





# RIASE

REVISTA IBERO-AMERICANA DE SAÚDE E ENVELHECIMENTO  
REVISTA IBERO-AMERICANA DE SALUD Y ENVEJECIMIENTO

**INTERVENTIONS BY OBSTETRIC NURSES IN PROMOTING  
SUCCESSFUL BREASTFEEDING**

**INTERVENÇÕES DO ENFERMEIRO OBSTÉTRA NA PROMOÇÃO  
DO SUCESSO DO ALEITAMENTO MATERNO**

**INTERVENCIONES DEL ENFERMERO OBSTÉTRICO EN LA  
PROMOCIÓN DEL ÉXITO DE LA LACTANCIA MATERNA**

Cláudia Sofia Veva Faustino<sup>1</sup> , Rita Isabel Guerreiro Peixeiro<sup>2</sup> ,  
Paula Cristina Vaqueirinho Bilro<sup>3,4</sup> , Maria Otília Brites Zangão<sup>4</sup> .

<sup>1</sup>Hospital da Misericórdia de Évora, Serviço de Consulta Externa, Évora, Portugal.

<sup>2</sup>Unidade Local de Saúde do Baixo Alentejo, Hospital José Joaquim Fernandes, Serviço de Obstetrícia, Beja, Portugal.

<sup>3</sup>Unidade Local de Saúde do Alentejo; Unidade de Saúde Familiar Alcáides, Montemor-o-Novo, Portugal.

<sup>4</sup>Universidade de Évora, Comprehensive Health Research Centre (CHRC), Escola Superior  
de Enfermagem São João de Deus, Departamento de Enfermagem, Évora, Portugal.

Received/Recebido: 2025-07-16 Accepted/Aceite: 2025-08-06 Published/Publicado: 2025-08-08

DOI: [http://dx.doi.org/http://dx.doi.org/10.60468/r.riase.2025.11\(0\).766.85-92](http://dx.doi.org/http://dx.doi.org/10.60468/r.riase.2025.11(0).766.85-92)

©Authors retain the copyright of their articles, granting RIASE 2025 the right of first publication under the CC BY-NC license,  
and authorizing reuse by third parties in accordance with the terms of this license.

©Os autores retêm o copyright sobre seus artigos, concedendo à RIASE 2025 o direito de primeira publicação sob a licença CC BY-NC,  
e autorizando reuso por terceiros conforme os termos dessa licença.

**VOL. 11 SUPPLEMENT 1 JULY 2025**

## Abstract

**Introduction:** Breastfeeding is known for its many benefits, both for the baby and the mother. In this context, the obstetric nurse's support is crucial, so that breastfeeding is effective and the woman feels safe and supported at this important and vulnerable time. The health professional's interventions are therefore aimed at ensuring the success of breastfeeding in the life of the newborn, as well as promoting informed decisions on the part of new mothers. **Objective:** To identify interventions by obstetric nurses that promote successful breastfeeding. **Methods:** Systematic Literature Review using the MeSH descriptors – “Breastfeeding”, “Nurse”, “Role”, and using the intersection operator “AND” to formulate the Boolean equation, through the search engines EBSCOhost and PubMed. **Results:** The results indicate that continuous training and the practice of effective communication, from pregnancy to postpartum support, are important interventions by the obstetric nurse, in order to promote an environment conducive to adherence to and maintenance of exclusive breastfeeding. Organizational barriers, such as work overload and lack of integration between hospital and primary care, are indicated as interferences to this provision of care. **Conclusion:** it is concluded that the continuous training of obstetric nurses, the integration of care and the individualization of the support provided, with special attention to the socio-cultural needs of each woman, are essential factors to ensure the success of breastfeeding.

**Keywords:** Breastfeeding; Education, Continuing; Nurse Midwives; Role.

## Resumo

**Introdução:** O aleitamento materno é conhecido pelos seus inúmeros benefícios, tanto para o bebé quanto para a mãe. Neste contexto, torna-se fulcral o apoio do enfermeiro obstetra, de forma a que ocorra uma amamentação eficaz e a mulher se sinta segura e apoiada neste momento tão importante e vulnerável. Assim, as intervenções do profissional de saúde visam o sucesso do aleitamento materno na vida do recém-nascido, bem como promover decisões informadas e esclarecidas por parte das recém-mamãs. **Objetivo:** Identificar as intervenções do enfermeiro obstetra que promovam o sucesso do aleitamento materno. **Métodos:** Revisão Integrativa da Literatura utilizando os descritores MeSH – “*Breastfeeding*”, “*Nurse*”, “*Role*”, e recorrendo ao operador de interseção “AND” para formular a equação booleana, através dos motores de busca EBSCOhost e PubMed. **Resultados:** Os resultados indicam que a formação contínua e a prática de uma comunicação eficaz, desde a gravidez até ao apoio no pós-parto são intervenções importantes do enfermeiro obstetra, de forma a promover um ambiente propício à adesão e manutenção do aleitamento materno exclusivo. São apontadas como interferências a esta prestação de cuidados, as barreiras organizacionais, tais como a sobrecarga de trabalho e a falta de integração entre os cuidados hospitalares e primários. **Conclusão:** A formação contínua dos enfermeiros obstetras, a integração dos cuidados e a individualização do apoio prestado, com especial atenção às necessidades socioculturais de cada mulher, são fatores essenciais para garantir o sucesso do aleitamento materno.

**Palavras-chave:** Amamentação; Educação Contínua; Enfermeiro Obstetra; Papel.

## Resumen

**Introducción:** La lactancia materna es conocida por sus numerosos beneficios, tanto para el bebé como para la madre. En este contexto, el apoyo de la enfermera obstétrica es crucial, para que la lactancia sea eficaz y la mujer se sienta segura y apoyada en este momento tan importante y vulnerable. Así pues, las intervenciones del profesional sanitario tienen como objetivo el éxito de la lactancia materna en la vida del recién nacido, así como promover decisiones informadas e ilustradas por parte de las nuevas mamás. **Objetivo:** Identificar las intervenciones de las enfermeras obstétricas que favorecen el éxito de la lactancia materna. **Métodos:** Revisión sistemática de la literatura utilizando los descriptores MeSH – “*Lactancia materna*”, “*Enfermera*”, “*Rol*”, y utilizando el operador de intersección “AND” para formular la ecuación booleana, a través de los motores de búsqueda EBSCOhost y PubMed. **Resultados:** Los resultados indican que la formación continua y la práctica de la comunicación efectiva, desde el embarazo hasta el apoyo posparto, son intervenciones importantes de la enfermera obstétrica, con el fin de promover un entorno propicio para la adherencia y el mantenimiento de la lactancia materna exclusiva. Las barreras organizativas, como la sobrecarga de trabajo y la falta de integración entre el hospital y la atención primaria, se señalan como interferencias a esta prestación de cuidados. **Conclusión:** se concluye que la formación continua de las enfermeras obstétricas, la integración de la atención y la individualización del apoyo prestado, con especial atención a las necesidades socioculturales de cada mujer, son factores esenciales para asegurar el éxito de la lactancia materna.

**Descriptores:** Educación Continua; Enfermera Obstetra; Lactancia materna; Rol.

## Introduction

Breastfeeding is recognized as one of the main factors contributing to positive impacts on maternal and child health. Breastfeeding is identified as essential and a public health priority<sup>(1)</sup>.

According to the World Health Organization [WHO] (2024), breastfeeding is one of the most effective ways to ensure a child's health and survival, classifying breast milk as the ideal food for babies. It is safe, clean, and contains antibodies that help protect against many common childhood illnesses. Breast milk provides all the energy and nutrients a baby needs for the first few months of life, continues to provide up to half, or more, of a child's nutritional needs during the second half of the first year and up to a third during the second year of life, and reduces infant mortality from preventable causes by up to 12%, requiring coordinated action between health professionals and the public system<sup>(2)</sup>.

At such an important moment as childbirth, it is essential to provide emotional support to women as they begin breastfeeding and to maintain fluid communication, always focusing on the wishes of the new mother. This is considered the only way to support the mother, physically and psychologically, so that she can breastfeed in the first hour of life. After childbirth and as soon as possible, it is extremely important to start breastfeeding, with benefits not only for the newborn but also for<sup>(3)</sup>. UNICEF (United Nations Children's Fund) and WHO recommend that babies be breastfed within one hour of birth and be exclusively breastfed for the first six months of life<sup>(1,4)</sup>. For breastfeeding to be effective in the first hour of life, it is essential that the mother receives adequate support and assistance. Providing clear information, answering questions, and offering a moment of tranquility and empathy are some important strategies for ensuring that the experience occurs safely and continuously, from the very first moments of the newborn's life.

The care provided by obstetric nurses and the advice they give are associated with an increase in the willingness of mothers in the immediate postpartum period to start breastfeeding, or at least to be more receptive to trying to do so. In this context, obstetric

nurses play a central role in promoting, welcoming, and adhering to breastfeeding. Their intervention should involve technical support, but also emotional support and ongoing education. In this way, the aim is to overcome physical, emotional, and cultural barriers that may hinder the practice of breastfeeding<sup>(3)</sup>.

The empathy and respect shown by healthcare professionals in the conscious decision-making process of postpartum women are considered crucial to the successful implementation of the teachings provided<sup>(5)</sup>. Thus, nursing care must be personalized, providing effective interventions and allowing women to exercise their rights within their specific context<sup>(6)</sup>.

The obstetric nurse should provide continuous care for the woman, family, and baby both during hospitalization and at home, as the nurse's assistance is extremely important in order to avoid complications with breastfeeding. By communicating the benefits of exclusive breastfeeding, as well as providing guidance and physical, psychological, and emotional preparation, it is possible to minimize some of the challenges that may arise, in addition to guaranteeing women all of their rights<sup>(7)</sup>.

This integrative literature review aims to identify obstetric nurse interventions that promote successful breastfeeding.

## Methods

The research question was formulated using the PIO methodology (Table 1), and through this approach, the following research question was developed: "What interventions by obstetric nurses promote successful breastfeeding?"

Table 1: Development of the PIO question.

P	Population	Obstetric Nurse
I	Intervention	Interventions performed by the obstetric nurse
O	Outcome	Successful breastfeeding

The methodology will be based on the guidelines proposed by the Joanna Briggs Institute (JBI) (2020): formulation of the question for the systematic review of the literature; specification of the methods for selecting studies; data extraction procedure; analysis and evaluation of the studies included in the systematic review of the literature; data extraction and presentation of the review/synthesis of the knowledge produced and published<sup>(9)</sup>.

For the purpose of preparing this review, data were collected through research in the following scientific repositories and databases: EBSCO (Elton B. Stephens Company), whose databases used were CINAHL, Cochrane, MEDLINE, and MedicLatina. PUBMED (database of the National Center for Biotechnology Information of the US National Library of Medicine) was also used. In addition, significant descriptors included in the Medical Subject Headings (MeSH) were adopted: Breastfeeding, Nurse midwife, Role. These were accessed through the Educational Roaming network (EDUROAM) of the University of Évora.

Once the terminology mapping was done, we used the Boolean operators AND, OR, and AND NOT to build advanced search strategies, where AND means intersection, OR means union, and AND NOT means exclusion. This resulted in the following Boolean equation for the search: “Breastfeeding AND Role AND Nurse midwife”.

The inclusion criteria were full-text articles with abstracts available in Portuguese and English that addressed the role of obstetric nurses in breastfeeding. Exclusion criteria included studies repeated in the databases used and studies addressing wet nurses, as well as studies dealing with other methods of nutrition and food formulas for newborns.

First, we conducted a search on PUBMED using the keywords Breastfeeding (AND) Role (AND) Nurse midwife and obtained 70 articles. Subsequently, we refined the results with the following search limits: last 5 years, full text, English, Portuguese, and obtained 50 results. We read the title and abstract of each article, excluding those that did not correspond to the topic addressed, obtaining 38 articles. Of these

articles, we proceeded to read the full text and excluded those that did not meet the criteria established to respond to the topic studied, leaving only one article. The same was done in EBSCO, where, after applying the search limits, 31 articles were obtained from the 39 articles found. After reading the title and abstract, we reached a total of 20 articles, and after reading the full text, 5 articles were selected. Data collection and management were carried out using the specific screening and organization tool, Rayyan software, which facilitated the screening of studies and removal of duplicates.

Based on the PRISMA methodology, we present a flowchart illustrating the selection process and criteria applied to the final number of articles (Figure 1). The entire process of identifying and screening articles was carried out by two independent reviewers. If necessary, a third reviewer would be included to resolve any contradictions, but this was not necessary.

## Results

Six articles were selected for detailed analysis in order to answer the proposed research question. Table 2 presents the included studies, highlighting the respective samples, type of study, main methodological characteristics, objectives, and results achieved. The level of scientific evidence was assessed following the JBI guidelines.

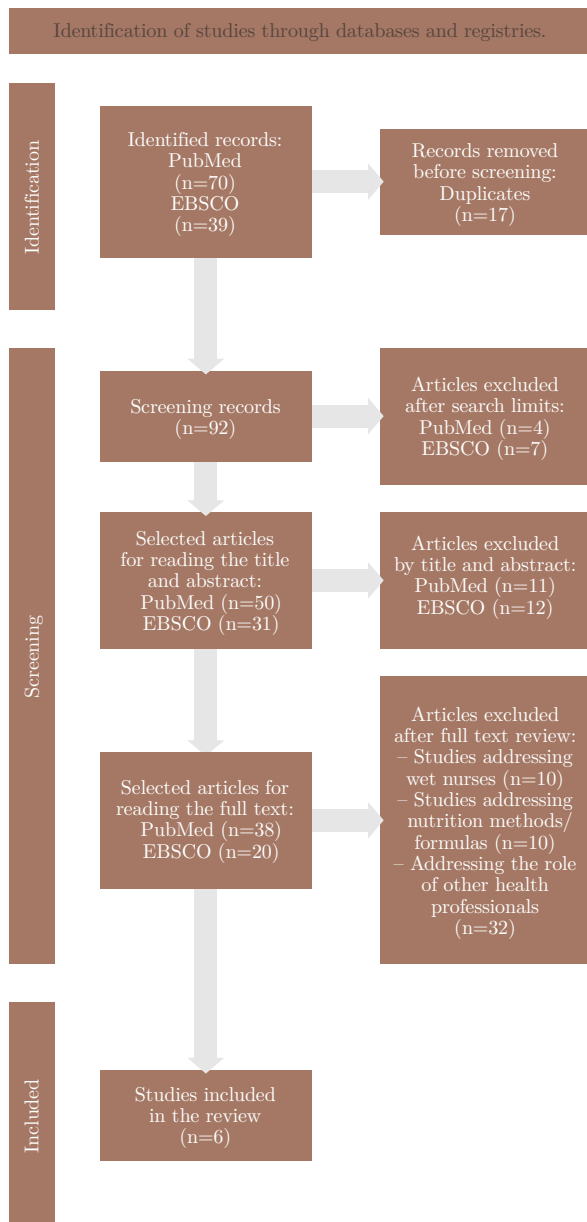


Figure 1: Article selection process – PRISMA flowchart.

## Discussion

The studies selected in this integrative review demonstrate the importance of obstetric nurse interventions in the success of breastfeeding, with their intervention being fundamental in promoting, protecting, and supporting it. Even so, some obstacles that compromise the effectiveness of this practice are revealed, with the training of health professionals being one of the main issues identified.

As observed in two studies<sup>(11,12)</sup>, it is noted that both pre-service training and continuing education throughout professional life are crucial for the development of nurses' skills in breastfeeding counseling. In-service training, considered essential, was identified as the main source of practical learning, especially in settings such as primary care health units, where direct experience with mothers has a significant impact on nurses' confidence. However, the lack of practical opportunities and work overload remain significant obstacles to the effective implementation of breastfeeding support, as pointed out in one of the studies<sup>(11)</sup> which reinforces the need for continuous and structured training, both theoretical and practical, in which effective communication is also a key element, to ensure that nurses are properly trained to respond to the needs of each woman and her baby.

Still in the context of communication, it is important to note that the level of effectiveness of breastfeeding support also depends on the empathy and sensitivity of the healthcare professional. As highlighted in the study by Sousa and Souza<sup>(13)</sup>, Counseling should not be restricted to technical aspects, but should involve active listening, avoid judgment, and be adapted to the sociocultural reality of each woman. This more humanized approach is reinforced in one of the studies, which points to flaws in continuity of care, especially in the postpartum period, where several women report a lack of individualized follow-up after hospital discharge. The lack of adequate support during this critical period by nurses is reflected in the search for external sources, indicating a significant gap in the training of these professionals and in the organization of the services where they perform their duties<sup>(5)</sup>. The involvement of the family support

Table 2: Presentation of the articles included.

Article/Country/Year	Authors	Type of study/Level of evidence	Objective of the study	Sample	Results obtained
"Nurse's performance in promoting breastfeeding" Brazil (2020)	Barboza <i>et al.</i>	Literature Review. Level V.	Recognize whether nurses take initiatives to promote breastfeeding and what measures are taken.	6 articles.	There are limitations in the practice of promoting breastfeeding, and a greater need for training and continuing education for nurses.
"Breastfeeding in Primary Healthcare Setting: Evaluation of Nurses and Midwives Competencies, Training, Barriers and Satisfaction of Breastfeeding Educational Experiences in Northern Ghana" Ghana (2021)	Dubik SD, Yirkyio E, Ebenezer KE	Cross-sectional study. Level IV.	Assessing the skills and satisfaction of midwives' teaching practices on breastfeeding.	104 nurses midwives.	Need for more training and qualifications on breastfeeding for better counseling. The barriers identified were: low adherence to recommendations by postpartum women, heavy workloads, and inadequate materials.
"Health professionals' breastfeeding practices and associated factors: a cross-sectional study" Brazil (2023)	Machado MED, Christoffel MM, Velarde LGC, <i>et al.</i>	Analytical cross-sectional study . Level IV.	Analyze healthcare professionals' practices regarding breastfeeding and associated factors.	38 healthcare professionals.	The practice revealed some weaknesses, highlighting the need to address the issue through strategies such as ongoing professional training and systematic monitoring of breastfeeding.
"Nurses' role in promoting and supporting breastfeeding during prenatal care: an integrative review" Brazil (2023)	Costa MM, Martins EL, Silva TF, <i>et al.</i>	Integrative Literature Review. Level V.	Challenging nurses' practice in promoting breastfeeding during pregnancy.	9 articles.	Nurses play an important role in promoting breastfeeding during pregnancy, helping mothers to start and continue breastfeeding. There is room for improvement in care and education to ensure more comprehensive and continuous support, with a view to reducing early weaning.
"The nurse's role in promoting breastfeeding: integrative review" Portugal (2024)	Galvão D, Silva E	Integrative Literature Review. Level V.	Analyze the role of nurses in promoting breastfeeding.	7 articles.	Nurses develop educational activities on breastfeeding starting during pregnancy, intensifying this support in the postpartum period. Women especially value empathetic support and an approach that strengthens their confidence in their ability to breastfeed. Also noteworthy is the importance of person-centered communication that is sensitive to their needs and respectful of their autonomy and decisions related to breastfeeding.
"Nurse's role in encouraging breastfeeding" Brazil (2024)	Souza J, Kronbauer F, Adiers E, <i>et al.</i>	Integrative Literature Review. Level V.	Understanding the importance of nurses' role in encouraging breastfeeding.	10 Articles.	Nurses play a central role in encouraging breastfeeding, accompanying women from pregnancy onwards, promoting education, guidance, and teaching about the importance of breastfeeding for mother and child, addressing difficulties and solutions, and ensuring comprehensive, decisive, humane, and continuous care.

network is another essential element for adherence to breastfeeding, which is why the use of interactive methodologies, such as simulations and social media, has proven effective in increasing pregnant women's knowledge about this topic, with special attention given to strategies adapted to each woman's sociocultural conditions. This family involvement and community support are decisive for exclusive breastfeeding to become a common practice, highlighting the need for even more effective educational actions during pregnancy<sup>(14)</sup>.

Similarly, childcare consultations were also identified as important for monitoring breastfeeding. In this context, nurses play a unique role, being responsible for advising mothers not only on breastfeeding, but also on other essential aspects of maternal and child health. However, the lack of continuous training policies and the lack of integration between hospital and primary care compromise the continuity of breastfeeding support, and many professionals are not adequately prepared to provide support after the woman and child are discharged<sup>(15)</sup>.

In summary, although obstetric nurses are recognized as essential in promoting and maintaining breastfeeding, gaps in their training, lack of continuity in care, and organizational barriers are significant limitations to the effectiveness of their work. The evidence from the studies analyzed reinforces the urgent need to invest in the continuing education of these health professionals, focusing on both technical and relational skills, as well as on adequate support structures that favor integration between different levels of care. Strengthening these practices will enable nurses to perform their role more effectively, ensuring the success of breastfeeding and the well-being of mothers and their babies.

### Limitations

Limitations observed in this integrative literature review include the fact that the guiding question was not fully answered, since the main objective of this study is to identify the interventions of obstetric nurses, and we mainly encounter obstacles to these interventions. Nevertheless, these limitations served as a

basis for assessing what interferes with the practice of obstetric nurses in supporting and ensuring the success of breastfeeding.

Therefore, it is important to continue the study to find concrete interventions by obstetric nurses in the practice of breastfeeding and to inform health professionals of their role and level of intervention in this area.

explore the specific needs of each woman and each family, with the aim of ensuring the success of breastfeeding in a wide range of social contexts.

## Conclusion

This review highlights the fundamental role of obstetric nurses in promoting, protecting, and supporting breastfeeding. The results reveal that, despite recognition of the importance of breast milk and the commitment of these professionals to supporting mothers, organizational barriers, lack of continuing education, and work overload compromise the effectiveness of the intended interventions. Pre-service training and continuing education are crucial for the development of nursing skills in breastfeeding counseling, with practical experience in contexts such as primary health care being a valuable source of learning. In addition, empathetic communication, active listening, and adaptation to the sociocultural realities of each woman are essential aspects to ensure adherence to breastfeeding. Postpartum support, which is often neglected, is also a critical area that needs improvement, especially in terms of continuity of care and involvement of the family support network.

Despite the difficulties identified, the findings reinforce that continuous training of nurses and effective integration between hospital and primary care are fundamental to improving breastfeeding practices. Empowering mothers through appropriate educational strategies and emotional support is extremely important for achieving global health goals related to breastfeeding.

Finally, it is essential that public health policies promote strategies to support breastfeeding, focusing on improving working conditions for nurses and educating families. Future research should investigate the effectiveness of continuing education strategies and



# References

1. Agosti M, Tandoi F, Morlacchi L, Bossi A. Breastfeeding beyond six months: Evidence of child health benefits. *Nutrients*. 2023;15(24): 5103. Available from: <https://doi.org/10.3390/nu15245103>
2. World Health Organization. Breastfeeding [Internet]. Geneva: WHO; 2024 [cited 2025 May 20]. Available from: <https://www.who.int/news-room/fact-sheets/detail/breastfeeding>
3. Silva LAT, Fonseca VM, Oliveira MIC, Silva KS, Ramos EG, Gama SGN. Professional who attended childbirth and breastfeeding in the first hour of life. *Rev Bras Enferm*. 2020; 73(2):e20180448. Available from: <https://doi.org/10.1590/0034-7167-2018-0448>
4. UNICEF Portugal. Aleitamento materno [Internet]. Lisboa: UNICEF Portugal; 2024 [accessed 2025 April 16]. Available from: <https://www.unicef.pt/aleitamento-materno/>
5. Galvão D, Silva E. The role of nursing support in breastfeeding practices: Challenges in post-discharge care. *Matern Health J*. 2024; 11(1):45-50.
6. Anjos CR, Almeida CS, Picanço CM. Percepção das enfermeiras sobre o aleitamento materno no puerpério imediato [Internet]. *Rev Baiana Enferm*. 2022;36(4):n.p. [accessed 2025 April 16]. Available from: <https://periodicos.ufba.br/index.php/enfermagem/article/view/43626>
7. Cassiano MLRM, Abel T, Sant'Ana GCSF. Prática da amamentação no puerpério imediato: assistência do enfermeiro [Trabalho de Conclusão de Curso na Internet]. Vila Velha: Universidade de Vila Velha; 2024 [cited 2025 March 24]. Available from: <https://repositorio.uvv.br/bitstream/123456789/1852/4/TCC%20Maria%20Luiza%20Ribeiro%20Mattos%20Cassiano%20e%20Thayn%20a1%20Abel.pdf>
8. Guerreiro A. Quero amamentar com confiança e conforto: aprender o essencial e superar os desafios. 1.<sup>a</sup> ed. Lisboa: Pergaminho; 2024.
9. Joanna Briggs Institute. Joanna Briggs Institute reviewers manual: 2015 edition [Internet]. Adelaide: Joanna Briggs Institute; 2015 [accessed 2025 April 16]. Available from: [http://joannabriggs.org/assets/docs/sumari/Reviewers-Manual\\_Methodology-for-JBI-Scoping-Reviews\\_2015\\_v2.pdf](http://joannabriggs.org/assets/docs/sumari/Reviewers-Manual_Methodology-for-JBI-Scoping-Reviews_2015_v2.pdf)
10. Galvão MCB, Ricarte ILM. Revisão sistemática da literatura: conceituação, produção e publicação. *Logeion Filos Inf*. 2019;6(1):57-73. Available from: <https://doi.org/10.21728/logeion.2019v6n1.p57-73>
11. Dubik YE. The importance of pre-service and in-service training for breastfeeding counseling. *J Health Educ*. 2021;47(2):134-41.
12. Machado E, Silva P, Costa M, et al. The role of healthcare professionals in promoting exclusive breastfeeding in primary care. *J Breastfeed Med*. 2023;32(4):211-8.
13. Sousa G, Souza CS. The emotional and cultural aspects of breastfeeding support in nursing practice. *J Nurs Pract*. 2022;58(3):123-30.
14. Costa J, Silva T, Oliveira A, et al. Educational interventions for promoting exclusive breastfeeding during pregnancy: A focus on interactive methodologies. *Rev Saude Publica*. 2023;57(5):98-106.
15. Barboza L, Almeida R, Gomes P, et al. The role of nursing in promoting breastfeeding: A legal and health perspective. *Pediatr Nurs*. 2020;35(6):50-8.



Corresponding Author/Autora Correspondente  
 Maria Otília Zangão – Universidade de Évora,  
 Escola Superior de Enfermagem São João de  
 Deus, Departamento de Enfermagem, Évora,  
 Portugal.  
[otiliaz@uevora.pt](mailto:otiliaz@uevora.pt)

Authors' contributions/Contributo das Autoras  
 CF; RP: Study coordination, study design,  
 data collection, storage, and analysis, review,  
 and discussion of results.  
 CF; RP: Data collection and analysis.  
 OZ; PB: Study coordination, review, and  
 discussion of results.  
 All authors have read and agreed with the  
 published version of the manuscript.

Ethical Disclosures/Responsabilidades Éticas  
 Conflicts of Interest: The authors have no  
 conflicts of interest to declare.  
 Financial Support: This work has not received  
 any contribution, grant or scholarship.  
 Provenance and Peer Review: Not  
 commissioned; externally peer reviewed.  
 Conflitos de Interesse: Os autores declararam  
 não possuir conflitos de interesse.  
 Suporte Financeiro: O presente trabalho não  
 foi suportado por nenhum subsídio ou bolsa.  
 Proveniência e Revisão por Pares: Não  
 comissionado; revisão externa por pares.

©Authors retain the copyright of their articles,  
 granting RIASE 2025 the right of first publication  
 under the CC BY-NC license, and authorizing  
 reuse by third parties in accordance with the  
 terms of this license.

©Os autores retêm o copyright sobre seus  
 artigos, concedendo à RIASE 2025 o direito de  
 primeira publicação sob a licença CC BY-NC,  
 e autorizando reuso por terceiros conforme os  
 termos dessa licença.