Review Article

Türk Fen ve Sağlık Dergisi
Turkish Journal of Science and Health

Volume 6
Number 3
Year 2025
Pages 150-163

e-ISSN: 2717-7173 https://dergipark.org.tr/tr/pub/tfsd

Received: 05.06.2025 *Accepted:* 25.08.2025 https://doi.org/10.51972/tfsd.1714831

Bibliometric Analysis of Nursing Studies Related to Breastfeeding in Newborns

Nurcan Karamercimek [1]*, Gülay Demir [2], İlknur Yıldız [3]

[1]Sivas Cumhuriyet University, Institute of Health Sciences, Sivas, Türkiye
[2]Sivas Cumhuriyet University, Vocational School of Health Services, Department of Medical Services and Techniques, Sivas, Türkiye
[3]Sivas Cumhuriyet University Faculty of Health Sciences, Department of Nursing, Sivas, Türkiye

ABSTRACT:
Purpose: This study aims to comprehensively examine nursing research on newborn breastfeeding and identify prominent topics via bibliometric analysis.
Material and Methods: In this study, detailed bibliometric analysis was executed utilizing the Biblioshiny application from the bibliometrix package, alongside RStudio and VOSviewer tools. A search within the Scopus database, employing the keywords "neonatal," "neonatal health," "breastfeeding," and "nurse," identified 317 articles published across 145 journals between 2014-01-01 and 2024-01-01. The analysis encompassed variables such as the annual publication rate, three-parameter analysis, journal publication count, author influence, keyword analysis, thematic assessment, factor analysis, and the status of countries and organizations.
Results: "Spatz DL" was the most prolific author, and *Breastfeeding Medicine* ranked highest in publication volume. The most cited study was **"**Effectiveness of a Nurse-Led Intensive Home-Visitation Programme for First-Time Teenage Mothers (Building Blocks): A Pragmatic Randomised Controlled Trial**"** by Robling et al. International collaboration rate was 15.77%, with the UK and USA leading both in partnerships and publication output. "Cardiff University" and "University of Sydney" showed strong research productivity. Frequently used keywords included “breastfeeding,” “human milk,” “infant,” and “breastfeeding support.”
Conclusion: This study offers a comprehensive insight into breastfeeding in newborns and the nurse’s role in its management, highlighting its global significance. By identifying key trends, international collaborations, and research gaps, it provides a strategic foundation for future studies. Understanding these patterns will strengthen evidence-based nursing practices and support relevant health policy development.
Keywords: *Newborn; newborn health; breastfeeding; nurse; bibliometric analysis*

**Corresponding author: Nurcan Karamercimek, email: nurcankaramercimek@gmail.com*

This study was presented as an oral presentation at the 2nd National Integrated Nursing Midwifery Congress held in Ankara between 08.05.2025-10.05.2025.

INTRODUCTION

Breast milk is the primary source of nutrition that supports the growth and development of the newborn and contains all the nutrients they need, and it is easy to digest. Breast milk meets the physical and mental needs of infants in the first six months of life alone, while it can meet at least 50% of the daily energy that 6-12-month-old babies need, and approximately 33% of the daily energy that they need from one year to two years of age alone. Breast milk, which is beneficial for both the newborn and the mother in many physical, mental and social areas, has also been used as a source of nutrition in historical processes. In the historical inscriptions of the Ebers Papyrus (Ancient Egypt 1550 BC), it is stated that breast milk should be used as a source of

nutrition for the newborn, especially up to the age of three. The intensive study of breast milk and breastfeeding in academic studies since the 1970s shows that the importance of this issue is still current. Article 24 of the Convention on the Rights of the Child (1989) explicitly refers to the benefits of breastfeeding, emphasizing the importance of informing and supporting families in this regard (Convention on the Rights of the Child, 1989; Samur, 2008; Sinha et al., 2021; Tanrıkulu et al., 2012; Victoria et al., 2016; WHO, 2023). Breastfeeding also supports the mental development of the newborn, reduces infant mortality by protecting them from non-communicable diseases and many infections such as meningitis and urinary tract infection. It also supports the immune system. It is also known to protect the mother from breast and ovarian cancers, asthma and obesity-like chronic diseases. Therefore, the role of the nurse is important because the nurse is the first health professional consulted just before breastfeeding (Barutçu et al., 2020; Ip et al., 2007; Kartal and Gürsoy, 2020; Tiryaki and Altınkaynak, 2021; WHO, 2023). In cases where the newborn baby does not suck effectively, does not want to suck, has digestive problems, and mothers do not have sufficient knowledge and experience, which will negatively affect breastfeeding, nurses, especially when counseling mothers, support mothers' self-confidence and increase their self-efficacy, ensuring that unwanted situations are prevented with the correct breastfeeding technique. Nurses take their place as health professionals who explain in which positions they should breastfeed, how long the average breastfeeding period is, and the storage conditions of expressed milk, by using their roles of providing care, education and counseling (Aluş Tokat and Okumuş, 2013; Conk et al., 2018; Çerçer and Nazik, 2023; Özkara et al., 2016; Sinha et al., 2021; Törüner and Büyükgönenç, 2023; Yenal et al., 2013). According to UNICEF (2023) data, the rate of starting breastfeeding in the first hour after birth is 46% in the world, and those who only receive breast milk in the first 2 days after birth is 67%. While the Southern Africa region has the lowest breastfeeding rate in the world with 39% in the first 60 minutes, East Asia and Pacific countries have the lowest breastfeeding rate in the world with 59% in 48 hours (UNICEF, 2023). When the World Health Organization 2025 Global Nutrition Goals are examined, it is aimed to reach at least 50% of breastfeeding in the first 6 months of life. Although access to breast milk increased by 10% between 2012 and 2024, reaching 48%, this goal has still not been achieved due to various problems (UNICEF, 2024; WHO, 2014). When breastfeeding rates up to the 9th month in Türkiye are examined, according to 2018 TNSA data, it was determined as 20.8% in 2003, 41.6% in 2008, 30.1% in 2013 and 40.7% in 2018. Considering the benefits of breastfeeding, it is seen that breastfeeding rates are low. When the obstacles to achieving the desired level of breastfeeding rates in the world and in Türkiye are investigated, it is determined that the share of nurses is quite high. Because breastfeeding is a skill acquired through knowledge and experience, the nurse is a key point in increasing breastfeeding rates with her roles such as care giving, defending patient rights, and providing education in the pre- and post-natal periods. The study conducted by Onbaşı and her colleagues in 2011 reveals that even just providing breastfeeding education increases breastfeeding and feeding rates, which will support the health of the mother and newborn. In a randomised controlled trial conducted by Şimşek Çetinkaya and colleagues in 2024, a breastfeeding education programme was implemented for mothers through an online counselling system led by nurses. The results of the programme showed that mothers' positive attitudes towards breastfeeding had increased. This finding suggests that breastfeeding education programmes can also have positive effects on attitudes that directly influence breastfeeding. In a study conducted in South India, it was determined that 28.3% of mothers breastfeed in an inappropriate position. In other words, almost one third of mothers breastfeed in an inappropriate position (Çerçer and Nazik, 2023; Health Statistics Yearbook, 2022; İşbay and Gerçek, 2019; Nancy et al., 2022; Onbaşı et al., 2011; Şimşek Çetinkaya et al.,2024; Tiryaki and Altınkaynak, 2021). Considering the rates of breastfeeding and ineffective breastfeeding in the world, the importance of nurses' roles in providing care, education and counseling cannot be ignored. Especially the fact that mothers who give birth for

the first time or after cesarean delivery are more worried while performing the breastfeeding act gives the nurse, who will provide counseling on this issue, some duties. The use of factors such as setting realistic goals while fulfilling duties such as education, counseling and care giving, starting breastfeeding early, using technological devices while providing education, and preferring up-to-date training materials positively affects breastfeeding. It is also very important for the nurse to have sufficient knowledge and equipment in the face of these duties (Annagür and Annagür, 2012; Farrag et al., 2019; Nancy et al., 2022; Şensoy and Yüksel Koçak, 2021; Yanıkkerem et al., 2014). In a study conducted by Maastrup and colleagues in 2021, it was found that breastfeeding education programmes for nurses increased breastfeeding rates (Maastrup et al., 2021). Therefore, not only education provided to mothers but also nurses being more knowledgeable in this area has a positive effect on breastfeeding rates. Bibliometric analysis stands out as a central analysis technique in the analysis of academic studies by making systematic reviews. It is used to reveal the importance of the subject and to be a source of light for science by examining the interactions of publications studied on the subject and the complex scientific literature network with different analyses such as publication production level, analysis of citations, efficiency of authors, usage trend of key concepts, utility level of institutions, distribution of geographical regions in activity (Demir et al., 2024a; Demir et al., 2024b). When the literature is examined, considering the number of publications and many factors, the role of nurses in the management of the breastfeeding process, which will primarily affect the health of the newborn, takes its place as a current issue. There is no bibliometric analysis on this subject. This study is the first bibliometric analysis aimed at filling this gap in literature.

MATERIAL and METHODS

In this study, the relationships between scientific studies are examined using the bibliometric analysis method. In line with the study, the keywords "newborn, newborn health, breastfeeding, nurse" were scanned in the Scopus database. The findings obtained from the literature review systematically reveal the activity analysis and scientific orientation analysis methods through RStudio software. In the analysis process, the distinct trends in the literature are examined in detail using a holistic approach, the most effective research areas, authors, academic journals and institutions. Keyword analysis was applied using VOSviewer software to visualize the relationships between keywords and reveal conceptual structures. The bibliometric metrics used in this study consist of annual publication count, total citation count, average citation count, author productivity level, country collaboration rate, keyword co-occurrence analysis, three-parameter analysis, and thematic mapping. Since the main objective of the research is to reveal scientific production trends, international collaboration networks, and research themes in the field under investigation, indicators such as the h-index, g-index, and m-index, which measure author or journal impact levels, have not been included in the analysis. This choice stems from the need to prioritise the content dimension and conceptual relationships in the bibliometric analysis, in line with the study's objective. Scopus was the only data source used in this study. This choice was made because Scopus's broad scope, detailed citation data, and advanced filtering capabilities were appropriate for the purpose of the study. However, the use of a single database limits the scope of the study, as publications not included in Scopus are excluded from the analysis. The population of this research consists of 1024 articles obtained by scanning the keywords "newborn", "newborn health", "breastfeeding" and "nurse" in the Scopus database. However, when limited by inclusion factors such as document type, publication language and publication year, 317 articles were used as a sample.

Research Gaps

This study examines the development and research trends of scientific literature on the nursing factor in newborn health and newborn breastfeeding. The study aims to seek answers to the research questions below:

1. What are the roles and responsibilities of nurses in increasing breastfeeding rates

among newborns?
2. How do the education and counselling services provided by nurses before and after birth affect the breastfeeding process?
3. Who is the author with the most publications in the field of breastfeeding in newborns?
4. Which is the journal, article, university and country that publishes the most in the field of breastfeeding in newborns?
5. What are the most trending topics in the field of breastfeeding in newborns?
6. Which countries cooperate in the field of breastfeeding in newborns?
7. What are the main research points and thematic researches in this field?

The data obtained aims to provide a comprehensive perspective in this field by revealing the productivity in the scientific field about the importance of breastfeeding and nursing that support newborn health, and by revealing the effective research areas and its place in the historical process.

Data Collection

This study examines the development and research trends of scientific literature on the nursing factor in newborn health and breastfeeding through bibliometric analysis. The analysis steps to be followed while performing bibliometric analysis were also taken into account in this study. The analysis processes of this research are summarized in Figure 1. In the first step of the study, keywords were scanned in the Scopus database in the form of "newborn", "newborn health", "breastfeeding" and "nurse". When the publication year is limited to 2014–2024, the publication language is English, and the document type is a published article, 317 articles are included, while articles for 2025, other publication languages, book chapters, reviews, proceedings, survey studies, and editorial publications are excluded from the scope of the study (Figure 1). The data collection process was carried out between February 15, 2025, and June 5, 2025. A total of 317 articles published between 2014 and 2024 have focused on various aspects of breastfeeding and the promotion of breast milk feeding. These studies have explored the experiences, attitudes, and challenges faced by both mothers and healthcare professionals during the breastfeeding process. They have also evaluated the impact of breastfeeding education, counseling services, and healthcare policies. Overall, the findings emphasize that knowledge, support, and professional guidance play a crucial role in sustaining successful breastfeeding practices.

Analysis of Findings

In the diagram showing the steps of the research, while the number of publications, author contribution analysis, the effectiveness and cooperation networks of the countries, journal and document types, thematic and factor analysis studies are carried out through RStudio (biblioshiny) and VOSviewer programs; In the 3rd step, the data obtained were interpreted and evaluated. The detailed results of the analysis are also included in the findings section.

Ethical Approval

In this study, there is no need for ethics committee approval since no direct intervention was performed on any human or animal subjects and only previously published studies were used as a data source. The study was carried out within the framework of ethical principles and in accordance with the Helsinki Declaration.

RESULTS

Performance Analysis

317 articles were accessed in 145 journals between 2014-2024 with the Scopus database. 1450 authors have studied with the keywords 'newborn', 'newborn health', 'breastfeeding', 'nurse'. 28 authors have contributed to the literature alone. International authors' cooperation is 15.77% and the average age of a work is 6.4 years (Figure 2).

Distribution of Studies by Years

Although the number of publications varies between 18-39 depending on the years of the articles, the number of publications has fluctuated over the years. Especially 2017 and 2018 are the years with the highest increase. The average number of

citations per article based on publication year varies between 0.77-34.92, and the average was determined as 13.93 (Table 1).

Three-Parameter Analysis

Three-parameter analysis examines three factors such as country, author, and keyword. Three-parameter analysis is a finding obtained only by using Biblioshiny software.8 The most important factors of this analysis are the country "Italy", the author "Mosca F", and the keyword "breastfeeding" (Figure 3).

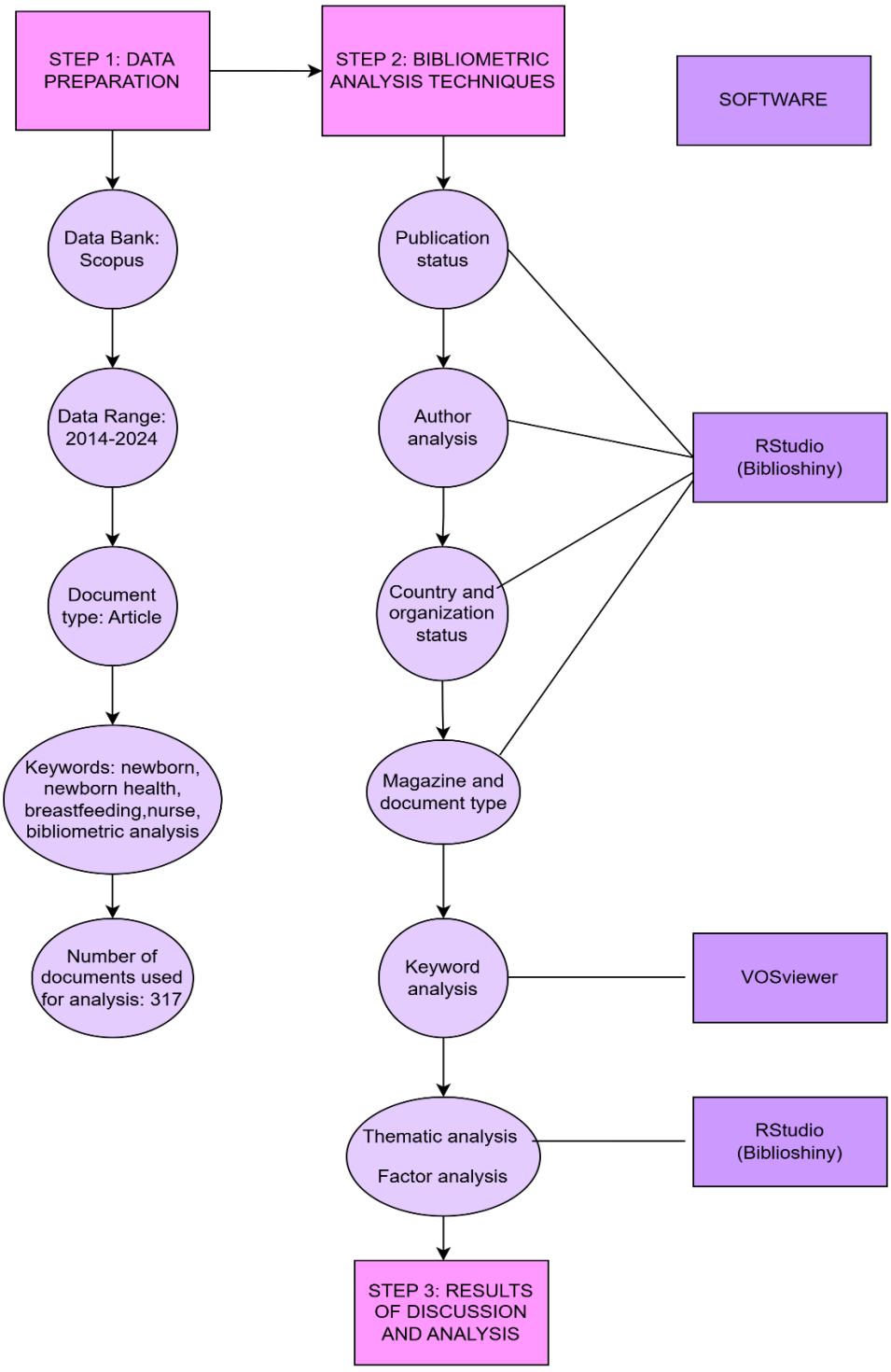

Figure 1. Flow diagram of bibliometric analysis

Figure 2. Performance analysis

Table 1. Status of publications and citations by year

Year of publication	Number of articles	Average number of citations per article
2024	30	0,77
2023	18	3,22
2022	23	4,83
2021	23	6,26
2020	28	11,18
2019	30	16,67
2018	39	21,59
2017	33	17,73
2016	25	34,92
2015	29	22,10
Total	278	Average 13,93

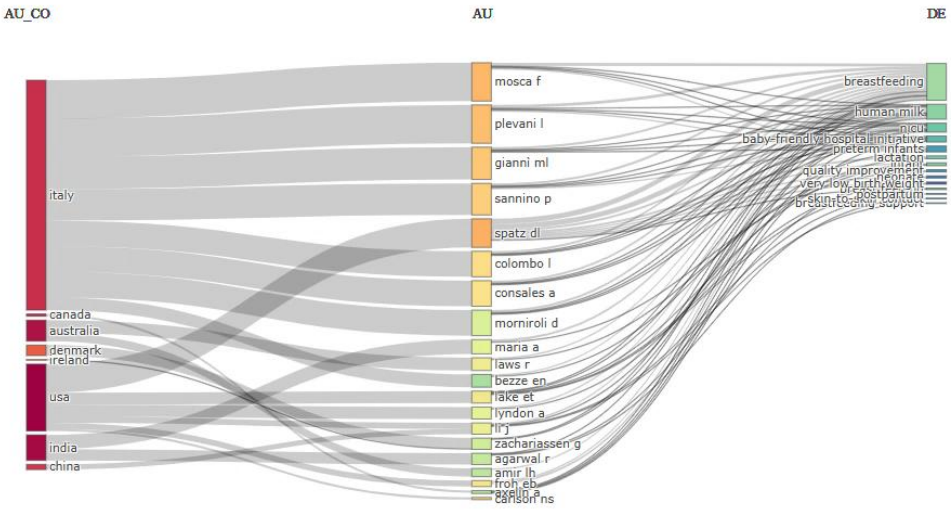

Figure 3. Three-Parameter Analysis

Effectiveness and organization status of countries

When analyzing countries, when the effectiveness of countries in the academic field is examined, countries painted in dark blue are the countries that have contributed the most publications to the literature, while countries painted in blue are countries that publish less, and countries painted in gray are countries that have not contributed any publications to the literature (Demir et al., 2024b; Demir et al., 2024c). When analyzing countries in the field of newborn health, breastfeeding, and nursing, the USA was determined as the country that contributed the most to the literature with 457 publications (Figure 4).

In the international cooperation map, thick brown lines indicate that the number of collaborations between countries is high, while thin brown lines indicate that the number of collaborations is low (Demir et al., 2024a). The United Kingdom and America are world leaders in cooperation. The United Kingdom and Kenya cooperated 3 times, America and Canada 3 times, America and Kenya 3 times, America and the United Kingdom 3 times, and India and Norway 2 times (Figure 5).

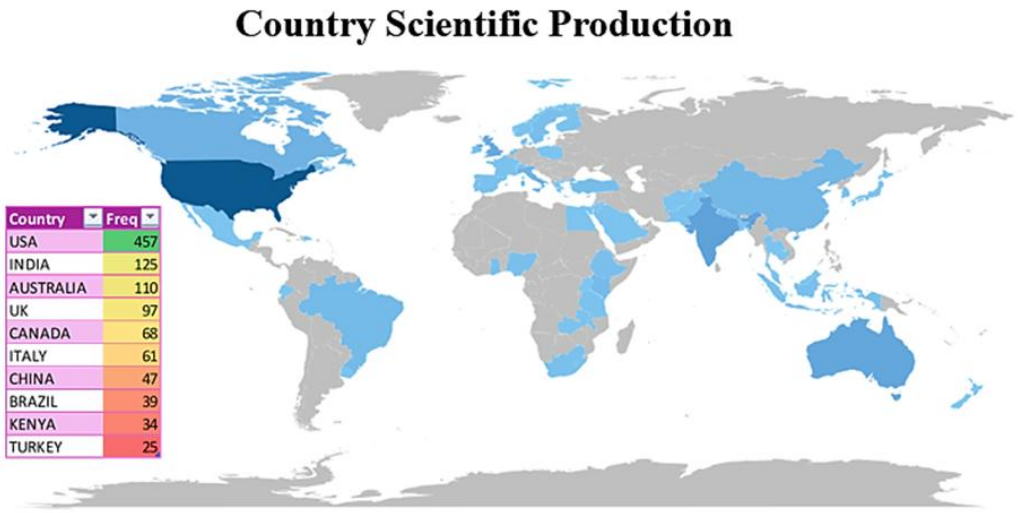

Figure 4. The most productive countries in the scientific process

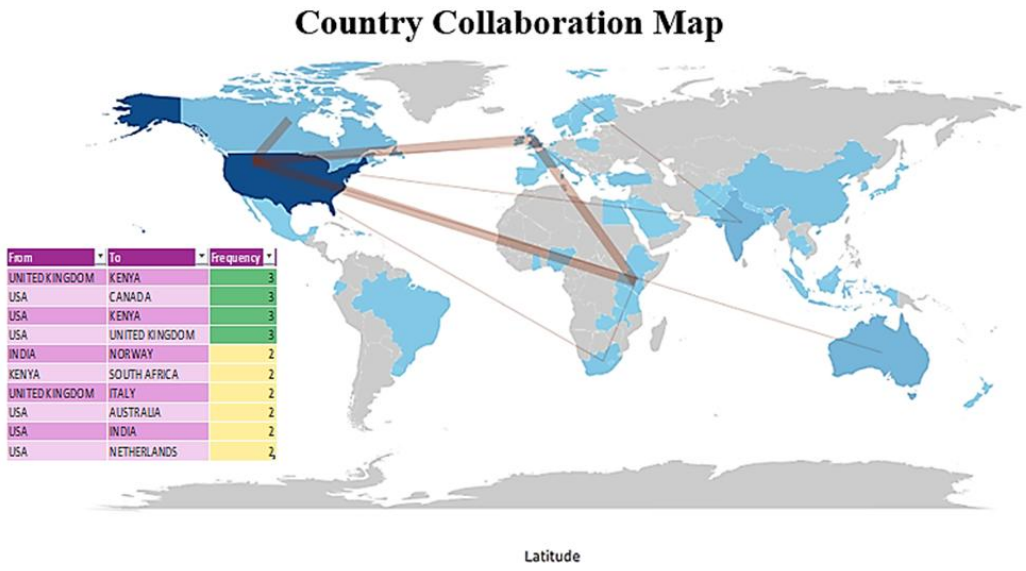

Figure 5. Map of countries' cooperation

Systematic Analysis of the Article

The journal "Breastfeeding Medicine" (n=19) ranks first in the world in terms of the number of publications, while "Cardiff University" and "Sydney University" (n=21) are the most active universities in terms of publication productivity. Spatz DL (n=7) is the most productive author. The article "Effectiveness of a nurse-led intensive home-visitation programme for first-time teenage mothers (Building Blocks): a pragmatic randomised controlled trial" written by Robling et al. is the most noticed and cited study by other authors (n=216) (Table 2).

Qualified Modeling Analysis

Qualified Modeling analysis; It is the application of calculation techniques in a holistic way with the method of analyzing and modeling scientific and technical studies by visualizing them (Demir et al., 2024c).

Table 2. Systematic Analysis of Articles (author, citation count, institution, and journal)

Authors	Number of publications
SPATZ DL	14
MOSCA F	5
PLEVANI L	5
GIANNÌ ML	4
SANNINO P	4
CARLSON NS	3
COLOMBO L	3
CONSALES A	3
FROH EB	3
LAKE ET	3

Institutions	Number of publications
CARDIFF UNIVERSITY	21
UNIVERSITY OF SYDNEY	21
UNIVERSITY OF HEALTH AND ALLIED SCIENCES	18
UNIVERSITY OF MILAN	18
UNIVERSITY OF WASHINGTON	17
NOTREPORTED	16
DEAKIN UNIVERSITY	15
ELIZABETH GLASER PEDIATRIC AIDS FOUNDATION	15
UNIVERSITY OF PENNSYLVANIA	14
FONDAZIONE IRCCS CA' GRANDA OSPEDALE MAGGIORE POLICLINICO	13

Article title	DOI	Total citations
ROBLING M, 2016, LANCET	10.1016/S0140-6736(15)00392-X	216
SAVAGE JS, 2016, JAMA PEDIATR	10.1001/jamapediatrics.2016.0445	203
VEDAM S, 2018, PLOS ONE	10.1371/journal.pone.0192523	176
MILLER TR, 2015, PREV SCI	10.1007/s11121-015-0572-9	91
FORD SL, 2019, AM J CLIN NUTR	10.1093/ajcn/nqz006	88
KIEFFER MP, 2014, J ACQUIRED IMMUNE DEFIC SYNDR	10.1097/QAI.0000000000000372	81
ENWERONU-LARYEA C, 2015, BMC PREGNANCY CHILDBIRTH	10.1186/1471-2393-15-S2-S4	78
AKSEER N, 2016, LANCET GLOBAL HEALTH	10.1016/S2214-109X(16)30002-X	76
MORRISON AH, 2019, MCN AM J MATER CHILD NURS	10.1097/NMC.0000000000000566	75
GEPHART SM, 2014, ADV NEONATAL CARE	10.1097/ANC.0000000000000052	72

Magazines	Number of publications
BREASTFEEDING MEDICINE	19
JOGNN - JOURNAL OF OBSTETRIC, GYNECOLOGIC, AND NEONATAL NURSING	17
ADVANCES IN NEONATAL CARE	14
NURSING FOR WOMEN'S HEALTH	14
MIDWIFERY	11
MCN THE AMERICAN JOURNAL OF MATERNAL/CHILD NURSING	10
BMC PREGNANCY AND CHILDBIRTH	9
INTERNATIONAL BREASTFEEDING JOURNAL	9
JOURNAL OF HUMAN LACTATION	9
PLOS ONE	9

Factor analysis, which is grouped into three clusters using keywords, provides convenience when interpreting keywords (Demir et al., 2024a). The large red cluster includes the words "Procedures, infant, newborn, mother, adult, education, male, nurse, breastfeeding, midwife, human experiment, breastfeeding education, organization and management, controlled study, child", the second large cluster includes "Breast milk, milk human, neonatal intensive care unit, neonatal", and the third large cluster includes the words "health knowledge, attitudes practice, psychology, surveys and questionnaires, cross sectional studies" (Figure 6). When the thematic map is examined, it is seen that the keywords are mostly among the themes. Topics such as "human, newborn, breastfeeding, female, humans" are included between the motor theme and the basic theme. Topics that have not been studied sufficiently such as "controlled study, child, major clinical study, newborn care, child health" are included between the motor and niche themes. Topics such as "prematurity, neonatal intensive care unit, intensive care units, neonatal, infant, premature, milk, human" are available among emerging or declining themes (Figure 7).

The word cloud shows the most used words in the literature. Breastfeeding 562, female 547, human 312, adult 292, newborn 291, humans 288, infant 284, infant newborn 273, pregnancy 245 are the most used words in the literature (Figure 8).

According to VOSviewer program data, when keywords are examined, a total of 178 concepts, 17 clusters, 803 links, and 1,029 total link strength were determined. "breastfeeding" (cluster 17), "exclusive breastfeeding" (cluster 6), "breastfeeding support" (cluster 1), "infant" (cluster 11), "neonatal mortality" (cluster 7), and "very low birth weight" (cluster 4) are the six most important clusters. The most important keywords in cluster 17 (breastfeeding), which is brown, are "knowledge, human milk, preterm, home visitation".

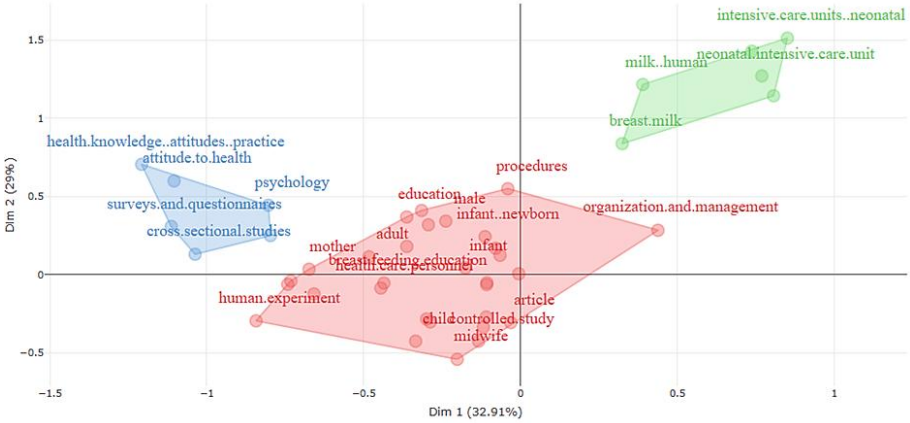

Figure 6. Three-cluster factor analysis

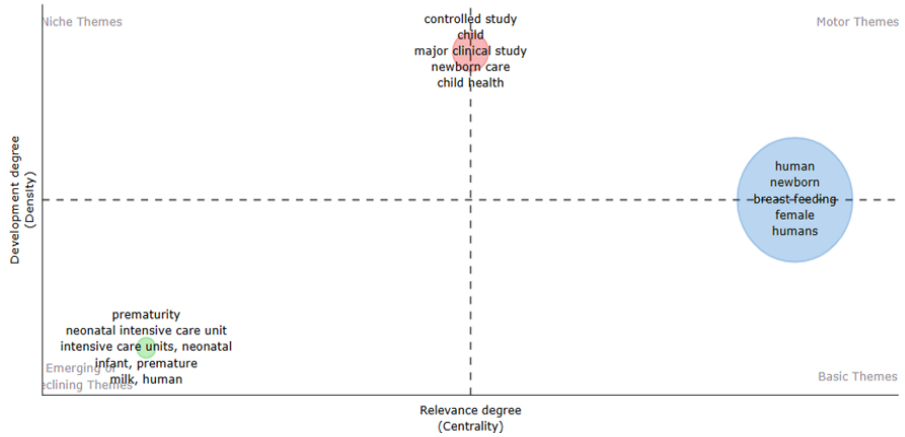

Figure 7. Thematic Map

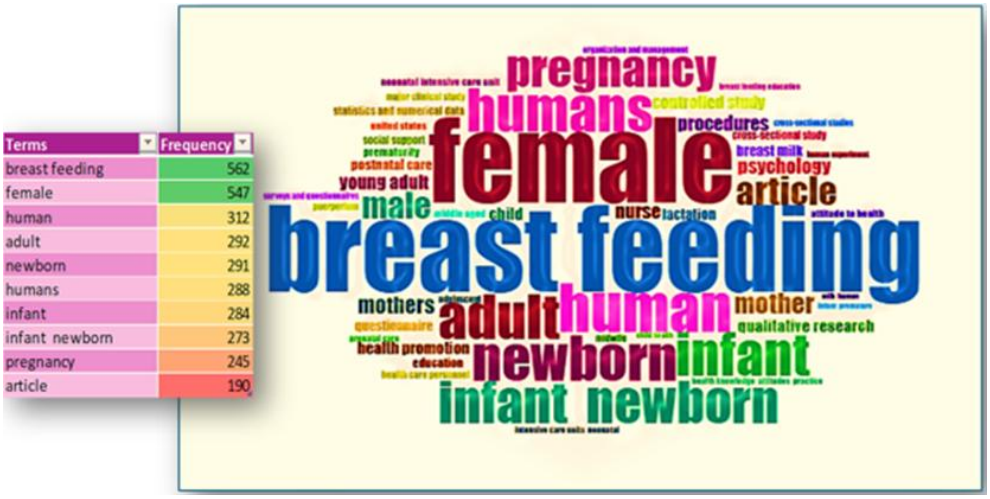

Figure 8. Word Cloud

The words "motherhood, baby friendly, preterm birth" are in cluster 6 (exclusive breastfeeding), which is blue. The words "nurses, child health, breastfeeding duration" are in cluster 1 (breastfeeding support), which is red. While the words "mothers, nursing, qualitative study, primary health care, midwives" are in cluster 11 (infant), which is green, the words "nurse education, newborn care, human milk feeding" are in cluster 7 (neonatal mortality), which is orange, and the keywords "randomized controlled trial, pregnant, covid-19" are in cluster 4 (very low birth weight), which is yellow (Figure 9).

The colors navy blue, blue, dark green, light green, and yellow on the timeline indicate the keywords used from 2017 to 2021 (Demir et al., 2024b). The keywords "policy", "neonatal intensive care unit", "very low birth weight", and "breastfeeding education" in navy blue were studied between 2017 and 2018. The keywords "human milk", "formula feeding", "self efficacy", and "primary care" in blue were studied between 2018 and 2019. The keywords "breastfeeding", "infant", and "breastfeeding support" in dark green were studied between 2019 and 2020. The keywords "quality improvement", "nurses", and "kangaroo mother care" in light green were studied between 2020 and 2021. The keywords "education", "counseling", "maternal health", "pregnancy", "pediatrics", "breastfeeding barriers", "maternal education", and "education" in yellow are still used in the literature (Figure 10).

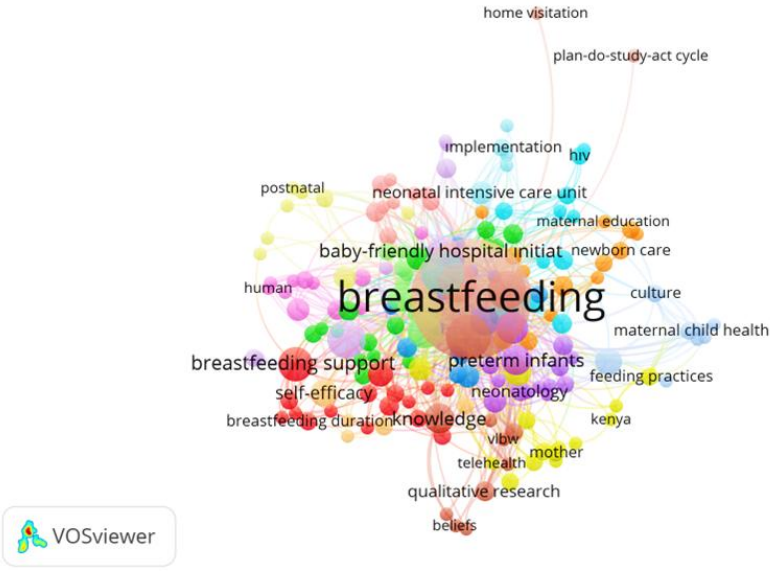

Figure 9. Keyword network map

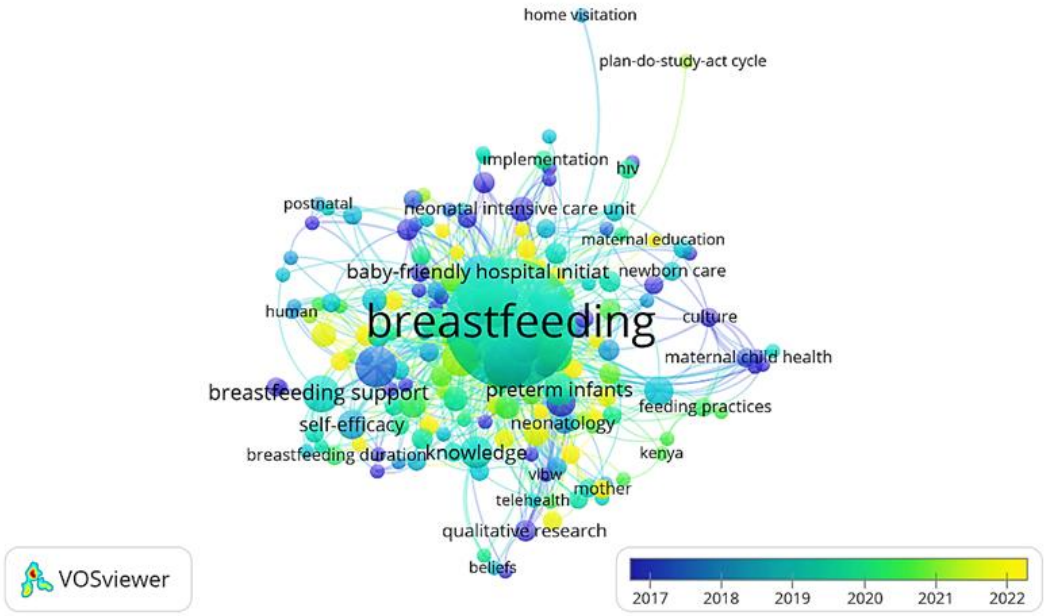

Figure 10. Timeline of keywords

DISCUSSION

Considering the findings of the study, although there have been fluctuations in the number of publications in the fields of breastfeeding and neonatal nursing over the past decade, the increase in the number of publications, author collaboration, and international collaboration indicates that joint studies are being conducted in the field of breastfeeding in newborns and that researchers around the world are coordinating scientific publications and projects. This highlights the importance of the field, but despite the extent of collaboration, the rates remain low. When examining the reasons for the low rate of international collaboration, differences in research infrastructure and funding opportunities, language and communication barriers, and incompatibilities in data sharing and ethical regulations are identified. Additionally, the fact that field studies such as breastfeeding and newborn care are dependent on local conditions limits international partnerships. This situation necessitates the development of strategies to overcome existing barriers in order to increase collaboration in the field. In addition, the continued widespread use of keywords such as 'education,' 'counselling,' 'maternal health,' 'pregnancy,' 'paediatrics,' 'breastfeeding barriers,' 'maternal education,' and 'nurses' in the literature indicates that the educational and counselling roles of nurses in supporting breastfeeding, as well as the importance of factors that hinder breastfeeding, remain an ongoing research topic. The themes that emerge from the keyword analysis support the critical role of breastfeeding in health outcomes and the intensity of research on the importance of breastfeeding in particular. Nurses' ability to provide direct support to mothers and newborns at both the hospital and community levels clearly demonstrates their importance in promoting breastfeeding. In addition, nurses play a critical role in promoting and sustaining breastfeeding that supports newborn health by using innovative and up-to-date methods in breastfeeding education (Galvão and Silva, 2024; Temizkan Sekizler and Ünsal Atan, 2023). Furthermore, the findings of the study show that academic research on breastfeeding and newborn care has progressed not only in terms of quantity but also in terms of quality and collaboration. At the same time, it serves as a guiding light for future research for student nurses, academics, and nurses working in the field. It is anticipated that bibliometric analysis will guide nurses' trends in this area by determining the status of studies in the field, establishing their relevance in line with the importance of the subject, and determining their place on an international scale.

CONCLUSION

The data obtained revealed that although the issue of breastfeeding has an important place in the field of health, it has not been sufficiently examined, especially with bibliometric analysis methods. While the majority of publications on breastfeeding in the literature are in the form of clinical studies, reviews and case studies; it has been determined that bibliometric studies evaluating publication trends, author collaborations, citation patterns and country contributions are quite limited. This situation shows that the issue of breastfeeding needs to be addressed in a more comprehensive and systematic way. With this study, an important start has been made to understand the roles of nurses in the breastfeeding process and the structure of related scientific production, and the ground has been prepared for future, more comprehensive analyses. In light of the data obtained in this study, it is evident that while breastfeeding, which affects newborn health, holds a significant place in the field of healthcare, a study specifically employing the bibliometric analysis method has not yet been featured in the literature. It has been determined that the studies contributed to the literature are mostly in the form of clinical research, reviews, and case presentations; bibliometric studies evaluating publication trends, international collaborations, and the contributions of authors and countries by looking at publication and citation statuses over the years are limited. This situation reveals the importance of nurses in breastfeeding and its impact on newborn health, highlighting the need for a more comprehensive and systematic approach. This study fills an important gap in the literature by shedding light on the roles of nurses in the breastfeeding process and the structural characteristics of scientific studies conducted in this field; it is also predicted to contribute to the literature in this field by forming a basis for more comprehensive bibliometric analyses to be carried out in the future. Based on these findings, it is recommended to expand modules on breastfeeding counseling within nursing curricula to better prepare nurses for their supportive roles throughout the breastfeeding process. Furthermore, the establishment of international collaboration platforms for researchers and practitioners is advised to enhance knowledge exchange, encourage joint projects, and accelerate advancements in the field. In addition, conducting comparative bibliometric analyses with similar studies in other health disciplines may provide a broader perspective on the development of the field and contribute valuable insights to the literature.

Conflict of Interest

The authors who conducted this study do not have any affiliation with a board, connection with board members, consultancy, employment at a firm, shareholding, or any similar situation that could create a conflict of interest.

REFERENCES

Aluş Tokat, M., Okumuş, H. (2013). The effect of antenatal education based on strengthening breastfeeding self-efficacy perception on breastfeeding self-efficacy perception and breastfeeding success. Journal of Nursing Education and Research, 10(1), 21–29.

Annagür, B. B., Annagür, A. (2012). The relationship between postpartum mood and breastfeeding. Current Approaches in Psychiatry, 4(3), 279–292. https://doi.org/10.5455/cap.20120417.

Barutçu, Çiftçi, A. Ç., Şahin, A. S. (2020). Current approaches in newborn, well child and social pediatrics (pp. 140–200). Academic Bookstore.

Conk, Z., Başbakkal, Z., Bal Yılmaz, H. et al. (2018). Pediatric nursing (2nd ed., pp. 310–314). Academic Bookstore.

Çerçer, Z., Nazik, E. (2023). Breastfeeding Problems and Nurses' Roles. Sakarya University Journal of Holistic Health, 6(2), 353-365. https://doi.org/10.54803/sauhsd.1267125.

United Nations Convention on the Rights of the Child. (1989). Available from https://www.unicef.org/turkiye/%C3%A7ocuk-haklar%C4%B1na-dair-s%C3%B6zle%C5%9Fme (Access date: 2025-04-20).

Demir, G., Chatterjee, P., Kadry, S. et al. (2024c). Measurement of Alternatives and Ranking according to Compromise Solution (MARCOS) method: A comprehensive bibliometric analysis. Decision Making: Applications in Management and Engineering, 7(2), 313–336. http://doi.org/10.31181/dmame7220241137.

Demir, G., Chatterjee, P., Pamučar, D. (2024b). Sensitivity analysis in multi-criteria decision making: A state-of-the-art research perspective using bibliometric analysis. Expert Systems with Applications, 237, 121660. https://doi.org/10.1016/j.eswa.2023.121660.

Demir, G., Chatterjee, P., Zakeri, S. et al. (2024a). Mapping the evolution of multi-attributive border approximation area comparison (MABAC) method: A

bibliometric analysis. Decision Making: Applications in Management and Engineering, 7(1), 290–314. http://doi.org/10.31181/dmame7120241037.

Farrag, N. S., Abdelsalam, S. A., Laimon, W. et al. (2019). Pediatric nurses' knowledge of and self-efficacy in breastfeeding counseling. American Journal of Perinatology, 36(11), 1120–1126. https://doi.org/10.1055/s-0038-1676486.

Galvão, D., Silva, E. (2024). The Nurse's Role In Promotıng Breastfeedıng: Integratıve Revıew. RIIS: Revista de Investigação and Inovação em Saúde, 7(1).

Ip, S., Chung, M., Raman, G. et al. (2007). Breastfeeding and maternal and infant health outcomes in developed countries (Evidence Report/Technology Assessment No. 153; AHRQ Publication No. 07-E007). Agency for Healthcare Research and Quality. https://archive.ahrq.gov/downloads/pub/evidence/pdf/brfout/brfout.pdf

İşbay, B., Gerçek, E. (2019). The importance of breast milk and the effect of grandmothers and fathers on breastfeeding behavior. Turkey Clinics Journal of Pediatrics, 28(2), 87–96. https://doi.org/10.5336/pediatr.2018-62695.

Kartal, T., Gürsoy, E. (2020). The Importance of Breastfeeding in Sustainable Development Goals (2015-2030) and the Duties of Nurses in Light of the Current Situation in Turkey. Mersin University Faculty of Medicine Lokman Hekim Journal of History of Medicine and Folkloric Medicine, 10(2), 147-153. https://doi.org/10.31020/mutftd.676389.

Maastrup, R., Rom, A. L., Walloee, S. et al. (2021). Improved exclusive breastfeeding rates in preterm infants after a neonatal nurse training program focusing on six breastfeeding-supportive clinical practices. Plos One, 16(2), e0245273. https://doi.org/10.1371/journal.pone.0245273

Ministry of Health of the Republic of Turkey. (2022). Health statistics yearbook 2022. Available from https://dosyasb.saglik.gov.tr/Eklenti/48054/0/siy202205042024pdf.pdf. (Access date: 20 April 2025)

Nancy, S., Sindhuri, R., Arunagirinathan, A. et al. (2022). Breastfeeding positioning and attachment among postnatal mothers: A mixed methods study in a tertiary care hospital in Puducherry, South India. Indian Journal of Community Medicine, 47(1), 120–124. https://doi.org/10.4103/ijcm.ijcm_859_21.

Onbaşı, Ş., Duran, R., Çiftdemir, N. A. et al. (2011). The effect of breastfeeding and breast milk education given to expectant mothers before birth on breastfeeding behaviors. Türk Pediatri Arşivi, 46(1), 75-80. https://doi.org/10.4274/tpa.46.13.

Özkara, H., Eren Fidancı, B., Yıldız, D. et al. (2016). Breastfeeding counseling. TAF Preventive Medicine Bulletin. https://doi.org/10.5455/pmb.1-1436701913.

Robling, M., Bekkers, M. J., Bell, K. et al. (2016). Effectiveness of a nurse-led intensive home-visitation programme for first-time teenage mothers (Building Blocks): A pragmatic randomised controlled trial. The Lancet, 387(10014), 146–155. https://doi.org/10.1016/S0140-6736(15)00392-X

Samur, G. (2008). Breast milk (pp. 1–24). Klasmat Printing House.

Sinha, S., Miall, L., Jardine, L. (2021). Basic newborn (pp. 1–65). Wiley Blackwell.

Sensoy, F., Kocak, D.Y. (2021). Current Approaches in Breastfeeding Consultancy. Ordu University Journal of Nursing Studies, 4(3), 427-435. https://doi.org/10.38108/ouhcd.844447.

Şimşek Çetinkaya, Ş., Gümüş Çalış, G., Kıbrıs, Ş. (2024). Effect of breastfeeding education program and nurse-led breastfeeding online counseling system (BMUM) for mothers: A randomized controlled study. Journal of Human Lactation, 40(1), 101–112. https://doi.org/10.1177/08903344231210813.

Tanrıkulu, P.Ç., Ersoy, N., Ersoy, G. (2012). Examination of the Knowledge Levels of Mothers with Babies Aged 6-24 Months Regarding Breastfeeding, Breastfeeding Periods, and the Factors Affecting These. Journal of Nutrition and Dietetics 2012, 40(2): 120-127.

Temizkan Sekizler, E., Ünsal Atan, Ş. (2023). Innovative Approaches and the Use of Technology in Breastfeeding Counseling. Journal of Women's Health Nursing, 9(Special Issue-1), 44–48.

Tiryaki, Ö., Altınkaynak, S. (2021). The role of the nurse in breastfeeding counseling. STED, 30(3), 1–7. https://doi.org/10.17942/sted.627192.

Törüner, E. K., Büyükgönenç, L. (2023). Basic nursing approaches to child health (pp. 252–258). Ankara: Nobel Medical Bookstores.

UNICEF (2023). Too few children benefit from recommended breastfeeding practices. Available from https://data.unicef.org/topic/nutrition/breastfeeding/. (Accessed date: 2025-04-20).

UNICEF (2024). UNICEF and WHO call for access to breastfeeding support. Available from https://www.unicefturk.org/yazi/emzirme-destegine-esit-erisim?utm_source=google&utm_medium=cpc&utm_campaign=DSA&utm_term=&utm_content=text-ad&gad_source=1&gbraid=0AAAADdL-pldFVPqxW2StfOf3Sl2nvwfe&gclid=Cj0KCQjwtpLABhC7ARIsALBOCVqpscaL2tdMQIUoI5BsGSlwL_N99lWqMFfTUckXt0GPmqL1DJNffWQaAgIrEALw_wcB (Accessed date: 2025-04-20).

Victora, C. G., Bahl, R., Barros, A. J. D. et al. (2016). Breastfeeding in the 21st century: Epidemiology, mechanisms, and lifelong effect. The Lancet, 387, 475–490. https://doi.org/10.1016/S0140-6736(15)01024-7

WHO (2014). Global Nutrition Targets 2025: Policy Brief Series. Available from https://iris.who.int/handle/10665/149018?utm_source=chatgpt.com. (Accessed date: 2025-04-20).

WHO (2023). Infant and Young Child Feeding. Available from https://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding. (Accessed date: 2025-04-20).

Yanıkkerem, E., Ay, S., Göker, A. (2016). Breastfeeding

attitudes and concerns of primiparous and multiparous pregnant women. Van Medical Journal, 21(1), 6–16.

Yenal, K., Aluş Tokat, M., Durgun Ozan, Y. et al. (2013). Examination of the relationship between mothers' breastfeeding self-efficacy perceptions and breastfeeding success. Journal of Nursing Education and Research, 10(2), 14–19.