assess studied mothers knowledge regarding breast feeding questions were prepared by the researcher after reviewing literature review. Arabic questionnaire take about 20 miniutes consist of 20 item such as (definition of breastfeeding, breastfeeding benefits for the child, breastfeeding benefits for the definition of exclusive breastfeeding, the time of exclusive breastfeeding, the time should be infant start feeding with breast feeding, definition of colostrum milk benefits of the colostrum milk, breast feeding duration, obstacles of breastfeeding, signs of infant hunger, the number of feeds infant needs per day, duration of breastfeeding from one breast, signs of infant is breastfeeding properly, signs of infant's fullness, contraindications of breastfeeding alternative food during mother outside home, effect of some medicines on breastfeeding, foods to be avoided while breastfeeding and foods that increase milk production).

Scoring system:

Scoring system was followed to assess mother knowledge regarding breast feeding.

Each item was assigned a score according to mothers' knowledge responses were complete correct answer was scored as point 2, incomplete correct answer was scored as point 1 and don,t know was scored as point 0. These scored were summed and were converted into percent score. The mothers' knowledge were checked with a model key answer and accordingly the mothers' knowledge were categorized into good, average and poor .Total



scores of items were 40. Scores were summed and were converted into a percent score and classified into 3 categories:

- Good knowledge if total score >75%.
- Average knowledge if total score from 60 < 75%.
- Poor knowledge if total score from < 60%. %.

Tool II: Mother observational practice checklists regarding breastfeeding: aimed to assess mothers practice regarding breast feeding take about 15 minites consist of 25 items (done, sometimes, not done) (washing hands before breastfeeding, washing the breast before feeding the position of the infant is the correct position, rotating breastfeeding on both breasts, burping the infant immediately after feeding, drying the breast after feeding, create a calm environment and lie on pillows, hold the infant close to the chest, hold the infant upright between breasts, support The infant not forced to breastfeed, support infant head and shoulders to searches for breasts, Position the infant in the right position as the questionnaire form, squeeze the areola slightly to enable infant capture breast more deeply, make sure the infant fingers behind the areola,let the nipple touch the widow, the large portion of the areola should be in the infant's mouth, Put mother finger between infant lips to stop breastfeeding if mother want, Put the infant with the nose is adjacent to the mother's nipple, breastfeed the infant for 10 minutes from each breast, wash the breasts after each feeding, changing bras on a daily basis, avoid solid-brimmed bras, use of special means to prevent leakage of milk, while changing it frequently, wiping the nipples with rose water and massage the breast).

Scoring system:

A scoring system was followed to assess mothers practice regarding breastfeeding. Each item was evaluated as "done" was scored as 2 point, "sometimes" was scored as 1point and "not done" was scored as 0 point. Scores were summed up and were converted into a percentage total score 50 and classified into 2 categories:

- Adequate if total score > 70%.
- Inadequate if total score < 70%.

Validity:

The developed tool was ascertained by three experts in maternity and newborn health nursing, opinions elicited regarding the format, layout, consistency, accuracy and relevancy of the tools to measure the content validity of the tool.

Reliability Cronbach's Alpha was used to determine the internal reliability of the tool. knowledge questionnaire 0.739 and Practice checklist0.819

Ethical considerations:

The research approval was obtained from the Ethics of Scientific Research Committee - Faculty of Nursing - Helwan University. The researcher was clarified the objectives and aim of the study to mothers included in the study before starting. Oral consent was obtained from the mothers before inclusion in the study; a clear and simple explanation was given according



to their level of understanding. All the gathered data was confidential and used for research purpose only. The researcher assured maintaining anonymity and confidentiality of subjects' data included in the study. Mothers were informed that allowed to choose to participate or not in the study and have the right to withdrawal from the study at any time. Ethical and cultural values were respected.

Pilot Study

A pilot study was carried out on 10% of the mothers (9 mothers) to test the applicability, feasibility clarity of questions and time needed to complete the study tools. Based on the results, The pilot has also served to estimate the time needed for each subject to fill in the questionnaire. According to the results of the pilot, no corrections and omissions of items were performed, so the mothers were exactled from the study sample.

Fieldwork

- Actual field work was conducted and data were collected through six months, started from end of September 2020 to march 2021 after getting official permission. The researcher firstly met with mothers at the previously mentioned settings, after explained the purpose of the study after introduced to mother.
- Researcher explains the purpose of study then the researcher taken 4 mothers each week.
- Individual interviewing was done after obtaining mothers oral consent to participate. Resarcher was visited the study setting 2days / week (Monday and Wednesday) at (9AM to12PM).
- Demoghraphic characterstic ,obestatric history and knowledge questionnaire was filled by mothers who take 15-30 minutes and the checklist was observed within 20-30 minutes.

Statistical analysis:

Data collected from the studied sample was revised, coded and entered using Personal Computer (PC). Computerized data entry and statistical analysis were fulfilled using the Statistical Package for Social Sciences (SPSS) version 24. Data were presented using descriptive statistics in the form of frequencies, percentages. Chi-square test (X2) Standared deviation and mean was used for comparisons between qualitative variables.

Significance of the results:

- Highly significant at p-value < 0.01.
- Statistically significant was considered at p-value < 0.05
- Non-significant at p-value ≥ 0.05



RESULTS

Part I: Demographic characteristics of breastfeeding mother

Table (1): Distribution of the breastfeeding mother according to their demographic characteristics (n=90).

Characteristics	No	%
Mother's age(years)		
18<25	43	47.8%
25-35	47	52.2%
Mean \pm SD	25.5 ± 4.8	
Educational level		
Can't read and write	7	7.8%
Primary	11	12.2%
Secondary	49	54.4%
University	23	25.6%
Work status (n=49)		
Academic	3	3.3%
Governmental work	20	22.2%
Self-employment	26	28.9%
Work hours/day (n=49)		
< 6 hours	16	32.7%
8 to 12 hours	31	63.2%
> 12 hours	2	4.1%
$Mean \pm SD$	3.36 ± 1.54	
Age of infant		
1<2 months	20	22.2%
2 < 4 months	34	37.8%
4-6 months	36	40.0%
$Mean \pm SD$	3.36±1.54	

Table (1) shows that more than half of mothers (52.2%) were the age between 25-35 years old with mean age \pm SD were 25.53 \pm 4.87. Regarding education the highest percentage (54.4%) had secondary education. Concerning work status the same table also displayed that (28.9%) were self-employment. Regarding work hours /day the highest percentage (63.2%) were working 8-12 hours/day. In relation to the age of infant the same table also shows that two fifth (40%) of studied mother's infants were aged from 4-6 months and the mean age \pm SD were 3.36 \pm 1.54.



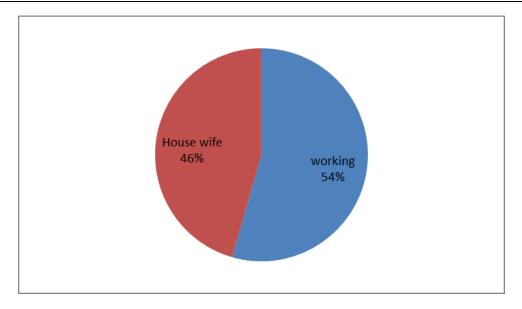


Figure (1) Donates that more than half (54%) of studied mothers were working while less than half (46%) of studied mothers were house wife.

Part II: Obstetric history of breastfeeding mothers

Table (2):Distribution of breastfeeding mothers according to their obstetric history (n=90).

Obstetric history (n=90).	NO	%
gravidity Number		
<2	49	54.4%
2-5	31	35.6%
>5	10	10%
Mean ± SD	2.91±1.01	
parity Number		
<2	49	54.4%
2-5 >5	31	35.6%
>5	10	10%
Mean \pm SD	2.37 ± 1.5	
Number of living children		
1-3	49	54.4%
>3	41	45.6%
Mean \pm SD	1.91 ± 1.01	
Mode of Delivery		
Normal vaginal delivery	36	40.0%
Cesarean section	54	60.0%



Table (2) shows that more than half (54.4%) of the mothers had number of gravida less thantwo, less than two parity and less than three children. Regarding mode of delivery table show that two third of studied mothers was cesarean section.

Part III: Knowledge assessment sheet according mother's knowledge regarding breastfeeding.

Table (3): Distribution of working and non-working mothers regarding to their breast feeding knowledge

	Studi	ed moth	ers			
Knowledge regarding breastfeeding	Work moth (N=4	ers	Non- work moth (N=4	ing ers	X^2	P-value
	No.	%	No.	%		
Definition of breastfeeding						
Don't know	8	16.3%	25	61.0%	19.221	0.001**
Correct in complete answer	32	65.3%	13	31.7%	19.221	0.001
Correct complete answer	9	18.4%	3	7.3%		
Breastfeeding benefits for the child						
Don't answer	10	20.4%	20	48.8%	10.400	0.005**
Correct incomplete answer	26	53.1%	18	43.9%	10.409	0.005***
Correct complete answer	13	26.5%	3	7.3%		
Breastfeeding benefits for the mother						
Don't know	26	53.1%	22	53.7%	6.934	0.031*
Correct incomplete answer	16	32.7%	19	46.3%		
Correct complete answer	7	14.3%	0	0.0%		
Definition of exclusive breastfeeding						
Don't Know	20	40.8%	23	56.1%	10.716	0.002**
Correct incomplete answer	16	32.7%	18	43.9%	12.716	0.002***
Correct complete answer	13	26.5%	0	0.0%		
The time of exclusive breastfeeding						
Don't know	11	22.4%	29	70.7%	2 102	0.240
Correct incomplete answer	36	73.5%	12	29.3%	2.103	0.349
Correct complete answer	2	4.1%	0	0.0%		
The time should be infant start feeding						
with breast feeding						
Don't know	11	22.4%	29	70.7%	2.103	0.349
Correct incomplete answer	36	73.5%	12	29.3%		
Correct complete answer	2	4.1%	0	0.0%	1	
Definition of colostrum milk						
Don't know	11	22.4%	30	73.2%		
Correct incomplete answer	36	73.5%	11	26.8%	1.849	0.307
Correct complete answer	2	4.1%	0	0.0%	1.049	0.397

Article DOI: 10.52589/AJHNM-JY8FPCWM DOI URL: https://doi.org/10.52589/AJHNM-JY8FPCWM

Volume 5, Issue 2, 2022 (pp. 33-54)



Benefits of the colostrum milk						
Don't know	10	20.4%	12	29.3%	1 166	0.480
Correct incomplete answer	25	51.0%	21	51.2%	1.466	0.480
Correct complete answer	14	28.6%	8	19.5%		

^{*} Statistical significant ** Highly statistically significant

Table (3) Table indicate that (73.5%, 73.5%.73.5%, 51%) of working mothers had insufficient knowledge regarding time of exclusive breastfeeding, time infant start breast feeding and definition and benefits of colostrum milk. Table also indicates that (61%, 48.8%, 53.7%, 56, 1%) of non-working mothers hadn't knowledge regarding breastfeeding definition, benefits' for child and mothers and definition of exclusive breast feeding. while (65.3%), (53.1%) of working mothers had insufficient regarding breastfeeding definition, also (53.1%), (40%) of working mothers hadn't knowledge regarding breastfeeding benefits to mothers and definition of exclusive breastfeeding. Table also shows that (70.7%, 70.7%, 73.2%) of non-working mothers hadn't knowledge regarding time of exclusive breastfeeding, time infant start breast feeding and also (51.2%) of non-working mothers had insufficient knowledge regarding benefits' of colostrum milk.

Table (4): Distribution of working and non-working mothers regarding to their breast feeding knowledge (n=90)

	(Occupational status				
Knowledge regarding breastfeeding		Working mothers (N=49)		Non- orking others N=41)	\mathbf{X}^2	P-value
	No.	%	No.	%		
Breast feeding duration						
Don't know	7	14.3%	12	29.3%	21.280	0.001**
Correct in complete answer	28	68.3%	20	40.8%	21.200	0.001
Correct complete answer	22	44.9%	1	2.4%		
Obstacles of breastfeeding						
Don't know	10	20.4%	12	29.3%	15.806	0.001**
Correct in complete answer	28	70.3%	21	40.9%	13.800	
Correct complete answer	18	36.7%	1	2.4%		
Signs of infant hunger						
Don't know	10	20.4%	10	24.4%	9.887	0.007**
Correct in complete answer	22	44.9%	28	68.3%	9.007	0.007
Correct complete answer	17	34.7%	3	7.3%		
The number of feeds infant needs per						
day						
Don't know	1	2.0%	4	9.8%	48.388	0.001**
Correct in complete answer	6	12.2%	32	78.0%		0.001
Correct complete answer	42	85.7%	5	12.2%		

Article DOI: 10.52589/AJHNM-JY8FPCWM DOI URL: https://doi.org/10.52589/AJHNM-JY8FPCWM



Duration of breastfeeding from one						
breast						
Don't know	1	2.0%	6	14.6%	5.659	0.059
Correct in complete answer	36	73.5%	29	70.7%		
Correct complete answer	12	24.5%	6	14.6%		
Signs of infant is breastfeeding properly						
Don't know	1	2.0%	5	12.2%	17 502	0.001**
Correct in complete answer	24	49.0%	32	78.0%	17.523	0.001
Correct complete answer	24	49.0%	4	9.8%		
Signs of infant's fullness						
Don't know	4	8.5%	9	22.0%	15.424	0.001**
Correct in complete answer	22	44.9%	28	68%	13.424	0.001
Correct complete answer	23	46.9%	4	9.8%		
Contraindications of breastfeeding						
Don't know	22	44.9%	9	22.0%	12 022	0.001**
Correct in complete answer	5	10.2%	31	75.6%	43.032	0.001**
Correct complete answer	22	44.9%	1	2.4%		

^{*} Statistical significant

Table (4) donates that (68.3%, 70.3%, 73.5%) of working mothers had insufficient knowledge regarding breast feeding duration, obstacles of breastfeeding and duration of breastfeeding from one breast. Table illustrate also that (40.8%, 40.9%) of non-working mothers hadn't knowledge regarding breast feeding duration and obstacles. Table also shows that (68.3%, 78%, 70.7%, 68%, and 75.6%) of non-working mothers had insufficient knowledge regarding signs of infant hunger, number of feeds infant needs per day duration of breastfeeding from one breast, Signs of infant is breastfeeding properly, signs of infant's fullness and Contraindications of breastfeeding.

Table (5): Distribution of working and non-working mothers regarding to their breast feeding knowledge (n=90)

	Studied mothers					
Knowledge regarding breastfeeding		mothers mo		Non-working mothers (N=41)		P-value
		%	No.	%		
Alternative food during mother						
outside home						
Don't know	1	2.0%	9	22.0%	27.329	0.001**
Correct in complete answer	27	55.1%	32	78.0%		
Correct complete answer	21	42.9%	0	0.0%		
Effect of some medicines on						
breastfeeding					25 520	0.001**
Don't know	2	4.1%	21	51.2%	35.538	0.001**
Correct in complete answer	19	38.8%	17	41.5%		

Article DOI: 10.52589/AJHNM-JY8FPCWM DOI URL: https://doi.org/10.52589/AJHNM-JY8FPCWM

^{**} Highly statistically significant



Correct complete answer	28	57.1%	3	7.3%		
Foods to be avoided while						
breastfeeding						
Don't know	0	0.0%	23	56.1%	58.311	0.001**
Correct in complete answer	6	12.2%	14	34.1%		
Correct complete answer	43	87.8%	4	9.8%		
Foods that increase milk production						
Don't know	1	2.0%	4	9.8%	10.222	0.006**
Correct in complete answer	30	61.2%	33	80.5%	10.222	0.006**
Correct complete answer	18	36.7%	4	9.8%		

^{*} Statistical significant

Table (5): indicates that more than half (55.1%, 61.2%) of working mothers had insufficient knowledge regarding alternative food during mother outside home andfoods that increase milk production. While(51.2%, 56.1) of non-working mothers hadn't knowledge regarding effect of some medicines on breastfeeding and foods to be avoided while breastfeeding, also shows that (78% and 80%) of nonworking mothers had insufficient knowledge regarding alternative food during mothers outside home and foods that increase milk production.

Table (6): Distribution of total knowledge regarding breastfeeding among working and non-working mothers

		g mothers =49)	non-workin (N=4	_	\mathbf{X}^2	P-Value	
	No.	%	No.	%			
Knowledge							
Poor	8	16.3%	39	95.1%	55.646	0.001**	
Average	32	65.3%	2	4.9%	33.040	0.001	
Good	9	18.4%	0	0.0%			

Table (6) shows that there was highly significant difference between working mothers and non-working mothers according knowledge regarding breastfeeding (P<0.001). Table indicate that most of working mothers group 65.3% was good knowledge while 95.1% of non-working mothers were poor knowledge.

^{**} Highly statistically significant



Part IV: distribution of working and non-working mothers regarding breastfeeding practice.

Table (6): Distribution of working and non-working mothers practice regarding breastfeeding.(n=90)

	Studied mothers					
Items	Working mothers (N=49)		Non- working mothers (N=41)		\mathbf{X}^2	P-value
	No.	%	No.	%		
Washing hands before breastfeeding						
Not done	4	8.2%	16	39.0%	18.214	0.001**
Sometimes	29	59.2%	23	56.1%	10.214	0.001
Done	16	32.7%	2	4.9%		
Washing the breast before feeding						
Not done	6	12.2%	20	48.8%	19.260	0.001**
Sometimes	27	55.1%	19	46.3%	19.200	0.001
Done	16	32.7%	2	4.9%		
The position of The infant is The correct position						
Not done	9	18.4%	11	26.8%	2.998	0.223
Sometimes	23	46.9%	12	29.3%		
Done	17	34.7%	18	43.9%		
Rotating breastfeeding on both breasts						
Not done	8	16.3%	26	63.4%	21.426	0.001 444
Sometimes	29	59.2%	12	29.3%	21.436	0.001**
Done	12	24.5%	3	7.3%		
Burping the infant immediately after feeding						
Not done	5	10.2%	11	26.8%	8.121	0.017*
Sometimes	28	57.1%	12	29.3%		
Done	16	32.7%	18	43.9%		
Drying the breast after feeding						
Not done	10	20.4%	25	61.0%	17.015	0.004 454
Sometimes	21	42.9%	12	29.3%	17.217	0.001**
Done	18	36.7%	4	9.8%		
Create a calm environment and lie on						
pillows						
Not done	6	12.2%	29	70.7%	33.357	0.001**
Sometimes	23	46.9%	9	22.0%	1	
Done	20	40.8%	3	7.3%	1	

^{*} Statistical significant

^{**} Highly statistically significant



Table (7) shows that (59.2%, 55.1%59.2%57.1%) of working mothers had inadequate practice regarding wash hands and breast before breastfeeding, rotating breastfeeding on both breasts and burping the infant immediately after feeding. Table also donates that (63.4%, 61.1%, and 70.7%) of non-working mothers had inadequate practice regarding rotating breastfeeding on both breasts, drying the breast after feeding and Create a calm environment and lie on pillows.

Table (7): Distribution of working and non-working mothers practice regarding breastfeeding (n=90)

	Occupational status					
Items	Working mothers (N=49)		wo mo	Non- working mothers (N=41)		P-value
	No.	%	No.	%		
Hold the infant close to the chest						
Not done	5	10.2%	31	75.6%	61.351	0.001**
Sometimes	1	2.0%	8	19.5%	01.331	0.001
Done	43	87.8%	2	4.9%		
Hold the infant upright between breasts						
Not done	5	10.2%	28	68.3%	57.923	0.001**
Sometimes	1	2.0%	10	24.4%		0.001
Done	43	87.8%	3	7.3%		
Support The infant not forced to breastfeed						
Not done	5	10.2%	26	63.4%	51.368	0.001**
Sometimes	1	2.0%	10	24.4%		
Done	43	87.8%	5	12.2%		
Support infant head and shoulders to searches for breasts						
Not done	17	34.7%	10	24.4%	14.957	0.001**
Sometimes	1	2.0%	13	31.7%		
Done	31	63.3%	18	43.9%		
Position the infant in the right position as the questionnaire form						
Not done	14	28.6%	26	63.4%	16.433	0.001**
Sometimes	12	24.5%	11	26.8%		
Done	23	46.9%	4	9.8%		
"Squeeze the areola slightly to enable						
infant capture breast more deeply						
Not done	12	24.5%	28	68.3%		
Sometimes	8	16.3%	11	26.8%	29.915	0.001**
Done	29	59.2%	2	4.9%		

Article DOI: 10.52589/AJHNM-JY8FPCWM DOI URL: https://doi.org/10.52589/AJHNM-JY8FPCWM

Volume 5, Issue 2, 2022 (pp. 33-54)



Make sure the infant fingers behind						
the areola						
Not done	29	59.2%	28	68.3%	19.124	0.001**
Sometimes	0	0.0%	9	22.0%		
Done	20	40.8%	4	9.8%		
Let the nipple touch the widow						
Not done	25	51.0%	23	56.1%	0.272	0.009**
Sometimes	6	12.2%	13	31.7%	9.373	0.009***
Done	18	36.7%	5	12.2%		
The large portion of the areola should						
be in the infant's mouth						
Not done	22	44.9%	13	31.7%	3.390	0.184
Sometimes	7	14.3%	12	29.3%		
Done	20	40.8%	16	39.0%		

^{*} Statistical significant

Table (8): shows that (59.2%, 51%, 44.9%) of working mothers had inadequate practice regarding breast feeding make sure the infant fingers behind the areola, let the nipple touch the widow, the large portion of the areola should be in the infant's mouth. Table also donates that (75.6%, 68%, 63.4%, 68.3%, 68.3%, 56.1%) of non-working mothers had inadequate practice regarding hold the infant close to the chest, hold the infant upright between breasts, support the infant not forced to breastfeed, position the infant in the right position as the questionnaire form, squeeze the areola slightly to enable infant capture breast more deeply, make sure the infant fingers behind the areola and let the nipple touch the widow

Table (8): Distribution of working and non-working mothers practice regarding breastfeeding (n=90)

Items		Occupatio	onal st	atus		
		orking mot		non- orking others (I=41)	\mathbf{X}^2	P-value
	No.	%	No.	%		
Put mother finger between infant lips to stop breastfeeding if mother want						
Not done	20	40.8%	27	65.9%	26.512	0.001**
Sometimes	3	6.1%	12	29.3%		
Done	26	53.1%	2	4.9%		
Put the infant with the nose is adjacent to the mother's nipple						
Not done	10	20.4%	17	41.5%	10.170	0.006**
Sometimes	23	46.9%	21	51.2%	10.170	0.000
Done	16	32.7%	3	7.3%		

Article DOI: 10.52589/AJHNM-JY8FPCWM DOI URL: https://doi.org/10.52589/AJHNM-JY8FPCWM

^{**} Highly statistically significant



Breastfeed the infant for 10 minutes							
from each breast							
Not done	8	16.3%	26	63.4%	21.895	0.001**	
Sometimes	21	42.9%	10	24.4%			
Done	20	40.8%	5	12.2%			
Wash the breasts after each feeding							
Not done	22	44.9%	18	43.9%	0.041	0.980	
Sometimes	23	46.9%	20	48.8%	0.041		
Done	4	8.2%	3	7.3%			
Changing bras on a daily basis							
Not done	7	14.3%	29	70.7%	30.829	0.001**	
Sometimes	19	38.8%	8	19.5%	30.829	0.001**	
Done	23	46.9%	4	9.8%			
Avoid solid-brimmed bras							
Not done	14	28.6%	19	46.3%	3.142	0.208	
Sometimes	24	49.0%	16	39.0%	3.142		
Done	11	22.4%	6	14.6%			
Use of special means to prevent							
leakage of milk, while changing it							
frequently					10.285	0.006**	
Not done	13	26.5%	21	51.2%	10.263	0.000	
Sometimes	16	32.7%	15	36.6%			
Done	20	40.8%	5	12.2%			
Wiping the nipples with rose water							
Not done	12	14.1%	22	53.7%	36.762	0.001**	
Sometimes	27	75.9%	15	36.6%	30.702		
Done	10	10.0%	4	9.8%			
Massage the breast							
Not done	11	22.4%	18	43.9%	4.708	0.095	
Sometimes	30	61.2%	18	43.9%	4.708 0.095		
Done	8	16.3%	5	12.2%			

^{*} Statistical significant

Table (9) indicates that (95.9%, 61.2%) of working mothers had inadequate practice regarding wiping the nipples with rose water and massage the breast. Table also shows that (65.9%, 63.4%, 70.7 %) of non-working mothers had inadequate practice regarding Put mother finger between infant lips to stop breastfeeding if mother want, breastfeed the infant for 10 minutes from each breast and changing bras on a daily basis.

^{**} Highly statistically significant



Table (9): Distribution of total practice regarding breastfeeding among working and non-working mothers

	Occupa	Occupational status					
	Workin (N=49)	ng mothers	Non-working mothers (N=41)		\mathbf{X}^2	P-Value	
	No.	%	No.	%			
Practice							
Not Adequte	18	36.7%	35	85.4%	21.806	0.001**	
Adequete	31	63.3%	6	14.6%			

Table (10) shows that 85.4% of non-working mothers had inadequate practice regarding breastfeeding while 63.3% of working mothers had adequate practice regarding breastfeeding.

Table (11): Distribution of working and non-working mothers according to total knowledge and practice mean score regarding breastfeeding.

	Working mothers (N=49)	Non-working mothers (N=41)	X^2	P-Value	
Knowledge	24.061±4.404	14.781±5.716	4.633	0.034*	
Practice	29.571±9.089	15.732±10.254	4.033	0.034	

Table 11: shows that there were significant differences between working mothers and non-working mothers according to total mean score of knowledge (24.061±4.404, 14.781±5.716) respectively and practice (29.571±9.089, 15.732±10.254) respectively (P<0.05).

Table (12): Correlation between total knowledge score and total practice score among working mothers

		Practice		
		Working mothers (N=49)	nNon-working mothers (N=41)	
Knowledge	R	0.637	0.353	
	p-value	0.001**	0.023*	
	N	49	41	

Table 12: shows that there were highly significant correlation between knowledge and practice in working mothers (P < 0.001) and significant correlation between knowledge and practice (P < 0.05)

Volume 5, Issue 2, 2022 (pp. 33-54)



DISCUSSION

Breastfeeding is a natural event the performance accomplished practice that requires continuous effective support to make breastfeeding successful. Breast milk the most superior feed for infant to fulfill nutritional need for proper growth and development for infant. Breastfeeding has both short term benefits like protection from respiratory infections and diarrhea as well as long term benefits on blood sugar level, Intelligence and obesity (Ford, et al., 2020).

Regarding the demographic characteristics of the studied sample, the present study revealed that the majority of studied mothers more than half were the age between 25-35 years with Mean \pm SD 25.5 \pm 4.8. Result similar with the study performed by Awoke, et al. (2020), which titled (Predictors of optimal breastfeeding practices done in Worabe town) who stated that the majority of studied mothers were in the age group 25–34 years. From the researcher point of age of 25 to 35 others is considered a better time for childbearing and breastfeeding.

Regarding to the educational level of studied mothers the present study revealed that majority of mothers were secondary education. The result similar with result in study performed by Cascone, et al. (2019) in italy which titled evaluation of knowledge, attitudes, and practices about exclusive breastfeeding among women in Italy who stated that nearly half of studied mothers were secondary education. From the research point of view increase in the percentage of technical secondary education among mothers is due to the increase in demand technical secondary education.

According to the occupation status of the studied mothers the current study revealed that majority of mothers was working. At the same line with Abekah-Nkrumah et al. (2020) in their study which titled, Examining working mothers' experience of exclusive breastfeeding in Ghana who showe that majority of studied mothers were working These results are inconsistent the study by Safdar et al. (2017) which titled the Assessment of Knowledge, Attitude and Practices of Exclusive Breastfeeding Among Lactating Mothers: A Case of Children Hospital of Lahore, Pakistan, who reported that more than half of mothers were house wife. From the researcher point of view the increase in the percentage of working mothers is due to the declining living conditions and the high prices, which prompt them to go out to work, as well as the desire of some to preserve carrier.

Concerning to non-working mothers" knowledge regarding breastfeeding the present study showed majority of studied non-working mothers respectively had insufficient answer regarding breastfeeding benefits for the infant. On the same line with study by Sultania et al. (2019) which titled Breastfeeding knowledge and behavior among women visiting a tertiary care center in India: A cross-sectional survey, who reported that about half of studied mothers had incomplete correct answer regarding breastfeeding benefits for the infant. This is against to what was studied by Raheel & Tharkar (2018) which titled Why mothers are not exclusively breast feeding their babies till 6 months of age? Knowledge and practices data from two large cities of the Kingdom of Saudi Arabia who reported that majority of studied mothers had high knowledge regarding breast feeding. From the researcher point of view the result due to most mothers inherit breastfeeding as nutritious for the infant only, without delving into other benefits

Volume 5, Issue 2, 2022 (pp. 33-54)



According to working mothers" knowledge regarding breastfeeding the present study showed that three quarter of non-working mothers had insufficient knowledge regarding contraindication of breastfeeding this result agree with study performed by Elnashar et al. (2021) which titled Knowledge, Attitudes, and Practice of mothers toward permanent and temporal contraindications of Breast Feeding in Taif city, Saudi Arabia. Reported that more than half of studied sample had insufficient knowledge regarding contraindication of breastfeeding. This disagree with study performed by Simanungkalit et al. (2021) which titled Knowledge Relationship with Maternal Anxiety in Breastfeeding Babies during the Covid-19 Pandemic at UPTD Puskesmas Bawomataluo in 2021, stated that nearly half of mothers had enough knowledge regarding breastfeeding contraindication. From the researcher point of view As a result of the different educational level of mothers.

As regarding non-working mothers" knowledge regarding breastfeeding the present study showed that majority of studied non-working mothers had a poor knowledge regarding breastfeeding while. This in the same line with study performed by Ahmed & Piro (2019). Which titled Knowledge and Attitudes of Pregnant Women Regarding Breastfeeding reported that more than half of the study mothers had poor knowledge and. This is contrary to what was stated in a study by Dukuzumuremyi et al. (2020) which titled (Knowledge, attitude, and practice of exclusive breastfeeding among mothers in East Africa: a systematic review) which reported that majority of mother had a good knowledge regarding breast feeding. From the research point of view this duo to lack of health teaching regarding breastfeeding.

Concerning to working mothers" knowledge regarding breastfeeding the present study showed that more than half of studied working mothers had a good knowledge regarding breastfeeding knowledge this result agree with study performed by McCardel & Padilla (2020) which titled Assessing workplace breastfeeding support among working mothers in the United States. Reported that about two third of working mothers had enough knowledge regarding breastfeeding. This disagrees with study performed by Dinour & Szaro (2017). In their study which titled Employer-based programs to support breastfeeding among working mothers: a systematic review. Reported that majority of working mothers had insufficient knowledge regarding breastfeeding. From the researcher point of view this related to individual variation.

Regarding non-working mothers" practice the present study clarifies that more than half had inadequate practice towards washing hands and breast before breastfeeding, wash the breasts after each feeding. this study agreement with study performed by Jose et al. (2020) in their study which titled A qualitative enquiry into the tribal mothers' breastfeeding and related hygiene practices in Kerala Who reported that more than half of studied mothers had not perform hygiene prior infant feeding. this disagreement with study performed by Okonya et al. (2017) which titled Perceptions of breast milk expression practices among working mothers who stated that majority of mothers perform hygienic care regarding breastfeeding. From the researcher point of view, this is may be due to the lack of time for mothers.

As regarding working mothers" practice regarding breastfeeding the present study showed that three quarter of working mother don't Express breast milk, at work or at home. This in the same line with study performed by Attahiru et al. (2018); which titled Breastfeeding support and determinants of expressed breast milk feeding practice among working mothers in Sokoto, Nigeria. Conducted that majority of studied mothers don't express breast milk, at

Volume 5, Issue 2, 2022 (pp. 33-54)



work or at home. This result disagreement with study performed by Litwan et al. (2021) in their study which titled How do breastfeeding workplace interventions work?: a realist review. International Journal for Equity in Health, who stated that more than half of studied mothers express breast milk, at work. From the researcher point of view because of lack of breastfeeding work place-support-and-determinants-of-expressed-breast-milk-feed and lack of privacy foe expressed breast milk and lack of places for store breast milk (refrigerator).

According to total non-working mothers practice regarding breastfeeding the present study showed that majority of studied non-working mothers had inadequate practice regarding breast feeding this study in the same study with study performed by Kassie et al. (2021). Study titled breastfeeding technique and associated factors among lactating mothers visiting gondar town health facilities, northwest Ethiopia, showed that just less than half of mothers apply effective breastfeeding technique, depicting the presence of poor breastfeeding technique. this against result by Al Ketbi et al. (2018) which titled Knowledge, attitudes, and practices of breastfeeding among women visiting primary healthcare clinics on the island of Abu Dhabi, United Arab Emirates who stated that about three quarter of mothers had average practices regarding breastfeeding. From the researcher point of view these variations of level of breastfeeding practice result in decrease level of knowledge.

Regarding working mothers practice toward breastfeeding the present study revealed that more than half of working mothers had inadequate practice regarding breastfeeding.this result agree with study performed by Chen et al. (2019). Which titled the association between work related factors and breastfeeding practices among Chinese working mothers: a mixed-method approach, conducted that about half of working mothers had inadequate practice regarding breastfeeding. This disagree with study performed by Zerfu et al. (2021) which titled Communities and employers show a high level of preparedness in supporting working mothers to combine breastfeeding with work in rural Kenya. Mentioned that two third of studied mothers had adequate practice regarding breastfeeding. From the researcher point of view this result in individual and cultural differences.

The present study demonstrates that there was a highly significant difference between total knowledge and practice regarding breast feeding among studied mothers. Which is similar to study performed by Khaliq et al. (2017) in the study which titled Assessment of knowledge and practices about breastfeeding and weaning among working and non-working mother, who reported that there was a significant relation between knowledge and practices of studied mothers? This result disagree with study performed by Rana et al. (2020) in their study which titled Knowledge and practices of exclusive breastfeeding among mothers in rural areas of Rajshahi district in Bangladesh: A community clinic based study, who showed that there were significant difference between knowledge and practices of studied mothers. From the researcher's point of view, this result is due to the individual differences between mothers.

CONCLUSION

There was highly significant difference between working mothers and non-working mothers according knowledge and practice regarding breastfeeding there were significant differences between working mothers and non-working mothers according to total mean score of



knowledgeand practice. Also there were highly significant relation between knowledge and practice in working mothers. Study also shows that there were highly significant correlation between knowledge and practice in working mothers and significant correlation between knowledge and practice. The study showed that working mothers have higher information and practices than non-working mothers regarding breastfeeding. Finally the results of the current study answer the research question.

RECOMMENDATION

Based on the result findings of the study, the following recommendations were suggested:

- Mothers should be taught on how to breastfeed and maintain exclusive breastfeeding through breast feeding booklet even if mothers should be separated from their infant.
- Increase health awareness regarding breast feeding in maternal and child health centers universities and schools.
- Researches on factors affecting the practice of breastfeeding among working and nonworking mothers should be conducted.
- Breastfeeding counseling during ante natal care should be more elaborative with emphasis on its advantage.

Further research recommendation:

Provide a nursery in the workplace, where the children of female workers join them until the age of two years to improve the continuity of breastfeeding with work

REFRENCES

- Okonya, J. N., Nabimba, R., Richard, M., & Ombeva, E. A. (2017). Perceptions of breast milk expression practices among working mothers in Bogota. *African Journal of Midwifery and Women's Health*, 11(4), 169-175.
- Sultania, P., Agrawal, N. R., Rani, A., Dharel, D., Charles, R., & Dudani, R. (2019). Breastfeeding knowledge and behavior among women visiting a tertiary care center in India: A cross-sectional survey. *Annals of Global Health*, 85(1).
- Abekah-Nkrumah, G., Antwi, M. Y., Nkrumah, J., & Gbagbo, F. Y. (2020). Examining working mothers' experience of exclusive breastfeeding in Ghana. *International breastfeeding journal*, 15(1), 1-10.
- Ahmed, H. M., & Piro, S. S. (2019). Knowledge and Attitudes of Pregnant Women Regarding Breastfeeding in India. *Polytechnic Journal*, 9(2), 55-62.
- Al Ketbi, M. I., Al Noman, S., Al Ali, A., Darwish, E., Al Fahim, M., & Rajah, J. (2018). Knowledge, attitudes, and practices of breastfeeding among women visiting primary healthcare clinics on the island of Abu Dhabi, United Arab Emirates. *International breastfeeding journal*, 13(1), 1-14.



- AM, E., MK, M., NM, S., ME, E. R., Ali WH, A., SS, A., & EE, E. (2018). Knowledge, attitude and practice of breastfeeding among working and non-working mothers in Saudi Arabia. Egyptian Journal of Occupational Medicine, 42(1), 133-150
- Awoke, N., Tekalign, T., & Lemma, T. (2020). Predictors of optimal breastfeeding practices in Worabe town, Silte zone, South Ethiopia. *PloS one*, *15*(4), e0232316.
- Cascone, D., Tomassoni, D., Napolitano, F., & Di Giuseppe, G. (2019). Evaluation of knowledge, attitudes, and practices about exclusive breastfeeding among women in Italy. *International journal of environmental research and public health*, *16*(12), 2118.
- Cazorla-Ortiz, G., Obregón-Guitérrez, N., Rozas-Garcia, M. R., & Goberna-Tricas, J. (2020). Methods and success factors of induced lactation in Campinas: A scoping review. *Journal of Human Lactation*, *36*(4), 739-749..
- Chen, J., Xin, T., Gaoshan, J., Li, Q., Zou, K., Tan, S., ... & Tang, K. (2019). The association between work related factors and breastfeeding practices among Chinese working mothers in China: a mixed-method approach. *International breastfeeding journal*, *14*(1), 1-13.
- Dinour, L. M., & Szaro, J. M. (2017). Employer-based programs to support breastfeeding among working mothers: a systematic review in Spain . Breastfeeding Medicine, 12(3), 131-141.
- Dukuzumuremyi, J. P. C., Acheampong, K., Abesig, J., & Luo, J. (2020). Knowledge, attitude, and practice of exclusive breastfeeding among mothers in East Africa: a systematic review. *International Breastfeeding Journal*, 15(1), 1-17.
- Elnashar, M. A., Al-fuhayd, A. M., Algethami, R. A., AlEssa, H. A., Alharthi, A. H., & Abdullah, A. M. (2021). Knowledge, Attitudes, and Practice of mothers toward permanent and temporal contraindications of Breast Feeding in Taif city, Saudi Arabia. Middle East Journal of Family Medicine, 19(9.
- Ford, E. L., Underwood, M. A., & German, J. B. (2020). Helping mom help baby: nutrition-based support for the mother-infant dyad during lactation in London. *Frontiers in nutrition*, 7, 54.
- Granger, C. L., Embleton, N. D., Palmer, J. M., Lamb, C. A., Berrington, J. E., & Stewart, C. J. (2021). Maternal breastmilk, infant gut microbiome and the impact on preterm infant health. *Acta Paediatrica*, 110(2), 450-457.
- Jose, J. P., Cherayi, S. J., & Raju, K. T. (2020). A qualitative enquiry into the tribal mothers' breastfeeding and related hygiene practices in Kerala. *Indian Journal of Health and Well-being*, 11(1), 119-128.
- Kassie, D. G., Safayi, B. L., & Assimamaw, N. T. (2021). Breastfeeding Technique and Associated Factors among Lactating Mothers Visiting Gondar Town Health Facilities, Northwest Ethiopia: Observational method.
- Khaliq, A., Qamar, M., Hussaini, S. A., Azam, K., Zehra, N., Hussain, M., & Jaliawala, H. A. (2017). Assessment of knowledge and practices about breastfeeding and weaning among working and non-working mothers. *Journal of the Pakistan Medical Association*, 67(3), 332-338.
- Lackey, K. A., Fehrenkamp, B. D., Pace, R. M., Williams, J. E., Meehan, C. L., McGuire, M. A., & McGuire, M. K. (2021). Breastfeeding Beyond 12 Months: Is There Evidence for Health Impacts?. *Annual Review of Nutrition* in Bhopal, *41*.
- Litwan, K., Tran, V., Nyhan, K., & Pérez-Escamilla, R. (2021). How do breastfeeding workplace interventions work?: a realist review in Argentina. *International Journal for Equity in Health*, 20(1), 1-25.



- McCardel, R. E., & Padilla, H. M. (2020). Assessing workplace breastfeeding support among working mothers in the United States. *Workplace health & safety*, 68(4), 182-189.
- Raheel, H., & Tharkar, S. (2018). Why mothers are not exclusively breast feeding their babies till 6 months of age? Knowledge and practices data from two large cities of the Kingdom of Saudi Arabia. Sudanese journal of paediatrics, 18(1), 28
- Rana, M. M., Islam, M. R., Karim, M. R., Islam, A. Z., Haque, M. A., Shahiduzzaman, M., & Hossain, M. G. (2020). Knowledge and practices of exclusive breastfeeding among mothers in rural areas of Rajshahi district in Bangladesh: A community clinic based study. *PLoS One*, 15(5), e0232027.
- Simanungkalit, A., Luahambowo, A., Siregar, L. E., Purba, D. S. B., & Wau, A. S. (2022). Knowledge Relationship with Maternal Anxiety in Breastfeeding Babies during the Covid-19 Pandemic at UPTD Puskesmas Bawomataluo in 2021. Britain International of Exact Sciences (BIoEx) Journal, *4*(1), 56-62
- Tahiru, R., Agbozo, F., Garti, H., & Abubakari, A. (2020). Exclusive breastfeeding and associated factors among mothers with twins in the tamale metropolis. *International journal of pediatrics*, 2020
- UvnäsMoberg, K., Ekström-Bergström, A., Buckley, S., Massarotti, C., Pajalic, Z., Luegmair, K., ... & Dencker, A. (2020). Maternal plasma levels of oxytocin during breastfeeding inVenezuela —A systematic review. *PLoS One*, *15*(8), e0235806.
- Zerfu, T. A., Griffiths, P., Macharia, T., Kamande, E. W., Anono, E., Kiige, L., ... & Kimani-Murage, E. W. (2021). Communities and employers show a high level of preparedness in supporting working mothers to combine breastfeeding with work in rural Kenya. *Maternal & Child Nutrition*, e13180