

# PREGNANT AND LACTATING WOMEN'S KNOWLEDGE OF EXCLUSIVE BREASTFEEDING

*Conhecimento de gestantes e lactantes sobre aleitamento materno exclusivo*

*Conocimiento de embarazadas y lactantes sobre lactancia materna exclusiva*

Original Article

## ABSTRACT

**Objective:** To identify what pregnant and lactating women say about what is exclusive breastfeeding, its duration and benefits for moms and babies. **Methods:** This is a quantitative, descriptive study that took place in 2011 at a Family Health Center in Fortaleza-CE. The following variables were analyzed: socioeconomic characteristics, knowledge and attitude regarding breastfeeding and its benefits for the mom and baby. Data collection was performed using a questionnaire and consisted of a non-probability sample of 45 women with simple descriptive statistical analysis using proportion. **Results:** In all, 40 (88.9%) respondents were pregnant and 5 (11.1%) were breastfeeding. Mean age was 24 years. Regarding socioeconomic characteristics, 12 (30%) women said they were housemaids, 9 (22.5%) were housewives and 6 (15%) were unemployed. Concerning the definition of exclusive breastfeeding, 25 (55.6%) women considered breast milk as the only form of breastfeeding, five (11.1%) respondents considered breast milk, water and tea and 12 (26.7%) women did not know the meaning of the term. Considering the benefits, 16 (35.7%) women reported the strengthening of the bond with the child. **Conclusion:** It was observed that the assessed moms had knowledge of the definition, duration and benefits of exclusive breastfeeding; however, they presented some factors that contributed to early weaning.

Descriptors: Breast Feeding; Health Services; Primary Health Care.

## RESUMO

**Objetivo:** Identificar o que as gestantes e lactantes afirmam sobre o que é aleitamento materno exclusivo, qual sua duração e quais seus benefícios para a mãe e o bebê. **Métodos:** Estudo descritivo, com abordagem quantitativa, realizado em 2011, em um Centro de Saúde da Família, em Fortaleza-CE. Foram avaliadas as seguintes variáveis: características socioeconômicas, conhecimento e atitudes sobre aleitamento materno e seus benefícios para a mãe e o bebê. A coleta ocorreu por meio de um questionário e foi constituída por uma amostra não probabilística de 45 mulheres, com análise estatística descritiva simples, através de proporção. **Resultados:** Das entrevistadas, 40 (88,9%) estavam gestantes e 5 (11,1%), amamentando. A média das idades foi de 24 anos. Com relação às características socioeconômicas, 12 (30%) afirmaram ser empregadas domésticas, 9 (22,5%), do lar e 6 (15%), desempregadas. Quanto à definição de amamentação exclusiva, 25 (55,6%) responderam que ela consiste apenas no leite materno, 5 (11,1%), em leite materno, água e chá, e 12 (26,7%) não conheciam o significado do termo. Sobre os benefícios, 16 (35,7%) afirmaram o aumento do vínculo com o filho. **Conclusão:** Observou-se que as mães avaliadas apresentaram conhecimento sobre definição, tempo e benefícios do aleitamento materno exclusivo, no entanto, apresentam fatores que favorecem o desmame precoce.

Descritores: Aleitamento Materno; Serviços de Saúde; Atenção Básica.

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## RESUMEN

**Objetivo:** Identificar qué las embarazadas y lactantes apuntan como lactancia materna exclusiva y su duración y cuales sus beneficios para la madre y el bebé. **Métodos:** Estudio descriptivo con abordaje cuantitativo realizado en 2011 en un Centro de Salud de la Familia en Fortaleza-CE. Fueron evaluadas las siguientes variables: características socio-económicas, conocimiento y actitudes sobre lactancia materna y sus beneficios para la madre y el bebé. La recogida de datos ocurrió a través de un cuestionario y se constituyó de una muestra no probabilística de 45 mujeres, con análisis estadístico descriptivo simple a través de proporción. **Resultados:** De las entrevistadas, 40 (88,9%) estaban embarazadas y cinco (11,1%) estaban amamantando. La media de edad fue de 24 años. Sobre las características socio-económicas, doce (30%) afirmaron ser empleadas de hogar, 9 (22,5%) amas de casa y 6 (15%) estaban paradas. Sobre la definición de lactancia materna exclusiva 25 (55,6%) contestaron que es apenas la leche materna, 5 (11,1%) en la leche materna, agua y té y 12 (26,7%) no conocen el significado del término. Cuanto a los beneficios de la madre, 16 (35,7%) afirmaron que era el aumento del vínculo con el hijo. **Conclusión:** Se observó que las madres evaluadas presentaron conocimiento de la definición, tiempo y beneficios de la lactancia materna exclusiva, sin embargo, ellas presentaron factores que favorecen el desmame precoz.

**Descriptores:** Lactancia materna; Servicios de Salud; Atención Primaria de Salud.

## INTRODUCTION

Breastfeeding is the most popular natural strategy for bonding with the child and providing him/her with affection, protection and nutrition. Human milk is the food that contains the ideal nutritional facts and supplies the proper balance of nutrients, besides providing immunological and psychological benefits that can reduce infant morbidity and mortality<sup>(1)</sup>.

Breastfeeding provides the newborn with healthy growth and development<sup>(2)</sup>, strengthening the bond between mother and baby<sup>(3)</sup>. Newborns must be exclusively breastfed up to six months of age and, after this period, breastfeeding must be continued along with other complimentary food (liquid and solid)<sup>(2)</sup>.

However, it is known that mothers wean their babies earlier and introduce them to artificial food. This may hinder the immunological system, masticatory function, deglutition, breathing, articulation of the speech sounds and the oral-motor development of the newborn<sup>(4)</sup>.

In Brazil, there have been a lot of concern regarding the rescue of exclusive breastfeeding through initiatives

of the National Program for Breastfeeding, Statute of the Child and Adolescent (Act No. 8069) and National Pact for Children<sup>(5)</sup>. In the state of Ceará, programs have been developed to train mentors and healthcare professionals to encourage breastfeeding in order to reduce infant mortality rates<sup>(6)</sup>.

Encouraging breastfeeding is a constant practice in primary healthcare services because it has a high nutritional value, provides immunological protection, favors a healthy development of the child and strengthens the bond between mother and baby, reducing infant morbidity and mortality<sup>(7,8)</sup>.

A study conducted with users of healthcare services of Fortaleza-CE about the perception of breastfeeding shows that the mother recognizes the importance and advantages of breastfeeding. However, a small number of mothers provide exclusive breastfeeding for their children<sup>(9)</sup>.

The healthcare professional plays an important role in the promotion of exclusive breastfeeding and he must be an instrument to develop women's autonomy to act. Pregnancy is the ideal moment for the discussion on the importance of breastfeeding because at this time women experience strong feelings that can awake interest in issues concerning the baby<sup>(3,10,11)</sup>.

In order to cooperate with the Pact for the Reduction of Infant Mortality in the Legal Amazon and Northeast, as proposed by the Ministry of Health, students and monitors enrolled in the Educational Program for Health/Family Health Work (*PET-Saúde/Saúde da Família*) of the University of Fortaleza (*Universidade de Fortaleza – UNIFOR*) were encouraged to develop essential health education practices in primary health care to help educate critical and reflexive professionals who need to be ready for team work<sup>(12,13)</sup>.

The continuing education programs have a great importance in the relationship between institution and society and are consolidated by offering the approximation and sharing of knowledge and experiences among professors, students and the population, giving the chance to develop teaching-learning processes from daily practices combined with teaching and research and, especially, providing the confrontation of theory with the world<sup>(13)</sup>. Thus, the Ministry of Health and the Ministry of Education have promoted initiatives to encourage the approximation between universities and non-hospital healthcare services – for instance, the Educational Program for Health Work (*Programa de Educação pelo Trabalho para Saúde - PET-Saúde*)<sup>(14)</sup>.

In this context, monitors of PET-Saúde awoke interest in assessing pregnant and lactating women's degree of knowledge of breastfeeding so they could understand the

practices used in the healthcare unit and their importance. The study is important because it provokes primary healthcare professionals' reflection regarding their health education practices for breastfeeding.

Thus, this study aimed to identify what pregnant and lactating women know about exclusive breastfeeding, its duration and benefits for the mother and baby.

## METHODS

This is a descriptive quantitative study conducted in a Family Healthcare Center (FHC) of Fortaleza-CE that is ruled by the Regional Executive Secretariat VI (*Secretaria Executiva Regional VI – SER VI*). This FHC covers 15 thousand inhabitants and is constituted by three Family Healthcare teams comprising pharmacists, dentist-surgeons, professionals of the Family Health Care Support Center (*Núcleo de Apoio à Saúde da Família – NASF*) and resident physicians and nurses. It offers services related to clinical medicine, pediatrics, gynecology, prenatal, family planning, tuberculosis, leprosy, hypertension and diabetes, sexually transmitted diseases (STDs) and AIDS, drug dispensation, immunization and dentistry.

The non-probability sample comprised 45 pregnant and/or lactating women assisted in the FHC who were intentionally selected according to their convenience and considering the demographic criteria of a bigger population. For that reason, it was decided to choose SER VI – with a population of 600 thousand inhabitants – and the FHC with the PET-Saúde program and the largest population of pregnant and lactating women being assisted at the moment of the research (circa 60 women).

Pregnant and lactating women registered at the FHC and scheduled for individual or collective activities were included in the study. Women who were not pregnant/lactating or registered were excluded.

The following variables were assessed: a) socioeconomic characteristics of the pregnant and lactating women assisted – age, education, marital status and family income; b) benefits for mom and baby; c) knowledge and attitudes regarding exclusive breastfeeding. The following points were checked to assess mothers' attitude regarding breastfeeding: caring for nipples, occurrence of weak milk, difference of the milk in the first and last feeds, offering water and tea before the age of six months and the difficulties experienced.

Undergraduate students of the *PET-Saúde*-UNIFOR were trained to collect data by applying a questionnaire containing questions that were easy to understand and addressed the aforementioned variables. Pregnant and lactating women were invited to individually participate in

the research after signing the Free Informed Consent Form.

The data obtained were inserted and analyzed in EPI-INFO version 3.5.2 database. The study started with a simple frequency and then obtained the proportions of the variables assessed.

The research complied with Resolution 196/96 of the National Health Council (Brazilian Ministry of Health, 1996) and was approved by the Research Ethics Committee of the University of Fortaleza (*Universidade de Fortaleza – UNIFOR*) under registration No. 382/2011.

## RESULTADOS

The research sample comprised 40 (88.9%) pregnant women and 5 (11.1%) lactating women aged 14-41 with a mean age of 24 years. Regarding socioeconomic characteristics, 40 (88.9%) of them reported performing some kind of professional activity such as housekeeper, manicure or artisan; however, among these, six (15%) were unemployed at the moment of the survey. Most pregnant and lactating women (n=42; 97.7%) had studied for a period of 5-10 years, 34 (57.8%) were married and 37 (53.4%) had a family income higher than one minimum wage (Table 1).

**Table 1** – Characteristics of pregnant and lactating women, according to education, marital status and family income, at the Family Health Center, from November to December, 2011.

	n	%
Education (years)	n=43	
+ de 10	19	44.2
5 a 9	23	53.5
Never studied	1	2.3
Marital status	n=45	
Married	16	35.6
Divorced	1	2.2
Single	10	22.2
Unmarried Cohabitation	18	40
Family income (Minimum wage)	n=41	
+ de 4	1	2.4
1 a 2	18	43.9
3 a 4	3	7.3
Up to 1	19	46.3

It was observed that 26 (57.8%) women participated in groups where they got information about breastfeeding, 34 (75.55%) attended medical appointments and 18 (52.9%) reported having only three consultations during pregnancy.

Regarding their knowledge of the term “exclusive breastfeeding”, 25 (55.6%) interviewees defined it correctly, acknowledging milk as the unique and proper food for babies. When asked about its duration, 26 (60%) women said it was about six months. However, 7 (16.3%) women said the duration was from 6-12 months (Table II).

Table II – Distribution of the sample regarding the definition and duration of exclusive breastfeeding, at the Family Health Center, from November to December, 2011.

	n	%
What do you understand by exclusive breastfeeding?	n=45	
Milk + water/tea	5	11.1
Milk + foods	2	4.4
Doesn't know	12	26.7
Other	1	2.2
Only milk	25	55.6
Up to what age is exclusive breastfeeding necessary?	n=41	
6-12 months	7	16.3
6 months	26	60
3-6 months	9	20.9
Up to 3 months	1	2.3

Regarding the benefits for the mother and baby, 36.4% of the women acknowledged human milk as the most appropriate food for the baby. Regarding the importance of breastfeeding for the mother, 15 (35.7%) women said the strengthening of the bond between mother and child was the most important factor. In all, 4 (8.88%) women did not answer this item, 1 (.45%) did not answer about the benefits for the mother and 3 (6.66%) did not answer about the benefits for the baby (Table III).

With regard to attitudes of mothers concerning breastfeeding, 13 (40.6%) said that massaging the breasts during the shower is part of their care. Still, 31 (75.6%) women believed there is no weak milk, 12 (30.0%) said there is a difference in the milk in the beginning and at the end of the feed and 32 (76.2%) said there was no need to offer water or tea to the baby during the first six months. Some of the difficulties reported in the study to make breastfeeding were high workload (n=20; 50%) and high frequency of feeds stand out (n=20; 50%).

Table III – Distribution of the sample regarding the benefits of exclusive breastfeeding to mother and baby, at the Family Health Center, from November to December, 2011.

	n	%
Mother	n=42	
Thrifty and practical	4	9.5
None	6	14.3
Family planning	8	19
Reduces the risk of cancer	9	21.4
Maternal bond	15	35.7
Baby	n=44	
Proper food	16	36.4
Strengthens the bond	1	2.3
Definition and speech	8	18.2
Development	4	9.1
Protection against infection	15	34.1

## DISCUSSION

In order to assess the pregnant and lactating women's knowledge of breastfeeding and its benefits, this current study took into account the socioeconomic characteristics, the participation in groups and consultations at the FHC, the knowledge of exclusive breastfeeding, time (months) required, benefits to mother and baby, and practices of breastfeeding.

It was observed that the mothers receiving care at the FHC assessed were young, married, had a low education level, performed some kind of professional activity and had a family income of up to one minimum wage. However, even though they performed some kind of professional activity, a large number of women were unemployed.

The variable age – especially under 20 – indirectly hinders breastfeeding because in this age group the physiological and emotional maturity have not been fully achieved<sup>(15)</sup>. Professional occupation may be associated with early weaning. A study conducted in Northern Jordan revealed that 37% of mothers reported weaning their babies because of their work<sup>(16)</sup>. Regarding education and family income, a study conducted in 2007 in Israel showed that women with higher economic and educational levels adhered more to breastfeeding<sup>(17)</sup>. Thus, the prevalence and duration of breastfeeding may be precociously interrupted due to the low income and educational levels found<sup>(18,19)</sup>.

The FHC assessed by this current study has some support groups for transmitting information about exclusive breastfeeding. However, 42.2% of the women assessed do not participate in any support groups of the unit. This may occur due to possible employment relationships. The importance women give to breastfeeding is clear once they only feed their babies with human milk within a certain period. This attitude may suggest an influence coming from group activities even though there is a group that includes human milk, water and tea in the baby's nutrition<sup>(3)</sup>.

It is worth saying that women receive prenatal consultations; however, most of them perform only three consultations, implying an inadequate or incomplete follow-up, considering the recommendation of at least six consultations.

It was observed that the pregnant and lactating women assessed know what exclusive breastfeeding is and that it must be the only food given to the baby up to six months of age. However, there was a large number of women who did not know the meaning of it or even thought it could be continued up to 12 months of age. It is, therefore, necessary to strengthen actions to provide information about the period of exclusive breastfeeding and complementary food.

It was also observed in this study a fact regarding the importance of breastfeeding to the mother and baby. It was verified that the strengthening of the bond between the mother and baby was the main point reported by the mothers. They also know that human milk is the proper food for the baby; however, there are mothers who do not know the benefits of breastfeeding.

According to 70.6% of mothers, there is no weak milk, and there is no need to offer water or tea in addition to human milk. Among the difficulties reported by the mothers, the big workload and the high frequency of feeds stand out.

A study conducted to assess the adolescents' knowledge in a school revealed that only 36% of them knew something about exclusive breastfeeding<sup>(20)</sup>. This may cause harms to the baby's health because the early introduction of other foods is associated with diarrhea, hospitalizations due to respiratory problems, malnutrition and poor absorption of the human milk nutrients such as iron and zinc<sup>(20)</sup>. Such complimentary food may be related to cultural beliefs<sup>(3,20,21)</sup>.

Exclusive and continued breastfeeding protects children against gastrointestinal tract infections and severe cases of respiratory infection. In Pelotas-RS, a case-control study analyzed the postpartum hospitalizations due to pneumonia in a cohort of 5,304 children and found that non-breastfed children were 17 times more likely to be hospitalized due to pneumonia<sup>(4)</sup>. In Israel, 256 Jewish mothers were assessed and it could be observed that women who breastfed for a shorter period, started breastfeeding later and complained

of "insufficient milk" were more likely to develop breast cancer<sup>(13, 20)</sup>.

It is very important for these women to participate in pregnancy support groups because of the benefits they provide, such as better confidence and understanding concerning breastfeeding and its benefits<sup>(4,15)</sup>. The lack of information about the quality of the milk and its importance for the healthy development of the baby is one of reasons for early weaning<sup>(21,22)</sup>. Thus, to start and continue breastfeeding effectively, mothers need active support from the family, communities and, mainly, the whole health care system during pregnancy and after delivery<sup>(23)</sup>.

The quality of knowledge and the support from healthcare professionals and university play an important role in the promotion of breastfeeding and adequate planning of policies to encourage breastfeeding. However, it is worth saying that this current study had some limitations such as the short time and the fact of conducting the research with specific groups. Thus, it is important to conduct other studies to assess this issue more deeply and provide a more detailed analysis of the findings.

## CONCLUSION

Mothers who participate in health education groups have a better knowledge of the definition and duration of breastfeeding and report performing exclusive breastfeeding up to six months of age. The benefits, maternal bond and child's protection against infections are well explained to the mothers assessed. However, the mothers receiving care at the FHC presented some factors that favored the early weaning such as age, employment relationship and income.

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