



Knowledge and Intention about Breastfeeding Practice among Mothers

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ABSTRACT

Background: Breastfeeding is an important issue to the whole community not only for mothers and infants. The WHO recommends exclusive breastfeeding (EBF) for the first six months of life. So mothers' knowledge of breastfeeding is a critical issue.

Objective: to assess mothers' knowledge and practice toward exclusive breastfeeding

Methods: This is a cross sectional study conducted on 261 mothers attending Awlad saqr family health center and units from November 2022 till September 2023. Data was collected by using semi semi-structured questionnaire. The mothers included in the study were in the third trimester till three months postnatal coming for breastfeeding counseling service or other health care services e.g. (vaccination, family planning, and antenatal and postnatal visits).

Results: The study revealed that mothers practiced exclusive breast feeding was 191 (73.2%) mothers. Sufficient knowledge level was reported in 45.2% of participants. Mothers' intention for exclusive breastfeeding at 6 months was 86.2%. Being a housewife, receiving high education, and counseling in previous and current pregnancies are significant predictors for sufficient knowledge detected by logistic multivariate analysis. They significantly increase the opportunity for sufficient knowledge by 2.31, 18.67, 2.04, and 6.3 respectively.

Conclusion: Although the percentage of participants who reported exclusive breastfeeding was high, there was an inadequacy of knowledge about breastfeeding in general and about correct feeding practices. Educated mothers, frequent antenatal care (ANC) visits, and counseling sessions are associated with good knowledge and intention. Counseling sessions for mothers about EBF need to be enhanced to improve counseling services during antenatal and post-natal care visits.

Keywords: Exclusive breastfeeding; knowledge; attitude

INTRODUCTION

Breastfeeding (BF) is a concerning public health strategy for enhancing baby and child health, lowering their morbidity and mortality, and enhancing maternal health [1]. Along with short and long-term benefits to mother and child health, it also economically benefits society [2].

Breastfeeding is the process of providing a newborn with breast milk, and it is very important for improving maternal and child health [3]. Its success is partly attributed to sociological and cultural legacies. Therefore, evaluating the contributing

factors of the EBF purpose needs to be done from a numerous perspective [4],[5].

If each child under the age of received optimal breastfeeding, approximately 820 thousand lives may be saved annually among children under the age of five [6].

The recommended feeding practice for all mothers during the first six months of life is exclusive breastfeeding (EBF) and is considered the most significant factor in a child's health and development [7].

Furthermore, only 71% of babies were breastfed until they were 12 months old, and by the time they

were 2 years old, just 45% of babies were breastfed [8].

With all of the health benefits breastfeeding offers to parents and children, besides its effect on the economy and the environment, it is not just a lifestyle choice but a public health concern.[9].

Longer breastfeeding duration is correlated with maternal attitudes and knowledge about nursing [10]. Additionally, there is an association between prenatal breastfeeding intentions and knowledge of the advantages of breastfeeding [11].

Additionally, in a previous observational study, exclusivity and length of breastfeeding were linked to mothers' knowledge that breastfeeding decreases the risk of breast cancer [12].

Counseling about breastfeeding should be a vital part of planning for feeding infants and young children [10].

Despite all the benefits of breastfeeding, the rate of exclusively breastfed infants between 0-6 months has declined. Breastfeeding counseling deserve more attention specially with the increasing role of family medicine in the new health system.

So, we conducted the current study to assess the knowledge and intentions of mothers toward breastfeeding practice and breastfeeding intentions.

METHODS

Study design and setting: A cross-sectional study was carried out in Awlad saqr district health center as urban and health units as rural to detect knowledge and intention toward breastfeeding practice from November 2022 till September 2023

Study subjects:

Inclusion criteria: Mothers who attended during the third trimester and three months post-natal for breastfeeding counseling services or other services (vaccination, family planning, antenatal and postnatal visits).

Exclusion criteria: non-lactating mothers were excluded from the study.

Sample size and technique: There are 27 rural units and 1 urban center from which our sample was selected. The urban center was selected with 3 rural units (randomly). The mothers were selected by systematic random sample technique. Assuming that the total number of mothers attending primary health units and centers annually is 107900 the prevalence of poor knowledge is 21.7 % (Christina et al., 2022). So the sample size was 261 mothers

Data collection tools

All subjects who participated in the study filled in structured questionnaire which took about 10-15

minutes to be completed. The questionnaire is composed of:

1.Socio-demographic part for age, educational status, occupation. Obstetric history as parity and number of children in addition to questions about having previous counseling sessions and their place [13].

2. Mothers' knowledge toward breast feeding practice was assessed by a semi-structured questionnaire adopted from WHO recommendations [13], previous literature of Zielinska et al.[14]

-Questions about the experience during the pregnancy (4 items): included detecting a number of visits to primary health care units, awareness of the attendants about breastfeeding counseling sessions, and if the staff had discussed any information about BF with them.

-Questions about breast feeding knowledge (15 items): to detect the knowledge about the composition of the milk and benefits of BF for both mothers and infant.

Questions about the birth and the maternity period (23 items): to assess type of delivery, rooming in, skin to skin contact, feeding of the infant and the type of help the staff gave to the mothers

Breastfeeding knowledge score: Every right answer given a score of 1, while incorrect answer received a score of 0. The total knowledge score was estimated and graded on a scale based on standards used in previous study Naja et al [16], as follows: (<50% insufficient), (50 to <70% intermediate) and (>70% sufficient).

3.Mothers' intention was assessed by a questionnaire adopted from Yehya et al [15].

-Questions about infant feeding intention (4 items): using the Arabic infant feeding intention scale to detect the intention of the mothers to initiate BF and the strength of intention to exclusively breastfeed, and is measured by a 5-point Likert scale from 0 (strongly disagree) to 5 (strongly agree). The total IFI score ranges from 0 (strong intention to not breastfeed) to 16 (strong intention to exclusively breastfeed for up to 6 months)

Pilot study

It will be carried out on 10% of the sample of mothers at Awlad saqr district to test the questionnaires for clarity, understanding, translation, consistency, and time needed to fill them out.

Feedback on the pilot study:

1.The time needed for the examination was 15 minutes on average for each participant.

2. The investigator should guarantee the confidentiality of the collected data.

All participants of the pilot were excluded from the study.

Validity and reliability: The questionnaire was semi-structured, part was Arabic and part was translated. We checked the validity and it was 0.834

Field work

Steps to fill out the questionnaire study:

1. Mothers attending the primary health units and center were interviewed by face-to-face discussion to ask about BF benefits and the role of counseling sessions in their experience, they filled the questionnaire with my help as most of them were not well educated. I helped them by reading and explaining the questions.

2. The researcher provided the participants with clear information on the rationale and objectives of the study and ensured the complete confidentiality of all data and opinions.

ethical considerations :

The protocol of the study was approved by the Institutional Review Board (IRB) for Medical Research Ethics, Zagazig University, Faculty of Medicine (ZU-IRB). The necessary official permission to carry out the study was obtained from the director of health administration before collecting the data. Informed consent was also obtained from every mother before participation. The participants were given the right to refuse or participate in the study. Participation was completely voluntary without any pressure.

Statistical analysis

To analyze the data, the software SPSS (Statistical Package for the Social Sciences) version 26 was used. Absolute frequencies were used to characterize categorical variables and were compared using chi square test, and Monte Carlo tests when appropriate. To confirm assumptions utilized in parametric tests, the Shapiro-Wilk test was used. Depending on the type of data, the means and standard deviations or the median and interquartile range were used to characterize quantitative variables. To compare quantitative data between two groups, Kruskal Wallis test (for not normally distributed data) and one way ANOVA test (for normally distributed data) were used. Pairwise comparison and Tukey HSD were used to identify differences between each two individual groups, when the difference is significant. Binary logistic regression was used to identify independent risk factors associated with certain health problem. The level statistical significance was set at $P < 0.05$.

Highly significant difference was present if $p \leq 0.001$.

RESULTS

The study included 261 mothers ranging in age from 19 to 47 years and mean age 28.5 years. The largest percentage (77.8%) received secondary education and 74.7% were housewives. Parity ranged from 1 to 5 where 34.5% of females were para 3. Of studied females, 76.2% received counseling in previous pregnancy and 69.3% received counseling in health unit.

On asking about counseling on BF in current pregnancy, 93.9% stated that counseling should start early in pregnancy, and 73.9% received counseling sessions on ANC visits. ANC visits ranged from 0 to 15 with median 3. About 63%, 50% and 41% were told about skin-to-skin contact, staying together for 24 hours and risk of adding water/formula during the first 6 months also showed that 72% of patients did not plan for only FF. About 89% of mothers agreed that they plan to give trial for BF, 89.3% and 86.2% agreed that they should exclusively BF for 1, 3 and 6 months respectively (Table 1).

According to level of knowledge evaluated, 22.6% had score $< 50\%$ which is considered as insufficient, 32.2% had scores from (50 to $< 70\%$) which is considered intermediate while 45.2% had sufficient level of knowledge. About 60.9% of mothers stated that breast milk composition is variable according to infants' need, 17.2% stated that breast milk did not differ from formula milk and only 13.8% viewed that formula milk is better than breast milk. About 58% agreed that excessive suckling increases milk output. About 69% agreed that lactating mother should stay away from allergens, e. g. peanuts, strawberries and 64.4% stated that colic in infants is caused by the lactating mother ingesting gas-producing meals. About 42% stated that breast-fed infants developed at slower rate. As regard benefits of BF, 69.7%, 57.1%, 68.2%, 81.6%, 78.2% and 71.3% agreed that they protected against poor brain development, obesity, diarrhea in infants, ovarian cancer, postpartum depression and type 2 DM for mothers. However, 28% and 23% agreed that BF increased risk of type 1 diabetes and both types did not differ (Table 2).

About 57% of mothers delivered by CS with spinal anesthesia and 73.2% fed their babies through exclusive BF. About 35% first held their babies within 30 minutes after delivery and 89.3% did not provide skin to skin contact and 45.6% claimed that delay in carrying babies was due to anesthesia.

About 82% first held babies for less than 30 minutes. About 40% of mothers reported that babies received water/sugary fluids. About 27% of mothers asked to give their babies supplementation and 60.5% of babies who received fluids got them by spoon. About 44% used soother/dummy. Twenty six mothers received Leaflet/supplies promote formula milk (23.1% received booklets and 76.9% received samples) (Table 3)

About 79.7% of mothers received help from staff, 68.2% reported that staff showed good position and attachment, 71.6% showed her how to express milk by hand, 72.4% of mothers try to express milk by themselves, and 41% were totally able to express milk by themselves. About 72% of mothers reported that baby was always with mothers. About 35% and 35% of mothers were advised to feed baby when hungry and from 1 to 2 hours respectively and 55.9% were breastfed for limited time. About 48% and 97% were advised to exclusively breastfeed baby and received PNC .Ninety percent of mothers had suggestions about to get help and 63.4% of mothers suggest that aid should be done via health care professionals (Table 4)

There is statistically non-significant association between level of knowledge among others and either age, parity or number of living children.

High education and housewives were associated with sufficient knowledge There is statistically significant relation between level of knowledge and number of ANC visits. On doing pairwise comparison, difference is significant between group with sufficient knowledge and each other group. (Table 5)

There is statistically significant association between level of knowledge among mothers and intent for formula feeding, trial for BF, exclusive BF for 1 and 3 months. There is significant association between sufficient knowledge and intent for exclusive BF. There is statistically significant relation between level of knowledge among mothers and the practice of infant feeding (no one with sufficient or intermediate level of knowledge gave FF). (Table 6).

Being housewife, receiving preparatory, secondary, high education, and counseling in previous and current pregnancy significantly increases the opportunity of sufficient knowledge by 2.31, 4.67, 5.8, 18.67, 2.04, and 6.3 folds respectively. By multivariate regression analysis, receiving high education and a higher frequency of ANC visits significantly independently increase the opportunity for sufficient knowledge by 17.362 and 1.337 folds respectively (Table 7).

Table 1: Distribution of the studied mothers according to experiences during pregnancy and infant feeding intention:

Experiences during pregnancy	N=261	%
Education on BF should start in pregnancy		
Yes	245	93.9%
No	16	6.1%
Number of ANC visits	3(0 – 15)	
Receive counseling session on ANC visits		
Yes	193	73.9%
No	68	26.1%
Told about skin to skin contact		
Yes	165	63.2%
No	96	36.8%
Told about rooming in/24 hours		
Yes	131	50.2%
No	130	49.8%
Told about risk of adding water/formula in first 6 months		
Yes	106	40.6%
No	155	59.4%
Infant feeding intention		
Plan to only formula fed:		
Agree	67	25.7%
Neutral	6	2.3%

Experiences during pregnancy	N=261	%
Disagree	188	72%
Plan to give trial for BF:		
Agree	232	88.9%
Neutral	2	0.8%
Disagree	27	10.3%
Plan to exclusively BF at 1 month:		
Agree	233	89.3%
Neutral	8	3.1%
Disagree	20	7.7%
Plan to exclusively BF at 3 months:		
Agree	225	86.2%
Neutral	4	1.5%
Disagree	32	12.3%
Plan to exclusively BF at 6 months:		
Agree	225	86.2%
Neutral	4	1.5%
Disagree	32	12.3%

Table 2: Distribution of the studied mothers according to infant feeding knowledge

Items	N=261	%
The composition of the mother's milk is adjusted to the infant's need	159	60.9%
The composition of milk formula is similar to human milk	45	17.2%
A superior source of nutrients than human milk is infant formula.	36	13.8%
Breastfeeding increases the volume of milk produced in the human body.	150	57.5%
Lactating mothers should avoid allergens, e. g. strawberries, and peanuts.	179	68.6%
Consuming gas-producing food by a lactating mother causes colic in infant	168	64.4%
Breastfed infants develop at a slower rate	109	41.8%
Breastfeeding improves infant brain development	182	69.7%
Concerning child health there is no difference between breastfeeding and milk substitutes	60	23%
Breast-fed babies have a high risk for development of type I diabetes	73	28%
Formula-fed babies have a high risk of obesity	149	57.1%
Breastfeed infants are less likely to get diarrhea	178	68.2%
Breastfeeding decreases risk of ovarian and breast cancer in mother	213	81.6%
Optimal breastfeeding may lower the risk of postpartum depression	204	78.2%
Breastfeeding decreases risk of type II diabetes in mother	186	71.3%

Table 3: Distribution of the studied mothers according to birth and maternity period

	N=261	%
Type of delivery:		
Vaginal delivery	74	28.4%
CS with spinal anesthesia	149	57.1%
CS with general anesthesia	38	14.6%
Infant feeding		

	N=261	%
Exclusive BF	191	73.2%
Mixed feeding	68	26.1%
Artificial feeding	2	0.8%
First hold baby		
Immediate	74	28.4%
Within 5 minutes after delivery	36	13.8%
Within 30 minutes after delivery	90	34.5%
Within 1 hour after delivery	51	19.5%
Whenever she can	10	3.8%
How they first hold baby:		
Skin –to- skin contact	28	10.7%
No skin–to-skin contact	233	89.3%
Reason for delayed holding baby:		
No delay	72	27.6%
Baby need resuscitation	60	23%
Anesthesia	119	45.6%
No energy/ no desire	10	3.8%
How long you first hold baby:		
<30 minutes	215	82.4%
30 – 60 minutes	24	9.2%
≥60 minutes	18	6.9%
Longer	4	1.5%
Type of supplement given when needed		
Formula	55	21.1%
Water/sugary fluids	104	39.8%
Others	12	4.6%
Not needed	10	3.8%
I don't know	78	29.9%
Reason for giving supplementation:		
As patients ask	70	26.8%
Doctor advice, for unrevealed reason	51	19.5%
Doctor advice, for revealed reason	20	7.7%
I don't know	28	10.7%
No need	92	35.3%
Reason for giving supplementation:		
As patients ask	70	26.8%
Doctor advice, for unrevealed reason	51	19.5%
Doctor advice, for revealed reason	20	7.7%
I don't know	28	10.7%
No need	92	35.3%
How were fed supplements:		
Syringe	158	60.5%
Bottle, nipple	97	37.2%
Nipple	2	0.8%
Others	4	1.5%
Using soother/dummy	116	44.4%
Leaflet/supplies promote formula milk	26	10%
Booklet	6	23.1%
Samples	20	76.9%

Table 4: Distribution of the studied mothers according to the role of staff members in helping mothers and maternal suggestions

	N=261	%
Staff help us with BF	208	79.7%
Staff show the good position and attaching	178	68.2%
Staff show her how to express milk by hand	187	71.6%
Mother tries to express milk by herself	189	72.4%
Mothers are totally able to express milk by herself	107	41%
During maternity service, where was the baby: Always with mother	187	71.6%
Advice on frequency of BF:		
No	40	15.3%
When hungry	91	34.9%
Every 1 hour	16	6.1%
1 - 2 hours	90	34.5%
2 - 3 hours	24	9.2%
Advice on the duration of BF:		
For limited time	146	55.9%
As long as the baby wants	115	44.1%
Advice about the baby should not receive anything other than BF	124	47.5%
How they received PNC	253	96.9%
You are given suggestions about how to get help		
Yes	235	90%
No	26	10%
Site of suggestions about how to get help	N=235	
Hospital aid	66	28.1%
HCWs aid	149	63.4%
Helpline	4	1.7%
Mother support group	14	6%
Community service	2	0.8%

Table 5: Relation between level of knowledge and demographic data of studied mothers and receiving pregnancy counseling in previous and current pregnancy

	Insufficient	Intermediate	Sufficient	χ^2	P
	N=59 (%)	N=84 (%)	N=118 (%)		
Age(year)[mean \pm SD]	28.22 \pm 5.81	28.46 \pm 5.38	28.66 \pm 5.87	F (0.12)	0.887
Education				χ^2 14.678	<0.001**
Primary education	6 (37.5%)	8 (50%)	2 (12.5%)		
Preparatory education	8 (40%)	4 (20%)	8 (40%)		
Secondary education	45 (22.2%)	66 (32.5%)	92 (45.3%)		
High education	0 (0%)	6 (27.3%)	16 (72.7%)		
Occupation				7.327	0.007*
Housewife	10 (15.2%)	16 (24.2%)	40 (60.6%)		
Worker	49 (25.1%)	68 (34.9%)	78 (40%)		
Previous counseling				1.216	0.27
Yes	47 (23.6%)	54 (27.1%)	98 (49.2%)		
No	12 (19.4%)	30 (48.4%)	20 (32.3%)		

	Insufficient	Intermediate	Sufficient	χ^2	P
Current counseling					
Yes	56 (22.9%)	73 (29.8%)	116 (47.3%)	2.255	0.133
No	3 (18.8%)	11 (68.8%)	2 (12.5%)		
	Median(IQR)	Median(IQR)	Median(IQR)	KW	P
Parity	2(2 – 3)	3(2 – 3)	2(2 – 3)	2.886	0.236
Number of living children	2(2 – 3)	3(2 – 3)	2(2 – 3)	3.406	0.182
Antenatal visits	2(1 – 3)	2(1 – 3)	4(2 – 5)	29.84	<0.001**
Pairwise	P ₁ 0.497	P ₂ <0.001**	P ₃ <0.001**		

F One way ANOVA test KW Kruskal Wallis test χ^2 Chi square for trend test , test KW Kruskal Wallis test χ^2 Chi square for trend test MC Monte Carlo test **p≤0.001 is statistically highly significant p1 difference between insufficient and intermediate p2 difference between intermediate and sufficient p3 difference between sufficient and insufficient

Table 6: Relation between level of knowledge and mother intention for infant feeding and type of infant feeding (practice)

	Insufficient	Intermediate	Sufficient	χ^2	P
	N=59 (%)	N=84 (%)	N=118 (%)		
Formula feeding					
Agree	27 (40.3%)	30 (44.8%)	10 (14.9%)	MC	<0.001**
Disagree	32 (17%)	52 (27.7%)	104 (55.3%)		
Neutral	0 (0%)	2 (2.4%)	4 (3.4%)		
Trial for BF					
Agree	44 (19%)	72 (31%)	116 (50%)	MC	<0.001**
Disagree	15 (55.6%)	10 (37%)	2 (7.4%)		
Neutral	0 (0%)	2 (100%)	0 (0%)		
Exclusive BF at 1m					
Agree	57 (24.5%)	68 (29.2%)	108 (46.6%)	MC	<0.001**
Disagree	0 (0%)	14 (70%)	6 (30%)		
Neutral	2 (25%)	2 (25%)	4 (50%)		
Exclusive BF at 3m					
Agree	55 (24.4%)	62 (27.6%)	108 (48%)	MC	<0.001**
Disagree	4 (12.5%)	22 (68.8%)	6 (18.7%)		
Neutral	0 (0%)	0 (0%)	4 (100%)		
Infant feeding					
Exclusive BF	43 (22.5%)	56 (29.3%)	92 (48.2%)	MC	0.031*
Mixed feeding	14 (20.6%)	28 (41.2%)	26 (38.2%)		
Artificial feeding	2 (100%)	0 (0%)	0 (0%)		

χ^2 Chi square test MC Monte Carlo test *p<0.05 is statistically significant **p≤0.001 is statistically highly significant

Table 7: Univariate and multivariate analysis of opportunities associated with sufficient knowledge of breastfeeding

	Univariate	P	Multivariate	
	COR (95% CI)		AOR (95% CI)	P
Age	1.01(0.97 – 1.05)	0.674	-	
Occupation (housewives)	2.31(1.3 – 4.08)	0.004*	-	
Education:				
Primary education	1(reference)		1 (reference)	
Preparatory education	4.67(0.83 – 26.34)	0.081	2.764(0.472 – 16.174)	0.259
Secondary education	5.8(1.29 – 26.19)	0.022*	4.424(0.96 – 20.385)	0.056
High education	18.67(3.23 – 107.82)	0.001**	17.362 (2.93 – 102.87)	0.002*
Parity	0.893 (0.71 – 1.13)	0.348		
Counseling in a previous pregnancy	2.04(1.12 – 3.72)	0.02*	-	
Counseling in a current pregnancy	6.3(1.4 – 28.29)	0.016*	-	
ANC visits	1.32(1.17 – 1.5)	<0.001**	1.337 (1.176 – 1.52)	<0.001**

Table 8: Distribution of the studied others according to baseline data

	Mean ± SD	Range
Age (year)	28.5 ± 5.86	19 – 47
Education	N=261	%
Primary education	16	6.1%
Preparatory education	20	7.7%
Secondary education	203	77.8%
High education	22	8.4%
Occupation		
Housewife	195	74.7%
Worker	66	25.3%
Parity:		
1	52	19.9%
2	78	29.9%
3	90	34.5%
4	33	12.6%
5	8	3.1%
Number of living children		
1	54	20.7%
2	82	31.4%
3	90	34.5%
4	33	12.6%
5	2	0.8%
Previous counseling	199	76.2%
Where	199	
Health unit	138	69.3%
PHC	43	21.7%
Hospital	6	3%
Others	12	6%

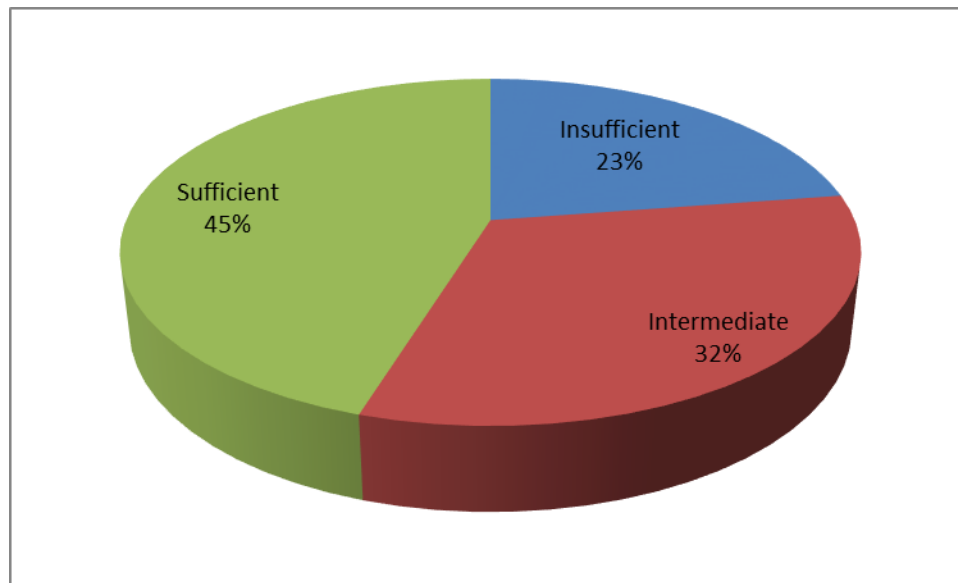


Figure 1: Pie chart showing distribution of studied patients according to total knowledge score

DISCUSSION

Decline in breastfeeding rate is not always the result of a lack of breast milk, but it can be due to insufficient knowledge about ideal feeding practices.

Counseling for mothers about breastfeeding is a well-known public health intervention. The WHO published the first international recommendations for women's counseling to enhance breastfeeding practices in 2018. [17]. So, we tried to detect the level of breast feeding knowledge and intention among mothers.

The distribution of participants mothers according to their baseline data revealed that the mean age was 28.5 years which is in consonance with previous studies [15],[18]. Most respondents (77.8%) received secondary education, (74.7%) were housewives and (76.2%) received counseling in previous pregnancy, in comparison with a study conducted in Saudi Arabia to assess the effect of counseling sessions on breastfeeding practice which stated that the mean age was 32 years, most of the participants had a college degree or higher (75.9%), (65.3%) were housewives, (31%) received counseling in previous pregnancy [17].

Answers about the content of breast milk were the most often correct, while those regarding food during lactation were the least correctly answered questions. Additionally, the most accurate responses concerned child growth was that breastfed babies would experience diarrhea, whereas the least accurate answers were that breastfed babies would develop type 1 diabetes.

The participants were divided into three groups of having insufficient, intermediate, and sufficient levels of knowledge,(22.6%) had insufficient, (32.2%) had intermediate (and 45.2%) had sufficient levels of knowledge in line with a study conducted in Bangladesh [18] which stated that Among the mothers, almost half (58.6%) scored highly in knowledge,(31.8%) average and only (9.1%) had poor knowledge. In a previous study in Poland the level of knowledge was reported as (12.5%) insufficient, (15.2%) sufficient, (35.7%) good and (36.5%) very good [14]. Furthermore, a study was conducted to detect the level of KAP in Lebanon and Qatar stating that (7%) were poor, (28%) were fair, (39.3%) were good and (25.8%) of participants had very good knowledge [16]. High knowledge score denotes awareness about the difference between the disadvantages of formula feeds and the advantages of exclusive breastfeeding. In our study, we found that about quarter of the sample do mixed breastfeed while Hassounah et al [17] reported that mixed feeding were (39.2%) .

The prevalence of EBF in this study was greater than in other studies, About (73%) exclusively breastfed at the moment of participation nearly similar to Hasan et al who reported that more than half (63.4%) practiced exclusive breastfeeding [18]; in comparison with Zielinska et al which declared that (43%) of mothers did not breastfeed exclusively [14].

Furthermore, we demonstrated that increased breastfeeding knowledge guards against prematurely ending exclusive breastfeeding, as

there is a significant association between sufficient knowledge and intent for exclusive BF in the first 6 months after birth.

Being a housewife, receiving secondary, high education, and counseling in previous and current pregnancy significantly increases the opportunity for sufficient knowledge and then increase the exclusivity of breastfeeding compared to their counterparts, studies conducted in Bangladesh [18] and Nigeria [19] supported that result. Housewives can easily participate in presidential initiatives for mothers and Infant like (The thousand golden days 2023-2024), which encourages them toward EBF practices. Educated mothers know about the benefits of EBF, from school-based initiatives supporting exclusive breastfeeding, while a previous study in Kenya, stated that knowledge score was not related to EBF practice [20], contrasting with our findings.

Regarding counseling on BF in the current pregnancy, almost all participants stated that counseling should start early in pregnancy reflecting their good intention of to know more about BF correct practices, and (73.9%) received counseling sessions on ANC visits with at least 3 sessions, The low number of sessions of counseling among mothers implies that health workers are not seizing the chance to raise mothers' awareness of the value of exclusive breastfeeding making it hard to adhere to the practice, that was in line with a study in Abu Dhabi, United Arab Emirates to detect KAP among mother about breastfeeding [21] found that about (81%) of mothers showed that Healthcare provider explained the importance of breastfeeding during ANC visits in contrast with a study conducted in The Gambia to assess the predictors affecting breastfeeding [22] which reported a low percentage of pregnant women who received breastfeeding counseling (34.4%).

This finding is notable, showing that counseling on EBF is advised for all pregnant women starting in the first trimester. Further researches may be needed to find the possible causes of the low rate of EBF counseling.

The postpartum period is an important time for maternal recovery, mother and child bonding and newborn adaptation [23]. WHO recommends using home visits as part of postnatal care services to improve the health of mothers and infants [24].

Almost all mothers declared that they had the counseling sessions during post natal care for proper practices during the home visits done by community health workers.

The World Health Organization (WHO) identified Exclusive Breast feeding (EBF) as giving only mothers' milk to a newborn for six months of life [25].

The participant's intention to breastfeed their infant could range from neutral to positive, with a higher score signifying a more positive attitude towards breastfeeding compared to formula feeding. (89%) which is in agreement with positive attitude reported in the study of Hasan et al [18] which was (55.2%). In comparison with Chaabna et al who conducted a study in Qatar to assess maternal attitude toward breastfeeding, they found that only (19.3%) of women had a positive attitude toward breastfeeding, while the majority (77.1%) had a neutral attitude toward breastfeeding [26].

Mothers are frequently advised to stay away from "gassy foods" like broccoli, cauliflower, and cabbage. Such foods can make a mother's bowels feel gassy, but gas and fiber do pass into breast milk. [27] .as anticipated more than half declared that eating of gas-producing food by breastfeeding mother is the cause of colic in infant proving that culture and inherited beliefs affect BF practices.

In the current study, About (57%) of mothers delivered by CS with spinal anesthesia and only (28%) delivered vaginally whereas it was reported that most of the participants (70%) delivered vaginally and about (30%) was CS [17] .About (35%) first held their babies within 30 minutes after delivery. Additionally, most of them first held babies for less than 30 minutes, and some of them claimed that delay in carrying babies was due to anesthesia.

About (89%) did not provide skin to skin contact while Hassounah et al [17] found that just 41% of the women had experienced skin-to-skin contact with their newborn, with women in the mostly breastfeeding group reporting the highest percentage (56.1%).One reasonable explanation of that is the effect of anesthesia as Caesarian mothers need more time to recovery from cesarean illness (fatigue, hypotension, pain, unable to breastfed ,delay the contact, carrying their infants for long period) and difficulty in moving; reasons why families were likely to start formula milk and not breastfeeding.

About (40%) of mothers gave their infants water/sugary fluids and (21%) gave formula based on the wrong knowledge inherited by grandmothers that the milk is not sufficient. About (20%) of mothers were asked to give their babies supplementation by the doctors or midwives in spite

of absence of the need however Zielinska et al [14] found that (44%) of stated that a pediatrician or midwife had encouraged them to start using infant formula ,reflecting lack of knowledge of health care providers and showing that cultural attitudes, beliefs and norms are important factors related to infant formula feeding therefor the need for lactation education is a must as cultural beliefs were identified that may lead to failed EBF practices and the result was in agreement with previous study [28].

In contrast to the myth of giving supplementation in the first hours after birth as the colostrum is not sufficient, those grand mamas advised introduction of FF or sugary fluid by syringe to avoid nipple confusion by the infant. Typically, (60.5%) of babies who received fluids got them by syringe. which indicates that partners and grandmothers are highly influential on the success of breastfeeding. Few nations have yet to comply, despite the WHO's declaration that it is fundamental that breast milk substitutes not be publicly marketed or advertised.. Because of this, marketing and labelling measures which are illegal in other countries are used to sell FF [29].

In our study (26%) mothers received Leaflet/supplies promote formula milk (23.1%) received booklets and (76.9%) received samples. Currently, the majority of families use various social media platforms like Facebook, Twitter, and others. Government and non-governmental organizations use these platforms to carry out their interventions to support exclusive breastfeeding and to provide videos that highlight the benefits of breastfeeding over breast milk substitutes.

Study limitations:

The sample size was limited and was in one place . we assessed the knowledge and intention but actually we didn't saw the practice .

CONCLUSION

The percent of participants who reported exclusive breastfeeding was high but there was an inadequacy of knowledge about breastfeeding in general and about correct feeding practice. Educated mothers, frequent ANC visits and having counseling sessions are associated with good knowledge and intension. Counseling sessions for mothers about EBF needs to be enhanced to improve counseling services during antenatal and post natal care visits.

Recommendations

Counseling sessions for mothers on EBF needs to be enhanced during antenatal and post natal care

visits as there is a great need for increasing awareness about optimal breastfeeding practices and to ensure that counseling is successful and supports babies' natural diet, health care units' collaboration needs to be improved.

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