

# Feeding newborns after hospital discharge from a Baby-Friendly Health Care Institution\*

Alimentação do recém-nascido após alta hospitalar de uma Instituição Amiga da Criança

Alimentación del recién nacido después del alta hospitalaria de una Institución Amiga del Niño

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# **ABSTRACT**

Objective: To characterize how babies are fed during their hospital stay and after hospital discharge from a Baby-Friendly Health Care Institution, using indicators proposed by the World Health Organization. Methods: This investigation was performed 30 days after the binomial's discharge, through a telephone interview with the puerperal woman. Data from medical records constituted secondary sources of information. Results: It was observed that, even though newborns had come from these institutions, some of them were weaned early from breastfeeding. Conclusion: Some factors were shown to be associated to weaning in the studied sample, such as the small percentage of binomials placed in skin-to-skin contact and early suction, mothers who smoked, the use of pacifiers and the use of dairy complements during the hospital stay.

Descriptors: Breast feeding; Weaning; Baby-friendly hospital initiative

#### **RESUMO**

Objetivo: Caracterizar a forma de alimentação dos bebês durante a internação e após a alta hospitalar de uma Instituição Amiga da Criança, utilizando indicadores propostos pela Organização Mundial de Saúde. Métodos: A investigação foi realizada 30 dias após a alta dos binômios, através de entrevista estabelecida via contato telefônico com a puérpera. Dados registrados nos prontuários constituíram-se em fontes secundárias de informações. Resultados: Observou-se que, mesmo oriundos de tais instituições, alguns recém-nascidos são desmamados precocemente do seio materno. Conclusão: Alguns fatores apresentaram-se associados ao desmame na amostra estudada, como a pequena porcentagem de binômios colocados em contato pele a pele e sucção precoce, o tabagismo materno, o uso de chupeta e a utilização de complementos lácteos durante a internação.

Descritores: Aleitamento materno; Desmame precoce; Iniciativa hospital amigo da criança

#### **RESUMEN**

Objetivo: Caracterizar la forma de alimentación de los bebés durante el internamiento y después del alta hospitalaria de una Institución Amiga del Niño, utilizando indicadores propuestos por la Organización Mundial de la Salud. Métodos: La investigación fue realizada 30 días después del alta de los binomios, a través de una entrevista establecida vía contacto telefónico con la puérpera. Los datos registrados en las historias clínicas constituyeron fuentes secundarias de informaciones. Resultados: Se observó que, pese a ser oriundos de tales instituciones, algunos recién nacidos son destetados precozmente del seno materno. Conclusión: Algunos factores se presentaron asociados al destete en la muestra estudiada, como el pequeño porcentaje de binomios colocados en contacto piel a piel y succión precoz, el tabaquismo materno, el uso de chupón y la utilización de complementos lácteos durante el internamiento.

Descriptores: Lactancia materna; Destete precoz; Iniciativa hospital amigo del niño

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# INTRODUCTION

Breastfeeding (BrF) is an unparalleled means to provide ideal feeding for adequate child growth and development, and it is also an integral part of the reproductive process, with important implications for maternal health. It must be practiced exclusively during the first six months of the child's life and, at this moment, in order to care for the child's evolutionary need for nutritional diversity, it should be followed by the introduction of complementary foodstuffs, simultaneous to the continuity of BrF, until two years of age or longer<sup>(1-2)</sup>.

Several factors influenced the initiation and duration of BrF. A wide range of studies show how intra-hospital routines may or may not influence the success of this practice<sup>(3-7)</sup>.

While BrF is a natural act, it is also a learned behavior. Mothers and healthcare professionals require active support to establish and maintain their practices appropriately<sup>(1-2)</sup>.

Therefore, the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) launched the Baby-Friendly Health Care initiative (BRFHC) in 1992 to strengthen maternity hospitals' practices to support BrF. The goal was to mobilize the employees of healthcare institutions to change actions and routines responsible for the high rates of early weaning. To reach it, the Ten Steps for Successful Breastfeeding were established<sup>(8)</sup>.

With the increasing number of Baby-Friendly Health Care institutions worldwide, there is a constant need to support and monitor these institutions. The WHO responds to this demand by elaborating the Monitoring Manual of Institutions that received the "Baby-friendly" title<sup>(9)</sup>. This document suggests, among other actions, the monitoring of the binomial after their discharge through interviews with the mother, in order to investigate the child's feeding conditions and the effectiveness of the actions employed in these institutions for the implementation of BrF.

# **OBJECTIVE**

To characterize the way of feeding newborns (NB) during their hospital stay and after hospital discharge from a Baby-Friendly Health Care institution, using the indicators proposed by the WHO.

#### **METHODS**

The project was assessed and approved by the local institution and by the Review Board of Escola de Enfermagem de Ribeirão Preto of Universidade de São Paulo. The binomials were included in the study only

after receiving authorization from the puerperal women, with their knowledge and signature of a term of consent. Therefore, the precepts of the Regulatory Norms and Guidelines for Research involving human beings, approved by CNS resolution No. 196/96 were thoroughly followed.

This is a descriptive study. The research subjects were all babies born at the institution who met the inclusion and exclusion criteria in a 30-day period. The chosen inclusion criteria were: NB interned at the institution from birth in rooming-in and receiving free breastfeeding on demand, with gestational age of 37 weeks or more, who received full support from a Baby-Friendly Health Care institution. NBs afflicted by pathologies, those from neighboring towns and those whose mothers were younger than 18 years were excluded. The sample obtained after the application of the aforementioned criteria was comprised of 80 binomials.

#### Data collection

The investigation was performed 30 days after hospital discharge, through a telephone interview with the puerperal women. The following topics were investigated in this interview: the type of food being offered to the child, the reason for weaning or complements (in case they occurred), if the child used a pacifier and if the woman, at the moment of hospital discharge, considered herself well-prepared for the BrF practice, based on the information and orientation offered by the Institution.

Consulting the medical records yielded maternal information, such as: age, smoking habits, marital status, job, type of delivery, skin-to-skin contact and suction in a delivery room. NB-related data were also retrieved, such as Apgar, ratio between weight and gestational age, gender, type of nourishment received during the hospital stay, justification for dairy complements when prescribed and length of hospital stay.

The instrument used to record the data was an adapted version of the instrument proposed by the WHO Manual for Monitoring and Reassessing Baby-Friendly Hospitalss.

Some pilot interviews were performed in order to develop an ideal approach, which could guarantee the truthfulness of the answers, so that the interviewer would not influence the answers.

#### Data analysis and processing

The database was structured and submitted to the double-typing process, and then exported to the Statistical Package for Social Science software (version 11.5) for the elaboration of descriptive statistics with the respective distributions of frequency and associated contingency charts.

# **RESULTS**

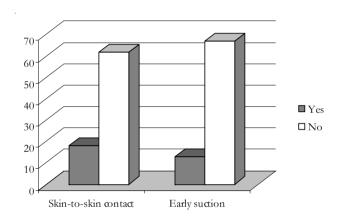
Average age was 25.2 years (±5.4), with a predominance of puerperal women with secondary education level, in

stable relationships (living with partners) and unemployed. The largest proportion of mothers who mentioned offering BrF to their NBs, in our sample, was in the 18-25 age range.

Twelve women (15%) were smokers, and only two (2.5%) consumed marijuana frequently. Altogether, 67 (83.8%) participants denied any type of drug addiction.

Regarding the type of delivery, the groups of normal delivery, pharmacologically-induced-analgesia normal delivery and cesarean section were equivalent, each with 26 (32.5%) subjects inserted. Only 2 (2.5%) were forceps deliveries in the considered sample.

Figure 1 presents the results found for skin-to-skin contact and early suction variables.



**Figure 1** – Distribution of the binomials according to having skin-to-skin contact and early suction while still in the delivery room.

The proportion of NB in BrF after hospital discharge was higher in the group that had early skin-to-skin contact (88.9%) when compared to babies who did not (80.6%). Also, the proportion of NB in BrF after hospital discharge was higher in the group that had early suction while still in the delivery room (92.3%) when compared to the group that did not (80.6%).

The average Apgar scores for the first and fifth minute of life was 8.16 ( $\pm$  1.7) and 9.65 ( $\pm$  0.6), respectively.

Most binomials stayed in the hospital for a day only. The average length of hospital stay was  $1.59 (\pm 0.9)$  days. A total of 70 (87.5%) newborns received only breast milk as nourishment during this period. Among the 10 (12.5%) who received some type of complement, two presented hypoglycemia episodes as a justification, two were in phototherapy and one presented both reasons for receiving complements. Two others received the complement due to the mother's refusal to breastfeed the baby, and three as a way to stimulate suction of the mother's breast by the procedure of relactation, since one of them presented difficulties in suction and others were

very upset when placed in contact with their mothers.

After the 30-day period, it was found that 66% (82.5%) of the children were in BRF, 6 (7.5%) received some type of dairy complement and 8 (10%) of all NBs included in the study were being bottle-fed (BoF). Among the reasons mentioned for mixed (MF) or bottle-feeding, lack of milk (57.1%) was predominant.

The amount of children using pacifiers was 43 (53.8%), which shows a high utilization of the practice, even in binomials from Baby-Friendly institutions. It was also observed that most NBs in BrF were those whose mothers mentioned not using pacifiers.

A higher proportion of BrF could be found among non-smoking mothers (83.8%) when compared to self-declared smoking mothers (75%).

Besides, there was a higher BrF proportion after hospital discharge among NBs who did not receive any type of dairy complements during their hospital stay (85.7%) when compared to those who received the complements (60%). Although only 10 NBs had received some type of complement during their internment and their prescriptions had been followed with indications that were coherent with the clinical situation of the baby, the proportion of early weaning was higher in this group, i.e. 40% of the binomials were already receiving MF or BoF 30 days after hospital discharge.

## **DISCUSSION**

The study was limited by the reduced sample size, resulting from the losses occurred during data collection. Although it was known that the mobile phone numbers provided by the subjects represented uncertainty regarding their location at the moment they were called, it was not possible to exclude them due to the high number of subjects that provided these as the only way of contacting them. This group of subjects, with few exceptions, could not be found after hospital discharge.

Even though there were losses and these constituted an important limitation, it is worth noting that the sample in the study corresponds to approximately 51% of the population proposed for the study.

Some studies relate skin-to-skin contact and early suction to a better establishment and longer duration of breastfeeding, which is in agreement with our findings. In a review elaborated by Almeida Filho<sup>(10)</sup>, it was evident that skin-to-skin contact and early suction greatly contribute to the beginning of breastfeeding and to its increased duration and exclusivity. The professionals involved with childbirth need to pay close attention to the skin-to-skin contact technique so that it happens as early as possible, still in the delivery room, placing the newborn's skin in direct contact with the mother's skin. The early skin-to-skin contact technique is recommended for the promotion

of breastfeeding, based on the knowledge that affective bonds are at their strongest in the first two hours of life, and that this bond is of maximum importance for the beginning and maintenance of exclusive breastfeeding<sup>(11)</sup>.

Our results are in agreement with a study<sup>(12)</sup> that proved the importance of early skin-to-skin contact for the duration of exclusive breastfeeding. In the group named "intervention", which had early skin-to-skin contact, the rate of exclusive breastfeeding at two months of age was 60%; on the other hand, in the "control" group, where there was no early contact, the rate was 20%.

Similar reports were found in another study<sup>(13)</sup>, referring to the lack of milk as the cause of early weaning in children under six months old. Furthermore, it is known that there is a direct link between the presence of hypogalactia and increased levels of maternal anxiety<sup>(14)</sup>.

The early suction of pacifiers and its frequent use can interfere in breastfeeding, causing the child to mistake the nipples, which may contribute to early weaning<sup>(15)</sup>. In a study on social representations about pacifiers<sup>(16)</sup>, they were shown to be, in the mother's representation, a tranquilizer for the child, an aid for the mother, and its use is passed on through generations. Besides, the pacifier offers the mother an alternative to comfort and tranquilize the child in moments of agitation, or when she cannot be with the child directly and continuously.

The tendency, among mothers who smoked during pregnancy, of breastfeeding exclusively for shorter times was highlighted in another study<sup>(17)</sup>, which considers the possibility that the same emotional factors that lead to smoking interfere negatively in the motivation of the woman to breastfeed and in the amount of milk.

Mothers holding jobs were not a cause for weaning in the present study sample, which was also found in other studies<sup>(13)</sup>.

The higher proportion of mothers who declared offering BrF to the NBs in our sample was in the 18-25 age range group. Our findings are opposed to some studies that, according to the author<sup>(18)</sup>, relate younger maternal ages to shorter exclusive breastfeeding durations, maybe caused by difficulties like lower educational levels, lower income and, often, being single.

It is worth noting that, according to the WHO and UNICEF, in a maternity, some medical reasons may require the administration of liquids or food to newborns, besides or as a replacement of breast milk<sup>(19)</sup>.

# **REFERENCES**

- World Health Organization. The WHO Global Data Bank on Infant and Young Child Feeding [Internet]. Geneva; WHO; 2001. Available from: http://www.who.int/ nutrition/databases/infantfeeding/en/index.html
- Brasil. Ministério da Saúde. Instituição Hospital Amigo da Criança [Internet]. [citado 2008 Jan 6]. Disponível em http://portal.saude.gov.br/portal/saude/cidadao/

The later another type of milk is introduced, the longer the mother tends to breastfeed, and those who wish to prolong breastfeeding delay the introduction of another type of milk. Even after its introduction, they maintain its concomitance with breast milk as long as they are able to<sup>(20)</sup>.

Therefore, the importance of trying to restrict the administration of other types of milk during the internment period is clear since, in the mother's imaginary, regardless of the amount of explanation provided, she conforms to the idea that her milk alone is not enough for the needs of her child.

## **CONCLUSION**

The results obtained in this research show that, even coming from Baby-Friendly Hospitals, some newborns are weaned early from the mother's breast. In our sample of 80 binomials, 14 (17.5%) were no longer under the exclusive breastfeeding method at the end of the first month of life.

It is interesting to note that, when questioned about the effectiveness of the information provided by the healthcare team and training for BrF performed at the institution, all puerperal women stated their satisfaction with the treatment received, and said that they were prepared during their hospital stay for the practice after hospital discharge – even those who did not provide exclusive breastfeeding to their babies, as well as those who mentioned the use of pacifiers.

Concomitant with literature, as demonstrated before, some factors were shown to be associated with weaning in our sample. Among them, the small percentage of binomials placed in skin-to-skin contact and early suction, mothers who smoked, use of pacifiers and the provision of dairy complements during the hospital stay. The magnitude of the association between the variables was not measured on this occasion.

Based on these findings, it can be concluded that Nursing professional, having scientifically-based knowledge, becomes a key element in the process of team awareness, transformation of hospital routines and assisted family healthcare education, thus justifying their importance in the success of breastfeeding practices, contributing to the results presented by Baby-Friendly Hospitals.

- visualizar texto.cfm?idtxt=24229
- Wright A, Rice S, Wells S. Changing hospital practices to increase the duration of breastfeeding. Pediatrics. 2006; 97(5): 669-75.
- Horvath A, Koletzko B, Kalisz M, Szajewska H. The Effect of supplemental fluids or feedings during the first day of life on the success and duration of breastfeeding: a systematic

- review of randomized controlled trials. Arch Pediatr Adolesc Med. 2005; 159(6): 597-8. Review.
- Alikasifoglu M, Érginoz E, Gur ET, Baltas Z, Beker B, Arvas A. Factors influencing the duration of exclusive breastfeeding in a group of Turkish women. J Hum Lact. 2001; 17(3): 220-6.
- 6. Eckert C. It takes two to breastfeed. J Nurse Midwifery. 1996; 41(1): 56.
- Gray-Donald K, Kramer MS, Munday S, Leduc DG. Effect of formula supplementation in the hospital on the duration of breast-feeding: a controlled clinical trial. Pediatrics. 1985; 75(3): 514-8.
- Fundo das Nações Unidas para a Infância (UNICEF); Organização Mundial da Saude (OMS). Dez passos para o sucesso do aleitamento materno, 1989. [Internet]. [citado 2008 Jan 6]. Disponível em: http:// http://www.unicef.org/brazil/pt/activities\_9999.htm
- 9. World Health Organization. The Baby-Friendly Hospital Initiative. Monitoring and Reassessment: Tools to Sustain Progress, 2000.Geneva: WHO; 2001.[cited 2008 Jan 12]. Available from: http://www.who.int/nutrition/publications/infantfeeding/en/
- Almeida EA, Martins Filho J. O contato precoce mãe-filho e sua contribuição para o sucesso do aleitamento materno. Rev Ciências Medicas. 2004; 13(4): 381-8.
- 11. Ventura WP. Preparando-se para amamentar: no pré-natal e na sala de partos. In: Rego JD, editor. Aleitamento materno: um guia para pais e familiares. São Paulo: Atheneu; 2002. p. 33-46.
- Thomson ME, Hartsock TG, Larson C. The importance of immediate postnatal contact: its effect on breastfeeding. Can Fam Physician. 1979; 25: 1374,1376,1378.

- Volpini CCA, Moura EC. Determinantes do desmame precoce no distrito noroeste de Campinas. Rev Nutr. 2005; 18(3): 311-9.
- 14. Aragaki IMM. Estudo sobre o traço e estado de ansiedade das nutrizes que apresentaram indicadores de hipogalactia e nutrizes com galactia normal. (Tese Mestrado). São Paulo: Escola de Enfermagem da Universidade de São Paulo; 2002.
- Cotrim LC. Aleitamento materno exclusivo e uso de chupeta nos primeiros quatro meses de vida [tese]. São Paulo: Universidade de São Paulo; 2005.
- Sertorio SCM, Silva IA. As faces simbólica e utilitária da chupeta na visão de mães. Rev Saude Publica = J Public Health. 2005; 39(2): 156-62.
- 17. Mascarenhas MLW, Albernaz EP, Silva MB, Silveira RB. Prevalence of exclusive breastfeeding and its determiners in the first 3 months of life in the South of Brazil. J Pediatr (Rio J). 2006; 82(4): 289-94.
- Faleiros FTV, Trezza EMC, Carandina L. Aleitamento materno: fatores de influência na sua decisão e duração. Rev Nutr. 2006; 19(5): 623-30.
- Pontificia Universidade Católica do Paraná. Pró-Reitoria Comunitária e de Extensão. Projeto de Aleitamento Materno
  – PALMA. Súmula de aleitamento Materno [Internet]. Curitiba; 2006. [citado 2008 Jan 12]. Disponível em: http://www.pucpr.br/servicos/programas\_saude/palma/arquivos/sumula.pdf
- 20. Bueno MB, Souza JMP, Paz SMRS, Souza SB, Cheung PPY, Augusto RA. Duração da amamentação após a introdução de outro leite: seguimento de coorte de crianças nascidas em um hospital universitário em São Paulo. Rev Bras Epidemiol. 2002; 5(2): 145-52.