Knowledge of Primipara Mothers Regarding Breast Feeding in Rural Area

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Abstract

Breastfeeding is the best method for giving infants the nutrition they need for healthy growth and development. Additionally, it has significant effects on maternal health and the reproductive process. A descriptive analytical design study was followed **aimed** to assess breastfeeding knowledge among primipara women in rural areas. The study was conducted in the maternal and child health centers in Menouf which serve seven maternal and child health centers106 mothers were included in the study through using **multistage stratified random sample technique. tool** of data collection was used named **structure interview sheet** the main **results** of the study illustrated that mother had average level of knowledge regarding breast feeding. The current study **concluded that** despite mother know about breastfeeding still there is a need for further knowledge for them. Based on this finding, the researchers **recommended;** conduction awareness brochure for mothers bout breastfeeding and its importance for mother, infant and family and right technique of breastfeeding.

Keywords: *Breast Feeding, knowledge, primipara in rural area.*

Introduction:

Initiating breastfeeding right after birth plays a crucial role in both mental and physical development. Early and frequent breastfeeding is essential for establishing and maintaining successful breastfeeding during the neonatal period. Additionally, maternal-infant skin-to-skin contact helps stabilize the infant's temperature, respiratory rate, and blood sugar levels (**Edmond et al., 2018).**

Breastfeeding provides growth factors and hormones that affect brain biochemistry and functional development, which are absent in formula milk. The physical and social interactions involved in breastfeeding may also enhance cognitive development. Another possible mechanism is that breastfeeding protects infants from infections and chronic illnesses (Quigley, 2017). Additionally, mothers who breastfeed report lower levels of perceived stress and negative moods, stronger maternal attachment, and view their infants as more rewarding. Breastfeeding mothers tend to hold their babies longer and feel more confident in their parenting abilities (**Katkin, 2018**).

A major challenge in increasing breastfeeding rates among primipara mothers is the belief that they are too inexperienced to breastfeed effectively. Mothers under 20 years old are less likely to start breastfeeding and often have shorter breastfeeding durations. Additionally, healthcare professionals frequently overlook and do not sufficiently address the social barriers that impact the continuation of breastfeeding **(Johnson, 2019**).

Having sufficient knowledge about exclusive breastfeeding is crucial for ensuring stable breastfeeding practices. Without proper information and support, mothers may prematurely stop breastfeeding. A lack of confidence can lead to insecurity and frustration,

often resulting in the choice of alternative feeding methods. Therefore, providing awareness and education about breastfeeding during pregnancy is essential, as it helps mothers build confidence in their ability to breastfeed (**Macadam & Detwyler, 2017).**

The infant mortality rate is a critical indicator of a community's health, often influenced by inadequate breastfeeding practices. National health data reveals that 75% of children are not breastfed from birth, and over 50% do not receive exclusive breastfeeding (EBF). According to a Lancet series, promoting breastfeeding alone can lead to an 11.6% reduction in infant mortality rates and lower the risk of death from diarrhea and pneumonia **(Dbhas, and the Lancet Series,2017).**

Significance of the Study:

In Egypt, exclusive breastfeeding (EBF) rates are over 50%. While EBF is relatively common in the very early stages of infancy, it is not universal. Among infants under two months old, 79% are reported to have received only breast milk. However, this rate of exclusive breastfeeding declines rapidly as infants reach 4 to 5 months of age (**Kandeel et al., 2018**)

Aim of the Study:

The study aimed to assess breastfeeding knowledge among primipara mothers in rural area through: -

1-Assessing of mothers' knowledge about breast feeding

2- Assessing barriers that delay initiation of breast feeding whether maternal or neonate.

Research question:

1-Is there relation between mothers' knowledge about infant feeding pattern and their socio demographic characteristic?

2- What are the barriers that delay initiation of breast feeding?

Subjects and Methods:

The subjects recruited and methods used for achieving the study were elaborated under the following items**:**

1- Technical design

2- Operational design

3- Administrative design

4- Statistical design

I-Technical design:

The technical design used for the study discussed the following four categories, research design, setting of the study, subjects of the study and tools for data collection.

A-Research design:

A descriptive analytical design will be used in this study.

B-Setting:

This study will be conducted in the maternal and child health centers in Menouf which serve seven maternal and child health centers.

C-Subjects:

Post natal (primipara) mothers attending maternal child health center for immunization from delivery to one year in the previous year (2015).

Sample type:

Multistage stratified random sample was selected

Sample size:

The sample of this study included 106 mothers from four centers will be chosen from seven centers who agreed to participate in the study and fulfill the following criteria.

Inclusion Criteria:

All mothers post-natal (primipara) attending previously mentioned settings from delivery to one year of child life within 3 months needed for data collection.

Tool of data collection:

Structure interview sheet*:*

The investigator was designed tool for mothers after reviewing the related literature and used structure

interview sheet instead of self-administered questionnaire. It was divided into three parts: -

Part I –Socio-demographic data: It aims to assess age, occupation, marital status, level of education and socioeconomic status as family members, housing, condition, income per month per persons**,** infant age and sex. It included question from 1-9

Part II- To assess knowledge of primipara mother about breastfeeding including, benefits, advantages, proper food during lactation**, effect** of drugs during lactation, colostrum milk as advantage, color and duration barriers. It included question from10- 28

Level of knowledge (scoring system):

The scoring system included three levels: two points for complete correct answer, one point for incomplete correct answer and zero point for don't know answer. After that with proper statically analysis the total level of knowledge scores ranged from 0 to 38, score less than 50% from (0-19) were evaluated poor knowledge, score equal and more than 50%

from (20-29) as average knowledge and score equal or more than75%from (30-38) as good knowledge

II- Operational design:

Preparatory phase:

This involved reviewing relevant local and international literature, including books, articles, and scientific journals, to create tools for data collection.

Validity:

The data collection tool was reviewed by five experts from the Faculty of Nursing at Ain Shams University to assess its content validity. No modifications were made.

Reliability:

By using Cronbach's Alpha coefficient test.

Pilot study:

A pilot study was conducted with 10% of the selected study sample based on the previously mentioned criteria, covering a period of two weeks. The purpose was to assess the simplicity and clarity of the tools, estimate the time required to complete the questionnaire, and identify any obstacles encountered during data collection. No modifications were necessary, and the pilot sample was not excluded.

Fieldwork:

The investigator visited maternal and child health centers in four areas: Barhim, Juzaa, Sunsaft, and Sodood. She introduced herself to the mothers and explained the purpose of the study, obtaining their consent to participate before starting data collection. The study was conducted over a three-month period, from October 2016 to January 2017. Data were collected by the investigator through interviews with the mothers twice a week in the morning, from 8 to 11 a.m., until the immunization sessions began. Oral consent was obtained from each participant.

The investigator used a structured interview sheet and explained the process of filling it out, which took approximately 30 minutes. She addressed any questions the mothers had before collecting the completed sheets. The investigator also waited until the mothers had completed the immunization for their infants before finalizing the data collection. The mothers were assured that the information gathered would be kept confidential and used solely for the study's purposes.

III- Administrative design:

An official written approval letter detailing the study's purpose was obtained from the Secretary of the Faculty of Nursing at Ain Shams University, as well as from the Director of the Maternal and Child Health Centers in Menouf, granting permission for data collection and the conduct of the study.

Ethical consideration:

Approval for the study protocol was taken from the Ethical Committee at the Faculty of Nursing, Ain Shams University, prior to commencing the study. The investigator explained the study's objectives and aims to the participating mothers, ensuring the anonymity and confidentiality of their data. Mothers were informed that participation was voluntary, and they had the right to choose whether or not to participate and could withdraw from the study at any time without needing to provide reasons.

Limitations of the study:

The researcher took more time and effort for explaining some questions in questionnaire for illiterate mothers which take more time for reply on sheet.

IV-Statistical design:

The collected data were organized, categorized, tabulated, and analyzed statistically using the Statistical Package for Social Sciences (SPSS) software. This analysis aimed to assess the mothers' knowledge and practices related to breastfeeding among primipara in rural areas. The results were presented in tables and graphs. The statistical analysis included percentage (%), the arithmetic mean ($\bar{X}$), standard deviation (SD), T-test (T) and Pearson correlation (R)

The observed differences and associations were considered as follows:

- P. > 0.05Non- significance (No difference)
- P. ≤ 0.05significance difference
- P. ≤ 0.001highly significance difference

Results

Table (1): This study reveals that 74.5%of the mothers their age less than 30years, 27.4% have university degree and 80.2% were housewife, while the majority 99.1% of them were married.

Figure (1): the figure shows that 50%of the studied mothers have

poor level regard to barriers delay initiation of breastfeeding related to mother while 78.3% of them have average level regard to delay initiation of breastfeeding related to breast, 71.7%of mothers have average level regard to delay initiation of breastfeeding related to infant.

Figure (2): - This figure shows that 38% of mothers obtain their knowledge from relatives while 24% and 21% respectively of mothers obtain their knowledge from pediatrician and maternal and child health centers.

Table (2): the table reveals that mothers with 20 to more 30 years have the highest proportion of satisfactory knowledge level (P < 0.001 Highly Significant).

Table (3): this table reveals that there was, a statistically significant difference between education level and knowledge level with increasing the education level the proportion of mothers with satisfactory knowledge increases. (P < 0.001 Highly Significant).

Part I: -Socio-demographic characteristics of the primipara mothers

Table (1): Distribution of the primipara mothers according to socio-demographic characteristics; age, level of education, occupation and marital status (N=106)

Items	No	%
Age		
<20	22	20.8%
20 <30	79	74.5%
30 <40	5	4.7%
Education		
Illiterate	13	12.3%
Reads and writes	19	17.9%
Basic education	19	17.9%
Secondary education	26	24.5%
University education	29	27.4%
Occupation		
Housewife	85	80.2%
Employee	21	19.8%
Marital Status		
Married	105	99.1%
Divorced	1	0.9%

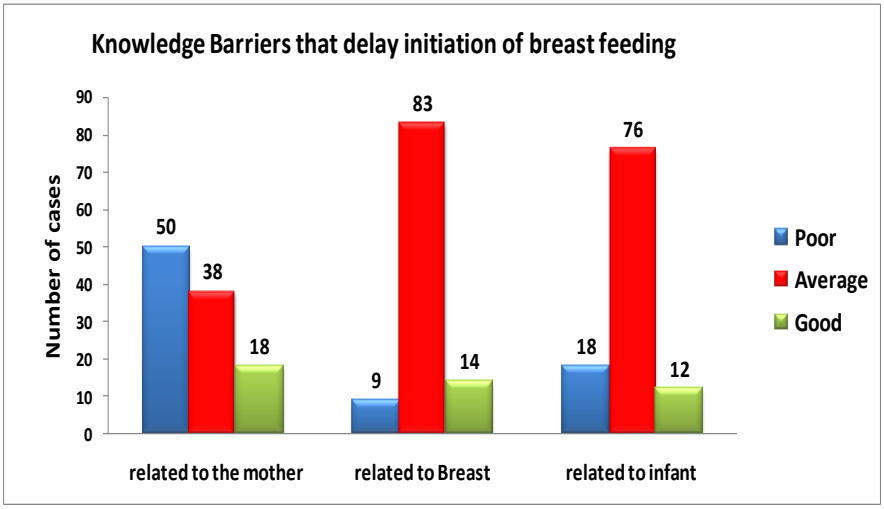

Figure (1): Knowledge of primipara mother according to: barriers that delay initiation of breast feeding

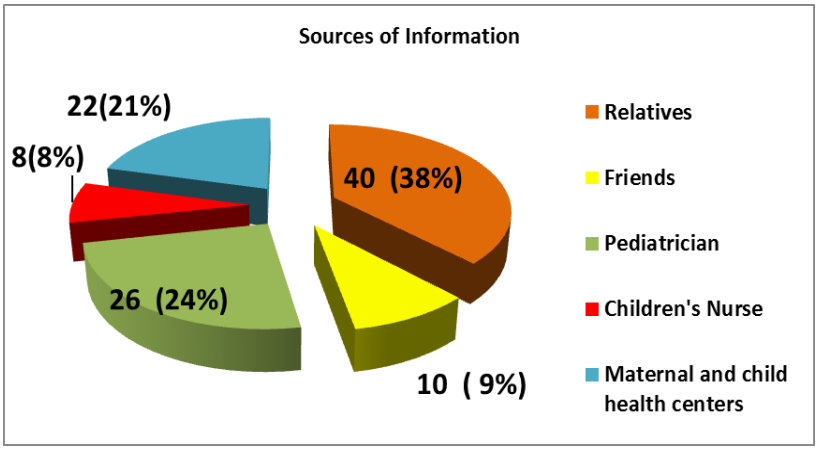

Figure (2): Distribution of primipara mother according to source of knowledge

Table (2): Relation between mothers' knowledge and socio demographic characteristic: age (N=106)

Mother Age	N	Mean	Std. Deviation	t	P value
< 20 years	22	54.01	12.30	4.49	0.00002
20 >30 years	79	67.78	12.82		

Table (3): Relation between mother's knowledge and socio demographic characteristic: education (N=106)

Items	N	Mean	Std. Deviation	F	P value
Illiteracy	13	54.75	10.24		
Reads and write	19	60.03	10.66		
Basic education	19	58.41	11.11	17.23	0.00000
Secondary Education	26	64.37	10.80		
University Education	29	78.74	11.15		

Discussion

In the current study, the socio-demographic characteristics of the primipara mothers showed that less than three-quarters were under the age of 30, and the majority were married. These findings were in accordance with **Katepa et al., (2015)** who study infants and young children feeding practices and nutritional status in two districts of Zambia and found that majority of mothers were married with age 20-29 years.

Regarding maternal education, over a quarter of the mothers had a higher education level. This finding aligns with the study by Metal et al. (2013), which examined perceptions and knowledge of breastfeeding among women in Saudi Arabia and found that most participants had a higher level of education. Similarly, **Girish and Gandhimathi (2015)** reported in their study on mothers' knowledge, attitudes, and practices regarding breastfeeding at Annamalai University that most mothers had a high level of education.

Regarding their occupation, the current study found that the majority of mothers were housewives. This finding is consistent with Prajapati et al. (2016), who studied positioning, attachment, and suckling during breastfeeding among infants aged 0-6 months in rural areas and found that most mothers were housewives. However, this contrasts with the study by Titilola (2015), which examined knowledge, attitude, and practice of exclusive breastfeeding among mothers in two semi-urban areas, where skilled professions were the most common occupation.

Regarding monthly income, the present study revealed that most primipara mothers had sufficient income to meet their family needs. This finding aligns with **Girish et al. (2015),** who studied mothers' knowledge, attitudes, and practices related to breastfeeding at Annamalai University and also found that most

mothers had adequate income to support their families.

Regarding family type, the study found that more than half of the primipara mothers reported living in nuclear families. This finding contrasts with Maumita et al. (2016), who found that most mothers were from joint families. However, it is consistent with **Kumar (2015),** who studied knowledge about breastfeeding and factors associated with its practice among postnatal mothers in central India and reported that most mothers were from nuclear families.

More than two-thirds of mothers demonstrated a good level of knowledge regarding foods and liquids that should be avoided during lactation. This finding contrasts with **Temesgen et al. (2015),** who studied nutritional knowledge and determinant factors among lactating mothers and reported that most mothers were unaware of the foods to avoid during lactation.

Regarding the advantages of colostrum milk, the present study found that less than two-thirds of mothers had an average level of knowledge about colostrum, while more than three-quarters were well-informed about the duration of colostrum secretion. Most mothers also had a good understanding of the color of colostrum milk. This result contrasts with Palanivel (2016), who studied awareness and difficulties faced by postnatal mothers during breastfeeding and found that most mothers had insufficient information about colostrum milk.

Regarding mothers' knowledge, the present study revealed that more than three-quarters of the mothers had a good understanding of breastfeeding practices when a child is ill. This finding is consistent with Maumita et al. (2016), who found that over half of the participants were aware that breastfeeding should continue even when the baby is ill.

Regarding the relationship between mothers' knowledge and socio-demographic characteristics, the present study found that mothers aged 20 to over 30 years had the highest proportion of satisfactory knowledge levels, suggesting that experience increases with age. This result contrasts with **Titilola (2015),** who found no significant association between knowledge and maternal age in his study on exclusive breastfeeding. However, it is supported by **Girish et al. (2015),** who found that better knowledge scores were significantly correlated with higher maternal age.

Conclusion:

Based on the results of the present study, it is concluded that:

- Despite mother know about breastfeeding still there is a need for further knowledge for them
- This returned to lack of awareness about its benefits and right technique of breastfeeding.

Recommendations:

In the light of the findings of the study, the following recommendations are suggested:

- Awareness brochure for mothers bout its benefits for mother, infant and family and right technique of breastfeeding.
- Researchers are needed to concentrate practices of mother regarding breastfeeding in Egypt

For further research in this field:

- Further research is needed to be applied on large sample at different geographic area
- Development guidelines to enhance practice of breastfeeding among primipara mother

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