

Influence of unintended pregnancy on breastfeeding duration*

Influência da gravidez não planejada no tempo de aleitamento materno

Influencia del embarazo no planificado en la duración de la lactancia materna

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ABSTRACT

Objective: Determine the prevalence of an unplanned pregnancy among mothers participating in the breastfeeding incentive program in a poor community and compare the breastfeeding durations of both a planned and unplanned pregnancy. **Method:** It was an exploratory, descriptive, retrospective documentary, and quantitative study. A sample of 202 records were integrated (N = 202). **Results:** Sociodemographic data revealed a mean age of 24.68 years (DP ± 6.07), 153 (75.74%) with a partner, with 103 (50.99%) ≥ 8 years of formal education, 168 (83.16%) were homemakers with an average family income of R\$ 971.82 (DP ± 63.12). It was identified that, although 95 (47.03%) were primiparous, 197 (97.52%) had received prenatal care and 103 (50%) had not planned their pregnancy. The average time of breastfeeding was 110.92 days, and the median was 112 days. In comparing the time difference between mothers with a planned and unplanned pregnancy the *t*-Student test was used and no statistically significant difference was observed ($p = 0.346$). **Conclusion:** Planned or unplanned pregnancy had no influence over the breastfeeding of these mothers.

Keywords: Breastfeeding; Pregnancy, Unplanned; Obstetric Nursing.

RESUMO

Objetivo: Verificar a prevalência de gravidez não planejada entre mães participantes de programa de incentivo ao aleitamento materno em uma comunidade carente e comparar o tempo de aleitamento das que planejaram ou não a gravidez. **Métodos:** Estudo exploratório, descritivo, retrospectivo, documental, quantitativo. Amostra 202 prontuários (N = 202). **Resultados:** Os dados sociodemográficos revelaram idade média de 24,68 anos (DP ± 6,07), 153 (75,74%) com companheiro, 103 (50,99%) com ≥ 8 anos de estudo, 168 (83,16%) do lar e renda familiar média R\$ 971,82 (DP ± 463,12). Identificou-se 95 (47,03%) de primíparas, 197 (97,52%) realizaram pré-natal, 103 (50%) não planejaram a gravidez. O tempo médio de aleitamento foi de 110,92 dias e a mediana 112 dias. Na comparação do tempo de aleitamento entre as que planejaram ou não a gravidez foi utilizado o teste *t-Student* e não houve diferença estatisticamente significante ($p = 0,346$). **Conclusão:** Planejar ou não a gravidez não influenciou no tempo de aleitamento nessas mães.

Palavras-chave: Aleitamento materno; Gravidez não planejada; Enfermagem obstétrica.

RESUMEN

Objetivos: Verificar la prevalencia de embarazo no planificado entre madres participantes de programa de incentivo a la lactancia materna en una comunidad carente y comparar el tiempo de lactancia de las que planearon o no el embarazo. **Métodos:** Un estudio exploratorio, descriptivo, retrospectivo, documental, cuantitativo. Integraron la muestra 202 archivos (N = 202). **Resultados:** Los datos sociodemográficos revelaron edad media de 24,68 años (DP ± 6,07), 153 (75,74%) con compañero, 103 (50,99%) con ≥ 8 años de estudio, 168 (83,16%) no trabajaban y renta familiar media R\$ 971,82 (DP ± 463,12). Se identificó 95 (47,03%) de primíparas, 197 (97,52%) con atención prenatal y 103(50%) no planearon el embarazo. El tiempo medio de lactancia fue de 110,92 días y la mediana 112 días. En la comparación del tiempo de lactancia entre las madres que planearon o no el embarazo fue utilizado la prueba *t-Student* y no hubo diferencia estadísticamente significante ($p = 0,346$). **Conclusión:** Planear o no el embarazo no influyó el tiempo de lactancia en estas madres.

Palabras clave: Lactancia Materna; Embarazo no Planeado; Enfermería Obstétrica.

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INTRODUCTION

Breastfeeding (BF), particularly exclusive breastfeeding (EBF), has been increasingly valued in view of its benefits for children's health¹. BF is an important factor in the reduction of infant mortality rates. Brazil presented a reduction in this rate within the period from 1990 to 2006, achieving second place among the countries struggling to reduce infant mortality rates².

The goal for 2015 is to reduce the number of deaths per thousand live births from 19 to 17.9. It is a challenging action due to the social differences, but it is possible to achieve this goal based on the results that have been achieved by public policies³. Therefore, it is very important to support and promote breastfeeding.

Researchers have been attempting to identify the factors that hinder or complicate the BF practice. The presence of thin milk or poor milk production, nipple trauma, lack of experience and support, work outside the home, and the desire and ability to breastfeed are emphasized among the most reported reasons by mothers⁴. Unintended pregnancy is another condition that interferes with the maintenance of BF, possibly reducing its duration. However, this factor is not clearly evidenced in the literature.

Unintended pregnancies are pregnancies that are unplanned by the couple, or by the woman. They may be classified in unwanted and mistimed. An unwanted pregnancy is a pregnancy that is not desired by one or both biologic parents; a mistimed pregnancy is a pregnancy that occurs in an unfavorable moment of the lives of the parents. Both types may cause serious damage to the health of the mother or the baby⁵.

The fact that the pregnancy is unintended may interfere in the decision of the mother regarding breastfeeding and establishment of a bond with the baby. Research on BF⁶ points out the existence of a positive correlation between breastfeeding duration and planning the pregnancy, that is, mothers who planned the pregnancy breastfeed for a longer period.

The prevalence of unintended pregnancies presented in some publications is high; one of the studies points out a prevalence of 66.5%⁶ of unwanted pregnancies while another one presents 75%⁷. In other words, most women participating in the study^{6,7} was not expecting or wanting the pregnancy at that moment, representing a risk for the establishment of breastfeeding and its maintenance.

This fact should be seen as a warning to health care professionals to support and encourage these mothers so that they establish a bond with the baby, leading to a successful breastfeeding process.

The present study aimed to: verify the prevalence of unintended pregnancy among mothers participating in the breastfeeding incentive program in a poor community, comparing the breastfeeding duration for intended and unintended pregnancies.

METHODS

Exploratory, descriptive, retrospective, documentary study using a quantitative approach developed with the database of the São Lucas Center for Women and Children Healthcare prepared in a primary project.

The Center is located in a poor community in the city of São Paulo and started its activities in 1999 as a volunteer work of one of the authors. Currently, it is part of the extension activities of the University; it is not connected nor has any partnership with the Health Unit. The activities take place in a daycare center located in the community, and that provided the physical space to the Center. The developed actions are aimed at promoting the health of pregnant women and their babies, and the main objective of the Center is to contribute to reducing infant mortality rates by promoting breastfeeding (BF), especially exclusive breastfeeding (EBF).

Pregnant women voluntarily joined the Center, attending the meetings on a weekly basis to participate in discussions about topics of interest such as self-care and childcare. After birth, the children are monitored in nursing and pediatrics visits by a pediatric nurse that follows the guidelines according to the needs of each binomial and reinforces the importance of exclusive breastfeeding. The first visit is aimed at puerperal women, identifying their difficulties and providing relevant guidance.

All the mothers and babies that attended the Center have a record containing their sociodemographic data, prior obstetric history, data of the current prenatal, and data of the birth. The babies' records contain their birth date, weight, length, Apgar, and vaccination record card. Data on BF and development of the baby are registered in their record in each visit. These data are entered into the database of the Center.

The present study analyzed all the records of 498 pregnant women that participated in the groups and returned for the nursing visits within the period from 2001 to 2012. The sample consisted of 202 (N = 202) medical records that met the inclusion criterion, that is, the mother attended at least three (3) of the six (6) scheduled visits.

Data of interest for this study were collected in the primary research database and transcribed to a record card elaborated for the present study.

Data were submitted to descriptive analysis, and quantitative variables are presented in mean and standard deviation; category variables are presented in absolute and relative frequency. Student's *t*-test was applied to compare the breastfeeding duration of the two groups (intended pregnancy X unintended pregnancy). The level of significance assumed was 5% ($p \leq 0.05$).

The primary project was approved by the Research Ethics Committee of the University Guarulhos - CEP/ under number 182/2010.

RESULTS AND DISCUSSION

Medical records of 2001 and 2002 were not included in the sample as none of the mothers had attended at least three visits. Thus, the presented data are from 2003 onwards.

The sociodemographic profile shown in Table 1 may be delineated as follows: mean age of 24.68 years (DP \pm 6.07), most (75.74%) living with a partner, 49% coming from the Northeastern region, 50.99% presenting \geq 8 years of schooling, and 83.16% were homemakers. The mean family income of those who provided this information was R\$ 971.82 (DP \pm 463.12), and most domiciles (75.74%) is shared by 2-4 people.

The highest percentage of women came from the northeastern region of the country; this fact may be explained by the migratory exodus to São Paulo, as pointed out by the 2010 census (IBGE)⁸.

Regarding the age, the results of this study indicate a young population, as the mean age was 24.68 years. A study⁷ on unintended pregnancy found a similar mean age (24 years).

The fact that 75.74% of the women have a partner represents a positive aspect for breastfeeding. A study¹ points out the importance of the presence of a paternal figure for BF maintenance. On the other hand, unintended pregnancies may complicate the establishment of a tie with the baby, leading to early ab lactation^{9,10}.

Half the women (50.99%) presented \geq 8 years of education; the others presented low educational level. Studies^{1,9} associate the low educational level and low socioeconomic status with early ab lactation as a result of lack of knowledge and poor understanding of the importance of BF by the mothers. However, a study identified that early interruption of breastfeeding was less frequent for mothers with higher socioeconomic level¹¹.

Regarding the employment status, the present study found that most pregnant women (83.16%) consist of homemakers. The absence of a paid job would allow the mother to remain for a longer period with the baby, thus keeping EBF for a longer period. Some authors^{12,13} suggest that working outside the home represents an obstacle for BF, as some companies do not allow a six-month parental leave.

Obstetric data presented in Table 2 evidenced that 51.98% of the women participating in the sample had more than one child while 47.03% were giving birth for the first time. A study⁹ indicates that the chances of having an unintended pregnancy increases after having the first child, and the higher the number of children, the higher the risk of a subsequent unintended pregnancy.

The high percentage of women who underwent prenatal care (97.52%) and Pap test (70.79%) may reflect the basic health care in force in this community after implementation of the Family Health Strategy (FHS). A study¹⁴ identified the positive impact of this strategy on the prenatal coverage.

In relation to the type of delivery, 61.39% of the women had a vaginal delivery. This rate differs from other studies that point out higher percentages of cesarean sections. UNICEF¹⁵ in its 2001 report on childhood highlights the fact that Brazil presents a very high rate of cesarean sections, and that this rate has been increasing. In 2000, the percentage was 38.9%, in 2007 it reached 46.5%¹⁶.

Postpartum complications presented a low percentage as 87.13% did not indicate this problem. The fact that they received prenatal care may explain the low percentages of complications.

Prenatal care prevents maternal and perinatal morbidity and mortality as it enables the detection and timely treatment of diseases and reduces the risk factors that cause complications to the health of the women and the baby¹⁷.

Data on Exclusive Breastfeeding and Pregnancy Planning

In the introduction of data on breastfeeding the sample consisted of 184 women (n = 184), as those women who had never provided exclusive breastfeeding were excluded.

Table 3 shows that the mean exclusive breastfeeding duration was 110.92 days; the median was 112 days. It is also observed a significant amplitude between the minimum (7) and the maximum (196) of days. A mean may be considered good in comparison with the national average of 54.1 days according to a study conducted by MS¹⁸ on the prevalence of exclusive breastfeeding in Brazil in 2008.

The mean value identified in this study may be associated and reflect the Breastfeeding Incentive Program attended in the Center by the mothers that were included in the sample.

Table 4 shows that 50% of the women had unintended pregnancy; this information was not available in 13% of the records. The high percentage of unintended pregnancies (50%) is very important to refocus actions aimed at sexual and reproductive health care within primary care. The Unified Health System (SUS) provides contraceptive and family planning courses. Women should be encouraged by health professionals to participate in family planning courses as this action could prevent future unintended pregnancies.

Studies^{18,19} associate unintended pregnancy with problems presented by women, such as using a lower dose of folic acid than the prescribed, smoking during pregnancy, postpartum depression, and early ab lactation.

Table 5 shows that the mean value found for EBF of mothers who planned the pregnancy was 113.53 days while those who had not intended the pregnancy presented a mean of 106.03 days. No statistically significant difference was found in the comparison of EBF duration between intended and unintended pregnancies ($p = 0.346$).

Some authors^{19,20} affirm that planning the pregnancy interferes in the exclusive breastfeeding duration. The present study, however, found no difference in the breastfeeding duration between intended/unintended pregnancies. A study²¹ conducted in the Philippines points out a significant difference in the beginning of breastfeeding between children born from intended/unintended pregnancies.

This result may be explained by the fact that of all women who had an unintended pregnancy (92), 26 mentioned that despite the fact that they had not planned the pregnancy for that moment, they had accepted and were happy for having a baby. These mothers probably established a tie with the baby and although the pregnancy had been mistimed, it was not unwanted and the child was not rejected.

Table 1. Distribution of sociodemographic data of the women included in the sample from 2003 to 2012. São Paulo, 2013

Variables (N = 202)	f	%	Mean ± Standard deviation
Age			
Not informed	02	0.99	
14 to 20	58	28.71	
21 to 25	55	27.23	24.68 ± 6
26 to 30	52	25.74	
31 to 35	24	11.88	
36 to 40	08	3.96	
> 40	03	1.49	
Marital Status			
Married/common-law marriage	153	75.74	
Maiden	45	22.28	
Separated/Divorced	02	0.99	
Not informed	02	0.99	
Origin			
Northeast	99	49.01	
Southeast	71	35.15	
Not informed	24	11.88	
North	03	1.49	
South	03	1.49	
Central-West	02	0.99	
Education			
Not informed	04	1.98	
Illiterate	03	1.49	
1-4 years	40	19.80	
5-7 years	52	25.74	
≥ 8 years	103	50.99	
Employment status			
Homemaker	168	83.16	
Employed	21	10.40	
Unemployed	13	6.44	
Family income in minimum wage*			
Not informed	166	82.18	971.82 ± 463.12
< 1	22	10.89	
1 to 2	13	0.06	
> 2	01	0.50	
Number of residents			
Not informed	02	0.99	
2 to 4	153	75.74	
5 to 7	39	19.31	
≥ 8	08	3.96	

* 1 minimum wage = 678.00 (2013).

Table 2. Distribution of obstetric data of the women included in the sample from 2001 to 2012. São Paulo, 2013

Variables (N = 202)	f	%
Number of children		
Not informed	02	0.99
1	95	47.03
2 to 3	67	33.17
≥ 4	38	18.81
Intended pregnancy		
Not informed	27	13.37
Yes	72	35.64
No	103	50.99
Pap test		
Not informed	30	14.85
Yes	143	70.79
No	29	14.36
Prenatal		
Not informed	03	1.96
Yes	197	97.52
No	02	0.99
Type of delivery		
Not informed	04	1.98
Natural	124	61.39
Caesarian section	58	28.71
Forceps	16	7.92
Complications during delivery		
Not informed	7	3.96
Yes	19	9.41
No	175	86.63
Postpartum complications		
Not informed	7	3.47
Yes	19	9.41
No	176	87.13

Table 3. Descriptive analysis of Exclusive Breastfeeding duration in days. São Paulo, 2013

N	Mean	Median	Standard deviation	Minimum	Maximum
184	110.92	112	50.49	7	196

Table 4. Sample distribution according to intended/unintended pregnancy. São Paulo, 2013

Intended pregnancy	f	%
Yes	68	37.0
No	92	50.0
Not informed	24	13.0
Total	184	100.0

Table 5. Comparison between the duration of exclusive breastfeeding and intended/unintended pregnancy. São Paulo, 2013

Intended pregnancy	N	Breastfeeding				
		Mean	Median	Standard deviation	Minimum	Maximum
Yes	68	113.54	119.00	47.451	7	192
No	92	106.03	107.50	52.604	9	196
Total	160	109.22	111.00	50.462	7	196

t-Student *p*-value = 0.346.

CONCLUSION

The mean exclusive breastfeeding duration for the studied population was higher than the national average. This may infer that participating in the EBF incentive program in the Center had a positive impact on the maintenance of breastfeeding. The guidance, the reception, and the individualized follow-up of the mothers in the program may have represented the differential to improve the EBF averages and to the establishment of a tie between mother and baby as no difference was found in the EBF maintenance duration between intended and unintended pregnant women.

The development of new studies in communities where similar programs are developed is still required to substantiate and compare the results.

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