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Barriers Of Exclusive Breastfeeding Among Mothers Attending Will-Baby Clinic In Phc, Makkah

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Abstract

Exclusive breastfeeding is defined as feeding the child nothing but breast milk for the first six months. EBF confers a number of protective benefits for children and mothers. Despite the many benefits of breast feeding it has been shown that there are barriers to the practice of optimal breast feeding. Therefore this study aimed to assess barriers of exclusive breast feeding among breast feeding mothers. A descriptive cross-sectional survey was conducted. Non randomized convenience sampling technique was used to include 150 mothers with healthy infants aged between 0-9 months. Structured interview questionnaire was designed to collect the necessary data. The main study were that the majority of mothers' housewife and multipara and not compliance with exclusive breast feeding. In addition the most common barriers to maintain exclusive breast feeding were the infants still hungry after feeding, perception of insufficient milk production, lack of support from surrounding and return to work. The study concluded that, there were many social constrains that influence mothers' exclusive breast feed their infants. Therefore this study aimed to assess barriers of exclusive breast feeding among breast feeding mothers.

Key words: Exclusive breast feeding, barriers, women, infants.

INTRODUCTION

There is general agreement that breastfeeding is good for the growth and health of infants. The World Health Organization (WHO) recommends exclusive Breast feeding as an important strategy for reducing child deaths, particularly in developing countries. Exclusive breastfeeding is defined as feeding the child nothing but breast milk for the first six months (no foods or liquids including water). After 6 months, breastfeeding is still encouraged, along with the introduction of other foods and liquids. It is also recommended that mothers feed their newborns colostrum, as the first feed immediately after birth. (Froozani, M.D *et al*., 1999; Otoo. G.E, *et al*., 2009)

Exclusive breastfeeding confers a number of protective benefits for children and mothers. For example, a longer duration of breastfeeding promotes sensory and cognitive development, protects infants against infectious and chronic diseases, and reduces infant mortality resulting from childhood illnesses such as diarrhea and pneumonia. (American Academy of Pediatrics, 2012; Me Thet M, *et al*., 2016)

Despite the many benefits of breast feeding it has been shown that there are barriers to the practice of optimal breast feeding. Some of these barriers include hospital practices, advertisement of breast milk substitutes, young mothers, single mothers, lower income and lack of support for the breast feeding mother. Many women identify employment as a barrier to breast feeding. In addition caesarean section and the infant having received supplementation during the first weeks of life. (Mohamed, S.M., *et al*., 2016) Negative attitudes of women, their partners, family members, health care professionals and the persistently sore and red nipples could be a barrier of breastfeeding and led to early termination. (Piper, S and P. Parks, 2012)

In a study on infant feeding practices among nursing personnel in Australia, returning to work was one of the main reasons women ceased breastfeeding, with 60 percent of women intending to breastfeed when they returned to work, but only 40 percent do so. (Danielle, W., J. Anneka, 2011) It is almost certain that women who go back to work before their babies are six months old will face challenges in adhering to the practice of EBF. (Abigail, A.H., *et al*., 2013)

Several studies have been conducted to understand the physical, biological, psychological, social, and cultural factors explaining poor lactation and breastfeeding outcomes. (Sibeko, L, *et al*. Beliefs, 2005; Kakute, P.N., J. Ngum, P. Mitchell, *et al*., 2005; Cohen, R.J., *et al*., 1999) Based on the benefits of exclusive breast feeding and continuous reduction in the number of breastfed mothers, the investigator found it necessary to explore the barriers to exclusive breast feeding among breastfed women.

Aim of the study:

The aim of this study was to assess barriers of exclusive breast feeding among breast feeding mothers.

Research question:

What are the most common barriers of exclusive breastfeeding among breast feeding mothers?

Study design:

A descriptive cross-sectional survey was conducted in carrying out of this study.

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Study setting:

the study was conducted at mother child clinic at primary health care centers at Makah.

Study population:

non randomized convenience sampling technique was used to include 150 mothers with healthy infants aged between 0-9 months and willing to participate in the study. Mothers with infants who were preterm, twins and birth defects were excluded from the study.

Tools of the study:

Structured interview questionnaire was designed to collect the necessary data, and developed by the researchers after review of the literature and reviewed by experts and modified after application of pilot study. It consisted of:

Part one:

Mothers sociodemographic characteristics: this part consisted data about mother's age, age at marriage, living with extended family, level of education, occupation, parity and gender of baby.

Part two:

included data about sources and factors that influencing the mother's preference for breastfeeding as social norm, helping baby to grow in a normal pattern, providing baby with natural immunity, a form of child spacing, easy and comfortable and returned body to normal.

Part three:

this part explain the reasons for breast feeding preference as Encouragement from mother, husband, nurse, mother-law, neighbours or members of my religious affiliation, Social pressure on mothers and their personal determination/experience.

Part four:

include items that determine the constraints and breastfeeding challenges which are maternal problems, feeling of pain or discomfort, poor growing baby or still hungry, or pressure from surrounding and return to work.

Method:

A pilot study:

was carried out before starting of data collection on (10 %) of the study period for the purpose to test the clarity, completeness, and to determine the time involvement. According to the results of the pilot study, the needed modification, omissions, and/or additions were done.

Data collection:

was done by the researcher from 1st October to 30 November The researcher interviewed each participated woman individually to obtain the necessary information. The actual work started by meeting the woman, the researcher firstly introduced self to them and gave them a complete back ground about the study. The researcher gave mother (who can read and write), the sheet which was pre-designed in Arabic language and stay with them to clarified any question vague to them or to read the sheet if the mother unable to read it. The sheet required about 15-20 minutes for filling it.

Statistical analysis:

Data were analyzed using the statistical package for social science (SPSS) version 20.0 (Windows Microsoft). Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables, means and standard deviations for quantitative variables. Quantitative continuous data were compared using Chi. Square to determine significance for non-parametric variable. Probability (p-value) less than 0.05 was considered significant.

Ethical consideration:

Administrative approval was obtained from the responsible persons. The mothers have ethical rights to agree or refuse to participate in the study. Consent to participate in the study was secured orally and informed that the information obtained will be confidential and used for the purpose of the study.

Results:

This table shows that more than two fifth (41.3%) were aged from 30-34 years followed by 24% aged from 20-24 years of age. Regarding age at marriage, more than half of women were married at 20-25 years of age and more than one quarter (26%) marry before 20 years of age. As regards level of education, the highest percentages (41.3%, 24.7%) were for secondary and university education respectively. The majority of women (90.7%) were house wives and two thirds (62%) of them delivered at governmental hospitals. Concerning parity, the majority (82%) of women was multiparous and more than half of them (59.3%) had a planned pregnancy. Approximately half of women has female baby with less than three months age.as for the age of administering food rather than breast, this table revealed that two thirds (68%) of women administer food at 3-6 months of baby age.

Table I: Frequency distribution of women sociodemographic characteristics:

Sociodemographic characteristics	N	%
Age:		
20-24	36	24.0
25-29	20	13.3
30-34	62	41.3
35-39	32	21.3
Age at marriage (years)		
<20	39	26.0
20-25.	78	52.0
>25	33	22.0
Women living with extended families		
Yes	24	16.0
No	126	84.0
Level of education		
Illiterate	15	10.0
Primary	21	14.0
Secondary	62	41.3
University	52	34.7
Occupation:		
Yes	14	9.3

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No	136	90.7
Place of delivery		
Governmental hospital	93	62.0
Private hospital	54	36.0
At home	3	2.0
Parity:		
Primiparous	27	18.0
Multiparous	123	82.0
Planned pregnancy		
Yes	89	59.3
No	61	40.7
Gender of baby		
Male	72	48.0
Female	78	52.0
Age of baby:		
< 3 months	72	48.0
3-6 months	42	28.0
7-10 months	12	8.0
11 to 12 months	24	16.0
Age of administering food rather than breast		
Not eat	48	32.0
3-6 months	102	68.0

Table II: Frequency distributions of factors influencing preference of breast feeding:

This table revealed that the highest percentages of women (100%, 94.7%,57.3%)preferred breast feeding because it helps the baby to grow in a normal pattern, provides baby with natural immunity and returns the mother's body to normal respectively.

Table II: Frequency distributions of factors influencing preference of breast feeding:

Items		Factors influencing preference for breastfeeding				Chi-square	
		Yes		No			
		N	%	N	%	X^2	P-value
1	Social norm as a mother	68	45.3%	82	54.7%	1.307	0.253
2	Helping baby to grow in a normal pattern	150	100.0%	0	0.0%	-	-
3	Providing baby with natural immunity	142	94.7%	8	5.3%	119.707	0.000
4	Is a form of child spacing	18	12.0%	132	88.0%	86.640	0.000
5	Easy and comfortable	26	17.3%	124	82.7%	64.027	0.000
6	Returned body to normal	86	57.3%	64	42.7%	3.227	0.072

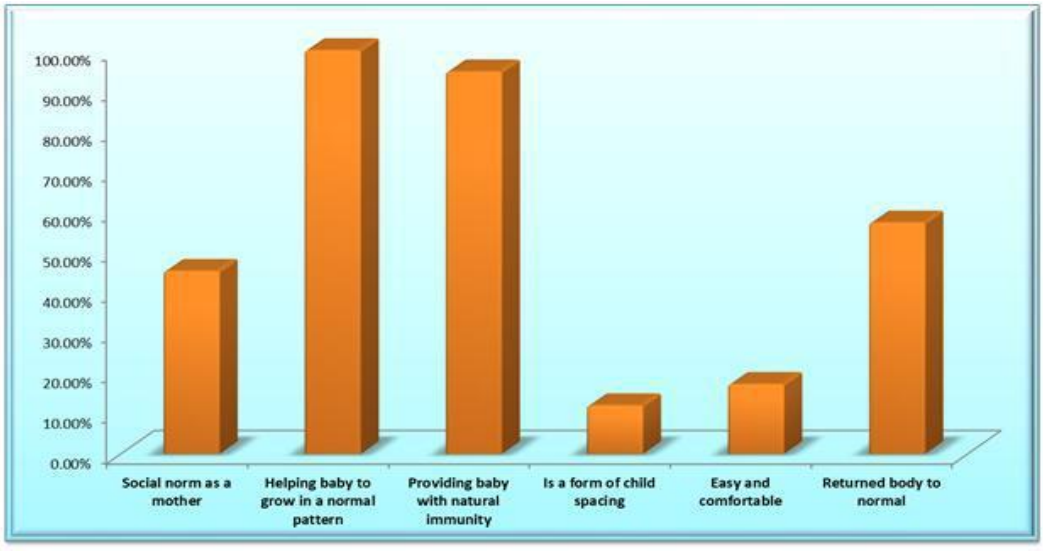

Table III: Frequency distribution of reasons for breast feeding preference:

It was observed that factors such as women personal determination/experience (96%), encouragement from husband (92.7%), mother (88%)and mother-law (66.7%)take the highest percentages.

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Table III: Frequency distribution of reasons for breast feeding preference:

Items		reasons for breast feeding preference				Chi-square	
		Yes		No			
		N	%	N	%	X^2	P-value
1	Encouragement from mother	132	88.0%	18	12.0%	86.640	0.000
2	Social pressure on mothers	38	25.3%	112	74.7%	36.507	0.000
3	My personal determination/experience	144	96.0%	6	4.0%	126.960	0.000
4	Husband encouraged me	139	92.7%	11	7.3%	109.227	0.000
5	Nurse and midwife	68	45.3%	82	54.7%	1.307	0.253
6	Encouragement from mother-law	100	66.7%	50	33.3%	16.667	0.000
7	Media	95	63.3%	55	36.7%	10.667	0.001
8	My neighbours encouraged me	56	37.3%	94	62.7%	9.627	0.002
9	Members of my religious affiliation encouraged me	68	45.3%	82	54.7%	1.307	0.253

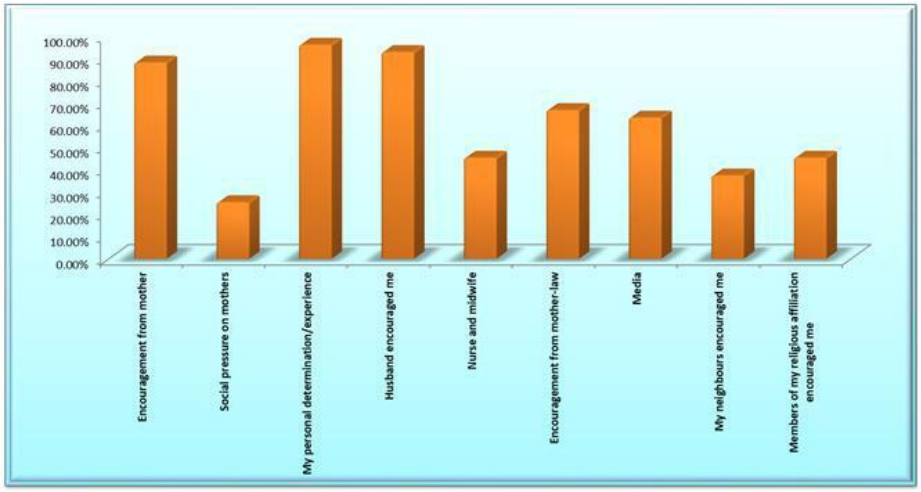

Table IV: Frequency distribution of the constrains and breast feeding challenges:

This table shows that presence of insufficient breast milk to satisfy the baby (80%), continue to be hungry after eating(68%), and the baby doesn't gain enough weight (64.7%) are the factors that take the highest frequencies.

Table IV: Frequency distribution of the constrains and breast feeding challenges:

Items		Constraints and breastfeeding challenges				Chi-square	
		Yes		No			
		N	%	N	%	X^2	P-value
1	Baby continued to be hungry after feeding	102	68.0%	48	32.0%	19.440	0.000
2	Maternal health problem	11	7.3%	139	92.7%	109.227	0.000
3	Fear of infant becoming addicted to breast milk	33	22.0%	117	78.0%	47.040	0.000
4	Due to pains in my breast	42	28.0%	108	72.0%	29.040	0.000
5	My mother-law pressured me to wean the baby	0	0.0%	150	100.0%	-	-
6	Was not making enough breast milk to satisfy my child	120	80.0%	30	20.0%	54.000	0.000
7	I returned to work/business	14	9.3%	136	90.7%	99.227	0.000
8	Lack of husband's support	17	11.3%	133	88.7%	89.707	0.000
9	Breastfeeding was too tiring	47	31.3%	103	68.7%	20.907	0.000
10	My neighbours pressured me to wean the baby	6	4.0%	144	96.0%	126.960	0.000
11	Baby refused breast milk	39	26.0%	111	74.0%	34.560	0.000
12	Was losing weight	70	46.7%	80	53.3%	0.667	0.414
13	I feel dizzy at times during breastfeeding	52	34.7%	98	65.3%	14.107	0.000
14	Due to pregnancy	14	9.3%	136	90.7%	99.227	0.000
15	My baby was not gaining enough weight	97	64.7%	53	35.3%	12.907	0.000
16	I was not feeding well	88	58.7%	62	41.3%	4.507	0.034

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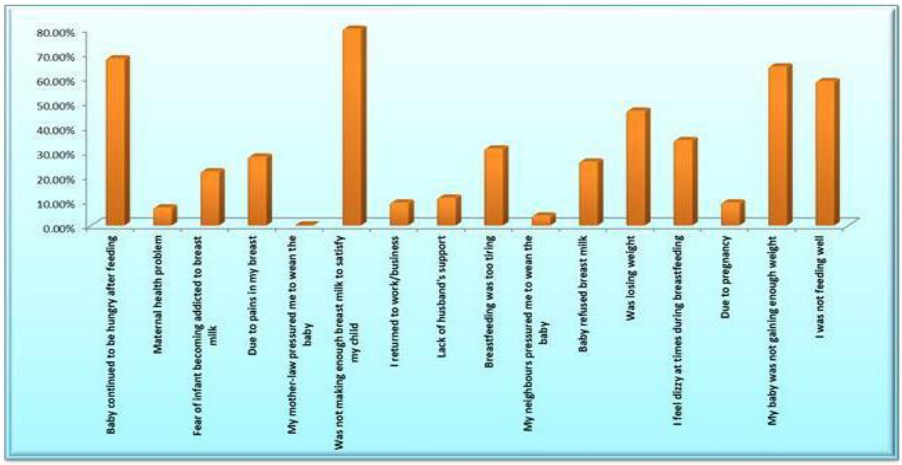

Table V: significant difference between factors affecting EBF and age at marriage and living with extended family:

Significance of difference between barriers of exclusive breast feeding and age of marriage, living in extended family: this table shows a statistical significant difference between the women age at marriage and factors influencing exclusive breast feeding as providing baby with natural immunity, form of child spacing, return body to normal, women personal experience, encouragement from husband and neighbors. Regarding barriers there were a a statistical significant difference between the women age at marriage and baby continuing hungry, maternal health problems, return to work and lack of husband support.

Table V: significant difference between factors affecting EBF and age at marriage and living with extended family:

	Age at marriage (years)						P-value	Women living with extended families				P-value
	<20		20-25.		>25			yes		No		
	N	%	N	%	N	%		N	%	N	%	
Social norm as a mother	12	17.6%	41	60.3%	15	22.1%	0.078	12	17.6%	56	82.4%	0.617
Helping baby to grow in a normal pattern	39	26.0%	78	52.0%	33	22.0%	1.000	24	16.0%	126	84.0%	1.000
Providing baby with natural immunity	39	27.5%	70	49.3%	33	23.2%	0.004*	24	16.9%	118	83.1%	0.090
Is a form of child spacing	6	33.3%	12	66.7%	0	0.0%	0.008*	6	33.3%	12	66.7%	0.05*
Easy and comfortable	3	11.5%	14	53.8%	9	34.6%	0.078	3	11.5%	23	88.5%	0.480
Returned body to normal	27	31.4%	35	40.7%	24	27.9%	0.005*	9	10.5%	77	89.5%	0.033*
Encouragement from mother	33	25.0%	69	52.3%	30	22.7%	0.707	24	18.2%	108	81.8%	0.009*
Social pressure on mothers	9	23.7%	20	52.6%	9	23.7%	0.916	0	0.0%	38	100.0%	0.000*
My personal determinatior/experience	33	22.9%	78	54.2%	33	22.9%	0.000*	18	12.5%	126	87.5%	0.000*
Husband encouraged me	36	25.9%	76	54.7%	27	19.4%	0.022*	24	17.3%	115	82.7%	0.046*
Nurse and midwife	18	26.5%	38	55.9%	12	17.6%	0.482	6	8.8%	62	91.2%	0.025*
Encouragement from mother-law	30	30.0%	49	49.0%	21	21.0%	0.271	18	18.0%	82	82.0%	0.335
Media	21	22.1%	50	52.6%	24	25.3%	0.247	9	9.5%	86	90.5%	0.005*
My neighbours encouraged me	15	26.8%	23	41.1%	18	32.1%	0.046*	9	16.1%	47	83.9%	0.985
Members of my religious affiliation encouraged me	15	22.1%	35	51.5%	18	26.5%	0.390	9	13.2%	59	86.8%	0.398
Baby continued to be hungry after feeding	21	20.6%	63	61.8%	18	17.6%	0.002*	0	0.0%	102	100.0%	0.000*
Matemal health problem	9	81.8%	2	18.2%	0	0.0%	0.000*	3	27.3%	8	72.7%	0.323
Fear of infant becoming addicted to breast milk	9	27.3%	18	54.5%	6	18.2%	0.831	3	9.1%	30	90.9%	0.196
Due to pains in my breast	21	50.0%	18	42.9%	3	7.1%	0.000*	3	7.1%	39	92.9%	0.049*
was not making enough breast milk to satisfy my child	27	22.5%	66	55.0%	27	22.5%	0.157	15	12.5%	105	87.5%	0.028*
I retumed to work/business	3	21.4%	11	78.6%	0	0.0%	0.015*	0	0.0%	14	100.0%	0.023*
Lack of husband's support	9	52.9%	2	11.8%	6	35.3%	0.001*	3	17.6%	14	82.4%	0.846
Breastfeeding was too tiring	12	25.5%	29	61.7%	6	12.8%	0.126	3	6.4%	44	93.6%	0.02*
My neighbours pressured me to wean the baby	0	0.0%	3	50.0%	3	50.0%	0.089	6	100.0%	0	0.0%	0.000*
Baby refused breast milk	6	15.4%	27	69.2%	6	15.4%	0.039*	9	23.1%	30	76.9%	0.174
was losing weight	30	42.9%	28	40.0%	12	17.1%	0.000*	12	17.1%	58	82.9%	0.721
I feel dizzy at times during breastfeeding	12	23.1%	28	53.8%	12	23.1%	0.835	3	5.8%	49	94.2%	0.008*
Due to pregnancy	3	21.4%	8	57.1%	3	21.4%	0.900	6	42.9%	8	57.1%	0.011*
My baby was not gaining enough weight	15	15.5%	58	59.8%	24	24.7%	0.000*	9	9.3%	88	90.7%	0.003*
I was not feeding well	15	17.0%	55	62.5%	18	20.5%	0.003*	12	13.6%	76	86.4%	0.350

Table VI: Significance of difference between factors affecting exclusive breast feeding and level of education:

This table revealed a statistical significant difference between level of education and mother's social norms, form of child spacing, return body to normal, social pressure, personal determination,media and the majority of barriers affecting exclusive breast feeding.

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Table VI: Significance of difference between factors affecting exclusive breast feeding and level of education:

	Level of education								P-value
	Illiterate		Primary		Secondary		University		
	N	%	N	%	N	%	N	%	
Social norm as a mother	9	13.2%	3	4.4%	33	48.5%	23	33.8%	0.007*
Helping baby to grow in a normal pattern	15	10.0%	21	14.0%	62	41.3%	52	34.7%	1.000
Providing baby with natural immunity	15	10.6%	21	14.8%	56	39.4%	50	35.2%	0.107
Is a form of child spacing	0	0.0%	9	50.0%	6	33.3%	3	16.7%	0.000*
Easy and comfortable	0	0.0%	3	11.5%	6	23.1%	17	65.4%	0.001*
Returned body to normal	6	7.0%	6	7.0%	38	44.2%	36	41.9%	0.006*
Encouragement from mother	15	11.4%	18	13.6%	53	40.2%	46	34.8%	0.231
Social pressure on mothers	0	0.0%	6	15.8%	24	63.2%	8	21.1%	0.001*
My personal determinatior/experience	9	6.3%	21	14.6%	62	43.1%	52	36.1%	0.000*
Husband encouraged me	15	10.8%	21	15.1%	56	40.3%	47	33.8%	0.098
Nurse and midwife	6	8.8%	9	13.2%	27	39.7%	26	38.2%	0.859
Encouragement from mother-law	12	12.0%	12	12.0%	39	39.0%	37	37.0%	0.391
Media	9	9.5%	6	6.3%	51	53.7%	29	30.5%	0.000*
My neighbours encouraged me	6	10.7%	3	5.4%	36	64.3%	11	19.6%	0.000*
Members of my religious affiliation encouraged me	6	8.8%	6	8.8%	36	52.9%	20	29.4%	0.053
Baby continued to be hungry after feeding	0	0.0%	12	11.8%	53	52.0%	37	36.3%	0.000*
Matemal health problem	0	0.0%	3	27.3%	0	0.0%	8	72.7%	0.001*
Fear of infant becoming addicted to breast milk	0	0.0%	3	9.1%	24	72.7%	6	18.2%	0.000*
Due to pains in my breast	6	14.3%	3	7.1%	18	42.9%	15	35.7%	0.349
was not making enough breast milk to satisf my child	6	5.0%	18	15.0%	59	49.2%	37	30.8%	0.000*
I retumed to work/business	0	0.0%	0	0.0%	0	0.0%	14	100.0%	0.000*
Lack ofhusband's support	0	0.0%	3	17.6%	12	70.6%	2	11.8%	0.012*
Breastfeeding was too tiring	6	12.8%	3	6.4%	21	44.7%	17	36.2%	0.261
My neighbours pressured me to wean the baby	0	0.0%	3	50.0%	0	0.0%	3	50.0%	0.017*
Baby refused breast milk	3	7.7%	6	15.4%	12	30.8%	18	46.2%	0.287
was losing weight	9	12.9%	3	4.3%	41	58.6%	17	24.3%	0.000*
I feel dizzy at times during breastfeeding	6	11.5%	3	5.8%	27	51.9%	16	30.8%	0.069
Due to pregnancy	0	0.0%	3	21.4%	0	0.0%	11	78.6%	0.000*
My baby was not gaining enough weight	0	0.0%	18	18.6%	44	45.4%	35	36.1%	0.000*
I was not feeding well	0	0.0%	18	20.5%	38	43.2%	32	36.4%	0.000*

Table VII: Significance of difference between factors affecting exclusive breast feeding with occupation and age of baby:

This table showed that there were a statistical significant difference between the occupation, age of baby and factors affecting exclusive breast feeding.

Table VII: Significance of difference between factors affecting exclusive breast feeding with occupation and age of baby:

	Occupation				P-value	Age of baby:								P-value
	yes		No			Less than 3 months		3-6 months		7-10 months		11 to 12 months		
	N	%	N	%		N	%	N	%	N	%	N	%	
Social norm as a mother	5	7.4%	63	92.6%	0.444	39	57.4%	15	22.1%	12	17.6%	2	2.9%	0.000*
Helping baby to grow in a normal pattern	14	9.3%	136	90.7%	1.000	72	48.0%	42	28.0%	12	8.0%	24	16.0%	1.000
Providing baby with natural immunity	12	8.5%	130	91.5%	0.180	72	50.7%	36	25.4%	12	8.5%	22	15.5%	0.003*
Is a form of child spacing	0	0.0%	18	100.0%	0.052	12	66.7%	3	16.7%	0	0.0%	3	16.7%	0.139
Easy and comfortable	5	19.2%	21	80.8%	0.081	21	80.8%	0	0.0%	3	11.5%	2	7.7%	0.000*
Returned body to normal	12	14.0%	74	86.0%	0.017*	42	48.8%	30	34.9%	9	10.5%	5	5.8%	0.000*
Encouragement from mother	11	8.3%	121	91.7%	0.292	63	47.7%	33	25.0%	12	9.1%	24	18.2%	0.007*
Social pressure on mothers	8	21.1%	30	78.9%	0.008*	9	23.7%	12	31.6%	6	15.8%	11	28.9%	0.001*
My personal determinatior/experience	14	9.7%	130	90.3%	0.273	66	45.8%	42	29.2%	12	8.3%	24	16.7%	0.028*
Husband encouraged me	9	6.5%	130	93.5%	0.001*	66	47.5%	42	30.2%	12	8.6%	19	13.7%	0.005*
Nurse and midwife	6	8.8%	62	91.2%	0.845	33	48.5%	24	35.3%	9	13.2%	2	2.9%	0.000*
Encouragement from mother-law	8	8.0%	92	92.0%	0.435	54	54.0%	21	21.0%	6	6.0%	19	19.0%	0.014*
Media	6	6.3%	89	93.7%	0.102	60	63.2%	21	22.1%	3	3.2%	11	11.6%	0.000*
My neighbours encouraged me	5	8.9%	51	91.1%	0.895	36	64.3%	15	26.8%	3	5.4%	2	3.6%	0.001*
Members of my religious affiliation encouraged me	9	13.2%	59	86.8%	0.135	36	52.9%	18	26.5%	6	8.8%	8	11.8%	0.518
Baby continued to be hungry after feeding	5	4.9%	97	95.1%	0.009*	48	47.1%	30	29.4%	6	5.9%	18	17.6%	0.472
Matemal health problem	0	0.0%	11	100.0%	0.134	3	27.3%	3	27.3%	0	0.0%	5	45.5%	0.057
Fear of infant becoming addicted to breast milk	0	0.0%	33	100.0%	0.007*	24	72.7%	9	27.3%	0	0.0%	0	0.0%	0.000*
Due to pains in my breast	6	14.3%	36	85.7%	0.210	30	71.4%	3	7.1%	3	7.1%	6	14.3%	0.000*
was not making enough breast milk to satisf my child	5	4.2%	115	95.8%	0.000*	63	52.5%	30	25.0%	6	5.0%	21	17.5%	0.012*
I retumed to work/business	14	100.0%	0	0.0%	0.000*	3	21.4%	3	21.4%	3	21.4%	5	35.7%	0.038*
Lack of husband's support	2	11.8%	15	88.2%	0.723	12	70.6%	3	17.6%	0	0.0%	2	11.8%	0.124

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Breastfeeding was too tiring	3	6.4%	44	93.6%	0.386	9	19.1%	18	38.3%	6	12.8%	14	29.8%	0.000*
My neighbours pressured me to wean the baby	0	0.0%	6	100.0%	0.273	3	50.0%	3	50.0%	0	0.0%	0	0.0%	0.281
Baby refused breast milk	0	0.0%	39	100.0%	0.003*	15	38.5%	9	23.1%	3	7.7%	12	30.8%	0.05*
was losing weight	8	11.4%	62	88.6%	0.410	33	47.1%	18	25.7%	6	8.6%	13	18.6%	0.835
I feel dizzy at times during breastfeeding	5	9.6%	47	90.4%	0.931	12	23.1%	18	34.6%	6	11.5%	16	30.8%	0.000*
Due to pregnancy	5	35.7%	9	64.3%	0.003*	6	42.9%	3	21.4%	3	21.4%	2	14.3%	0.412
My baby was not gaining enough weight	3	3.1%	94	96.9%	0.000*	45	46.4%	24	24.7%	9	9.3%	19	19.6%	0.245
I was not feeding well	3	3.4%	85	96.6%	0.003*	36	40.9%	30	34.1%	6	6.8%	16	18.2%	0.104

Discussion:

Breast milk is the safest and most natural food for an infant. It provides an infant's complete nutritional needs up to four to six months of age. There is no need for other food or drink before this age. When the baby is fed on breast milk only, it is called exclusive breastfeeding. Exclusive breastfeeding provides the best nutrition and growth for infants, and continued growth with the introduction of solid foods at six months breastfed during the first four months of life. (Amadhila, J.E., 2005)

The current study showed that the reasons for breast feeding preference is previous personal experience and encouragement from surrounding (husband, mother). They also consider factors that affecting the mother's preference and maintenance of exclusive breast feeding. Several studies reported that the experience of a mother, for example, experience of breastfeeding a previous child or not having any problems with breastfeeding during the first month, can be supportive to exclusive breast feeding. (Thepha *et al*., 2017)

The current study results revealed that, statistically significant differences were found between mothers' age, the exclusive breastfeeding. Younger mothers (20-25 years) were maintaining exclusive breastfed until 6 months of age. These results were supported by Woldie, *et al*., (2014) who mentioned that the women least likely to breastfeed are those who are young. Also this study agreed with Vogel *et al*., (2009) who revealed that, younger maternal age was associated with a short length of breastfeeding. The present study findings are dissimilar with the results of Gijsbers*et al*., (2007) which shown that younger maternal age associated with a longer duration of breastfeeding. Women who are young may have low confidence in their ability to breastfeed and it is probable that older women know more about the benefits of breastfeeding and have more realistic outcome expectation. (Woldie, T., A. Kassa and M. Edris, 2014; Vogles, N., *et al*., 2009; Gijsbers, B., *et al*., 2007)

The majority of mothers mentioned that there was difficult to continue breast feeding with return to work and other women found it hard to maintain their milk supply when separated from their babies and were forced to stop breastfeeding. Working mothers were able to continue breastfeeding. The present study reveals statistically significant differences between the mothers' occupation and exclusive breast feeding and the mother return to work was a barrier for exclusive breast feeding. House wife mothers were more likely to exclusive breast fed their infants than working mothers; this finding was supported by Setegn *et al*., (2012) who showed that, unemployed mothers were about 5 times more likely to breastfed exclusively as compared to employed mothers. This may attribute to worked mothers were away from the home and from their infants which make the breast feeding difficult. (Setegn, T., *et al*., 2012; MacKean, G and W. Spragins)

In this study, the highest numbers of women were agree that the reasons for not exclusively breast fed were their infants were still feeling hungry after breastfed, feeling that the baby doesn't gain enough weight, perception of insufficient milk production, infants comfort and ease with formula feeding and breast milk dried up. In the same line, these findings were also in congruence with Negayama *et al*., (2012) & Hawkins (2014) who clarified that the first or the second reason cited for initiating supplementation or weaning was perception of insufficient milk production. In addition Otsuka (2008) showed that 54% mothers give an inadequacy of breast milk as reason for giving formula before six months. Also, Negayama (2012) mentioned that the most researchers found that approximately 35% of all women wean their children early, reporting that milk insufficiency was the primary reason. These findings may attribute to many women utilize infant satisfaction cues as their main indication of milk supply and many women do not evaluate actual milk supply. (Negayama, K., *et al*., 2012; Hawkins, S., *et al*., 2014; Otsuka, K., *et al*., 2008)

Barriers related to maternal factors identified in the review included being a teenage mother, working away from home, lack of support from surrounding and a lack of breastfeeding knowledge, which are similar to findings in TEKLE (2015). Additional barriers related to the mother were being a first time mother, her physical condition (such as nipple problems and breast pain) and negative attitudes to breastfeeding. Other studies have identified insufficient breast milk supply reported as a barrier to 6 months EBF by mothers. Family can be both a facilitator and a barrier. Support from family members (i.e. grandparents or the husband) was shown to have a positive impact on EBF, and this has been found in other studies. Lack of family support was also identified as barrier. (TEKLE, M. *et al*., 2015; Elsayed, H. *et al*., 2016)

Physical conditions in the mother, such as inverted, retracted or flat nipples, breast pain, postpartum depression, smoking and drug addiction were reported as influential barriers to EBF Moreover, mothers who had a caesarean section were more likely to report difficulty breastfeeding initially or "having to give formula milk". (Elsayed, H. *et al*., 2016)

Conclusion:

Based on the findings of the present study it can be concluded that the majority of mothers' housewife and multipara and not compliance with exclusive breast feeding. In addition the most common barriers to maintain exclusive breast feeding were the infants still hungry after feeding, perception of insufficient milk production, lack of support from surrounding and return to work. The study concluded that, there were many social constrains that influence mothers' exclusive breast feed their infants.

Recommendations:

- Efforts should be made in private and government hospitals, clinics, home-visits, to help educate the mothers about benefits of exclusive breast feeding.
- Encourage employed mothers to express breast milk for their exclusively breastfed infants and provide appropriate facilities and adequate time in the work place for breast feeding.
- Provide individualized education programme to mother and family members on health benefits of breastfeeding, and use culturally appropriate counseling techniques to explore knowledge, attitudes, beliefs, and personal ambivalence.
- Further research must be done to provide guidance towards preventing and overcoming common barriers to breastfeeding to the woman and her supportive family members during pregnancy.

Limitation of the study:

- Convenience sample.
- Small sample size.

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Highlights and contributions

-Bacteria isolated from the natural environment can be used to produce economically important enzymes, using in agriculture, industrial and food fields.

-These bacterial isolates can grow and produce in a broad spectrum of salinity and high osmosis, can be used in biological treatments of various environmental wastes