INTERFERENCE OF PROFESSIONAL SUPPORT IN BREASTFEEDING: A SYSTEMATIC REVIEW

INTERFERÊNCIA DO APOIO PROFISSIONAL NO ALEITAMENTO MATERNO: REVISÃO SISTEMÁTICA

INTERFERENCIA DEL APOYO PROFESIONAL EN LA LACTANCIA MATERNA: UNA REVISIÓN SISTEMÁTICA

Kellen Karoline Almeida dos Santos Lira, Monalisa Batatinha de Castro Silva, Chalana Duarte de Sena Fraga, Gilvânia Patrícia do Nascimento Paixão, Tatiane Pina Santos Linhares, Mônica Cecilia Pimentel de Melo

ABSTRACT

OBJECTIVE: To evaluate clinical studies that sought to verify the interference of professional support in breastfeeding. METHOD: Systematic review of the literature, registered in PROSPERO, under registration no. CRD42021240399, analyzing clinical trials available in Pubmed, Embase, SciELO, Bireme, and CINAHL databases. The PICOT was used as a search strategy, in which P corresponds to studies involving lactating women; I, randomized clinical trials addressing professional follow-up regarding breastfeeding; C, group or individual comparison with control and experimental groups; O, breastfeeding maintenance; and T, randomized controlled trials. Randomized clinical trials that aimed to investigate how professional support interferes with breastfeeding were included, and studies that configured secondary analysis of previous clinical trials or did not answer the study question were excluded. One hundred thirty-one studies were identified, and after analysis, eight studies were included for final analysis. RESULTS: The eight studies analyzed dealt with professional support interventions. Of these, five showed statistical relevance between groups concerning the effect of professional support interventions on exclusive breastfeeding rates and maintenance. CONCLUSION: Professional support interventions were identified as beneficial to promote breastfeeding self-efficacy.

Descriptors: Breastfeeding; Puerperium; Nursing; Maternal and Child Health; Systematic review.

RESUMO

OBJETIVO: Avaliar estudos clínicos que buscaram verificar a interferência do apoio profissional no aleitamento materno. MÉTODO: Revisão sistemática da literatura, cadastrada no PROSPERO, sob o registro CRD42021240399, que analisou ensaios clínicos disponíveis nas bases de dados Pubmed,
Embasa, SciELO, Bireme e CINAHL. Utilizou-se da PICOT como estratégia de busca, em que P corresponde a estudos que envolvam mulheres lactantes; I, ensaios clínicos randomizados que abordem algum tipo acompanhamento profissional em relação ao AM; C, comparação em grupo ou individual, com grupo controle e experimental; O, manutenção do AM; e T, ensaios clínicos randomizados. Incluíram-se ensaios clínicos randomizados que tinham o objetivo de investigar como o apoio profissional interfere no aleitamento materno e excluíram-se estudos que configuraram análise secundária de ensaios clínicos prévios ou que não respondessem à questão do estudo. Identificaram-se 131 estudos e, após análise, oito estudos foram incluídos para análise final. RESULTADOS: Os oito estudos analisados tratavam sobre intervenções de apoio profissional. Destes, cinco apontaram relevância estatística entre grupos após intervenção de apoio profissional no que diz respeito às taxas de aleitamento materno exclusivo e à manutenção deste. CONCLUSÃO: As intervenções de apoio profissional foram apontadas como benéficas para promover a autoeficácia do aleitamento materno.

Descritores: Aleitamento Materno; Puerpério; Enfermagem; Saúde Maternoinfantil; Revisão Sistemática.

RESUMEN

OBJETIVO: Evaluar estudios clínicos que buscaron verificar la interferencia del apoyo profesional en la lactancia materna. MÉTODO: Revisión sistemática, registrada en PROSPERO, bajo el registro CRD42021240399, implicando ensayos clínicos disponibles en las bases de datos Pubmed, Embase, SciELO, Bireme y CINAHL. Se utilizó como estrategia de búsqueda el PICOT, en el que P corresponde a estudios que involucran mujeres lactantes; I, ensayos clínicos aleatorizados que aborden el seguimiento profesional de la lactancia materna; C, comparación grupal o individual con grupos control y experimentales; O, mantenimiento de la lactancia; y T, ensayos controlados aleatorios. Se incluyeron ensayos clínicos aleatorizados que tenían como objetivo investigar cómo interfiere el apoyo profesional en la lactancia materna y se excluyeron los estudios que configuraban análisis secundarios de ensayos clínicos previos o que no respondían a la pregunta de estudio. Se identificaron 131 estudios y, después del análisis, se incluyeron ocho estudios. RESULTADOS: Los ocho estudios trataron sobre intervenciones de apoyo profesional. De estos, cinco mostraron relevancia estadística entre grupos con respecto al efecto de intervenciones de apoyo profesional en las tasas de lactancia materna exclusiva y mantenimiento. CONCLUSIÓN: Las intervenciones de apoyo profesional fueron identificadas como beneficiosas para promover la autoeficacia en la lactancia materna.

Descripciones: Lactancia materna; Puerperio; Enfermería; Salud maternal e infantil; Revisión sistemática.
INTRODUCTION

Much is known about the importance of breastfeeding for the health of the mother-child dyad in the short and long term. Breast milk is a safe diet that, due to the numerous protective factors for infections, has proven efficacy in reducing mortality in children in the first year of life, in addition to bringing benefits in the long term for better academic and social performance of the child, reducing the risk of arterial hypertension, high cholesterol rates, diabetes, obesity, among others.

For women, breastfeeding contributes to faster postpartum uterine involution, strengthens the affective bond between mother and child, and reduces the incidence of breast and ovarian cancer. In addition to the benefits to the dyad, Breastfeeding (BF) also brings benefits to the family, such as reducing hospitalization costs and the use of drugs to treat pathologies potentially avoided with breastfeeding, in addition to reducing costs with food to be offered to the baby.

Most of these benefits are enhanced when breastfeeding occurs exclusively. Thus, the World Health Organization (WHO) recommended that breastfeeding be exclusive for up to six months of life and supplemented with other foods up to two years of age or more. It is estimated that Exclusive Breastfeeding (EBF) could prevent 823,000 child deaths and 20,000 breast cancer deaths yearly. However, in low- and middle-income countries, only 37.0% of children under six months of age are exclusively breastfed.

The act of breastfeeding and its maintenance depends on some sociodemographic, psycho-affective, and physical factors. Among these, we can mention the support of health professionals. The first postpartum days are essential for the future of breastfeeding, and for this reason, receiving guidance on BF during hospitalization and postpartum helps in the continuity of EBF for the recommended time. Thus, the support offered by health professionals in the hospital network and primary care is essential to extend breastfeeding time.

In this perspective, a health professional is a fundamental tool for promoting, protecting, and assisting BF by carrying out strategies that benefit the mother-child dyad through educational actions on breastfeeding techniques and emotional and verbal support. Nursing care, for example, in the first
moment of breastfeeding, is providential, acting as a facilitator, motivator, and demystifier of beliefs, myths, and taboos that involve the act of breastfeeding. Nurses, therefore, play a relevant role in EBF as they contemplate the singularity and the lived context of the woman/nurturing mother, supporting her at the beginning of breastfeeding to gain self-confidence in her ability to breastfeed. However, this assistance still falls short of what is necessary for the effective continuity of BF.

Given the above, evaluating the association of professional hospital or home support received and the breastfeeding process, specifically, the intention to exclusively breastfeed the newborn (NB) up to six months of life, is necessary.

The justification for this study is based on the premise that in the hospital environment, there is an influence contrary to breastfeeding exercised by health professionals themselves, evidenced by the encouragement of the use of formulas and artificial nipples. This fact was observed during the experiences of the Breastfeeding Support Group, an extension group linked to the State University of Bahia, UNEB, Campus VII. The negative influence of these professionals undermines the mothers’ intention to exclusively breastfeed the NB, a fact that corroborates the emergence of possible health problems associated with the mother-child dyad.

The proposed problem started from the following research question: How does professional support interfere with the maintenance of breastfeeding? Suppose that there is indeed an association between these two factors. In that case, it will be possible to stimulate the formulation of strategies that encourage professionals in the hospital network and primary care to guide and encourage the practice of BF, to emphasize positive and pro-breastfeeding actions with the support matrix, and manage the main difficulties faced by mothers.

Given the aspects above, the objective was to evaluate clinical studies that sought to verify the interference of professional support in breastfeeding.

**METHOD**

This is a systematic review of the literature, which seeks to evaluate clinical studies investigating professional support's interference in breastfeeding.

This study was registered in the PROSPERO (International prospective register of systematic reviews) database under the number: CRD42021240399.

The problem proposed in this review was based on the following research question: How does professional support interfere with maintaining breastfeeding? For the preparation of this question, the PICOT strategy was used, in which P consists of studies involving lactating women; I – randomized clinical trials addressing professional follow-up regarding breastfeeding; C – group or individual comparison, with control and experimental groups; O – maintenance of breastfeeding; and – randomized clinical trials.

The search strategy was based on the research of scientific articles available in the databases: Pubmed, Embase, SciELO, Bireme, and CINAHL and included keywords defined and available in the MeSH (Medical Subject Headings) vocabulary. The keywords were related to professional support (Professional Roles; Role, Professional; Roles, Professional), breastfeeding (Breastfeeding; Breastfed; Breast Fed; Milk Sharing; Sharing, Milk; Breast Feeding, Exclusive; Exclusive Breast Feeding; Breastfeeding, Exclusive; Exclusive Breastfeeding; Wet Nursing), and the type of study intended (Randomized Controlled Trial). The Boolean operators OR and AND were used. The search strategies were initially used in MEDLINE/PubMed and later in other databases, respecting the specificities of
each database. Thus, the search strategy was: Professional Roles OR Role, Professional OR Roles, Professional AND Breastfeeding OR Breastfed OR Breast Fed OR Milk Sharing OR Sharing, Milk OR Breast Feeding, Exclusive OR Exclusive Breast Feeding OR Breastfeeding, Exclusive OR Exclusive Breastfeeding OR Wet Nursing AND Randomized Controlled Trial. Table 1 shows how the descriptors were crossed in the selected databases.

Table 1. Research Strategies. Senhor do Bonfim (BA), Brazil, 2022.

<table>
<thead>
<tr>
<th>DATABASE</th>
<th>#1</th>
<th>#2</th>
<th>#3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pubmed, Bireme, Embase, CINAHL.</td>
<td>(Professional Roles) OR (Role, Professional) OR (Roles, Professional).</td>
<td>(Breastfeeding) OR (Breastfed) OR (Breast Fed) OR (Milk Sharing) OR (Sharing, Milk) OR (Breast Feeding, Exclusive) OR (Exclusive Breast Feeding) OR (Breastfeeding, Exclusive) OR (Exclusive Breastfeeding) OR (Wet Nursing).</td>
<td>(Randomized Controlled Trial).</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Professional Roles OR Role, Professional OR Roles, Professional AND Breastfeeding OR Breastfed OR Breast Fed OR Milk Sharing OR Sharing, Milk OR Breast Feeding, Exclusive OR Exclusive Breast Feeding OR Breastfeeding, Exclusive OR Exclusive Breastfeeding OR Wet Nursing AND Randomized Controlled Trial.</td>
</tr>
</tbody>
</table>

Source: Authors own elaboration. Senhor do Bonfim (BA), Brazil, 2022.

The eligibility criteria were: randomized clinical trials that aimed to investigate how professional support interferes with breastfeeding. Studies that configured secondary analysis of previous clinical trials or did not answer the study question were excluded.

The searches were carried out in February 2021, independently and in pairs, by two researchers (KKAS and MBCS). Filters for year and language were not used. The analysis was carried out from the databases' conception to the data collection period. The Mendeley software was used as a manager for the bibliographic references. A conservative screening was performed, in which only studies that did not meet the eligibility criteria were excluded, including studies available for a full screening. Data extraction consisted of three steps: reading titles, abstracts, and the full text. Then the data were compared. In cases of disagreement between three of the eight articles included, the third researcher (CDSF) was recruited, analyzing and judging the eligible studies.

A table was used to extract data from eligible studies by a researcher who carefully examined the following information: title, country, objective, and primary and secondary outcomes. Data were entered into the Review Manager software and checked for accuracy. The following variables were evaluated regarding the professional support provided: support intervention applied, professionals involved, and primary and secondary outcomes.
This systematic review was reported under the recommendations of the PRISMA writing guide (Preferred Reporting Items for Systematic Reviews and Meta-Analyses). The assessment of the risk of bias (quality) of the clinical trials included in this review was performed according to the criteria standardized by the Cochrane Collaboration. This tool is divided into two parts, the first consisting of seven domains (randomized sequence generation, allocation concealment, blinding of participants and professionals, blinding of outcome evaluators, incomplete outcomes, reporting of selective outcomes, and other sources of bias). The second part concerns the judgment regarding the risk of bias for each of the domains analyzed, classified into three categories: low risk, high risk, or uncertain risk of bias. This assessment was also carried out independently and paired. When disagreements emerged, a third evaluator judged and classified the risk of bias in the included studies. The Review Manage software was used to summarize the results found based on the risk of bias assessments.

A meta-analysis was not carried out, as the studies had great heterogeneity in terms of interventions and evaluation methods, which made the analysis unfeasible.

RESULTS

One hundred thirty-one studies were identified from the initial searches in the databases used, of which 22 were found in Pubmed, four in Bireme, four in Embase, and 101 in CINAHL. Of these 131 studies, two were concomitantly indexed in two or more databases, and after the exclusion, 129 studies were kept for further analysis. Of these, 107 titles were excluded for not meeting the inclusion criteria. Thus, 22 abstracts were analyzed, and 11 were excluded for not meeting the eligibility criteria. There were 11 articles eligible for full-text screening, requiring, at this stage, the participation of a third researcher to analyze existing differences in the assessment of the first two researchers. Of the 11 articles read in full, three were excluded for not meeting the eligibility criteria, resulting, therefore, in eight studies included in this review.

Figure 1 presents the PRISMA diagram of the flow of analyzes performed at each stage of the review.
Characteristics of the studies

The studies were published in English. Due to the variety of countries, a wide dissemination of the theme around the world was noticed (Table 2).  

Table 2. Description of authors, countries of origin, objectives, and primary and secondary outcomes of included studies. Senhor do Bonfim (BA), Brazil, 2022.

<table>
<thead>
<tr>
<th>TABLES</th>
<th>AUTHORS</th>
<th>COUNTRIES</th>
<th>OBJECTIVES</th>
<th>PRIMARY OUTCOMES</th>
<th>SECONDARY OUTCOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>The effect of training administered to working mothers on maternal anxiety levels and breastfeeding habits</td>
<td>CIFTCI; ARIKAN, 2011</td>
<td>Turkey</td>
<td>To determine the effect of training given to working mothers and duration on maternal anxiety levels and breastfeeding habits.</td>
<td>Anxiety and breastfeeding frequency.</td>
<td>Duration of breastfeeding and supply and type of supplementary foods.</td>
</tr>
<tr>
<td>Effectiveness of an implementation strategy for a breastfeeding guideline in Primary Care: cluster randomised trial</td>
<td>MARTIN-IGLESIAS et al., 2011</td>
<td>Spain</td>
<td>To determine whether a breastfeeding guide implementation strategy is more effective than usual dissemination in terms of increasing the percentage of children using exclusive breastfeeding or predominant</td>
<td>Mother-infant pairs on exclusive breastfeeding or predominant breastfeeding at six months.</td>
<td>Professional, sociodemographic, gender, age and number of children variables.</td>
</tr>
<tr>
<td>Study Title</td>
<td>Authors</td>
<td>Country</td>
<td>Objective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>----------------------------------------------</td>
<td>-----------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home versus Hospital Breastfeeding Support for Newborns: A Randomized Controlled Trial</td>
<td>McKeever et al., 2002</td>
<td>Canada</td>
<td>To compare the effects of breastfeeding support offered in hospital and domestic settings on breastfeeding outcomes and maternal satisfaction of mothers of full-term newborns who had normal or early discharge. Breastfeeding success and maternal satisfaction. Not applicable.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Pilot Randomized Controlled Trial of a Breastfeeding Self-Efficacy Intervention With Primiparous Mothers</td>
<td>McQueen et al., 2011</td>
<td>Canada</td>
<td>To examine the feasibility and compliance of a newly developed trial protocol and the acceptability of an intervention to increase breastfeeding self-efficacy in the immediate postpartum period. Feasibility, compliance and acceptability of the breastfeeding self-efficacy intervention. Self-efficacy, duration and exclusivity of breastfeeding.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Randomized Trial of Single Home Nursing Visits vs Office-Based Care After Nursery/Maternity Discharge</td>
<td>Paul et al., 2012</td>
<td>United States</td>
<td>To compare office care with a model of care using a nursing home visit as the initial post-discharge encounter for newborns and mothers who breastfeed “well”. Unplanned use of health care for other children and newborns within two weeks of delivery. Duration and exclusivity of breastfeeding, maternal postpartum depression, state anxiety, perceived social support, and parental self-efficacy.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promotion of breastfeeding: the importance of pediatricians with specific training</td>
<td>Santiago et al., 2003</td>
<td>Brazil</td>
<td>To investigate the factors involved in maintaining exclusive breastfeeding in healthy infants, in the first four months of life, with emphasis on the pediatrician's role. The type of care received and the occurrence of exclusive breastfeeding at four months of age.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| A randomised controlled trial in England of a postnatal midwifery intervention on breastfeeding duration | Wallace et al., 2006                          | England   | To determine whether the care provided by midwives in the postnatal period without their intervention in positioning and Duration of breastfeeding (exclusive breast milk and any). Type of care provided and duration of exclusive breastfeeding (analyzed for those who only gave breast milk and those who

breastfeeding at six months.
Effect of Postnatal Home Visits on Maternal/Infant Outcomes in Syria: A Randomized Controlled Trial

BASHOUR et al., 2008

Syria

- Holding the newborn improves the duration of breastfeeding.
- Introduced food with non-nutritive water.
- To evaluate whether an intervention based on home visits, in the postnatal period, has an effect on maternal morbidities in the postpartum period; childhood morbidity; uptake of postpartum care; use of contraceptive methods; and in selected neonatal health practices.

Postpartum maternal morbidities, uptake of postnatal care, use and type of contraceptives, infant morbidities, infant immunization, according to the national calendar at three months, and infant feeding, that is, exclusive breastfeeding during the first four months of life.

Women's perceptions of health and impressions of home visits and perceptions of their own quality.

Source: Authors own elaboration. Senhor do Bonfim (BA), Brazil, 2022.

Concerning applied support interventions, three studies used only home visits combined with instructions regarding breastfeeding as a support strategy. Nurses carried out the visits. Another study used, as an intervention to support BF, in addition to home visits, hospital follow-up performed by nurses who were certified lactation consultants (Table 3).10-3

Three studies only used interventions applied in the hospital environment: individualized self-efficacy sessions, follow-up with a trained pediatrician and a multidisciplinary breastfeeding team, and verbal advice only on positioning and fixing the breastfeeding. Interventions were performed, respectively, by a nursing team, a pediatrician, accompanied by a team specialized in BF, and midwives.9,14-5

Another study used as an intervention strategy the training of professionals with the presentation of the Breastfeeding Guidelines – elaborated from the articulation between Primary Care and the maternity of a health center in Madrid, Spain – and breastfeeding techniques (Table 3).16

Regarding the main results of the studies, five clinical trials identified a significant difference in the effectiveness of professional support in maintaining BF and EBF.9-13

Another study did not show statistically significant differences between the experimental and control groups despite demonstrating that professional support was beneficial concerning BF self-efficacy. As well as another study pointed out concerning the care provided by midwives in the postnatal period, no significant difference was found in the number of mothers breastfeeding at six or 17 weeks in the experimental and control groups.14-5

A study also revealed that professionals should appropriate strategies that facilitate learning about breastfeeding to offer better support and care to puerperal women in this period, favoring the maintenance of BF (Table 2).16

Of the studies that showed statistical differences, the maintenance rates, frequency, and duration of BF and EBF increased with the professional support provided, either in the hospital or at home (Table 3).9-13
It was observed that professional support contributed to the reduction of anxiety in the group of mothers studied. Furthermore, there was also a greater sense of competence of parental and family responsibility in mothers who received home visits from the nursing team. 

Table 3. Description of applied support interventions and main results of included studies. Senhor do Bonfim (BA), Brazil, 2022.

<table>
<thead>
<tr>
<th>AUTHORS</th>
<th>APPLIED SUPPORT INTERVENTIONS</th>
<th>MAIN RESULTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ÇİFTÇİ; ARIKAN, 2011</td>
<td>Five home visits two weeks before the mothers returned to work and ending when the babies were six months old. Breastfeeding techniques were taught to mothers in the experimental group during the visits.</td>
<td>The rate of natural feeding (exclusive breastfeeding) among trained mothers was higher than that of untrained mothers. Breastfeeding frequency affects maternal anxiety levels; the mothers' level of anxiety decreased with increasing breastfeeding frequency.</td>
</tr>
<tr>
<td>MARTÍN-IGLESIAS et al., 2011</td>
<td>Presentation of the Breastfeeding Guidelines in a centralized and punctual clinical session for all UBS lasting 60 minutes and training lasting one and a half hours for all health professionals.</td>
<td>Strategies must be found to facilitate effective counseling by professionals about breastfeeding and to support women during the breastfeeding period. By applying the guide based on the recommendations, clinical variability can be reduced and the care received by patients can be improved.</td>
</tr>
<tr>
<td>MCKEEVER et al., 2002</td>
<td>Follow-up by either a standard care group (standard care and standard length of hospital stay) or an experimental group (standard hospital care with early discharge and home support from nurses who were certified lactation consultants).</td>
<td>The duration of breastfeeding is affected by early postpartum support. More mothers of full-term infants in the experimental group were exclusively breastfeeding during follow-up (p ¼ 0.02) compared with the control group. No significant differences in breastfeeding occurred between mothers with short-term infants in the experimental and standard care groups.</td>
</tr>
<tr>
<td>MCQUEEN et al., 2011</td>
<td>A standardized and individualized nursing intervention protocol was designed and administered to increase mothers' self-efficacy in breastfeeding. Intervention group participants received three individualized self-efficacy sessions with the researcher: two in the hospital and one over the phone. Control group</td>
<td>The results suggest that the intervention was feasible; there was a high degree of adherence to the protocol, and most mothers reported that the intervention was beneficial. Mothers in the intervention group had higher rates of breastfeeding self-efficacy, duration, and exclusivity at the fourth and eighth weeks postpartum. However, differences between groups</td>
</tr>
</tbody>
</table>
participants received standard hospital and community care. were not statistically significant.

PAUL et al., 2012
Home nursing visits scheduled within a maximum of two days after discharge. The time of care in the office was determined by the physician. At two weeks, hospital readmissions and emergency department visits were uncommon, and there were no differences between study groups in these outcomes or in frequency of unplanned outpatient visits. Newborns in the nursing home visit group were more likely to breastfeed at the second week of life (92.3% vs 88.6% (P =.04) and two months (72.1% vs 66.4%). %) (P =.05), but not at six months of life. No group differences were detected for maternal mental health or satisfaction with care, but mothers in the nursing home visit group had a greater sense of parental competence (P, 01 at two weeks and two months).

SANTIAGO et al., 2003
Follow-up with a trained pediatrician, accompanied by the multidisciplinary breastfeeding team (GAMA) and individual consultations with the pediatrician. It was found, significantly, that, at the end of the follow-up, groups 1 and 2 had similar percentages in relation to exclusive breastfeeding and higher than group 3 (p = 0.002). Pacifier use was negatively associated with exclusive breastfeeding (p = 0.003). It was also found that the higher the mother’s education, the greater the possibility of exclusive breastfeeding (p = 0.041).

WALLACE et al., 2006
An experimental protocol of verbal-only counseling on positioning and attachment, delivered at first feeding on the postnatal ward, compared with routine care by a skilled midwife. Mothers in the experimental group more often held the baby in their arms and received “hands-free advice”, but fewer babies in the experimental group than in the control group were fed: 59% (106/180) vs. 67% (118/175), p=0.1. No significant difference was found in the number of mothers breastfeeding at six or 17 weeks in the experimental and control groups (discontinuation of exclusive breastfeeding: 76% (130/172) vs. 77% (126/163) at six weeks; 96% (167 /174) vs. 96% (161/168) at 17 weeks; odds ratio 1.02, 95% CI 0.77 to 1.22; p ¼ 0: 8; stopped breastfeeding: 35% (61/172)
32% (53/167) at six weeks; 63% (109/173) vs. 60% (101/167) at 17 weeks; odds ratio 1.10, 0.84 to 1.45; \( p = 0.5 \).

**BASHOUR et al., 2008**

Four home visits on days 1, 3, 7 and 30 postpartum or one home visit on the third postpartum day. A significantly higher proportion of mothers in groups A and B reported exclusively breastfeeding their babies (28.5% and 30%, respectively), compared to group C (20%), which received no visits. There were no reported differences between groups for the other outcomes. While postpartum home visits significantly increased exclusive breastfeeding, other outcomes did not change.

**Source:** Authors own elaboration. Senhor do Bonfim (BA), Brazil, 2022.

**Risk of bias in included studies**

The risk of bias tables display the performance for each domain. Figures 2 and 3 provide a visual summary of the methodological quality judgment. Most trials were assessed as having a low risk of bias across the six domains, except for the blinding of participants, practitioners, and outcome assessors. As predicted, masking was rarely adopted.

![Risk of bias graph](image)

**Figure 2. Risk of bias graph: analysis of the authors' judgments on each risk of bias item presented as percentages in the included studies.**

**Source:** Authors own elaboration. Senhor do Bonfim (BA), Brazil, 2022.
In addition to the physiological issues determining breastfeeding, other related factors increase this practice. One of these is the communication between the health team and the mothers/family, in addition to the set of actions that make this strategy viable. The guidelines offered and the practices taught in the health services and at home play an important role in determining and maintaining breastfeeding. The woman's social network intrinsically influences this process and, therefore, requires continuous support from the family, community, and, mainly, health professionals.

Of the eight studies investigated, the applied interventions aimed at promoting self-efficacy in breastfeeding showed that professional hospital or home support beneficially affects breastfeeding patterns in the groups studied, and these benefits are centered on maintaining exclusive breastfeeding. In this sense, it is confirmed that the autonomy for installing and maintaining breastfeeding is achieved from the development of technical skills that are not limited only to obtaining information, but also to the encouragement and professional instrumental support during the breastfeeding process.¹⁷

The maintenance of exclusive breastfeeding was observed in the interventions applied at home and in the hospital, which points out that it is not the place that influences the effectiveness of the intervention, but the technique used and the professional who assists the woman. The knowledge about how information is acquired about the benefits of breastfeeding and breastfeeding techniques contributes to the woman's decision-making process to initiate and maintain this practice. Whether during prenatal care, at home, or during hospitalization, the aspects related to acquiring this knowledge contribute to achieving women's autonomy in breastfeeding.¹⁸

Strategies involving verbal monitoring and training in breastfeeding techniques were prevalent in the investigated studies and were effective for the intended outcomes. Investment in breastfeeding support groups in the hospital environment, which extend to home care when necessary, should be
thought of as a strategy to promote BF and maintain it, serving as an additional tool to satisfy breastfeeding needs.\textsuperscript{19} In this way, a change can be observed in the patterns of admissions and searches for hospital services, with a reduction in these, as observed in one of the investigated studies.

The duration of the applied interventions and the continuous presence of the responsible professional also seem to influence the effectiveness of breastfeeding support. Of the investigated studies, the longest follow-up time was identified in home visits, with a maximum of four to five visits. Interventions centered in the hospital environment were shorter, with two to three days of follow-up, or followed the service routine. In this perspective, a study points out that health professionals who make themselves authentically present and available to mothers when necessary, whether in the hospital environment or at home, make them feel more comfortable and confident about the practice of breastfeeding, since the professional would have enough and adequate time to meet the demands.\textsuperscript{20}

Having enough time to assist these women also implies a more empathetic, positive, and warm approach, making communication easier, such as solving doubts and active listening. Verbal counseling, either during home visits or in individualized sessions at the hospital, was part of the approaches used in the interventions studied. In this sense, a facilitating communication style is necessary to achieve the intended objectives. The women who experienced the bilateral dialogue and the exchange of knowledge were able to obtain better perceptions of what they were taught and point out the breastfeeding learning process as a positive event.\textsuperscript{20}

Individualized intervention protocols also showed a greater degree of adherence among women. Professionals, when using computerized advice that is inappropriate for the mother's individuality, reproduce a reductionist approach that denies the critical care of the mother-child dyad. In this regard, the importance of systematized and individual assistance during breastfeeding support is highlighted, especially during hospitalization. There is, therefore, a need for greater investments in health policies to promote, protect and support this practice in all sectors and health services.\textsuperscript{17}

The training of professionals is also of paramount importance concerning the provision of a high quality breastfeeding support, as pointed out in one of the investigated studies. Research points out that the percentage of mothers who abandon breastfeeding under the pretext of the unsustainability of breast milk is similar to the percentage of diffusion of conflicting information and inadequate recommendations by health professionals, a fact that points to the importance of training them to encourage the maintenance of breastfeeding.\textsuperscript{21}

In this way, the guidelines provided by health professionals, the responsibility for dissemination through the media, and investments in publicity campaigns to promote breastfeeding can be better explored by the health system.\textsuperscript{17}

Concerning the professionals who participated in the applied interventions, the nursing team plays a leading role, although other professionals have been also present. This finding is in line with another study, which highlights the importance of the nurse's role in breastfeeding, standing out as the health professional most involved in activities to promote and protect breastfeeding.\textsuperscript{22}

In addition to the benefits for the mother-child dyad, benefits were also observed at the psychological levels of the applied interventions. The increase in breastfeeding frequency was linked to the decrease in anxiety in the group of mothers studied. The way how health professionals approach the women and the family nucleus should facilitate the spontaneous exposure of doubts and concerns. Thus, during the process of counseling mothers, professionals should promote self-confidence and self-esteem and prepare them for decision-making, thus reducing anxiety related to the breastfeeding process.\textsuperscript{21}
Also, it was observed that mothers who received home visits from the nursing team had a greater sense of paternal and family responsibility competence. Breastfeeding is constituted by a bond between mother and child and between the entire family nucleus, including the father. Therefore, the father or partner represents an important figure in this scenario, being able to present himself as a protector and encourager of the practice of breastfeeding. Professionals must be careful to include fathers in actions involving the promotion of breastfeeding.\textsuperscript{22}

Given the above, it is understood the importance of knowing the impacts and particularities of the support strategies that most help health professionals in the support that should be offered, especially: hospital follow-up (verbal and instrumental), hospital follow-up combined with home visits, home visits, and professional training.

Whether verbal or instrumental, the influence of guidance and support in this scenario is notorious when it comes to hospital follow-up, as it is the first environment in which the mother has contact with breastfeeding.\textsuperscript{2} In this context, a study points out that of 52.9\% of women who faced difficulty breastfeeding during hospitalization, 44.7\% reported a reduction in these difficulties after discharge, demonstrating that the hospital support received by women can positively impact overcoming challenges.\textsuperscript{23}

BF failure is often the result of a lack of guidance on preventing or solving common and frequent difficulties at the beginning of breastfeeding. Therefore, support during the puerperal period and other months are extremely important so mothers can be guided and encouraged to practice EBF until the sixth month, preventing early weaning.\textsuperscript{4} This support can be understood as a continuity of hospital care and must be made possible by primary care and services, such as home visits.

After the baby's birth, the nursing mother needs to be assisted regarding expectations, experiences, and life projects. The woman cannot be seen only as an object of the child's BF. For this reason, even BF adherence should be treated with caution since judgments about women's decisions can distance them from the health service when made dogmatically. BF should be encouraged and supported, but it should not be considered an exclusive right of the child. When she is seen only as fulfilling duties towards the child, the nursing mother can develop emotional conflicts that make it even more difficult to establish and maintain BF.

In addition to the physical needs of the dyad during breastfeeding, health professionals must be aware of all the particularities mentioned above, including the intrinsic needs of each family. Intervening positively in the biopsychosocial sphere of the breastfeeding mother reduces the individual and social vulnerability they are subjected to, and promoting breastfeeding in the unique universe that belongs to each nursing mother.\textsuperscript{2}

The intervention of the health professional, who incorporates the family nucleus and the support network, allows the woman to plan together with the network. These alternatives enable moments of rest and leisure, such as creating groups that bring together pregnant and puerperal women for information sharing.\textsuperscript{4} Again, the mother should not be solely responsible for meeting the baby's needs but also as a woman who, during breastfeeding, needs support for emotional and social needs.

Despite the above, the present systematic review has limitations regarding the risk of bias in the primary studies due to methodological restrictions and the heterogeneity of interventions, comparators, and definitions of outcomes, which made it impossible to carry out the meta-analysis and, therefore, the quantitative assessment of aspects involving professional support strategies. Furthermore, despite an exhaustive search with high sensitivity, few studies responded to the established objective.
CONCLUSION

Among the eight studies included in this review, the interventions applied consisted of home follow-up, hospital follow-up, or both. In addition to verbal support, by providing guidance, professionals trained in breastfeeding techniques seek to facilitate this process for the assisted mother. Most of the time, the interventions were applied by nurses or nursing staff, but there was also the participation of physicians and multidisciplinary teams specialized in breastfeeding.

The professional support provided to the mother-child dyad in various care spheres has a beneficial influence on breastfeeding aspects, mainly its maintenance and exclusivity. There was evidence of improvement in rates of the duration of exclusive breastfeeding and maintenance and frequency of breastfeeding, a fact associated with professional support provided by hospitalization or home care. Professional support interventions were also identified as beneficial to promote breastfeeding self-efficacy.

The findings of this study point to the need for health services to formulate strategies that train professionals to meet the demands of postpartum women, especially concerning breastfeeding. Municipal, state, and federal managers are also responsible for encouraging health teams to offer more effective and targeted maternal and child care. Considering the benefits attributed to breastfeeding for the mother-child dyad, the family nucleus, the community, and the health service as a whole, the health professional, must play the role of encouraging breastfeeding from prenatal care, providing the nursing mother with tools with knowledge and supporting it in all dimensions beyond the biological.

It is suggested that more robust clinical trials be conducted to evaluate better interventions concerning professional support in maternal and child health.

CONTRIBUTIONS

The authors contributed equally to the design of the research project, data collection, analysis, and discussion, as well as to the writing and critical review of the content, with intellectual contribution, and to the approval of the final version of the study.

CONFLICT OF INTERESTS

The authors declare no conflict of interest.

FUNDING

The study was funded by the Research Support Foundation of the State of Bahia, FAPESB.

ACKNOWLEDGMENTS

We thank the University of the State of Bahia, UNEB – Campus VII, and the Research Support Foundation of the State of Bahia, FAPESB, for the technical and material assistance, and for the financial support provided through a scientific initiation scholarship, during the years 2020 and 2021.
REFERENCES


DelRio MT, Gutiérrez AMC. Effectiveness of an implementation strategy for a breastfeeding guideline in Primary Care: cluster randomised trial. BMC Family Practice [Internet]. 2011[cited June 25]; 12(144): 2-8. DOI: https://doi.org/10.1186/1471-2296-12-144


Correspondence
Kellen Karoline dos Santos Lira
Email: karoline19amaral@gmail.com

Submission: 20/04/2022
Accepted: 14/11/2023
Published: 02/01/2023

Section Editor: Fernanda Machado S. Rodrigues
Scientific Editor: Tatiane Gomes Guedes
Managing Editor: Maria Wanderleya by Lavor Coriolano Marinus

Copyright© 2023 J Nurs UFPE online/JNUOL. This is an open access article distributed under the CC BY 4.0 Assignment CreativeCommonsAttribution-ShareAlike 4.0 InternationalLicense, which allows others to distribute, remix, adapt and create from their work, even for commercial purposes, as long as they give it due credit for the original creation. It is recommended to maximize the dissemination and use of licensed materials.