

Women's Experience of Exclusive Breastfeeding: Pre and Post COVID-19



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ABSTRACT

Background: Exclusive breastfeeding is crucial for maternal and infant health; however, it is a challenge for the lactating mothers to continue breastfeeding exclusively during COVID-19 pandemic. COVID-19 pandemic has intensified the concerns of mothers regarding breastfeeding. As, subsequent lockdown and social distancing, risk of infection affect breastfeeding practice and experience. **Aim:** The study aimed to assess women's experience of exclusive breastfeeding pre and post COVID-19. **Method:** a qualitative design used a phenomenological exploratory approach was utilized. A non-probability purposive sample of 50 postpartum lactating women attended their appointment in the breastfeeding clinic at Dr. Soliman Fakeeh Hospital (DSFH), Jeddah, Kingdom of Saudi Arabia. Two tools were used: A structured interview questionnaire for demographic, reproductive, medical and infants' data & an in-depth open-ended interview to assess women's experience regarding exclusive breastfeeding. **Results:** women's experience pre and post COVID19 is totally different from women perspectives. Regarding women Previous experience, not all women had exclusive breastfeeding. The studied women were exclusive as they all delivered in DSFH, and many of them reported that the lactation consultant was very helpful and supportive. Furthermore, the majority of them reported that they followed the recommended PPE before infant's feeding. **Conclusion:** COVID-19 pandemic surprisingly enhances women's positive breastfeeding experience. Presence of lactation consultant, support from healthcare team, quarantine, limited visitors, presence of husband, encouraged women to complete breastfeeding. While, limited personnel postnatal visits, fear of infection, psychological concerns were the major difficulties during the pandemic. **Recommendation:** Virtual breastfeeding educational classes should be continued during the pandemic and after providing an accurate information, correcting misbelieves, and psychologically supporting lactating mother.

Keywords: COVID-19 Pandemic, Exclusive Breastfeeding, Women's Experience.

Introduction:

Exclusive breastfeeding is the most complete form of infant nutrition; it starts a healthy foundation for infant growth and development and positively affects maternal health (Badr & Alghamdi, 2022). The World Health Organization (WHO) recommends exclusive breastfeeding for newborns starting from the first hour after birth until at least 6 months, and ideally breastfeeding should be continued until the child is 2 years old (WHO, 2022). The COVID-19 pandemic has intensified the concerns of mothers regarding breastfeeding. As subsequent lockdown and

social distancing led to changes in breastfeeding practice and experience (Fakari & Simbar, 2020).

The fear of vertical transmission through breastfeeding is currently a core concern of new mothers, and the evidence is still conflicting (Pacheco et al., 2021). Despite mixed results, a recent review of 26 global and governmental guidelines reports that contrary to the initial measures adopted early in 2020, the overall current consensus recommends breastfeeding (Dimopoulou et al., 2022). In the specific case of mothers who tested

positive for COVID-19, despite the risks, the World Health Organization (WHO) supports the continuation of breastfeeding as well as postpartum skin-to-skin contact as long as the necessary precautions are adopted (Tomori et al., 2020). These general guidelines should then inform shared decisions to be taken by parents and discussed with their perinatal health providers outweighing the risk of transmission and the advantages of breastfeeding (Kang et al., 2020).

The COVID-19 pandemic and subsequent lockdown and social distancing led to changes in breastfeeding practice and experience (Lubbe et al., 2020). Several international health agencies and medical societies including the WHO, Royal College of Obstetricians and Gynecologists (RCOG), and Italian Society of Neonatology support direct breastfeeding with following the hygienic precautions and recommend mother and neonate separation only in situations of poor maternal health conditions or the need to provide therapies to the newborn (Cheema et al., 2020).

Furthermore, the COVID-19 pandemic has significantly altered how breastfeeding support is provided, resulting in mixed breastfeeding outcomes and experiences for mothers (Turner et al., 2022). Mothers were temporarily separated from their babies when infection was present or suspected, parents were prevented from being present on neonatal units and vital breastfeeding support was altered (Walker et al., 2022).

Due to the severe public health measures implemented to reduce community transmission, COVID-19 pandemic has related to fear and worry. This is likely to lead to increased stress, worry, loneliness, and depression, especially among lactated mothers, who will be concerned for their own health and the safety of their babies (Lubbe et al., 2020). Breastfeeding is a complex process that is influenced by several personal, environmental factors, psychosocial, financial, cultural, and religious factors. These factors can influence breastfeeding initiation and continuation (Chandrasekharan et al., 2020).

Moreover, the global COVID-19 pandemic affected health appointments may have as face-to-face breastfeeding support groups were moved online or abandoned and antenatal care was delivered largely online (Rodríguez-Gallego et al., 2022). So, it is very important to listen carefully to women experience of exclusive breast feeding during covid-19 crisis and explore their point of view during this intense period of their life (Alsulaimani, 2019).

Significance

The World Health Organization declared the outbreak of COVID-19 to be a global pandemic in March 2020 (WHO, 2020). Like all countries around the world, Saudi Arabia was affected by COVID-19; From March 2020 until February 2021, there were almost 370,000 cases in Saudi Arabia, and this number increased cumulatively every day. The length and experience of breastfeeding could have been affected during this time because of the COVID-19 pandemic (Lubbe et al., 2022).

The WHO has planned to increase the rate of exclusive breastfeeding in the first six months to at least 50% by the year 2025; however, the percentage of infants under six months who are exclusively breastfed is only 40% globally (WHO & UNICEF, 2020). During the COVID-19 pandemic, the attention of health services was more geared toward resolving the COVID-19 problem, which might have led to mothers not receiving effective breastfeeding support. Furthermore, the COVID-19 phenomenon reshaped to new adaptations, such as working from home, lockdown restrictions and social distancing rules, which has created a variety of obstacles for breastfeeding women, including the support available to them as well as adequate support from the community level (Agrina et al., 2022). So, the current study was conducted to assess the experience of exclusive breastfeeding from women's perspective during COVID-19 Pandemic.

Aim of the Study

The study aimed to assess women's experience of exclusive breastfeeding pre and post COVID-19.

Research Question

Dose women's experience of exclusive breastfeeding is different pre and post COVID-19 pandemic?

Methods

Study Design

The current study followed a qualitative methodology using a phenomenological exploratory approach. It is a form of qualitative inquiry that emphasizes experiential, lived aspects of a particular construct that is, how the phenomenon is experienced at the time that it occurs, rather than what is thought about this experience, or the meaning ascribed to it subsequently (Bengtsson, 2016). Given to the objective of the study, Qualitative research methods are appropriate to capture and elucidate women's perspective and to gather in-depth insights of the exclusive breastfeeding experience during COVID-19.

Study Setting

The current study was conducted at Breastfeeding clinic in Dr. Soliman Fakeeh Hospital (DSFH), Jeddah, Kingdom of Saudi Arabia. It is a private hospital in Saudi Arabia opened in 1978 with high success rates comparable to international standards. It is considered as a pioneer establishment in the private healthcare sector in the Kingdom.

Breastfeeding clinic started at Fakeeh hospital in 2010, located on the mezzanine floor bldg.2. The breastfeeding clinic starting from Sunday to Thursday from 0800 to 1700h. The clinic receives case as: Pregnant and lactated mothers or any mother with breastfeeding problem, mothers with breast or nipple concern like breast engorgement, nipple sore, breast abscess, flat nipple, inverted nipple, breast surgery, women how want to do re-lactation, or any disease can affect breastfeeding. Also, babies with: congenital anomalies, fussiness, breastfeeding refusal, preterm, babies not gaining weight or any condition affect breastfeeding are admitted.

In the clinic, the BF consultant visits the mother upon the discharge from hospital immediate giving birth to be sure about breastfeeding. All the educational materials for breastfeeding were handed to mother during the visits. Clinic accepts all women who follow up from Fakeeh hospital or from outside.

Study Subjects

The study subjects included a non-probability purposive sample of 50 postpartum lactating women according to the following criteria:

Inclusion Criteria: mothers who

- Aged from 20-40 years.
- Opted to exclusive breastfeeding during the first six months after delivery.
- Had a normal vaginal delivery with a singleton, full-term infant.

Exclusion Criteria: mothers who

- Used artificial or partial feeding.

Sample Size

The purpose of this study design was to explore women's views and experiences regarding exclusive breastfeeding during the COVID-19 pandemic. The qualitative methodology tends itself to collect large amounts of data till reaching saturation point (Bernard et al, 2016). So, it was at 50 lactating mothers.

Data Collection Tools

Data was collected using two tools

Tool I: Structured Interview Questionnaire

The questionnaire was developed by the researcher after reviewing the related literature (Wambach et al., 2016) and consisted of four parts:

Part I: Socio-Demographic of the Lactating Mothers

This part included the following maternal characteristics: age, nationality, level of education, current work status, income, and smoking habits.

Part II: Reproductive History and Breastfeeding Experience of the Lactating Mothers

The questionnaire also included questions related to the reproductive history of the mother as gravidity, parity, number of pregnancies, number of abortions, number of living children, mode of deliveries, history of lactation, attending antenatal and postnatal breastfeeding education.

Part III: Medical History and Health Condition of the Lactating Mothers

This part involved history of chronic diseases, food allergies, physical activities, taking vitamins, minerals, or other nutritional supplements, previous diagnosis with COVID 19, and if she gets the COVID vaccine.

Part IV: Infant Characteristics

This part included the following: gender of the infant, birth weight, current weight, age when mother return to work, working hours during lactation, and working environment supporting lactation.

Tool II: An In-Depth Open-Ended Interview to assess women's experience regarding exclusive breastfeeding during the COVID-19 pandemic

This interview started with an open-ended question which was, "Tell me about your experience of exclusive breastfeeding during the Covid-19 pandemic?"

and followed by probing questions

Research Process

The current study was done through two processes as the following:

I- Preparatory Phase: Official permissions to carry out the study were obtained from Institutional Review Board (IRB) at Dr. Fakeeh hospital with approval No. (319/IRB/ 2022). As well as an approval from the research ethics committee of Faculty of Nursing, Mansoura University was taken.

II- Data collection phase:

This data was collected during the regular working hours from Sunday to Thursday of the routine work from 8 a.m. to 5.p.m. Women attended the breastfeeding

consultation clinic for follow-up after delivery. They had a complete assessment, evaluation, education and care by the breastfeeding consultant as apart from the routine care. the researcher conducted a face-to-face interview with the women on their last follow up visit on the sixth month to offer the women voluntary participation in the research.

The privacy and confidentiality of the women were maintained; the researcher explained to the women the aim of the study to obtain their acceptance and promoted their cooperation. The participated women had signed a written informed consent that they approved to participate in the research. Consent encompassed permission to be interviewed, writing their responses, and using a tape recorder. Eligible mothers who agreed to share their information with the researcher, were interviewed personally with the researcher at the breastfeeding clinic. After they received their intended care, the researcher introduced the structured interview questionnaire to her and explained the whole content of the questionnaire, which included women's socio-demographic data obstetric history, medical history, and infant's characteristics.

After completion of the predesigned questionnaire, recording or documenting the conversation had started, one open-ended question was asked to elicit women's views and experience regarding exclusive breastfeeding. Probing questions were used to explore deeper into experiences, the researcher asked the mother in detail about her current experiences compared with the previous experience. what was different this time during breastfeeding, if she practiced skin to skin or not, her baby was with her rooming in all time or separated from her, what are the difficulty in breastfeeding during COVID-19?, how the pandemic affect breastfeeding?, is the lockdown affect her breastfeeding or was helpful?, if she received enough support during the pandemic and which support made different?. How the pandemic affect her emotional, physiological, physical and psychological condition? education and follow up from the hospital was available or limited,

....etc. The time spent by the researcher with every woman to complete the interview was between 30-60 minutes. The researcher continued to interview the mothers till reaching the data saturation.

Data Analysis

Data analysis was done according to the following:

I- Quantitative data (Socio-demographic characteristics, obstetric, medical history, and infant characteristics) were coded, computed and statistically analyzed using SPSS, version 26. Data were presented as frequency and percentages (qualitative variables) and mean \pm SD (quantitative continuous variables). The Chi-square test was used for comparison of the categorical variables regarding current and previous breastfeeding experiences. The difference was considered significant at $P \leq 0.05$.

II- Qualitative data

During the data analysis of the qualitative data, the researcher had a literature review for the data analysis of the qualitative study (El-Nemer, 2003). The data were transcribed in Arabic and then translated into English. Burnard's 14 stages for analyzing qualitative interview transcripts were utilized to categorize and code the data (Burnard, 1991) as the following:

Stage One: Making Notes

The researcher made the notes and wrote every word related to woman's experience after each interview. Also, memos' were written regarding the ways of categorizing the data as the researcher try to collect the responses that are related to the same point together in a category. Memos serve as memory joggers and facilitate recording ideas and theories that the researcher had during working with the data. Such memos allow the researcher to record anything that attracts her attention during the initial phases of the data analysis.

Stage Two: Transcripts Reading

During this stage, the researcher reads the transcripts and makes notes throughout the reading after finishing the interviews. The purpose of this stage is to become immersed in the data and

become more fully aware of the 'life word' of the respondent

Stage Three: Re-Reading

Transcripts were re-read through again and the main headings were written down to describe all aspects of the content, excluding 'dross'. The dross is used to denote the unusable 'fillers' in the interview and to exclude the issues that are unrelated to the topic (Field and Morse, 1985). The 'headings' or 'category system' should account for almost all of the interview data. Categories are freely generated during this stage.

Stage Four: Creating Categories List

The categories list was surveyed and grouped together under higher-order headings. The purpose is to reduce the numbers of categories by collapsing some of the ones that are similar into broader categories. During this stage, the main categories included 4 main themes.

Stage Five: Sub-Heading List

The new list of sub-categories and sub-headings was created through, and a final list was produced after removing the repetitious or very similar headings. The four main themes were sub-categorized into 18 sub-themes.

Stage Six: Validity of the Categorization

This stage aimed to ensure the validity of the categorizing method and guard against the researcher bias. This can be done through inviting two colleagues to independently generate a new category system without seeing the researcher's list. After that, the three lists of categories are then discussed and adjustments made as necessary.

Stage Seven: Checking the Transcript and the Sub-Heading List

Transcripts and sub-headings are re-read alongside the finally agreed list of categories to assess the degree to which the categories list covers all aspects of the interviews. Adjustments are made as necessary.

Stage Eight: Color-Coding of the Categories List

Each transcript is worked through with the list of categories and sub-headings and 'coded' according to the list of categories headings. Colored highlighting pens are used

here to distinguish between each piece of the transcript allocated to a category and sub-heading. Examples of the way such colors could be used:

- *Previous experience of exclusive breastfeeding: blue*
- *Current experience of exclusive breastfeeding: red*
- *Personal protective measures during breastfeeding: green*
- *Psychological conditions of the mothers during COVID-19: yellow*

Stage Nine: Coding Collection

Each coded section of the interviews is cut out of the transcript and all items of each code are collected together. Multiple photocopies of the transcripts were used here to ensure that the context of the coded sections is maintained. Everything that was said in an interview is said in a context. The multiple copies allow for the sections either side of the coded sections to be cut out with the coded areas.

A note of caution must be sounded here. Once sections of interviews are cut up into pieces, the 'whole' of the interview is lost it is no longer possible to appreciate the context of a particular remark or piece of conversation. For this reason, a second 'complete' transcript must be kept for reference purposes.

Stage Ten: Creating Sheets for Themes and Sub-Themes

The cut-out sections are pasted onto sheets, headed up with the appropriate headings and sub-headings.

Stage Eleven: Checking Appropriateness of the Category

Selected respondents were asked to check the appropriateness of the category system. They were asked: 'Did this quotation from your interview fit this category? Does this? Adjustments were made as necessary. This allowed for a check on the validity of the categorizing process to be maintained. This

can be done during the next follow-up visit to the clinic.

Stage Twelve: Collecting the Sections

All of the sections were filed together for direct reference when writing up the findings. Copies of the complete interviews were kept on hand during the writing up stage, in addition to the original tape recordings. If anything, unclear appears during the writing up stage of the project, the researcher should refer directly back to the transcript or the recording.

Stage thirteen: Writing-up Process

Once all of the sections were together, the writing up process begins. The researcher started with the first section, selected the various examples of data that have been filed under that section and offered a commentary that links the examples together. The researcher then continued on to the next section and so on, until the whole data was written up. All the time that this writing up process is being undertaken, the researcher stayed open to the need to refer back to the original tape recordings and to the 'complete' transcripts of the interviews. In this way, it is possible to stay closer to original meanings and contexts.

Stage Fourteen: Writing up the Findings

In this stage, the researcher must decide whether or not to link the data examples and the commentary to the literature. Two options can be followed. First, the researcher can write up the findings, using verbatim examples of interviews to illustrate the various sections. Then, write a separate section which link those findings to the literature on the topic and make comparisons and contrasts. Second, the researcher may choose to write up the findings alongside references to the literature. In this way, the 'findings' section of the research becomes both a presentation of the findings and a comparison of those findings with previous work. The researcher followed the second way as it was more practical and readable (Burnard, 1994).

Validity of the Categorization Process

The aim of the phenomenological qualitative research is to offer a glimpse of another person's perceptual world (Glaser & Strauss,

1967). So, the researcher should try to eliminate any possible bias or subjectivity that might be raised during handling the interview data. To ensure that, two methods are recommended:

First, the researcher asks a colleague who is not involved in any other aspect of the study but who is familiar with the category generation to read through three transcripts and to identify a category system.

The categories generated in this way are then discussed with the researcher and compared with the researcher's own category system. If the two category analyses prove to be very similar, the original category analysis was reasonably complete and accurate.

The second check for validity is that of returning to three of the people interviewed and asking them to read through the transcripts of their interviews and asking them to jot down what they see as the main points that emerged from the interview. This produces a list of headings which can then be compared with the researcher's and the two lists can be discussed with the respondents. Out of these discussions, minor adjustments may be made to the category system.

The researcher followed the technique to ensure the validity of the categorization process. As checking the category generation. As well as some respondents were selected during their follow-up visits to read the transcript and

compare with their responses during the interview.

Ethical Considerations

Official permissions to carry out the study were obtained from the research ethics committee at the Faculty of Nursing, Mansoura University to implement the study. Before the study, written formal consent was obtained from all participants after explaining the nature and purpose of the study. Participation in the study was voluntary, and each participant had the right to withdraw from the study at any time. Anonymity, privacy, safety, and confidentiality of the collected data and the recording were assured throughout the whole study. The results were used as a component of the necessary research for a master's study as well as for publication and education.

Results

Part I:

Table 1 shows that the 36% of the studied women aged between 30-35 years and more than half of them (54%) were Saudis. Regarding the level of education high percentage of the study sample were graduated from the university represented by 92%. Considering the working status, more than half (62%) of women were employed represented by of the study sample. The income of (42%) of them was between 15000-20000 SR per Month and 98% of them were non-smokers.

Table 1. Socio-Demographic Data of the Lactating Women (n=50)

Characteristics	n	%
Age in Years		
20-25	6	12.0%
>25-30	13	26.0%
>30-35	18	36.0%
>35-40	13	26.0%
Mean Age + SD	31.9+ 4.7	
Nationality of the women		
Non-Saudi	27	54.0%
Saudi	23	46.0%
Level of education		
High school	1	2.0%
Illiterate	1	2.0%
Less than high school	2	4.0%
University	46	92.0%
Current work status		
Employed	31	62.0%
Housewife	19	38.0%
Income		
Lessthan5000	1	2%
5000-<10000	4	8%

10000-<15000	18	36%
15000-<20000	21	42%
>20000	6	12%
Smoking Habits		
Smoker	1	2%
Non-Smoker	49	98%

Table 2 presents that 74% of the study sample were multi-para and 50% were pregnant for 2-3 times. More than half of them (60%) have no history of abortion and had 2-3 living children. The highest percentage of them (94%) have a single birth and also 96% of them have a normal delivery.

Table 2. Obstetric history of the lactating women (n=50)

Variables	n	%
Parity		
No. of pregnancies		
Primi-Para	13	26.0
Multi-Para	37	74.0
1-3	25	50.0
4-5	18	36.
6-8	4	8.0
9-11	3	6.0
No. of abortion		
0	30	60.0
1	13	26.0
2	5	10.0
3	1	2.0
4	1	2.0
No. of live births		
2-3	30	60
4-5	17	34
6-8	2	4
9-11	2	4
History of Multiple births		
Single birth	47	94
Twines	2	4
Triples	1	2
Mode of deliveries		
Cesareanbirth	2	4.0
Normal delivery	48	96.0

Table 3 represents that there was a highly statistically significant difference between delivery history and breastfeeding experiences in relation to delivery in a baby friendly hospital, performing skin to skin contact, attending antenatal and postnatal classes, as p value is (<0.001).

Table 3. Association between delivery and lactation history and breastfeeding experiences (n=50)

Delivery and Lactation History	Previous experience		Current experience		Significant tests ($p<0.05$)	
	n	%	n	%	X ²	P value
Delivered in a Baby Friendly Hospital:						
Yes	8	16%	50	100%	68.59**	<0.001
No	42	84%	0	0%		

Women's Experience of Exclusive Breastfeeding....

Skin to skin contact:						
Done	10	20%	46	92%	62.88**	<0.001
Not Done	40	80%	4	8%		
Types of lactation:						
Exclusive Breastfeeding	6	12%	50	100%	68.47**	<0.001
Partial Feeding	29	58%	0	0%		
Artificial Feeding	13	26%	0	0%		
Predominate Feeding	2	4%	0	0%		
Attending ante-natal education classes:						
Yes	14	28%	50	100%	52.55**	<0.001
No	36	72%	0	0%		
Attending post-natal classes:						
Yes	7	14%	50	100%	71.59**	<0.001
No	43	86%	0	0%		

Table 4 shows that 38.0 % of the studied women had anemia and only 8% of them had a high blood pressure. More than half of them (60%) take vitamins and minerals and 82.0% received the COVID-19 vaccine. The highest percentage of the women (94%) maintained a moderate level of activities.

Table 4. Medical history and health condition among lactating women (n=50)

Characteristics	n	%
Chronic Diseases:		
High blood pressure	4	8.0%
Hypothyroidism	4	8.0%
Gestational Diabetes	4	8.0%
Anemia	19	38.0%
Vitamins and minerals supplements		
Yes	30	60.0%
Diagnosed with COVID-19 in this pregnancy		
Yes	13	26.0%
Receiving COVID-19 Vaccine		
Yes	41	82%
Physical activities		
Fairly in-active (only walking)	1	2.0%
Moderately active (not regularly perform exercise)	47	94.0%
Very active (regular exercise, 3times/ a week or more)	2	4.0%

Table 5 shows that more than half of the infants were female repented by 56%. The majority of them had birth weights in between 2500-3000 gm and 3000-3500 gm represented equally by 42%.

The current weight of the more than one third of the infants was between 7000-7500 gm represented by 34%. 76% of the studied women returned back to work when the infant age was 4 months. Similarly, 76% of them worked 8hrs daily during lactation.

Table 5. Infant characteristics of the lactating women (n=50)

Characteristics	n	%
Infant sex		
Female	28	56.0
Male	22	44.0
Infant birth weight		
2000-<2500	8	16%
2500-<3000	21	42%
3000-3500	21	42%
Infant current weight		
6000-<6500	7	14%
6500-<7000	14	28%
7000-<7500	17	34%
7500-8000	12	24%
Age of baby in month when mother return to work		
3month	4	16%
4month	19	76%
5month	1	4%
6month	1	4%
Daily working Hrs. during the lactation		
6hrs.	2	8.0%
7hrs.	4	16.0%
8hrs.	19	76.0%

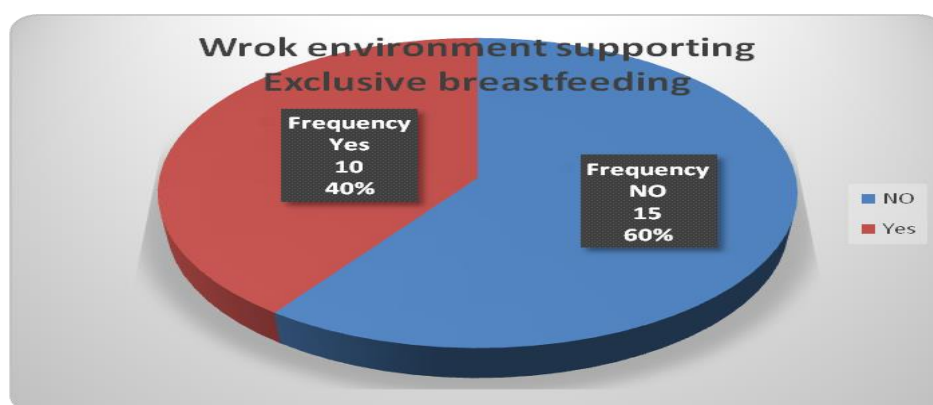


Figure 2 &3. Distribution of Lactating Women According to A Working Environment that Supports Lactation.

Figure 2 and 3 highlight that only 40% of the studied women worked in an environment that support the lactation.

Part II. Women's Perspective regarding exclusive Breastfeeding Pre &Post COVID-19

Themes 1: Lactating Women Previous Experience Regarding Exclusive Breastfeeding

Regarding the women's experience of exclusive breastfeeding during COVID-19, open questions were asked to the respondents' answers as the following:

1.1 Lack of Information and Preparation

1.1.1 "I did not know about the importance of the breast-feeding" (n=4Women).

1.1.2 "I didn't receive any education about the breastfeeding either during the ante-natal or post-natal period" (n=4 Women).

1.1.3 "I had twins before and I did not know how to breastfeed both babies together" (n=2 women).

1.1.4 "I was worried to breastfeed as I know breastfeeding is causing hair fall (n=2 women).

1.1.5 "breastfeeding is scary for me as I heard that it's painful and it can cause hair fall" (n=3 women).

1.1.6 , breastfeeding caused nipple cracked during feeding and she have some blood coming from nipples and this is annoying her." (n=5women).

1.2 Inappropriate breastfeeding practices

1.2.1 "I did not try to feed my previous baby" (n=4Women).

1.2.2 "I failed during the trial of breastfeeding every time (n=4 women).

1.2.3 "I feed my previous baby, but the feeding was not completely exclusive (n=29women).

1.2.4 'I used bottle feeding for my baby during at nighttime only to sleep more (n=13women).

1.2.5 "I used bottle feeding for my baby during my working hours" (n=16 women).

1.2.6 "Our babies refused to breastfeed, and he/she was fussy if we tried to breastfeed especially at night (n=31 women).

1.2.7 "I had nipple sore, and the pain was not tolerated (n=21 women).

1.2.8 "Skin to skin contact was hard for me, I felt tired up on delivery (n=7 women).

1.2.9 "improper latching is very painful and she was not happy during feeding because of this pain, she told me every time she start feeding she fell sever pain and cant continue the feeding, even she has phobia from breastfeeding

1.2.10 "Her experience about breastfeeding is very pad as she developed breast abscess during last breastfeeding in her left and she re admitted to the hospital for drain.

1.2.11 "I fell breastfeeding will impact my infertility and I want to become pregnant soon as I'm almost 40 and don't like to be late.

1.3 Lack of Family, Social and Work Support:

1.3.1 "My family told me that babies who receiving formula feeding getting more weight than the breastfeed babies (n=6women).

1.3.2 "I had no time to breastfeed exclusively as I had other responsibilities, and my other children need me too and no family member helped me (n=14women)

1.3.3 "My work had not allowed me to breastfeed during the working hours (n=16women).

1.3.4 "In my workplace, there is no designated room for breast-feeding or even to use the pump (n=16women).

1.3.5 "I struggled to feed my baby because of the pressure of others, lack of support and they encourage me to give formula for our babies (n=34women)

1.3.6 "I had a family pressure to eat some special food and restrict other, that made me upset and didn't like to continue breastfeeding" (n=19 women).

1.4 Women Misbeliefs Regarding Breastfeeding

1.4.1 “My baby cried too much and I thought my milk production is not enough” (n=41 women).

1.4.2 “I thought my small breast size was affect the amount of milk production” (n=7 women).

1.4.3 “breastfeeding increased my breast size and made it saggy” (n=7 women).

1.4.4 “I thought using contraception that safe with breastfeeding was not efficient to control pregnancy (n=7 women).

1.4.5 “I thought that the artificial formula had the same benefits as the breast milk (n=4 Women).

1.4.6 “I thought formula was more beneficial for my baby as mentioned from my friends; the bottle formula was reach with vitamins, minerals and iron (n=11 women).

1.4.7 “I have a gastric sleeve operation, and I thought I am not able to produce enough milk because I am not eating too much food (n=1women).

1.5 Lack of health care workers / Facility Support

1.5.1 “I was separated from my baby upon delivery, and I did not feed him/her after birth and this affected my breastfeeding later (n=8 women).

1.5.2 “Hospital policy to keep baby in nursery and I didn’t get the chance to feed my baby after birth” (n=8 women).

1.5.3 “Nursery staff was feeding my baby by formula without medical indication then my baby refused to take my breast (n=8 women).

1.5.4 “The pediatrician advised me to use formula to help my baby to get more weight (n=8 women).

1.5.5 “I had twins and the nurse in the hospital told me that breast milk was not enough for my twins and breastfeeding will be difficult (n=2 women).

1.5.6 “During my last breastfeeding experience, the attending physician restricted

me from many foods, and this let me to stop breastfeeding earlier (n=8).

Themes 2: Lactating Women Current Experience Regarding Exclusive Breastfeeding

2.1. Accurate Information and Proper preparation:

1.5.7 “During pregnancy I attend an online antenatal class that provides me with important information regarding the importance of exclusive breastfeeding for me and my baby”. (n=46 women).

1.5.8 “Starting from the second trimester, my doctor referred me to the breastfeeding clinic and I learned more about all the benefits of breastfeeding, management of breastfeeding issues, and how I can increase my milk production during breastfeeding. This education was very helpful”. (n=46 women).

1.5.9 “I learned from the first day post delivery the proper position and latching. Also, I felt that my baby was relaxed and steeled during breastfeeding, and I didn’t experience any nipple pain as before”. (n=46 women).

2.1.1 “I used to eat everything during feeding without restriction, which made me very happy”. (n=44women)

1.5.10 “The knowledge about breastfeeding helped me to complete successful exclusive breastfeeding for 6 months after birth”. (n=50 women).

1.5.11 Appropriate breastfeeding practices:

1.5.12 “I had enough time during the lockdown to sit with my baby and continue exclusive breastfeeding” (n=37 women).

2.1.2 “I didn’t find any difficulties till I completed the 6-month exclusive breastfeeding (n=38 women).

2.1.3 “I was able to cope with breastfeeding and my other responsibilities”. (n=38 women).

2.1.4 “Despite I was interested to do skin to skin contact but, I asked the health care team to remove my baby as I wanted to sleep since I didn’t sleep one day before. Also, I get worried that my baby to be cold or need to be examined” (n=4 women).

2.1.5 “I felt uncomfortable to keep my baby all the time with me and I asked the

nurse to take him/her for 2 or 3 hours so I can relax and sleep". (n=4 women).

2.1.6 "Redistricted visitors during the hospitalization period after delivery positively affected my experience better, as nobody interfered with my breastfeeding, and my baby was more steadily with no noises (n=22 women).

2.1.7 "skin to skin contact with my baby was a lovely experience and I enjoyed it too much" (n=39).

2.1.8 "the presence of our babies in the same room all the time helped me to continue exclusive breastfeeding as I know my baby more and I was worried if they take my baby in the nursery and give him/her formula, then my baby might refuse my milk as what happened before" (n=43).

2.3. Family and Social support

2.3.1. "Having limited visitors during COVID-19 time help me to continue breastfeed successfully "(n=34 women).

2.3.2. "In all my previous children my mom and my mother-in-law were insisting me to give my baby water with honey, herbal tea or formula but this time because of the limited visits and not having many visitors I didn't use this supplement for my baby" (n=37).

2.3.3. "My partner duty hours were less than routine regular hours during the pandemic, and he spent more time every day with us, he used to help with nappy changes, looking after our baby and letting me sleep when I need to do so" (n=12).

2.3.4. "My sister was my main support, she was also a mother and had a previous experience as she breastfed her child exclusively, which was really supportive to me" (n=3).

2.3.5. "I had confidence in breastfeeding this time as the social isolation gave me a chance to stay more time with my child and there was a plenty of time to breastfeed my baby and carry out my household activities" (n=7).

2.3.6. "Support group which I was referred to it upon discharge from the hospital was very helpful for me to continue my breastfeeding exclusively". (n=16).

2.3.7. her husband was very helpful and supportive to her, and this is really made different

with her breastfeeding experience" (n=16 women).

2.3.8. my family helped me allot and was one of the reasons that i continue breastfeeding as they used to take baby and give me time to sleep and preparing food for her and this made my breastfeeding journey easy and Enjoyable" (n=7 women)..

2.3.9. the work environment facilitated the breastfeeding journey as my hospital provided us with one hour free to come late or go home early, also they allowed me to use the breastfeeding room during pumping my milk, and really this was a big reason to continue breastfeeding" (n=9 women)..

2.4. Women beliefs regarding breastfeeding

2.4.1. "Since before, I believed that any food or drink am taking was affecting my baby and causing gasses, but, after I attended the breastfeeding classes, I ensured that I can eat anything with no caution" (n=36).

2.4.2. "I believed that babies who exclusively breastfeed were not able to sleep well at night" (n=11).

2.4.3. "Exclusive breastfeeding can delay new pregnancies that's why I'm very interested to breastfeed my baby as I'm very worried to use any contraception that may interfere with breastfeeding" (n=14).

2.4.4. "I noticed this time that my baby health was different from my other children, he/she didn't suffer from gases, constipation and vomiting, and no need to go to the hospital frequently as before" (n=41).

2.4.5. "I believed before that exclusive breastfeeding was impossible and my baby need to feed at least one bottle before sleeping, but now I assumed that exclusive breastfeeding was possible and it need only patience from me and support from others" (n=27).

2.4.6. "I used to drink some special herbal to increase my milk production, and I believed that it made a difference when I used it" (n=39).

2.5. Health care workers / Facility Support

2.5.1. "My lactation consultant advised me to eat a healthy food and a balanced diet and no

need to restrict or increase special food, which was really made me more comfortable” (n=44 women).

2.5.2. “post-natal support was very helpful, once I delivered all the team in the delivery room started to make all the effort to put my baby in my breast” (n=48).

2.5.3. “During my hospitalization period, nursery staff and breastfeeding consultants educated me how to hold my baby, also how I feed while lying down, which was very helpful” (n=22).

2.5.4. “Upon my discharge from the hospital, they give me an appointment to the breastfeeding clinic, also they referred me to an online support group, which it was very good for me and really make different compared to my previous experience” (n=29).

2.5.5. “After the lactation consultant informed me during pregnancy about the benefit of skin-to-skin contact for my baby. Also, the videos that showed to me about skin-to-skin contact made me very interested to do it immediately after birth” (n=17)

2.5.6. “Lactation consultant was very helpful as he educated me how to manage breastfeeding issues effectively and provide the necessary support to continue exclusive breastfeeding. He showed me how to adopt many different positions for breastfeeding, and how to know that my baby is getting enough milk” (n=42).

2.5.7. “all healthcare team in this hospital mentioned the same information regarding importance for exclusive breastfeeding tone and my baby” (n=29).

2.5.8. “The experience of giving birth in a baby friendly hospital made change my view and concerns regarding exclusive breastfeeding” (n=44).

Discussion

Exclusive breastfeeding (EBF) for the first six months postpartum is recommended as one of the most important ways to support maternal and child health (**Chertok et al., 2022**). The World Health Organization (WHO) supports the continuation of breastfeeding during COVID-19 as well as postpartum skin-to-skin contact as long as the necessary

precautions are adopted (**Tomori et al. 2020**). Restrictions during the pandemic may have negatively affected breastfeeding practices in maternity care facilities (**Nuampa et al., 2022**). Breastfeeding women encountered several obstacles during the COVID-19. It is very crucial to assess these obstacles and understand women’s concern that may affect exclusive breastfeeding practices (**Chen et al., 2020**).

The current study aimed to assess the experience of exclusive breastfeeding from women’s perspective during COVID-19. The results of the study answered the study question as the current study explored women’s experience regarding exclusive breastfeeding. Women’s previous breastfeeding experience, current breastfeeding experience, psychological condition, and the precautionary measures during COVID-19 were the main themes that have been discussed during women’s interviews.

Concerning the socio-demographic characteristics of the studied women, the mean age was 31.9 ± 4.7 years, most of them had a university education (92%). Half of the women were employed, and the majority had an income ranging between 15000 - <20000. This was supported by a Saudi study by (**Alyousefi, 2021**) who explored the determinants of successful exclusive breastfeeding among Saudi mothers and reported that most of the studied mothers were aged between 25 and 35 years old. Most of them were college graduates. More than half of the study participants were housewives. Another Saudi study by (**El-Gilany et al., 2011**) who assessed factors affecting breastfeeding practice among postpartum women and found that most of the mothers were highly educated, employed, and had enough monthly income. Furthermore, (**Amin et al., 2011**) who studied the determinants of exclusive breastfeeding among Saudi women and reported that most of the participants had higher education and had enough monthly income.

Concerning obstetric data among the study participants, the majority of women in this study were multi-parous and multi-gravidas. Most of them had no previous

history of abortion and the most common mode of delivery was normal delivery. This finding was in agreement with **AlShahrani (2022)** who carried out a study to evaluate factors affecting breastfeeding practice and reported that most of mothers were multiparous, delivered by vaginal delivery. In addition, **(Takahashi et al., 2017)** found that majority of the study participants were multigravidas, had no obstetric problems in their current pregnancy, and delivered through normal vaginal delivery.

Regarding the delivery setting, all the participants in the current study delivered in a baby-friendly hospital, while less than a quarter of them delivered in a baby-friendly hospital in their previous deliveries, which significantly affected and favored the exclusive breastfeeding practices in both deliveries. This was in an agreement with this result, previous report by **(Fallon et al., 2019)** who studied the effect of delivery in a baby friendly hospital on breastfeeding outcomes and revealed that, hospitals that followed the Baby Friendly Hospital Initiative (BFHI) has been shown to improve mother's breastfeeding knowledge and attitudes and had a successful impact on breastfeeding initiation, duration and exclusivity.

Also, this finding was supported by **(Munn et al., 2016)** who conducted research to examine the importance of following the baby-friendly initiatives on breastfeeding outcomes and found that the breastfeeding rate and outcomes had greatly improved following the friendly initiatives. This can be explained as hospitals that follow the baby-friendly initiatives provide effective counseling sessions regarding breastfeeding started during pregnancy, follow-up after delivery and continued throughout the breastfeeding period. Support, education, and counseling for all breastfeeding related issues can help mothers to manage their breastfeeding practice effectively and improve breastfeeding outcomes.

Regarding women's previous experience regarding breastfeeding, the present study reported that about half of women breastfed their babies, but the feeding was not exclusively because there was a lack of

information and preparation regarding the importance of exclusive breastfeeding. This finding was supported by a recent study that examined breastfeeding rates and showed a significantly lower exclusive breastfeeding rate among women in their previous deliveries compared to the current delivery **(Zanardo et al., 2021)**.

About one quarter of lactating women in our study thought that formula was better than breast milk regarding the nutritional values. In contrast, the United States study by **Snyder and Worlton (2021)** found that some of the mothers preferred to continue breastfeeding since it was a safer option (e.g., fear of formula shortages). This was supported by **Toledo and Cianelli (2019)** study results. This difference is explained by the different study populations.

As well as the 'mixed breastfeeding' rate among Saudi women was 49.8% in the first delivery, which was lower than the current rates **(Amin et al., 2011)**. In addition, **Al-Shahrani (2022)** reported that lower exclusive breastfeeding rates in the first 2 months postpartum among Saudi mothers. One third of mothers were exclusively breastfeeding in the first 2 weeks postpartum, and this rate dropped significantly to one fifth at 6–8 weeks post delivery in their previous deliveries **(Al-Shahrani et al., 2022)**.

The previous findings were not supported by **(Badr & Alghamdi, 2022)**. In a study analyzing the Saudi Arabian breastfeeding mothers during COVID-19 pandemic, and reported that the duration of breastfeeding for previous babies was 3–22 months, and for the current baby, the duration ranged between 2 and 19 months, with no significant effect of COVID pandemic on the breastfeeding.

Concerning family and social support during their previous deliveries, , about half of the study participants stopped breastfeeding early due to lack of family and social support. Also, they returned to work, which did not allow them to breastfeed during the working hours. This was consistent with a study conducted in Al-Madinah city in the Kingdom Saudi Arabia and found that most of the

mothers did not find enough support from family or friends to continue breastfeeding. They returned to work in an environment that was unfriendly to support lactation. These results were in the same line with (Murad et al., 2021) who studied factors associated with breastfeeding practices among Saudi women and reported that there was lack of work support to continue breastfeeding and there was an inconvenience of trying to practice breastfeeding with full-time working and there were no breastfeeding facilities, so they do not complete breastfeeding for a long period.

Another Saudi study assessed the environmental factors affecting women's breastfeeding practices and infant feeding and revealed that one of the main influential environmental and social factors was returning to work, which did not allow a special time for breastfeeding (Habib et al., 2021). Also, there were cross-sectional studies in the Middle East found that lack of support for the working mothers was the main factor to discontinue breastfeeding before 6 months postpartum (Raheel & Tharkar., 2018 & Al-Mamari et al., 2017). In addition, a study by Zhang et al. (2015) who analyze factors affecting breastfeeding among Chinese women and found that 16% of the participants turned to formula feeding when they returned to work as there was no family support to continue.

Considering inappropriate previous breastfeeding practices, about half of mothers reported that their babies refused to breastfeed, and he/she was fussy if the mother tried to breastfeed, especially at night. In concordance with these findings (Hegazi et al., 2019) in a study conducted to assess factors affecting breastfeeding practice in Rabigh, Western Saudi Arabia, and reported that one of the main causes to discontinue breastfeeding before 2 years was infant refusal of breast milk. Also, another study done in Hail district, KSA found that an important factor for early cessation of breastfeeding was the refusal of the baby to hold the breast (Shommo & Al-Shubrumi, 2014).

Regarding women's previous misbelief of exclusive breastfeeding, more than half of lactating women believed that breastfeeding had

a negative impact on the body image and breast size. This comes in agreement with Laili and Amalia study, it was detected that a negative body image perception in postpartum mothers can affect breastfeeding practices, because mothers stopped breastfeeding because they were afraid from fat, bad breasts, or even mothers made a diet and restricted certain foods to improve their body shape and this would affect their milk production (Laili & Amalia., 2020).

Similarly, Bucher & Spatz (2019) conducted a study regarding factors affecting breastfeeding decisions and concluded that women's concerns and fears from breast sagging negatively influence their continuity of breastfeeding. Other research showed that there is a relationship between body image, self-esteem, and continuity of breastfeeding, as fears of changed body image during breastfeeding affect maintenance of the exclusive breastfeeding practice (Sari., 2011). Also, in another research reported in Annisa study that the higher the negative body image scores, the shorter the duration of exclusive breastfeeding among mothers (Annisa., 2015).

Concerning the current breastfeeding experience, it was detected that all the women participating in this study underwent exclusive breastfeeding. This can be explained by the fact that all of them delivered in a baby-friendly hospital, and the majority of them assured that the delivery in a baby friendly hospital was very helpful to initiate and continue breastfeeding. Similarly, the majority of the 37 participants in the study by Schindler and Phillips (2021) assessed the breastfeeding experienced during the pandemic and reported that there was an obvious change in women's perceptions of exclusive breastfeeding during COVID-19, including increased receptivity to the idea of breastfeeding for the immune benefits.

Concerning the accurate information and preparation during the current breastfeeding experience, the current study reported that about three quarters of the women thought that the lactation consultant was very helpful in educating them and provided the necessary support to continue the exclusive

breastfeeding. The majority of lactating women told that all health team, including nursing, pediatricians, and obstetricians, were all supportive and giving the same information about the importance of continuing exclusive breastfeeding.

These results were supported by a systematic review of 58 studies on maternity and newborn care published in 2016, which demonstrated a clear relationship between implementation of breastfeeding friendly hospital interventions (BFHI) and the likelihood of improved breastfeeding outcomes (**Pérez et al., 2016**). Similarly, the main finding of a study conducted by **Lojander et al. (2022)** who analyzed the hospital support to breastfeeding mothers after childbirth and found that the hospital's designation to the BFHI provided effective information, counseling, and support to breastfeeding mothers, which positively improved breastfeeding experiences from a maternal perspective

Another cause of improving exclusive breastfeeding practice as reported by the women in this study was the attendance of antenatal classes from the second trimester by the majority of the study participants. All of them attended and get benefit from both antenatal and postnatal educational classes. About half of mothers assumed that exclusive breastfeeding possible only instead of mixed feeding as a result of effective breastfeeding education. And more than half of the study participants got benefit from information received from a lactation consultant about the importance of breastfeeding, as it reduces the likelihood for COVID-19 transmission to their infants due to the antibodies and its immune-support effects.

In agreement with this finding, **Schreck et al. (2017)** conducted a study to measure the effect of hospital-based prenatal and postnatal breastfeeding interventions on breastfeeding initiation and continuation rates in a low-income population. The interventions implemented were a prenatal breastfeeding education curriculum and a hospital-based breastfeeding support group. It was found that breastfeeding initiation rates were greater in the post-intervention group. The breastfeeding continuation rate at or beyond 6 months did

not differ among baseline and post intervention groups but was greater among women who also participated in the breastfeeding support group compared with women who participated in the prenatal intervention alone. Participation in interventions did not affect the rate at which women reported not meeting their breastfeeding goals.

In contrast, another study found inadequate evidence to clarify the association between BFHI compliance and breastfeeding initiation. It is therefore not possible to conclude whether adherence to Baby-Friendly care is optimizing breastfeeding initiation (**Lokeesan et al., 2022**). This may be due to cultural differences or unequal educational level between the study participants.

In addition, a study to explore the knowledge, attitude and practice of breastfeeding among women attending primary health care centers before and after health education in Al Madinah Munawwara, KSA which conducted by **Hanafi et al. (2014)**, concluded that health care workers played an important role in disseminating knowledge and motivating women to breastfeed. Significant differences were found within the intervention group before and after health education. Also, **Wong et al. (2021)** suggest that health education can be effective to enhance exclusive breastfeeding over 6 months, partial breastfeeding and breastfeeding self-efficacy over 2-month postpartum. In addition, **Brown and Shenker (2021)**, who assessed the breastfeeding experience during COVID-19 and reported that the most common reason for continuity of exclusive breastfeeding was sufficient professional support and education.

As regards skin-to-skin contact with babies, most of the study participants reported that it was a lovely experience. However, less than one quarter found it hard to practice because they were very tired and exhausted. These results were in the same line with **Dalbye et al. (2011)** study, who analyzed skin-to-skin contact experience and showed that mothers who practiced skin-to-skin care with their healthy full-term infants experienced a mutual affinity which generated and catalyzed a circle of positive energy; both

mother and infant expressed feelings of wellbeing.

Similarly, **Moore et al. (2016)** conducted a systematic review to assess the effect of skin to skin contact after delivery and reported that it was a very grateful practice that enhance the positive attachment between mothers and their newborns, even some mothers expressed worry about falling asleep and dropping the baby or losing their grip of the baby when practicing skin-to-skin care.

Also, **Stevens et al., (2017)** in their study reported that women wanted their baby to stay with them and have skin-to-skin contact, even if they felt apprehensive about providing this care. Also, **Stevens et al (2017)** in their study reported that women wanted their baby to stay with them and practice skin-to-skin contact, even if they felt apprehensive about providing this care. Giving to the fact that skin-to-skin care was natural and logical just as it is amongst other mammals that also need to provide physical contact and touch to ensure acceptance for their offspring. Expressions of wellbeing and affinity, which evolve when holding the child skin-to-skin, confirm its effectiveness in many studies **Moore et al. (2016)**.

Regarding women's beliefs during the current breastfeeding practice, nearly half of the studied women believed that breastfeeding can delay new pregnancies as they had problems using the other methods of contraception which is why mothers were more interested in exclusive breastfeeding. This was supported by **Pal and Mukhopadhyay (2014)** study to examine the factors associated with breastfeeding experience among Indian women, it was detected that more than half of mothers had a good knowledge regarding contraceptive effect of breast milk especially exclusively feeding during the first six months. This was much higher in compared to **Sultania et al. (2017)** study, in which the participants were not completely confident that breastfeeding could effectively delay the occurrence of pregnancy. This disharmony may be due to the different education levels among the participants.

In the present study, most of the studied participants perceived that they had not

enough milk and they need to drink some herbals to increase their milk. This comes in agreement with previous study that concluded that the importance of maternal self-confidence in breast-feeding ability (the concept of 'self-efficacy') has been demonstrated to be an important factor in the perception of insufficient milk and the continuation of breast-feeding (**Menekse et al., 2021**).

As well as less than a quarter of the lactating women were separated from their babies upon delivery, as they were tired and unable to feed him /her. This finding was in agreement with **Jaafar et al. (2016)** who studied rooming-in versus separation care and its effects on breastfeeding duration and reported that mother-infant rooming-in significantly increased the rate of exclusive breastfeeding at discharge (day four postpartum). Furthermore, **Davanzo et al. (2020)** who studied breastfeeding during COVID-19 and recommended that rooming-in was very essential practice after delivery, and in case of separation of mother and neonate, routine use of breast milk substitutes should be avoided; expression, transportation, and administration of the fresh mother's milk to the neonate should be considered

Conclusion

During COVID-19 pandemic, the experience of exclusive breastfeeding for 6 months was improved than the women's previous experiences. all the studied lactating women continued breastfeeding exclusively. Delivery in BFIH positively affected the exclusive breastfeeding initiation and practice significantly. Certain positive factors that enhance exclusive breastfeeding were having more time staying at home, enhancing better breastfeeding practice, less visitors due to lockdown, the presence of husband more time supporting the mother in infants' care, and the need for raising baby immunity during the pandemic, which encouraged the mother to complete breastfeeding exclusively. While there were certain difficulties due to the pandemic, such as limited postnatal breastfeeding consultant visits, fear of transmission of infection, psychological

impact of the lockdown and lack of family support during this critical time.

Recommendations

Based on the study findings, the following is recommended:

- Breastfeeding educational classes should be started during pregnancy and continued throughout lactation to provide accurate information and correct misbeliefs regarding exclusive breastfeeding.
- Providing virtual breastfeeding education should be established to ensure the continuity of care and encourage mothers to continue exclusive breast feeding.

Limitations

Certain limitations were faced by the researcher, which were: generalization of these findings to different geographical areas or other countries was limited as the data was collected from one setting in Saudi Arabia. Also, recall bias regarding previous women's experience of exclusive breastfeeding practice.

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