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Educational interventions for the training of nurses in childbirth assistance: integrative review

Intervenções educativas para capacitação de enfermeiros na assistência ao parto: revisão integrativa

Intervenciones educativas para la capacitación de enfermeros en asistencia al parto: revisión integrativa

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ABSTRACT

Objective: to identify in the scientific literature educational interventions for training nurses in childbirth care. **Method:** integrative review, carried out between January and February 2024, with searches in the databases Latin American and Caribbean Literature in Health Sciences (LILACS), Spanish Bibliographic Index in Health Sciences (IBECS), Nursing Database (BDENF), Virtual Health Library (VHL), Scientific Electronic Library Online (SciELO), National Library of Medicine (PubMed) and Web of Science. Full articles were included, without restriction of language or year of publication. Data were extracted and evaluated for the level of evidence, considering objectives, educational strategies, clinical outcomes, methodological clarity and characteristics of interventions. **Results:** 12 studies published between 2010 and 2023 were identified. Theoretical and practical training, of short duration and carried out in the workplace predominated. The interventions proved to be effective in transmitting knowledge, both in person and at a distance. In addition, training aimed at improving health indicators was highlighted, such as the increase in vaginal deliveries, the expansion of skin-to-skin contact and the promotion of early breastfeeding. **Final thoughts:** continuing education contributes to professional qualification, promoting improvements in technical knowledge, quality of care and health indicators.

Keywords: Nursing. Education Continuing. Parturition.

RESUMO

Objetivo: identificar na literatura científica as intervenções educativas para capacitação de enfermeiros na assistência ao parto. **Método:** revisão integrativa, realizada entre janeiro e fevereiro de 2024, com buscas nas bases de dados Literatura Latino-Americana e do Caribe em Ciências da Saúde (LILACS), Índice Bibliográfico Espanhol em Ciências da Saúde (IBECS), Base de Dados de Enfermagem (BDENF), Biblioteca Virtual em Saúde (BVS), *Scientific Electronic Library Online* (SciELO), *National Library of Medicine* (PubMed) e *Web of Science*. Incluíram-se artigos completos, sem restrição de idioma ou ano de publicação. Os dados foram extraídos e avaliados quanto ao nível de evidência, considerando objetivos, estratégias educativas, desfechos clínicos, clareza metodológica e características das intervenções. **Resultados:** identificaram-se 12 estudos publicados entre 2010 e 2023. Predominaram capacitações teórico-práticas, de curta duração e realizadas no local de trabalho. As intervenções mostraram-se eficazes na transmissão de conhecimento, tanto presencialmente quanto à distância. Ademais, destacaram-se capacitações voltadas à melhoria dos indicadores de saúde, como o aumento dos partos vaginais, a ampliação do contato pele a pele e a promoção da amamentação precoce. **Considerações Finais:** a educação continuada contribui para qualificação profissional, promovendo melhorias no conhecimento técnico, na qualidade da assistência e nos indicadores de saúde.

Palavras-chave: Enfermagem. Educação Continuada. Parto.

RESUMEN

Objetivo: identificar en la literatura científica las intervenciones educativas para la capacitación de enfermeros en la asistencia al parto. **Método**: revisión integrativa, realizada entre enero y febrero de 2024, con búsquedas en las bases de datos Literatura Latinoamericana y del Caribe en Ciencias de la Salud (LILACS), Índice Bibliográfico Español en Ciencias de la Salud (IBECS), Base de Datos de Enfermería (BDENF), Biblioteca Virtual en Salud (BVS), *Scientific Electronic Library Online* (SciELO), *National Library of Medicine* (PubMed) y *Web of Science*. Se incluyeron artículos completos, sin restricción de idioma o año de publicación. Los datos fueron extraídos y evaluados en cuanto al nivel de evidencia, considerando objetivos, estrategias educativas, desenlaces clínicos, claridad metodológica y características de las intervenciones. **Resultados**: se identificaron 12 estudios publicados entre 2010 y 2023. Predominaron capacitaciones teórico-prácticas, de corta duración y realizadas en el lugar de trabajo. Las intervenciones demostraron ser eficaces en la transmisión de conocimientos, tanto presenciales como a distancia. Además, se destacaron capacitaciones dirigidas a la mejora de los indicadores de salud, como el aumento de partos vaginales, la ampliación del contacto piel a piel y la promoción de la lactancia temprana. **Consideraciones finales**: la educación continua contribuye a la cualificación profesional, promoviendo mejoras en el conocimiento técnico, en la calidad de la asistencia y en los indicadores de salud.

Palabras clave: Enfermería. Educación Continua. Parto.

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Introduction

Maternal health is a priority field in health care, since it directly affects the well-being of mother and fetus. The maternal and child policies and programs were developed with the objective of reducing risks of illness and morbidity associated with mother and baby, as well as guiding and basing professionals' actions in providing safe and quality care[1].

In view of this, it is essential that health professionals are able to offer evidence-based care, focusing on the humanization and safety of the patient, at all levels of assistance. Continuing education emerges, in this context, as an essential tool for professional development, highlighting itself as a strategy for updating and technical-scientific improvement, with direct impact on the quality of assistance provided[2].

The planning of educational actions should be based on the health needs of the population, focusing on improving health care and processes, as pointed out in the Sustainable Development Goals (SDG) of the United Nations (UN), reference in the context of childbirth care. These actions are essential to achieve goals aimed at reducing maternal mortality, through prenatal care, skilled delivery assistance and access to reproductive health services[3].

In this context, educational interventions are configured as relevant and effective strategies to improve knowledge and strengthen the skills of nurses in childbirth care. Investing in the expansion of these actions can not only raise confidence in care routines, but also develop skills and attitudes essential to problem solving, focusing on a more optimistic perspective in the face of challenges[4-6].

Thus, health technologies emerge as key resources in the teaching and learning process. These technologies can be classified into three categories: light, light-hard and hard. The light technologies are characterized by relational characteristics, such as bond formation and reception. Light-hard technologies correspond to structured knowledge, such as standards and protocols. Finally, hard technologies refer to the use of materials and devices used in health care, including organizational structures[7].

Considering the currently several educational technologies for continuing education, such as videos, booklets, serial albums and online courses[8-12], it was considered pertinent to perform an integrative review of the literature, in order to know the main educational interventions in the context of childbirth care, since the application of improvement strategies is fundamental for the qualification of childbirth care, contributing to safety and well-being of both mother and newborn.

Through continuous training, nursing professionals can provide more humanized, efficient and evidence-based care, which may result in a better experience for the parturient woman and better outcomes for the mother-baby binomial[11]. In this context, considering the diversity of available educational technologies and their relevance for professional qualification, it is necessary to understand how these interventions have been applied in the assistance practice[8-12].

It should be noted that, although there is a growing number of studies focused on the training of nurses[8-12], there are still few investigations that identify and offer comprehensive and critical analysis of these interventions. Thus, the findings of this review may subsidize clinical practice by supporting the implementation of more effective educational strategies, contributing not only to the strengthening of humanized obstetric care, as well as for the formulation of public policies more aligned to the real needs of health care.

Therefore, this study aimed to identify, in the scientific literature, educational interventions for training nurses in childbirth assistance.

Method

This is an integrative literature review, developed through a bibliographic survey, in order to enable the knowledge and critical analysis of available evidence on a specific topic[13].

The study was structured in stages: definition of the review question; search and selection of primary studies; data extraction; critical evaluation; synthesis of results; and presentation of the review[13].

It began with the definition of the guiding question and eligibility criteria. The search was then carried out in the portals and in the national and international databases. After this step, the information to be extracted from the articles was selected, proceeding with the critical evaluation and analysis of the results obtained.

To formulate the research question, the PICO strategy was used (Population, Intervention, Context and Result), which helps in the structured definition of the problem and directs the conduct of the review study[13]. The definitions established were: P (Population) – nurses; I (Intervention) – educational interventions; C (Context) - childbirth assistance; O (Outcome) - professional training. From this, the question was formulated: what are the educational interventions for professional training of nurses in childbirth assistance?

In the data collection stage, searches were made in portals and electronic databases: Latin American and Caribbean Literature in Health Sciences (LILACS), Spanish Bibliographic Index in Health Sciences (IBECS), Nursing Database (BDENF), through the Virtual Health Library (VHL) and the Scientific Electronic Library Online (SciELO). We used the CAPES Journal Portal and the Federated Academic Community (CAFe)

resource, with access through institutional login of the University of International Integration of Afro-Brazilian Lusophony (Unilab), to access international sources.

A search strategy was applied consisting of descriptors from Medical Subject Headings (MeSH) and Health Sciences Descriptors (DeCS), which were associated with the Boolean operators AND and OR, as shown in Chart 1.

Chart 1. Database sources and search strategies applied to sample identification. Redenção, Ceará, Brazil, 2024

Information Sources	Search Strategy	Number of records identified
LILACS, BDENF and IBECS through VHL	(enferm* OR "Enfermagem Obstétrica") AND ("Educação Continuada" OR "Intervenção educativa" OR "Intervenção educacional") AND ("Saúde da Mulher" OR "Plano de parto" parto OR "Parto normal" OR "Trabalho de parto") AND (db:("LILACS" OR "BDENF" OR "IBECS"))	109
SciELO	(Enferm* OR "Enfermagem Obstétrica") AND ("Educação Continuada" OR "Intervenção educativa" OR "Intervenção educacional") AND ("Saúde da Mulher" OR "Plano de parto" parto OR "Parto normal" OR "Trabalho de parto")	19
MEDLINE through PubMed	("nurse*"[MeSH Terms] OR "nurse*"[All Fields] OR "Obstetric Nursing"[MeSH Terms] OR "Obstetric Nursing"[All Fields]) AND ("education, continuing"[MeSH Terms] OR "education continuing"[All Fields] OR "Educational intervention"[All Fields]) AND ("Women's Health"[MeSH Terms] OR "Women's Health"[All Fields] OR "Birth plan"[All Fields] OR "Natural Childbirth"[MeSH Terms] OR "Natural Childbirth"[All Fields] OR "labor, obstetric"[MeSH Terms] OR "labor obstetric"[All Fields] OR ("labor s"[All Fields] OR "labored"[All Fields] OR "laborer"[All Fields] OR "laborer s"[All Fields] OR "laborers"[All Fields] OR "laboring"[All Fields] OR "labors"[All Fields] OR "labour"[All Fields] OR "work"[MeSH Terms] OR "work"[All Fields] OR "labor"[All Fields] OR "labor, obstetric"[MeSH Terms] OR ("labor"[All Fields] AND "obstetric"[All Fields]) OR "obstetric labor"[All Fields] OR "laboured"[All Fields] OR "labourer"[All Fields] OR "labourers"[All Fields] OR "labouring"[All Fields] OR "labours"[All Fields]))	1,887
Web of Science	(Nursing OR "Obstetric Nursing") (All Fields) AND ("Continuing Education" OR "Educational Intervention" OR "Educational Intervention") (All Fields) AND ("Women's Health" OR "Birth Plan" childbirth OR "Normal Birth" OR "Labor") (All Fields)	85

Source: Created by the authors.

Regarding the eligibility criteria, we included articles available in full, without restriction of language or year of publication. Duplicates, reviews and articles with different themes from the research problem, with a distinct target audience or that did not answer the guiding question were excluded.

To carry out the screening and selection of articles evidenced in the databases, we relied on the support of the free online software Rayyan, a tool that assists in screening, selection and exclusion of studies[14]. The triage of the studies was carried out in a paired and independent way by two researchers, and, in cases of disagreement, a third reviewer was consulted for final decision, ensuring greater methodological rigor to the process.

The search in the databases occurred between January 15 and February 28, 2024, this being the date of the last search performed. To collect the information, a standardized instrument was used, elaborated by the authors, contemplating the following items: identification, authors, year of publication, objective, sample, scenario, place of study, level of evidence, educational strategy, Description of the intervention and main result. These elements served as a basis to analyze the consistency and applicability of the results of each study.

The level of evidence was evaluated according to the following classification: level I –from systematic review or meta-analysis of randomized trials or guidelines based on these reviews; level II – from at least one well-delineated randomized clinical trial; level III – from well-defined clinical trials without randomization; level IV – from well-defined cohort or case-control studies; level V – from systematic review of descriptive and qualitative studies; Level VI – from a single descriptive or qualitative study; Level VII – evidence from the opinion of authorities and/or report of expert committees[15].

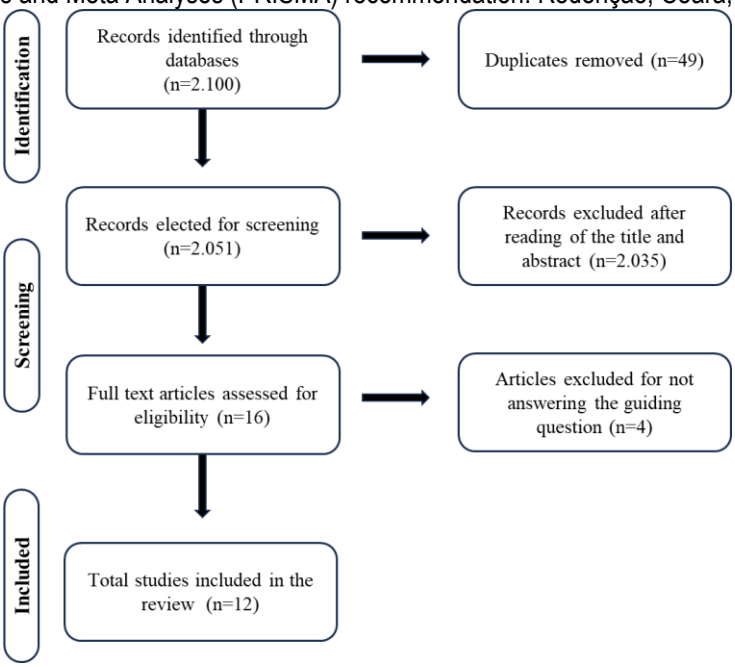
In the final stage, the main findings of the studies were analyzed and synthesized, being subsequently organized in a framework to present educational interventions aimed at training nurses in the context of maternal health. In addition, aspects such as methodological clarity, the detail of educational interventions and the consistency of the results presented were considered. Because it is an integrative review, there was no need to submit to the Research Ethics Committee.

Results

The databases returned 2,100 articles. In the duplicate analysis step, 49 records were excluded. The titles and abstracts were then read, resulting in the exclusion of 2,035 articles for the following reasons: divergent theme (n=2,014), review articles (n=10) and different target audience (n=11). At the end, 16 articles were selected to read the texts in full.

After reading in full, four studies were eliminated because they did not answer the guiding question. The sample consisted of 12 articles. Figure 1 shows the identification, screening and inclusion flow of articles included in this review.

Figure 1. Flowchart for searching and selecting review articles, constructed based on the Preferred Reporting Items for Systematic Reviews and Meta Analyses (PRISMA) recommendation. Redenção, Ceará, Brazil, 2024



Source: Created by the authors.

The articles were published in 2023 (n=2), 2020 (n=3), 2019 (n=1), 2018 (n=4), 2016 (n=1) and 2010 (n=1), with the objective of identifying the main educational interventions for training nurses in the context of childbirth assistance. Studies were conducted in Brazil (n=5), California (n=2), Japan (n=1), Mexico (n=2), Mongolia (n=1) and the United States (n=1), published in different national and international journals.

The articles were published in the years 2023 (n=2), 2020 (n=3), 2019 (n=1), 2018 (n=4), 2016 (n=1) and 2010 (n=1). The studies were conducted in Brazil (n=5), the United States (n=3), Japan (n=1), Mexico (n=2) and Mongolia (n=1), and published in different national and international journals.

Regarding the level of evidence, most studies were classified as level VI, corresponding to descriptive or qualitative studies (n=9), followed by level VII, relating to reports of experiences or expert opinions (n=2), and level II, referring to a randomized clinical trial (n=1).

Data collection was conducted in some studies by means of own instruments, with multiple choice questions applied before and after the intervention (A1, A2, A4, A5, A12). The interventions were predominantly carried out in the professionals' work environment (A1, A3, A4, A5, A6, A8, A9, A12), most of which consisted of theoretical and practical courses (A1, A3, A4, A5, A8,

A9, A12). Short courses were the most frequent formats among the offered trainings (A1, A2, A4, A5, A6, A7, A10, A12).

The studies reported positive results in knowledge transmission, regardless of whether the intervention was face-to-face or distance (A1-A12). In addition to the individual improvement of professionals, some studies pointed to direct effects on clinical practice and maternal and child health indicators (A1, A4, A6, A9, A12).

In addition, interventions focused on increasing the rate of vaginal births assisted by nurses (A1, A5, A8), favoring skin-to-skin contact frequency between mother and newborn (A3, A5, A6, A11) and improving early breastfeeding rates (A3, A5, A6).

Chart 2 presents the characterization of the included articles, contemplating the identification of the study and year, the educational strategy, the sample of studies, the description of the interventions and the main results observed.

Chart 2. Characterization of articles regarding identification/authors/year, educational strategy, sample/scenario/location, description of the intervention, and main result. Redenção, Ceará, Brazil, 2024

Identification/ Year	Educational Strategy	Sample/Scenario/ Study Location	Description of the Intervention	Main result
A1[16]/ 2023	Improvement course	18 nurses Hospital California	This short, 55-minute theoretical and practical instructional course addressed the provision of care during the second stage of labor. The educational portion was lecture-based and lasted 30 minutes, using PowerPoint slides. Following the presentation, there was an interactive and dynamic session on the variety of maternal positions for the second stage of labor, using materials such as a squat bar, peanut ball, stool, and other materials to simulate the positions that help promote vaginal delivery. Participants completed an electronic pre-test and post-test with multiple-choice questions to assess nurses' knowledge before and after the educational intervention.	After the educational intervention, an increase in the rate of vaginal births assisted by nurses and an improvement in clinical outcomes were observed, when related to the provision of care, in the second stage of labor.
A2[12]/ 2023	Improvement Course + Seminar	77 professionals (nurses and midwives) Hospital Japan	A short educational program consisting of e-learning and a seminar on safe care in obstetric practice. Pre- and post-tests were conducted to assess participants' knowledge after the educational activity.	The intervention group significantly improved the clinical educators' knowledge of the clinical judgment model, contributing to the training of new midwives, with improvements in judgments in response to changes in maternal condition and providing safe and evidence-based obstetric care.
A3[10]/ 2020	Theoretical-practical improvement course	80 nurses Hospital Brazil	Theoretical-practical course on evidence-based care regarding good practices in childbirth and birth, lasting 14 days, with a total workload of 132 hours, including 96 hours of practical activities carried out at the Sofia Feldman Hospital and 32 hours of theoretical activities, with	The improvement experience favored the learning and qualification of professionals who returned to their original services, in a safer and more empowered way.

			supporting material on guidelines and protocols for childbirth care.	
A4[17]/ 2020	Theoretical and practical improvement course + educational videos and clinical simulations.	351 professionals (Multidisciplinary Team) Hospital Mexico	Blended training, with didactic presentation and clinical simulations of obstetric and neonatal emergencies. The intervention is divided into two modules. Module I, lasting 16 hours and conducted over two consecutive days, focuses on postpartum hemorrhage, neonatal resuscitation, and care team communication. Module II, covering emergencies such as hypertensive syndromes and shoulder dystocia, lasts 8 hours and is scheduled three months after Module I. Dummies and medical devices to assist in the management and management of obstetric emergencies were used during the intervention. Participants completed a pre-test and post-test instrument containing 53 questions on the course topics.	The PRONTO training produced positive and significant results in terms of increased knowledge and self-efficacy, in all topics covered.
A5[18]/ 2020	Training course	32 nursing professionals Hospital Brazil	This short, three-hour theoretical and practical training course, in a lecture format, utilized active methodologies for participant interaction, focused on recommended best practices for care for women in labor and newborns. An instrument containing ten questions about labor and three related to newborn care was administered to assess the professionals' knowledge before and after the intervention.	An improvement in the professionals' knowledge was observed after the course, through the results of the post-tests, which addressed topics such as humanized assistance during childbirth and care for newborns.
A6[19]/ 2019	Educational lecture	36 healthcare professionals Hospital Mexico	The training was a single-lecture format, focusing on the benefits of skin-to-skin contact and early breastfeeding. The 45-minute lecture utilized audiovisual techniques and a PowerPoint presentation.	Skin-to-skin contact (SSC) and early breastfeeding were achieved in 77% of births, with improvements in the quality of care and standards of newborn care.
A7[20]/ 2018	Seminar + provision of theoretical material based on scientific evidence.	32 professionals (nurses and doctors) Hospital Brazil	An eight-hour seminar on evidence-based practices in natural childbirth care was held outside the work environment. Updated reading material (randomized clinical trials and systematic reviews) was provided to all participants. Care practices were assessed using pre- and	There was a positive impact after the intervention related to the increase in the number of normal births, followed by a statistical decrease in the prescription and infusion of oxytocin, as well as the performance of amniotomy and the increase in the number of women who had a

			post-intervention medical records.	companion of their choice during labor and delivery.
A8[9]/ 2018	Improvement course + workshops.	18 nurses Hospital Brazil	This long-term course aims to improve obstetric and neonatal practice, comprising 96 hours of practical experience and 36 hours of theoretical and expository activities. The course used educational materials and audiovisual resources to support the teaching-learning process. Subsequently, the professionals were monitored in their practical work to assess the improvement in care provided after the intervention.	The course benefited obstetric nurses by improving their knowledge and developing autonomy to intervene in their services, focusing on improving obstetric and neonatal care, as well as increasing the bond with the women they assist, increasing the rates of normal births assisted by obstetric nurses and optimizing woman- and family-centered care.
A9[8]/ 2018	Theoretical-practical improvement course	77 professionals (nurses and midwives) Hospital Brazil	Theoretical and practical course, totaling 132 hours, focused on care for women and newborns. Workshops and focus groups were held to gather information through dialogue and group interaction.	The course strengthened and reaffirmed the importance of obstetric nursing in labor and birth care, as studies highlight the profession as less interventionist professionals who respect the physiology of childbirth and encourage best practices. The topics covered in the course allowed for the updating of theoretical and practical knowledge essential for the development of safe and humane care in the maternal and child area.
A10[21]/ 2018	Online course + provision of evidence-based theoretical materials.	80 nurses Virtual Environment Mongolia	Short distance learning course offered to nurses and midwives in the form of video lessons, literature recommendations and clinical case resolution.	The distance learning program was well received by professionals, who recognized the importance of enhancing theoretical and practical knowledge related to maternal and child care. Mongolia's relative isolation means this educational program is particularly valuable there.
A11[22]/ 2016	Educational website	351 professionals (doctors, nurses, pediatricians, midwives, and interns) Virtual Environment United States	The BirthTOOLS.org website is an open-access perinatal education platform that provides videos and reference materials based on best practices and scientific evidence, with a focus on professional development.	Continuing education is crucial for perinatal nurses. The BirthTOOLS.org website provides guidance on the procedures and care required for labor and birth, aiming to contribute to safe and humane obstetric and neonatal nursing care.
A12[23]/ 2010	Course + videos + clinical simulations	32 nursing professionals Hospital California	Short course. The simulation group received 3 hours of training in a simulation laboratory, using mannequins and medical devices used to manage shoulder dystocia and eclampsia. The	Participants underwent performance tests related to labor and delivery exercises. When it came to written test scores, both groups performed equally. However,

			didactic group received 1.5 hours of theoretical instruction on eclampsia and watched a 26-minute video on shoulder dystocia. After completing the educational interventions, participants in both groups received two articles and two clinical guidelines on shoulder dystocia and eclampsia. All participants completed a pre-test with 20 multiple-choice questions. One month after the intervention, participants completed the same questionnaire used for the initial assessment, followed by a performance test.	when it came to practical performance, the simulation group demonstrated superior performance when tested in a labor and delivery simulation exercise, reinforcing the importance of using simulation to improve obstetric emergency training in professional education.

Source: Created by the authors.

Discussion

Based on the studies analyzed in this review, educational interventions directed to health professionals proved to be an effective strategy for improving theoretical and practical knowledge. The analyzed studies indicated that professionals felt motivated to participate in educational actions related to the area of activity, especially when promoted in their own work environment[24,25].

Regarding the type of methodology adopted, it was found that theoretical and practical courses were the most frequently applied educational interventions to health professionals. These courses not only promote the development of knowledge and practical skills, but also improve the quality of patient care, reduce errors, encourage teamwork and increase professionals' confidence in the performance of work functions[26].

Regarding the educational modality, both face-to-face teaching and distance learning demonstrated effectiveness in the transmission of knowledge. The variety of available educational technologies plays a key role in the teaching-learning process, being applicable both in physical and virtual environments. Among these technologies, we highlight online learning platforms, multimedia resources, educational applications, Virtual Learning Environments (VLE), Virtual Reality (VR) and gamification strategies. These resources provide a dynamic, accessible and interactive learning experience[27].

During periods of health crisis, such as the COVID-19 pandemic, it was evident that the reorganization of health services interfered with the accessibility of face-to-face educational activities. In this context, educational technologies, such as digital platforms, were essential to mitigate the gaps in access to training and promote the development of skills necessary for clinical practice, as highlighted in a study that addressed the adaptations made in obstetric care during the pandemic to preserve the humanization and rights of women in childbirth[28].

The integration of active methodologies and educational technologies, when planned and incorporated into the teaching-learning process, is an important element for stimulating critical thinking, improving decision-making capacity and developing autonomy. These aspects have a direct and positive impact on learning outcomes[29,30].

Regarding the duration of the intervention, the short courses proved to be effective because they addressed specific topics and promoted rapid improvements in knowledge, attitudes and practices of health professionals[31]. It was also found that the most used method to evaluate and compare the knowledge of professionals before and after instructional intervention was the use of semi-structured instruments with multiple-choice questions. This format favors standardization of evaluation, efficiency in data collection and the reduction of biases by minimizing the influence of the researcher on the answers and dispenses with subjective interpretations, allowing a more accurate measurement of the impact of instructional health interventions[32,33].

In the context of childbirth assistance, the World Health Organization (WHO) has been committed to improving the model of care offered to the mother-baby binomial. An example is the project Apice-On: Improvement and Innovation in Care and Teaching in Obstetrics and Neonatology, which aims to qualify professionals in the teaching and practice of obstetrics and neonatology, ensuring safe care and guaranteeing users' rights[34].

The relationship between improving knowledge, providing safe care and participating in improvement courses was also demonstrated in the studies analyzed in this review. There was a significant improvement in the knowledge and clinical judgment of professionals

after educational interventions. In addition, there was an increase in the safety of professionals when performing specific skills, such as performing dystocia maneuvers in obstetric emergencies[10,12,17].

When considering the relevance of qualification and continuing education programs in childbirth assistance, it was also observed the positive effect of educational interventions on care practices. With the improvement, professionals began to adopt evidence-based care, promoting and encouraging the implementation of good practices in childbirth and birth, focusing on safety and humanization[16,19,20].

The educational interventions analyzed were directly reflected in care outcomes, with an increase in the rate of vaginal births, greater implementation of skin-to-skin contact and increased early breastfeeding. These results indicate that professional qualification, regardless of the format adopted, reflects not only in technical knowledge, but also in the effective adoption of obstetric practices, aligned with WHO recommendations. In addition, professionals report greater safety in the execution of procedures after training, configuring a set of factors that contribute to improving maternal and child care[8,10,16,19].

On the other hand, structural and organizational barriers, such as high demand for care, scarcity of resources, overload and turnover of professionals, hinder both the implementation and continuity of educational interventions. These challenges are particularly accentuated in services with logistical and operational limitations, making it necessary to adapt strategies to local conditions, valuing continuing education and encouraging the engagement of nursing staff[35].

Thus, it is essential that health institutions promote the continuing education of maternal and child care professionals in order to overcome the barriers present in this context. Training can directly influence the achievement of better clinical outcomes, raise patient satisfaction, increase employee motivation and facilitate adaptation to new care demands and technologies, resulting in quality care, focused on the needs of patients[29].

Given the above, the findings of this review indicated that the implementation of educational strategies for nurses in childbirth care should be prioritized by health institutions, especially in contexts related to the qualification of obstetric care. It is recommended that managers and public policy makers invest in structured training programs, with active methodologies, clinical simulations and use of digital technologies, adapted to local needs. The integration of these actions into institutional plans for continuing education can amplify the care impact and strengthen the role of nursing in maternal and childcare.

The limitations of this study concern that the databases used may not have covered all the available material on the subject. In addition, the heterogeneity between the included studies regarding methods, scenarios, participant profile and format of educational interventions made it difficult to compare results and limited the generalization of findings. Thus, it is recommended to conduct systematic reviews to deepen the analysis of the effects of these interventions and provide more robust evidence for practice.

Final thoughts

The evidence obtained in this review demonstrated the effectiveness of educational interventions directed to health professionals in the maternal and child area, highlighting the importance of continuing education for the improvement of theoretical and practical knowledge.

The studies showed that both face-to-face and distance training are effective in promoting professional qualification, as well as having a positive impact on increasing normal birth rates, skin-to-skin contact and early breastfeeding. These findings reinforce the potential of educational interventions as a practical and accessible strategy to qualify maternal and childcare, promote safe and humane practices, and support clinical and managerial decisions in health services.

However, despite the obvious benefits, there remain gaps in understanding the challenges faced in implementing these initiatives, such as structural and organizational aspects. Therefore, future research could address these issues in more depth, contributing to the development of policies and strategies that ensure the success and sustainability of continuing education in the maternal and child area.

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