ORIGINAL ARTICLE

Program to support exclusive breastfeeding for mothers working in the private sector

Programa de apoio ao aleitamento materno exclusivo para mães trabalhadoras da iniciativa privada

Elizabeth Menezes Maia[1], Luciano Borges Santiago[2], Antonio Carlos Freire Sampaio[3], Joel Alves Lamounier[4]

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ABSTRACT

Objectives: to describe the impact of a program to encourage exclusive breastfeeding (AME) named Expectant Couple Course (GCC), conducted during the prenatal period and followed-up to six months postpartum. **Method:** this was a retrospective cohort, quantitative, descriptive, and comparative study conducted in the private sector with 28 mothers who had their babies in January 2012, followed-up in the following six months; 14 participated in the CCG and received preliminary guidelines about AM. Information about AME indexes on the first, second, fourth and sixth months postpartum and the main difficulties while breastfeeding were collected. The data were evaluated by descriptive statistics and the nonparametric Chi-square test (x2) for comparison of proportions. **Results:** the end of the sixth month postpartum follow-up, 18 (64.3%) mothers remained in AME, 13 (46.4%) did not use bottle-feeding, 15 (53.6%) did not offer a pacifier. Out of the 14 mothers who participated in the CCG receiving guidance on AM, 13 (93%) remained in AME until the sixth month of the newborn life. **Conclusions:** the GCC course proved to be a complementary strategy for maintaining AME in up to two-thirds of mothers, until the sixth postpartum month, and capable of reducing the main difficulties in breastfeeding.

Key words: Breast Feeding; Health Programs and Plans; Pregnant Woman; Prenatal Care.

RESUMO

Objetivos: *descrever a repercussão de um programa de incentivo ao aleitamento materno exclusivo (AME) denominado Curso Casal Gestante (CCG), realizado durante o pré-natal com seguimento de seis meses pós-parto.* ***Método:*** *estudo de coorte retrospectivo, quantitativo, descritivo e comparativo, realizado em empresa privada, com 28 mães que tiveram seus partos em janeiro de 2012, acompanhadas durante os seis meses seguintes, tendo 14 delas participado do CCG, recebendo orientações prévias sobre AM. Foram coletadas informações sobre índices de AME no primeiro, segundo, quarto e sexto mês pós-parto e as principais dificuldades durante a amamentação. Os dados foram avaliados por estatística descritiva e pelo teste não paramétrico qui-quadrado (x^2) de comparação de proporções.* ***Resultados:*** *ao final do sexto mês de acompanhamento pós-parto, 18 mães (64,3%) permaneceram em AME, 13 (46,4%) não fizeram uso de mamadeira, 15 (53,6%) não ofereceram bico/chupeta. Das 14 mães que participaram do CCG recebendo orientações sobre AM, 13 (93%) permaneceram em AME até o sexto mês de vida do recém-nascido.* ***Conclusões:*** *o curso CCG mostrou-se estratégia complementar na manutenção do AME em até dois terços das mães, até o sexto mês pós-natal, e capaz de reduzir as principais dificuldades com amamentação.*

Palavras-chave: *Aleitamento Materno; Planos e Programas de Saúde; Gestantes; Cuidado Pré-Natal.*

[1] RN. Family Health Strategy. Campina Verde, MG – Brazil.
[2] MD, Pediatrician. PhD in Pediatrics. Full Professor of Pediatrics at Federal University of Triângulo Mineiro – UFTM. Uberaba, MG – Brazil.
[3] Geographer. PhD in Geography. Full Professor of the Institute of Geography at the Federal University of Uberlândia – UFU. Uberlândia, MG – Brazil.
[4] MD, Pediatrician. PhD in Pediatrics. Full Professor at the Federal University of São João Del Rei. Midwest Campus. Divinópolis, Minas Gerais – Brazil.

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Institution:
Federal University of Triângulo Mineiro
Uberaba, MG – Brazil

Corresponding Author:
Elizabeth Menezes Maia
E-mail: elizabeth.maia@hotmail.com

INTRODUCTION

Exclusive breastfeeding (EBF) provides all nutrients that the newborn (NB) needs for proper nutrition in their first six months of life, and it is important to be maintained as a supplementation until at least two years of age. Human milk provides immune protection and favors the sensory-motor cognitive development of RNs and favors the nursing mother because it is associated with lower risk of developing breast cancer, protection against new pregnancies, promotes faster and more suitable uterus regression in the postpartum (which decreases the risk of puerperal anemia), strengthen the mother-RN bond, lower the cost of feeding, and being in adequate quantity and temperature for immediate consumption.[1-3]

Breastfeeding indicators (BF) in Brazil were considered adequate until the 60s. In the subsequent decades, however, following the international trend, there has been a sharp decline in breastfeeding rates. BF indexes are still far from the rates considered ideal by the World Health Organization (WHO), despite the encouragement, support, and encouragement to their practice provided by health policies and the action of educators and health professionals. Ideally, EBF should start soon after birth, maintained until the sixth month of life, and complemented (AMC) until at least two years of age.[1,4] The last national evaluation of BF, held by the Ministry of Health (MH) in Brazilian capitals and the Federal District in 2008, showed that the median duration of EBF was 54.1 days (1.8 months) and BF was 341.6 days (11.2 months) despite the programs that encourage EBF. [4-9]

The MH recommends a minimum of six consultations during pregnancy, the essential moment for education and preparation of the future nursing mother to feel capable to breastfeed and confident in the face of difficulties. The guidelines reinforce the benefits of BF, depending on the correct usage of aiding techniques that that are important to its success, particularly for primiparous.[8,9] The action supporting BF in the hospital and maternity sectors can provide a healthy start in life for all NBs. To become a Friend of the Child health unit, the hospital needs to adequate to the 10 BF steps.[6,7]

However, after discharge, breastfeeding needs other facilitating initiatives that must be enhanced by the health services for increased support and protection of nursing mothers. Breastfeeding management and information groups are important because they are pillars for maintaining long-term BF. The objective exhibition of BF benefits and help before troubles allow the nursing mother to see this moment, not as an obligation, but as an act of kindness and love toward others and herself.[3,5]

Isolated strategies, even well performed, do not guarantee that the breastfeeding mother can keep breastfeeding. Alternative possible options to be executed as interventions throughout the gravid-puerperal cycle should be used to promote support for the nursing mothers. Health professionals must be suitable and qualified to make these interventions a part of their daily activities of assistance to women in labor.[10,11]

This study evaluated a program to encourage BF developed by a multidisciplinary team offered by a private company of Uberaba-MG, from the prenatal period to six months postpartum.

MATERIAL AND METHODS

This was a retrospective cohort study, quantitative, descriptive and comparative, performed in the company Unimed Uberaba by the Integral Health sector, which is the center of healthcare responsible for management of home care services and preventive medicine. These services aim to offer preventative guidelines to preserve and/or change life habits, prevent diseases, and avoid complications in chronic cases. Among these programs is is the BF incentive program consisting of the Pregnant Couple Course (PCC), which is a social worker's visit to the maternity ward, and postpartum clinical follow-up by a nurse and two nursing technicians trained to guide BF.

This study included mothers who had their childbirth in January of 2012, with term NBs, without disease at birth, with appropriate weight for their gestational age of at least 2,500 g at birth, of both genders, clients at UNIMED Uberaba, and residents in Uberaba-MG. Mothers under the age of 18 years and those not found after three attempted home visits were excluded. Only mothers who signed the Voluntary Informed Consent Form (VICF) participated in the research.

Therefore, 34 births occurred in January of 2012, including 28 mothers, of which, 14 attended the course (PCC) consisting of 12 classes, once a week, with one-hour duration. This course is part of the program to encourage BF beginning in the prenatal care and aiming to aggregate knowledge and practices to the work conducted by the doctor in the office in relation to the preparation of the couple for this stage of life (Table 1).

Table 1 - List of themes covered in the Pregnant Couple Course and their duration

Theme	Load (hour)
Breastfeeding-continual learning	1
Clinical management of breastfeeding	1
Physical activity for a healthy pregnancy	1
Anesthesia for a healthy childbirth	1
Vaginal delivery and cesarean birth	1
NB oral health	1
NB urgency/cramps/baby safety	1
Legislation and basic information for mothers	1
Healthy eating during pregnancy	1
Speech therapist and breastfeeding	1
NB care/bath/umbilical stump care	1
Harm caused by artifacts such as nozzles/pacifiers, and baby bottles	1

The course was taught by a BF interdisciplinary team through 40 hours from the MH, replicated by the team of "Support Group for Breastfeeding Mothers-GAMA" from the Federal University of Triângulo Mineiro. The BF program has a team of social workers, nurses, OB-GYNs, and pediatricians.

Pregnant women and mothers received information about pregnancy, childbirth, and postpartum with a special focus on BF and the uniqueness of each family. The program has its structure suitable for carrying out the activities with professionals trained to respond to questions without additional cost to the insured. The 14 women who participated in the course were accompanied only by the prenatal care team. Soon after birth, all mothers received a visit from a social worker who gave general information about BF; after discharge, they were directed to contact the Service of Integral Health to schedule an appointment with the nurse if deemed necessary. All were followed-up by telephone contact and/or outpatient consultations with the nurse and nursing technician. The telephone contact was made in the first, second, fourth, and sixth months, and the outpatient consultations were at the mother's discretion who should schedule an appointment with the team. All information was recorded in medical records.

The data were collected from the medical records provided by UNIMED Uberaba after six months from the NBs' birth (July of 2012). The study was approved by the Ethics and Research Committee of the Federal University of Triângulo Mineiro in compliance with the provisions of Resolution CNS 196/96 and signed Voluntary Informed Consent Forms (VICF). The acceptance to participate in the research was initiated based on the responses to the questionnaire with objectives and descriptive questions to verify the type of BF, use of pacifiers/nozzles and/or bottles, and breastfeeding difficulties.

The data analysis on EBF was performed by descriptive statistics with averages and standard deviations calculated for the quantitative variables. The nonparametric Chi-square test (x^2) was used for the comparison of proportions with the Yates correction.[12,13] Restrictions in the application of this test[16] was verified based on the tabulated value of $x^2 = 3.84$, obtained from calculations with the Yates correction. The level of significance was adopted as $p < 0.05$. The calculation for each month was performed to evaluate the efficiency of the Pregnant Couple Course. The main difficulties faced by mothers in the first, second, fourth, and sixth months of breastfeeding were compared between the two groups. Based on this test it was possible to reject or not the null hypothesis, which in this study, was prioritized as: H_0 (null hypothesis): the guidance about BF in the Pregnant Couple Course WAS NOT EFFICIENT to show differences between the groups regarding the practice of breastfeeding. H_A (alternative hypothesis): the guidance about BF in the Pregnant Couple Course WAS EFFICIENT to differentiate the groups regarding the practice of breastfeeding. The Epi-Info version 6.22 for Windows software was used in the database and statistical analysis.

RESULTS

Out of the 34 mothers who had their childbirth in January of 2012 and were clients at Unimed Uberaba, six were not found after three attempted house visits for the presentation of the research and collection of signature on the consent form.

Out of the 28 mothers and their NBs who were followed-up for six months, 14 (50%) participated in the Pregnant Couple Course and other 14 (50%) did not participate based on lack of knowledge about the course or did not feel the need to participate because the course was made available to all clients at no additional charge. The participants presented similar characteristics, all of whom were upper-middle class, between 24 and 34 years old, nulliparous, in stable unions, and with a steady job. Out of the 14 mothers who participated in the PCC, showing a minimum attendance of 75%, 13 (93%) remained in EBF until the sixth month of life of their newborns and out of the

14 who did not participate in the PCC, five (35.7%) remained in EBF. During the follow-up period, 10 (35.7%) weaned, and of these, nine (90%) did not participate in the Pregnant Couple Course, which is part of the program to encourage BF.

Over time, the difficulties with breastfeeding decreased to zero, i.e. absence of difficulties at the sixth month for mothers in EBF (Table 2). In the first month of follow-up, the main difficulty reported by the mothers was breast engorgement, affecting four (14.3%) mothers. Difficulties with incorrect grip, mammillary fissure, and low production also appeared affecting two (7.14%) mothers per difficulty. Anxiety, lack of milk letdown pain affected one (3.57%) mother each; the other 15 mothers did not report difficulties.

Table 2 - Main difficulties faced by mothers during breastfeeding. Uberaba – MG, 2012

Difficulties	1st month	2nd month	4th month	6th month
None	15	15	20	18
Breast engorgement	4	3	–	–
Incorrect grip	2	2	–	–
Mammillary fissure	2	1	–	–
Low production	2	–	–	–
Anxiety	1	–	–	–
No milk letdown	1	–	–	–
Pain	1	2	–	–
None due to weaning	–	5	8	10

It was observed that out of the 18 mothers in EBF until the sixth month of life of NBs, 15 (83.3%) did not offer spout/pacifier. Out of these, 11 (73.3%) received preliminary guidelines on the harm of this artifact to BF through the course offered to the Unimed clients. The bottle was not used by 13 (46.4%) mothers until the end of the sixth month; 12 (92.3%) of them participated in the Pregnant Couple Course receiving guidance with main focus on BF.

The efficiency of the course can be evaluated in Table 3, which compares who was and was not in EBF among the mothers who were previously guided for the practice of breastfeeding and mothers who did not receive such guidelines. This efficiency is directly related to the fact that mothers who participate in the PCC keep EBF longer than those who did not participate in the course. The statistical analysis did not help differentiating the two groups in the early months of follow-up, however, in the long run it was possible to separate the two groups proving the alternative hypothesis as correct, which says that the guidance on BF in the Pregnant Couple Course was effective to distinguish the groups regarding the practice of breastfeeding.

Table 3 - Absolute number and percentage of children in EBF in the 6th month in comparison with participation in the Pregnant Couple Course. Uberaba – MG, 2012

Course\breastfeeding	Yes	No	Total
Yes	13(46.4%)	1(3.5%)	14(50%)
No	5(17.8%)	9(32.1%)	14(50%)
Total	18(64.3%)	10(35.7%)	28(100%)

DISCUSSION

The results of the program to encourage BF from the prenatal period and up to six months postpartum could provide the acquisition of nursing skills to participants that are required to maintain the practice of BF even in the face of difficulties. It is known that skilled, qualified, and competent professionals trained in the art of direct and effective communication for pregnant women and nursing mothers, are fundamental for a good mother-child interaction. These findings reinforce the need for incentive programs that protect, promote, and support breastfeeding effectively.[12,13]

The knowledge about the benefits of BF is well spread in the population, however, professionals with the determination to act in care from the first feeding in the delivery room to laws protecting the nursing mother.[14] The continued incentive to breastfeeding helps mothers on their maintenance for longer periods than those who are not encouraged. The PCC course is an opportunity for stimulating the practice of BF.

It is observed that practicing EBF in the first months of the NB's life was not influenced by the specific guidelines acquired in the course (Table 2). This guidance helps, but it does not differentiate the groups with and without the practice of EBF in the first postnatal months. This shows that mothers who did not remain breastfeeding until the sixth month of life have the called maternal instinct,[1,15-17] that makes them breastfeed in the early postpartum months. The maintenance of breastfeeding for longer periods seems to depend on, however, the prior orientation and continuous monitoring by a professional who works with breastfeeding and is engaged in this practice.

The guidelines on BF during the course enabled the creation of a bond between pregnant woman/mother and professional, being possible to clarify doubts and ask questions,[18] with more freedom of expression during the prenatal and post-partum care consultations. The prenatal care is an important moment to inform the mother about future complications that can occur during the process of breastfeeding and to clarify doubts about the pregnancy. Courses for pregnant women and their families are of the utmost importance to increase the chance of an uneventful pregnancy, childbirth without complications, and exclusive BF without major doubts.[19] To guide the mother about what might happen can reassure her on how to act in front of problems before they occur. The trust earned means the chance to help broadly and directly. The PCC provided encompasses the whole family because it takes into account that family members will be the closest persons to the mother in times of difficulties.

It is remarkable that the BF practice improved its contents in relation to previous decades,[4] however, the use of pacifiers and baby bottles is still ingrained in the popular ideals of good practice with NBs. The use of these artifacts influence decisively on weaning,[20] therefore, being essential that the discussion on this practice is included in the program in support of BF. In the Pregnant Couple Course, this subject was approached, and solutions and instructions on harms caused by pacifiers and baby bottles were offered. It is observed that the mothers who received guidance understood the issues discussed. However, it is observed that the rates of mothers who make use of artifacts such as nozzles/pacifiers are high in the first months. Although it may be admitted as a flaw in the PCC course, it involves cultural aspects well rooted in our midst. Thus, the improvement in the argument concerning the use of nozzles/pacifiers is necessary because of the negative interference in the maintenance of breastfeeding and orofacial development of NBs. The professional should know the benefits of breastfeeding to know how to argue effectively, seeking the success of BF. In the ten steps to success of BF,[21] step 9 reinforces not giving artificial nozzles or pacifiers to breastfed children.

The maintenance of a trained and qualified team is essential to inform and answer questions in a coherent and correct manner to pregnant/nursing mothers. We stress that BF is of a great value, however, it is essential that the information reach mothers in an integral and comprehensive form, showing that the inclusion of other foods along with human milk can cause detachment of the NB towards the mother's breast; the first six months of life should be under exclusive BF. Discussing the exact time and how to proceed on a daily basis helps maintaining longer breastfeeding time.[22] It is important that the whole team is engaged in practice and encouragement of breastfeeding to prevent differences in the information passed to the mother or family. The team qualified for the management of BF allows more confidence and support to the mother in a moment of particular importance for her and her NB.[23]

Group actions are of great importance for the exchange of experiences among mothers. However, it is necessary that each case be treated individually when necessary. The local culture and maternal protection laws can influence directly in the mother's form of thinking and acting.[24]

The aid and support for the nursing mother are important to address and clarify questions about the process of breastfeeding. In relation to the health professional, flaws and actions can contribute to the failure of BF.[25] The lack of support and information during pregnancy and the breastfeeding process make it difficult to maintain EBF until the sixth month of life, and AMC up to two years or more. These failures can be assigned, in part, to the training of health professionals who are not trained adequately to inform pregnant women and mothers about BF. The responsibility is also of the public sector, which restricts the maternity leave to four months and companies that do not have support for breastfeeding rooms or nurseries for the working nursing mothers. In addition, the support at this moment is crucial to the mother's, the father's, and other relatives' resourcefulness that pervade the family during the period of breastfeeding.[26]

In this study, EBF reached 64% of mothers until the sixth month of the NB's life, which demonstrates high superiority compared with the National Breastfeeding Research,[4] that shows a national probability rate of 9.3% in EBF up to the sixth month of the NB's life. For mothers to be informed about the advantages of BF and opt for this practice is not enough. She needs to be inserted in a breastfeeding-friendly environment and receive professional support bring forth this option, and if necessary, receive information about how to properly remedy problems.[27] Courses for pregnant women addressing the benefits of BF are excellent for maintaining this practice after birth.

During this period, mothers can be informed about the appropriate time for breastfeeding, when to add solid foods to the NB's diet, and how to proceed in the face of any complication. The mother informed about possible complications during breastfeeding will be more prepared at the time of delivery and ready to resolve difficulties.[28] the Pregnant Couple Course proved to be an effective intervention in favor of exclusive BF and could be included as an action offered by health plans even in the public network.

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