Breastfeeding: knowledge and practice*

ALEITAMENTO MATERNO: CONHECIMENTO E PRÁTICA

AMAMANTAMIENTO MATERNO: CONOCIMIENTO Y PRÁCTICA

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ABSTRACT
The objective of this study was to characterize the practices of breastfeeding promotion developed by nursing professionals of the Family Health Strategy and analyze the correlation between their knowledge of breastfeeding and how often they provided teaching regarding this topic. This cross-sectional, descriptive study was performed at the Family Health Strategy units of Uberaba, Minas Gerais with 85 nursing professionals, using two questionnaires. Data analysis was performed using frequency distribution and Spearman's correlation analysis. Most professionals said that they often addressed breastfeeding in the investigated practices. However, a poor correlation was observed between the frequency of this approach and the mean score on knowledge test. The nursing professionals' statements indicate that breastfeeding recommendations were provided regardless of their knowledge on the topic.

RESUMEN
Se objetivó caracterizar las prácticas de promoción del amamantamiento materno desarrolladas por profesionales de enfermería de la Estrategia de Salud de la Familia y analizar la correlación entre sus conocimientos sobre amamantamiento materno y la frecuencia con que se realizaban orientaciones sobre el tema en la actualidad. Se realizó un análisis descriptivo y exploratorio, desarrollado en unidades de salud de la familia del municipio de Uberaba-SP, con 85 profesionales de enfermería, mediante dos cuestionarios. En el análisis, se utilizaron distribución de frecuencias y análisis de correlación de Spearman. La mayoría de los profesionales afirmó que, frecuentemente, abordaba el amamantamiento materno en las actividades prácticas investigadas. Entretanto, existió una débil correlación entre las frecuencias de tal abordaje y la media de aciertos del test de conocimiento. Las declaraciones de los profesionales de enfermería indican que las orientaciones sobre amamantamiento materno se hacían independientemente del conocimiento que poseían sobre el tema.

DESCRITORES
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Health Promotion
Health knowledge, attitudes, practice
Public health nursing

DESCRITORES
Aleitamiento materno
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INTRODUCTION

Breastfeeding, as a social practice, has undergone several transformations through the times. It is a complex and key issue for maternal-child health; therefore, it is important to constantly address and study this topic.

Despite the innumerable advantages of breastfeeding, supported by scientific evidence, and the improvement of breastfeeding rates in Brazil, its indicators have revealed a tendency towards stabilization, and remain far from the recommendation of the World Health Organization, i.e., exclusive breastfeeding until the age of six months and complemented breastfeeding until the age of two years or more. This reality evidences early weaning and raises the rates of malnutrition and child morbidity and mortality in the country.

Based on the finding that early weaning emerges in a social and educational context of which healthcare services are accountable for, it is emphasized that there is a need to develop interventions for breastfeeding promotion with a view to support its practice for a period of six months. Primary healthcare professionals are responsible for the continuous follow-up of the breastfeeding process, from prenatal care to childcare. Family Health is a priority strategy to organize primary healthcare, and the analysis of professional nursing practice in the family health teams is justified by the fact that nurses comprise the largest group of healthcare professionals in the Unified Health System (SUS) services.

Nursing professionals must be adequately qualified and sensitized to offer adequate and accessible recommendations to pregnant and breastfeeding women. This care promotes and supports breastfeeding, and contributes with establishing and maintaining this practice.

The strategy of identifying the breastfeeding promotion knowledge of Family Health Strategy nurses and nursing technicians and their practice within their workplace aims at recognizing the setting created to support breastfeeding, judge the effects of a program and, thus, reflect about their practice considering the principles of primary healthcare. This analysis allows for planning, designing and evaluating public policies regarding breastfeeding. Changing the service paradigm is a challenge that must be faced and overcome.

Therefore, the objectives of the present study were to characterize the breastfeeding promotion practices developed by Family Health Strategy nursing professionals of Uberaba, Minas Gerais state, and analyze the correlation between their knowledge regarding breastfeeding and how often they provided recommendations regarding this topic.

METHOD

This observational, cross-sectional, descriptive and exploratory study was developed with urban Family Health Strategy teams of the Uberaba Health Department, in Minas Gerais state.

The participants were nurses and nursing technicians working in the family health teams during the data collection period, between March and July of 2010. Therefore, the study population consisted of 85 participants, comprised of 45 nurses and 40 nursing technicians.

Data collection was performed using two self-administered and semi-structured questionnaires; one specific for nurses and the other for nursing technicians. Both questionnaires were tested and validated before the study.

In order to identify the professionals’ knowledge regarding breastfeeding, ten true/false questions were used. The investigated breastfeeding promotion activities developed by the nursing professions were: the times when they provided recommendations about breastfeeding to women in the third trimester of pregnancy, the educational groups for pregnant and breastfeeding women, the home visits to women in the postpartum period, and the continuing educational activities aimed at the professionals of the family health units.

Data were collected in two phases: the first consisted of applying the questionnaires, and the second referred to observing the care provided to pregnant women and the mother-child binomial.

For the first phase, the nurses were contacted, informed about the study and then invited to participate. A time and date were scheduled to apply the questionnaires, according to their availability. The mean time for completing the questionnaires was 35 minutes.

Before the second phase of data collection, the questionnaires were briefly analyzed in order to identify the Family Health Units (FHU) where the activities supposed to be observed took place, which included: the times when they provided recommendations about breastfeeding to pregnant women in the third trimester, the educational groups for pregnant and breastfeeding women, the home visits to women in the postpartum period, and the continuing educational activities aimed at the professionals of the family health units.

The observations were performed at the FHUs with the purpose to follow nurses and nursing technicians in their practice of caring for pregnant or breastfeeding clients who attended the unit.
The following aspects were considered in the observations: the dynamics of the service; the client’s flow in the health unit; the welcoming; the unit’s physical structure; the ambiance; the privacy; and the professionals’ conduct during the activities. Regarding the home visits, the conditions of the residence, mainly on how the professionals approached the mother-child binomial.

The statistical analysis was performed using the Statistical Package for Social Sciences (SPSS), version 16.0. Bivariate analysis was used to identify the correlation between the response-variables and the explanatory-variables, using Spearman’s Correlation. A level of significance of α below or equal to 0.05 was established for the value of p (test statistics). The response-variables consisted of the frequency that breastfeeding recommendations were provided to pregnant women in the third trimester; in nearly all the encounters, in some encounters, rarely; how often breastfeeding recommendations were provided during group educational activities: in nearly every encounter, in some encounters, rarely; how often breastfeeding recommendations were provided during the home visits to women in the postpartum: in nearly every encounter, in some encounters, rarely; and how often breastfeeding recommendations were provided during continuing education activities: in nearly every encounter, in some encounters, rarely. The explanatory-variable was the mean score on the knowledge test, which consisted of a true/false questionnaire.

The research proposal of the present study was approved by the Research Ethics Committee of University of São Paulo at Ribeirão Preto College of Nursing (Process number 1035/2009), in compliance with Resolution 196/96 of the National Health Council. The study followed all ethical standards, respecting human dignity, and a Free and Informed Consent Form was used.

RESULTS

The participants were 85 nursing professionals, of ages between 22 and 55 years, and a mean age of 34.2 (± 8.7) years. Most nursing professionals were female (82 – 96.5%) and did not have children (43 – 50.6%). The 42 professionals who were parents were female, 38 (90.5%) of which had breastfed their children.

It was observed that 75 (88.2%) nursing professionals participated in breastfeeding courses at least once. In terms of their perception regarding their own competence to observe women while breastfeeding and recommend the correct technique, 76 (89.4%) participants considered they were prepared for that role.

Table 1 lists the characterization of the breastfeeding promotion practices develop by the Family Health Strategy nursing professionals in the city of Uberaba, Minas Gerais.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency of recommendations</th>
</tr>
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<tbody>
<tr>
<td>In nearly every encounter</td>
<td>In some encounters</td>
</tr>
<tr>
<td>Encounters with pregnant women in the third trimester</td>
<td>75</td>
</tr>
<tr>
<td>Educational groups for pregnant and breastfeeding women</td>
<td>43</td>
</tr>
<tr>
<td>Home visit in the postpartum period</td>
<td>38</td>
</tr>
<tr>
<td>First home visit after delivery</td>
<td>30</td>
</tr>
<tr>
<td>Continuing education activity</td>
<td>18</td>
</tr>
</tbody>
</table>

It was observed that 82 (96.5%) nursing professionals provided breastfeeding recommendations to pregnant women in the third trimester. The other three professionals (3.5%), all nurses, did not reveal the frequency of this activity.

Regarding health education group activities for women who were pregnant and in the postpartum, it was observed that 49 (57.6%) of the nursing professionals from the health units used this strategy and provided breastfeeding recommendations during the activity. The other 36 (42.4%) professionals did participate in educational groups.

Considering the 45 nurse participants, 40 (88.9%) performed home visits to women in the postpartum period and provided breastfeeding recommendations at those occasions. The other five (11.1%) did not participate in this type of activity.

In terms of the first home visit after the delivery, more specifically, which was performed by nursing technicians, it is highlighted that considering the 40 nursing technicians participating in the study, 37 (92.5%) visited women in the postpartum at their homes, but three (8.1%) of them did not report how often they provided breastfeeding recommendations at those occasions.

Considering the continuing education activities performed by nurses and aimed at the FHU workers, one (2.2%) nurse reported that she did not participate in this type of activity. Hence, 44 (97.8%) nurses participated in continuing education activities at their units, and provided breastfeeding recommendations at those occasions.

The analysis of the correlation between the response-variables how often nursing professionals addressed breastfeeding during their activities at the FHU and the explanatory-variable the mean score on the true/false knowledge test, using Spearman’s Correlation Coefficient (r), found a poor correlation (0 < r < 0.3), which was not statistically significant, between the frequency of the pro-
professionals’ breastfeeding recommendations in the activities aimed at maternal-child care and their mean score on the knowledge test. One exception was observed regarding the frequency of breastfeeding recommendations during the first home visit to the mother-child binomial after the delivery, performed by nursing technicians, which revealed a moderate correlation with the mean score, despite the correlation coefficient (r=0.31) being near the threshold for a poor correlation.

**DISCUSSION**

Regarding the breastfeeding recommendations provided to pregnant women in the third trimester, 75 (91.5%) nursing professionals reported they offered recommendations nearly at every encounter they had with these clients. A study performed in the city of Montes Claros (MG) (9) found that 87.6% of Family Health Strategy professionals provided breastfeeding recommendations to pregnant women in the late prenatal period. One of the reasons given by the women for not breastfeeding or for the early interruption is the lack of recommendations from healthcare professionals during prenatal care(10). It is highlighted that, according to the *Iniciativa Unidade Básica Amiga da Amamentação*, a program of the Brazilian Ministry of Health to promote breastfeeding, six of the ten steps for breastfeeding, six of the ten steps for effective breastfeeding involve providing pregnant women with guidance and support.

The bivariate analysis showed there was a poor correlation between the frequency of breastfeeding recommendations to pregnant women in the third trimester and the mean score on the knowledge test. That means that regardless of their level of knowledge on breastfeeding, the participants often provided the pregnant women with recommendations regarding this social practice. This situation can have a negative effect on the practice of breastfeeding, because part of the breastfeeding women's knowledge is obtained from the recommendations of healthcare professionals. Any information that is wrong, incomplete or lacking scientific evidence can lead to early weaning.

In this sense, there is a need for strategies that facilitate the dissemination of the anatomic, physiologic, and immunologic foundations of breastfeeding, how to clinically manage breastfeeding and the associated complications. By detaining this knowledge, the nursing professional is capable of providing information and work creatively to highlight the advantages and importance of breastfeeding and the ways to balance this practice with the women’s other social roles(11-12). This is a task for all healthcare professionals, particularly for the nursing team, because they work as health promotion agents, and thus have a positive effect on breastfeeding. Therefore, nursing professionals should value the power of education, as it helps to bring people closer and strengthen the individual and collective potentials in terms of the valorization of health, using available resources and practicing citizenship(11,13).

An effective breastfeeding is associated with different types of educational programs and with valuing the culture that is strictly related to this social practice. Furthermore, the promotion and encouragement of breastfeeding should occur in every circumstance so that mothers can broaden their knowledge on the topic, and, consequently, raise its prevalence and duration(11,14). This context includes the health education group activities for women who are pregnant and in the postpartum, performed at FHUs.

Considering all the study participants, 49 (57.6%) participated in educational group activities performed at their units. Of those who participated, 43 (87.8%) provide breastfeeding recommendations in nearly every encounter. The results from the Montes Claros (MG) study revealed that most Family Health Strategy professionals participated in educational groups for pregnant and breastfeeding women and provided breastfeeding recommendations at those occasions(10).

The groups consist of health promotion strategies and are characterized by gathering people who interact with the purpose of expanding their capacities, which promotes the development of autonomy and coping with new situations, permitting clients to have greater control over their social and environmental context. In this sense, it is essential to overcome the traditional forms of approaching the health-disease process and the simplistic reduction of groups as promoters of individual behavior changes(13).

The educational group activities for pregnant and breastfeeding women are based on the idea that sharing expectations and experiences regarding breastfeeding, allied to the recommendations of the healthcare professionals, can avoid difficulties and teach them how to deal with anxiety, insecurities, and possible problems related with breastfeeding. In this sense, it is possible to neutralize some of the hindrances and obstacles for exclusive breastfeeding(15). However, this may not be a current reality of the studied FHUs, because regardless of their having or not good levels of knowledge regarding breastfeeding, nursing professionals often instructed pregnant and breastfeeding women about this social practice during the health education group activities, which was demonstrated by the poor correlations found between the frequency of the breastfeeding recommendations by the nursing professionals during these activities and their mean score on the knowledge test.

Following the mother-child binomial in the postpartum period is recognized as the adequate time to identify and correct any attitudes that could hinder breastfeeding(6). This strategy can be implemented through home visits to women in the postpartum period, which were performed by 40 nurses, 38 (95%) of which provided breastfeeding recommendations in nearly every encounter. These data corroborate the findings of a study(6) that showed that 92.6% of the professionals with superior education...
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performed the home visits to women in the postpartum period. However, it should be noted that nurses gave recommendations regardless of their knowledge level about breastfeeding, as it was demonstrated, by the Spearman’s Coefficient of Correlation, that there was a poor correlation between how often the topic was addressed in these activities and the mean score on the knowledge test. This can be a determining situation for early weaning and for mothers to abandon breastfeeding, because providing incorrect instructions and missing a simple error in the breastfeeding technique, due to the professionals’ lack of knowledge, can trigger a process of suffering for the women, who eventually introduce other foods too early in the child’s diet.

A study performed with mothers enrolled in the Family Health Strategy found that the home visits was a decisive factor for mothers to feel supported regarding the act of breastfeeding\(^{(16)}\). Extending and strengthening home care values the health-disease process and the influence of the life context and family dynamics on maternal-child health, in addition to allowing health professionals to enter their homes. The objective of this entrance is to observe and improve the development of the mother-child binomial within their environmental, cultural and family context\(^{(18)}\).

Therefore, nursing care to women in the postpartum period promotes breastfeeding as a positive and satisfactory experience for the mother-child binomial, because these primary healthcare professionals are the source of support for the breastfeeding women\(^{(17)}\).

Taking into consideration the continuing education activities aimed at the FHU professionals, it is highlighted that 44 (97.8%) nurses participated in these encounters.

Continuing education activities at the family health units in Uberaba occur usually once a week. This is a time when the professionals of the team gather and one of them, usually with a superior education level, talks about a topic as a lecture or expositive class.

The name of these activities is a true picture of how things happen: timely actions, represented by training on the chosen topic, which is randomly selected by the lecturer. The communicative character, therefore, follows the hierarchy of decision-making regarding the education process, which has the purpose to disseminate knowledge. These activities are restricted to updating the workers’ knowledge, which will not necessarily be applied in their everyday practice, as it may differ from the reality they experience at the unit\(^{(18)}\). Nevertheless, the continuing education initiatives can promote a reflection about each professional’s individual practice, although the activity does not aim at problematizing and discussing the reality of the service and propose solutions to the identified problems, but the topics may originate from a situation from their practice.

Therefore, there is a need for constant knowledge update and acquisition regarding breastfeeding by the nursing team, and this may be acquired through continuing education, which is a space that permits participants to solve questions, acquire new knowledge and exchange experiences. Nevertheless, in the present study, it was observed there was a poor correlation between the frequency of the breastfeeding recommendations by nurses during the continuing education activities, and their knowledge level on the test. This indicates that the recommendations were provided regardless of the professionals’ knowledge on the topic, which denotes a considerable severity and even irresponsibility from these professionals, as by promoting incorrect information about the issue to the rest of the team, they eventually contribute with an ineffective breastfeeding. Also within this context, the recommendations may reflect the knowledge that the professionals acquired through personal breastfeeding experience, which contributes with the perpetuation of beliefs, myths, and untruths in the community they care for.

In this sense, it is highlighted that effective breastfeeding depends on the participation and partnership of all the professionals involved in the care for the mother-child binomial, and they should provide adequate and accurate recommendations in the prenatal and postpartum care\(^{(6)}\).

It was identified that most of the aforementioned breastfeeding promotion practices had a poor correlation with the professionals’ mean score on the knowledge test, except for the recommendations about the advantages and importance of breastfeeding during the first home visit after the delivery, which were performed by nursing technicians, and showed a moderate correlation. This demonstrates that professionals with a technical-level education were more careful regarding the recommendations they gave to women in the pregnancy-puerperal cycle regarding breastfeeding, because, to some extent, the frequency of recommendations during home visits increased as their knowledge level also increased. It is emphasized that these times when it is believed that the recommendations were based on deeper knowledge were adequate for the early approach to breastfeeding, which helps reduce the rates of weaning and child morbidity and mortality, considering that breastfeeding problems are more common on the first weeks following the delivery, when women are at home\(^{(19)}\).

The healthcare professionals’ practice can have a negative effect on starting and maintaining breastfeeding, in case they lack a broader view that reaches beyond the clinical management and offers support to the mothers\(^{(19)}\). The family health teams work within the family environment and, therefore, they have the opportunity to identify the meaning that breastfeeding have for the women and her surroundings, and to transmit theoretical and practical knowledge aiming to advise and capacitate that woman in her breastfeeding process\(^{(20)}\). Therefore, authors have suggested to invest in the professional education for primary healthcare workers, considering that this
is the level of healthcare that most women seek for prenatal care and child care, when they require support and recommendations regarding breastfeeding(21).

The training that the studied family health team nursing professionals receive on breastfeeding is based on traditional pedagogy and continuing education, therefore it is centered on intentional, planned interventions, with a cognitive focus and distant from contextual problems, which results in a fragmented practice that is decontextualized and rooted on the biological and hierarchical view of breastfeeding(22).

Within this context, the importance of permanent health education is highlighted, which has the purpose to structure the capacitation of healthcare professionals by problematizing the working process. It is based on the premise of meaningful learning, which occurs when the learning material is related to the professionals’ prior knowledge. Therefore, it proposes the transformation of professionals practice through critical thinking of the reality and reorganizing the work, based on the clients’ health needs, sectorial management and on the social health control(22).

In the current primary healthcare setting, there is one permanent education strategy for healthcare professionals regarding breastfeeding, the Amamenta Brasil network, which is based on meaningful learning and the problematization of the reality, thus providing a new view and a new practice regarding the socio-biological breastfeeding network. However, Uberaba is a city that cannot count on network tutors and certified FHUs, and, therefore, does not have any encouragement towards permanent health education aimed at breastfeeding.

Breastfeeding courses, performed by the study participants, are not useless, because permanent education can cover several specific capacitation actions, as long as they are connected with the main strategy of institutional change. Therefore, in order to change the reality of a service and propose solutions for the identified problems, it is necessary to have at least a minimal knowledge and theoretical and practical skills regarding what is supposed to be changed, and this can be obtained through capacitation strategies.

**CONCLUSION**

The nursing professionals’ statements are unanimous regarding their approach to breastfeeding in the investigated activities aimed at mother-child care. However, the correlation between their level of knowledge and how often they addressed breastfeeding in these practices indicated that the nursing professionals provided recommendations regardless of their knowledge on the topic.

This situation may be justified by the fact that since their first professional training, nurses and nursing technicians are instructed about the need to address the breastfeeding issue in these activities. Furthermore, women expect to receive these recommendations from the Family Health Strategy professionals during their pregnancy-puerperal cycle.

Therefore, the present study results alert Family Health Strategy professionals and administrators regarding the need for a permanent education program on breastfeeding, which would permit to implement breastfeeding promotion actions, and, consequently, increase its prevalence and duration.

Due to the scarcity of studies that focus on the knowledge and practice of breastfeeding promotion by Family Health Strategy professionals, the present study findings propose that further studies should be performed to investigate this correlation.

**REFERENCES**


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