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ORIGINAL RESEARCH

Contraceptive Practices among Breastfeeding Mothers

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ABSTRACT

Background: Breastfeeding women should have access to family planning information and services to help them select a method of birth control that allows them to support breastfeeding and is safe for the breastfeeding child.

Objectives: The study aimed to evaluate the practices of various contraceptive methods among mothers who were breastfeeding.

Methodology: A descriptive-analytic design was conducted for breastfeeding mothers from the period of 12 February to 28 October 2021. To give equal chances to participate, the probability simple randomization technique was applied for selecting (800) postnatal breastfeeding mothers attending the immunization unit in Primary Health Centers in Sulaimani City.

Overall, items included in the questionnaire were in two parts: part one General and specific information about breastfeeding mothers' concerns, and the response to the characteristics of socio-demographic variables and obstetric status. Part two was contraceptive practices. The data were collected through the use of interviews and then analyzed through the application of descriptive statistical analysis and inferential statistical analysis. Common contraceptives used among breastfeeding mothers were natural contraception (62.5%), condoms (17.5%), ICUD (5.0%), oral contraceptives (3.5%), and breastfeeding (11.5%).

Results: A high percentage of breastfeeding mothers used contraceptives and only ten percent of mothers were using breastfeeding for contraception. A significant difference was found between socio-demographic data and practice contraception and resumption of menstrual after delivery.

Conclusion: According to the findings of the study, a focus on health education for mothers should be established, and the nurse should take on the role of contraceptive method educator.

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INTRODUCTION

Postpartum contraception is essential for preventing unplanned pregnancy, (Gebremariam & Gebremariam, 2017) and having spaced births, substantially reducing maternal, infant, and child mortality (Roy et al., 2021). The Lactation Amenorrhea Method (LAM) is a natural, short-term birth control method in which a woman ultimately depends on breastfeeding to prevent conception after

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giving birth (Abraha et al., 2018). This is due to the nipple's regular stimulation during breastfeeding producing neural inhibition of the hypothalamus, diminished secretion of pituitary gonadotropin, and inhibition of ovulation and menstruation (Akin et al., 1983).

LAM was created in 1988 in Bellagio, Italy when a group of international scientists gathered to design a set of guidelines that a woman may follow to forecast her return to fertility during lactation (Abraha et al., 2018). LAM should have three criteria to be used; exclusively breastfeeding a child who is less than 6 months old and the mother should be amenorrhea (Altshuler et al., 2017).

However, it should be noted that the return of ovulation cannot be predicted with certainty and that once it occurs, lactation no longer has the same contraceptive effect (Akin et al., 1983). As a result, if a woman in her puerperal cycle begins coital activity without utilizing an efficient way of contraception, she may be at threat of becoming pregnant before her menstrual period resumes. At six weeks, none of the women who practice exclusive breastfeeding ovulate; however, 1% ovulate by nine weeks. This proportion increases up to 17% at 12 weeks and 36% at 18 weeks (Vindhyashree & Kruthika, 2020). Where contraceptive options exist, focus on optimizing the use of contraceptive methods in combination with lactation-induced ovulation inhibition (WHO, 2020).

Contraception is a technical advancement that aims to transcend biology. A device, a medication, a technique, or behavior might all form part. Contraception provides a woman control over her reproductive health and allows her to participate actively in her family planning (Adongo et al., 2013). In 2019, 1.1 billion of the world's 1.9 billion women of reproductive age (1549 years) require family planning; 842 million of them use contraceptive methods, and 270 million have an unmet contraception need. (WHO, 2020). Furthermore, the unmet need for postpartum contraception remains significant across many situations: According to a study based on Demographic and Health Surveys conducted in 21 low- and middle-income countries, 61% of postpartum women did not conceive in the following year but did not use contraception. (Loewenberg Weisband et al., 2017).

Cochrane Evidence-Based Practice stated Breastfeeding duration appears to be unaffected by hormonal contraception, and infant growth seems to be unaffected. (Baird, 2016).

The study's results will provide valuable insights into various aspects of couples' contraception preferences, including both modern and traditional methods, the timing of initiation, and the potential effects of birth spacing and contraceptive use on a child's future linear growth. This newfound understanding holds significant importance for public health, as it will contribute to the formulation of appropriate interventions and strategies for postpartum contraceptive utilization and distribution.

AIMS OF THE STUDY

The study aimed to evaluate the practices of various contraceptive methods among mothers who were breastfeeding.

METHODOLOGY

Study Design and Setting:

A descriptive-analytic study was undertaken involving 800 breastfeeding mothers whose newborn babies received vaccinations at various Health Centers. Specifically, five healthcare centers, namely Ali Kamal, Ali Naji, Zargata, Shahid Hasan Khawey, and Ebrahim Ahmad, were randomly selected for this study. To gather data from different locations within Sulaimani city, a simple random sampling technique was employed.

Sample size:

The study involved 800 lactating mothers with infants aged six months or younger. The sample size is derived using the single population percentage formula, which takes into consideration 51.3 percent of modern contraceptive use, a 95% confidence level, a 5% error rate, and 1.5 design effects.

Study participants:

The study population was selected using a multistage sampling technique. A two-stage sampling method is used. In the first stage, five vaccination centers were chosen at random from a list of 240 regional immunization sites (primary sampling units). Mothers of children under the age of six months who attended the immunization clinic on recruitment days were picked at random and invited to an interview in the second round (secondary sampling unit). Mothers were eligible if they were aged 18 years or over, mothers should be lactating, primi and multigravida and willing to participate, mothers carrying exclusion criteria, breastfeeding is contraindicated, Pregnant lactating mothers, and mothers want permanent methods (Tubectomy/ Vasectomy) as contraception had excluded by the researcher) and deemed eligible Thus, they received verbal consent.

The collection process was performed for the period 12 February to 28 October 2021. Interviewing the use of the questionnaire took just 10 minutes for each mother.

To reduce bias, interviews were performed in a setting that provided sufficient anonymity and privacy, as well as without the engagement of health care practitioners or her relatives. The questionnaire covered the following domains: (1) Women's demographic parameters (age, education level, occupation, and socioeconomic level), while (2) obstetric status includes the number of living children, the mode of delivery, and menstrual cycles after delivery. Section (3) Questions asked during the first six months of practices of contraception among breastfeeding mothers.

Statistical analysis:

All statistical computation was enhanced using Statistical Sciences (SPSS) 23.

The following probability level criteria can be used to determine the test's importance: Their P-value is defined as:

1. Extremely significant (p 0.001)
2. Potentially significant (p0.05)

3. Not statistically significant (p>0.05).

The statistical procedure applied to determine the results of the present study includes Descriptive statistics and Inferential statistics.

Ethical considerations:

Ethical approval from the Ethical Committee / College of Nursing was obtained. Study Participants received informed consent and did not seem to be induced or coaxed into participating in the study. The subjects' confidentiality, honesty, respect, and dignity were all guaranteed. They could withdraw without concern of being persecuted. Administrative arrangement from the Director of the Center was given and informed before study initiation.

RESULTS

According to demographic data, **Figure 1** indicates the following characteristics of the study sample. The participants' ages ranged from 15 to 45 years old, with a mean age of 34.75.1 years. About 68% of women were housewives, and only 6% were illiterate rest of them were educated, (68.5%) were housewives and Two-third of 66% were barely satisfied economically.

The study sample's obstetric status is shown in **Figure 2**. More than half of the study participants (58%) had two or more children. Concerning the mode of last delivery in the group, more than half (41.5%) had cesarean section deliveries while 58.5% had delivered by the vagina delivery, and fifty present 49.5% of women had a return of menses within six months.

Figure 3: In this study, 88.5 % of breastfeeding mothers practiced one or other methods of contraception whereas 11.5 % of mothers did not use any methods of contraception.

Regarding practicing breastfeeding as a contraceptive, only 11.5% were using a lactation amenorrhea method in the first six months.

Table 1: represented the association between maternal age and the practice of contraception among breastfeeding mothers. The majority of maternal age (25-29 years) represented 35.0% of those with good information practice of contraceptives regarding breastfeeding compared with other age groups, but, statistically, no significant difference is observed between the two variables.

The same table showed the association between the education level of women and the practice of contraception among breastfeeding mothers. Mothers with intermediate and secondary education (n=46. 33.6%) had enough information about the practice of contraceptives regarding breastfeeding, compared to other educated mothers. There was no significant difference between the two variables.

Table 2: No significant association was found between the practice of contraception among breastfeeding mothers and the number of living children (as shown in table 2). The majority of mothers (n=80, 58.4%), who had 2-3 children, had a good practice of contraception regarding breastfeeding.

DISCUSSION:

Eight hundred breastfeeding mothers participated in this study. They were characterized by, Their age ranging between 15 and 45 years, showing that the older mothers were less likely to practice contraceptives than younger mothers, Only 6% of study participants were illiterate, while the majority were educated, which will enable them to define their postpartum health needs and expectations, and our research found that education was significantly associated to contraceptive use. It refers to education that enables women to obtain knowledge and control over various aspects of their lives. More than two-thirds (68.5%) were housewives and the association between the practices of contraception use and occupation was significant. Because working outside the home allows women to engage with more experienced people and gain significant health and social participation age, this finding highlighted the need for a comprehensive safe reproductive life and health advice for these women. The current study's findings on education and employment were identical to those of a study conducted (Mohammed, 2016).

The obstetric status of the current study. More than half (58 %) of the study sample had 2-3 children, the mode of last delivery in the group, more than half (58.5%) had vagina delivery while 41.5% had delivered by cesarean section.

Cesarean delivery rates are greater than those found in a recent study (Atyia, 2022) reported that the incidence of C.S. in Sulaimani maternity teaching hospital in Iraq was 34.6%, which is much more than the WHO recommendation (5%-15%). This could be the result of poor exclusive breastfeeding practices and reduced intensity of breastfeeding.

In the present study, half 49.5% of women had a return of menses within six months, There was a statistically significant association between breastfeeding mothers' contraceptive use and their menstrual cycle after birth. All mothers who still exclusively breastfeeding for the duration first six months (55.5%) had resumed menstruation., while (Eleje et al., 2020) show that about a third of women in labor reach the puerperal period and Young age, multiparty, and early use of family planning are all significant risk factors.

The study's main goal was to determine which types of contraception were most commonly used by breastfeeding mothers of interest. As obvious in this study, 88.5 % of breastfeeding mothers practised one or other methods of contraception whereas 11.5 % of mothers did not use any methods of contraception. This means that proportions (11.5%) used a lactation amenorrhea method in the first six months.

Similar results have been obtained in other works published in the literature, with contraception being widely used in the United States, with an estimated 88.2 percent of all women aged 15 to 44 having used some type of contraception at some point in their lives.

Concerning using a lactation amenorrhea method to prevent pregnancy (11.5%), LAM relies on the natural suppression of the overcurrent LH that occurs during exclusive breastfeeding. It is most effective when babies are exclusively fed breastmilk on demand when babies are less than six months old, and when the woman has not yet started menstruating. If breastfeeding is not exclusive or if the infant is older than six months, effectiveness decreases (Norman P Spack Daniel E Shumer, 2017). Four pathways have been identified concerning the resumption of normal menstrual cycles after delivery. The first two (weaning and infant mortality) have a direct causal effect, the third (women's breastfeeding models of menstrual women who are still breastfeeding) and fourth (maternal nutrition and health status) may have indirect causal effects, and the fourth (maternal nutrition and health status) may have indirect causal effects. (Eleje et al., 2020).

In addition, when we investigated the types of contraception used among our target breastfeeding mothers were Condoms 17.5%, IUCD 7%, Oral Contraceptives 3.5 and as excited from this study,

only around a third 62% of the participants utilized natural or fertility awareness contraceptive methods such as rhythm, symptothermal, cervical mucus surveillance, and so on and basal temperature methods Refraining, which could be an alternative for Iraqi spouses who do not want to use other contraceptive methods for religious or cultural reasons.

According to Adanikin et al., family planning use is most likely in the month following menses return, particularly male condom use and withdrawal method. (Adanikin et al., 2015).

CONCLUSIONS:

A high percentage of breastfeeding mothers used contraceptives and only ten percent of mothers were using breastfeeding for contraception. Most breastfeeding mothers used family planning methods such as natural contraception during breastfeeding (62.5%). A significant difference was found between socio-demographic data and practice contraception and resumption of menstrual after delivery.

ACKNOWLEDGEMENTS:

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ETHICAL APPROVAL:

The study received approval from the institutional ethics committee.

Disclosure:

In this particular research, no financial disclosures are required, and there are no conflicts of interest.

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FIGURES & TABLES:

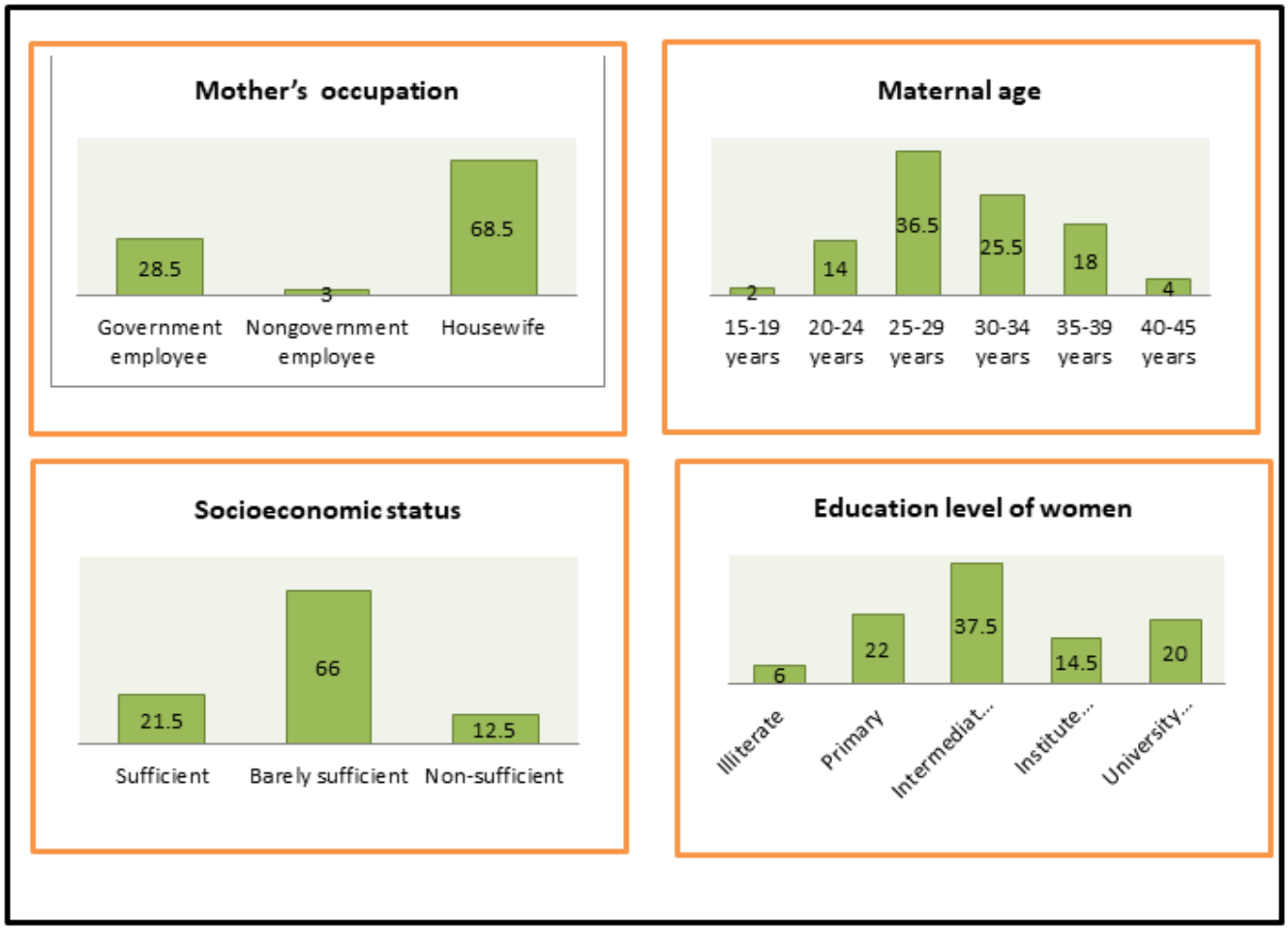

Figure (1): Study sample distribution according to socio-demographic variables

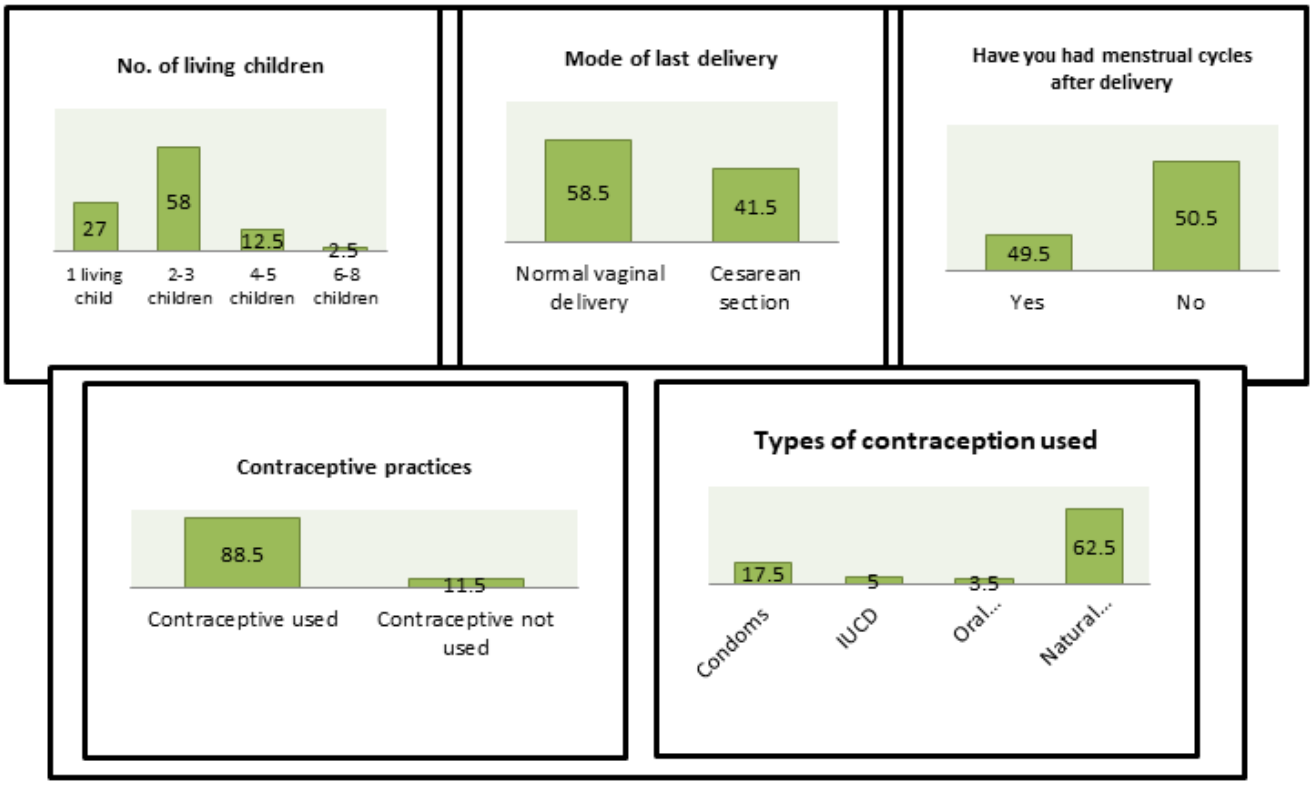

Figure (2): The distribution of the study sample according to obstetric status (number of living children, mode of delivery, and having menstrual cycles after delivery) for the study sample

Table (1): The association between the practices of contraception used among breastfeeding mothers and socio-demographic variables

Socio-demographic variables	Practices			
	No / N (%)	Yes / N (%)	Total	Mean score +S.D
Maternal age				
15-19 years	4 (1.6)	12 (2.2)	16 (2.0)	9.5 + 1.0
20-24 years	36 (14.3)	76 (13.9)	112 (14.0)	9.3 + 0.9
25-29 years	100 (39.7)	192 (35.0)	292 (36.5)	9.2 + 0.9
30-34 years	60 (23.8)	144 (26.3)	204 (25.5)	9.2 + 0.9
35-39 years	48 (19.0)	96 (17.5)	144 (18.0)	9.2 + 0.9
40-45 years	4 (1.6)	28 (5.1)	32 (4.0)	9.7 + 0.7
Test value =7.346			**P value =0.196**	
Education level of women				
Illiterate	12 (4.8)	36 (6.6)	48 (6.0)	9.4 + 0.9
Primary	40 (15.9)	136 (24.8)	176 (22.0)	9.4 + 0.8
Intermediate &Secondary	116 (46.0)	184 (33.6)	300 (37.5)	9.1 + 0.9
Institute graduate	40 (15.9)	76 (13.9)	116 (14.5)	9.2 + 1.0
University &postgraduate	44 (17.5)	116 (21.2)	160 (20.0)	9.3 + 0.8
Test value = 16.023			**P value =0.003**	
Mothers occupation				
Government employee	64 (25.4)	164 (29.9)	228 (28.5)	9.2 + 0.9

Non-government employee	4 (1.6)	0 (0.0)	4(0.5)	8.0 + 0.0
Housewife	180 (71.4)	368 (67.2)	548 (68.5)	9.2 + 0.9
Student	4 (1.6)	12 (2.2)	16 (2.0)	9.5 + 1.0
Others	0 (0.0)	4 (0.7)	4 (0.5)	10.0 + 0.0
Test value =12.555			**P value =0. 014**	
Socioeconomic status				
Sufficient	64 (25.4)	108 (19.7)	172 (21.5)	9.1 + 0.9
Barely sufficient	160 (63.5)	368 (67.2)	528 (66.0)	9.3 + 0.9
Non-sufficient	28 (11.1)	72 (13.1)	100(12.5)	9.3 + 0.9
Test value = 3.517			**P value =0. 172**	

Table (2): The association between the practice of contraceptives used among breastfeeding mothers and obstetric status

Obstetric status	**Practices**			
	No / N (%)	**Yes / N (%)**	**Total / N (%)**	**Mean score +S. D**
No. of living children				
1-living child	80 (31.7)	136 (24.8)	216 (27.0)	9.1 + 1.0
2-3 children	144 (57.1)	320 (58.4)	464 (58.0)	9.2 + 0.9
4-5 children	28 (11.1)	72 (13.1)	100 (12.5)	9.3 + 0.9
6-8 children	0 (0.0)	20 (3.6)	20 (2.5)	9.8 + 0.4
Test value =12.88			**P value =0. 005**	
Mode of last delivery				
Normal vaginal	128 (50.8)	204 (37.2)	332 (41.5)	9.1 + 0.9
Cesarean section	124 (49.2)	344 (62.8)	468 (58.5)	9.3 + 0.8
Test value =13.088			**P value =0. 000**	
Did you have a menstrual cycle after delivery				
Yes	92 (36.5)	304 (55.5)	396 (45.9)	9.4 + 0.8
No	160 (63.5)	244 (44.5)	404 (50.5)	9.1 + 0.9
Test value =24.841			**P value =0. 000**	