# RIASE

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

# ROLE OF THE NURSE SPECIALIZING IN MATERNAL AND OBSTETRIC HEALTH NURSING IN SAFE CHILDBIRTH

PAPEL DO ENFERMEIRO ESPECIALISTA EM ENFERMAGEM DE SAÚDE MATERNA E OBSTÉTRICA NO PARTO SEGURO

EL PAPEL DEL ENFERMERO ESPECIALISTA EN ENFERMERÍA DE SALUD MATERNA Y OBSTÉTRICA EN EL PARTO SEGURO

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## Abstract

Introduction: Childbirth and the first 24 hours after birth are critical phases with high maternal and neonatal mortality rates, especially in developing countries. The Maternal and Obstetric Health Nurse Specialist plays an essential role in this context, promoting continuous clinical surveillance and care based on good practices and respect for women's rights Objective: Analyze scientific evidence on the intervention of Specialist Nurses in Maternal and Obstetric Health Nursing in promoting safe childbirth. Methodology: An integrative review, carried out in April 2025, the search was conducted on PUBMED and EBSCOhost (MEDLINE Ultimate, CINAHL Ultimate and DOAJ), including studies in English, Portuguese and Spanish. Of the 73 articles identified nine were selected because they met the eligibility criteria. Results: The studies analyzed, conducted between 2017 and 2023 in countries such as Portugal, Brazil, India and Ethiopia, highlight the importance of a culture of safety in maternal care. The World Health Organization Checklist has proven effective in preventing adverse events. Continuous training of healthcare teams, combined with supervision and teamwork, has proved essential for adherence to good practices and for improving maternal and neonatal outcomes. Conclusion: Maternal and Obstetric Health Nurse Specialists play a fundamental role in promoting safe and humanized childbirth. The need for continuous training, clinical coaching and better institutional conditions to ensure the safety and quality of obstetric care stand out.

**Keywords:** Health Strategies; Labor, Obstetric; Obstetric Nursing; Parturition; Safety Management.

### Resumo

Introdução: O parto e as primeiras 24 horas após o nascimento são fases críticas, com altos índices de mortalidade materna e neonatal, especialmente em países em desenvolvimento. O Enfermeiro Especialista em Enfermagem de Saúde Materna e Obstétrica desempenha um papel essencial nesse contexto, promovendo a vigilância clínica contínua e cuidados baseados em boas práticas e respeito aos direitos da mulher. Objetivo: Analisar na evidencia científica a intervenção do Enfermeiro Especialista em Enfermagem de Saúde Materna e Obstétrica na promoção do parto seguro. **Metodologia:** Revisão integrativa, realizada em abril de 2025, a pesquisa foi realizada na PUBMED e EBSCOhost (MEDLINE Ultimate, CINAHL Ultimate e DOAJ), com inclusão de estudos em inglês, português e espanhol. Dos 73 artigos identificados, nove foram selecionados por atenderem aos critérios de elegibilidade Resultados: Os estudos analisados, conduzidos entre 2017 e 2023 em países como Portugal, Brasil, Índia e Etiópia, evidenciam a importância da cultura de segurança nos cuidados maternos. A Lista de Verificação da Organização Mundial da Saúde demonstrou eficácia na prevenção de eventos adversos. A formação contínua das equipas de saúde, aliada à supervisão e ao trabalho em equipa, mostrou-se essencial para a adesão às boas práticas e na melhoria dos resultados maternos e neonatais. Conclusão: O Enfermeiro Especialista em Enfermagem de Saúde Materna e Obstétrica exerce um papel fundamental na promoção de um parto seguro e humanizado. Destacam-se a necessidade de capacitação contínua, coaching clínico e melhores condições institucionais para garantir a segurança e qualidade dos cuidados obstétricos.

Palavras-chave: Enfermagem Obstétrica; Estratégias de Saúde; Gestão da Segurança; Parto; Trabalho de Parto.

# Resumen

Introducción: El parto y las primeras 24 horas después del nacimiento son fases críticas con altas tasas de mortalidad materna y neonatal, especialmente en los países en vías de desarrollo. Las Enfermeras Especialistas en Salud Materna y Obstétrica desempeñan un papel esencial en este contexto, promoviendo una vigilancia clínica continua v unos cuidados basados en las buenas prácticas y en el respeto a los derechos de la mujer. Objetivo: Analizar la evidencia científica sobre la intervención de las Enfermeras Especialistas en Salud Materno Obstétrica en la promoción del parto seguro. Metodología: Revisión integradora, realizada en abril de 2025, la búsqueda fue realizada en PUBMED y EBSCOhost (MEDLINE Ultimate, CINAHL Ultimate y DOAJ), incluyendo estudios en inglés, portugués y español. De los 73  $\,$ artículos identificados, se seleccionaron nueve porque cumplían los criterios de elegibilidad. Resultados: Los estudios analizados, realizados entre 2017 y 2023 en países como Portugal, Brasil, India v Etiopía, destacan la importancia de una cultura de seguridad en la atención a la maternidad. La lista de verificación de la Organización Mundial de la Salud ha demostrado su eficacia en la prevención de eventos adversos. La formación continua de los equipos sanitarios, combinada con la supervisión y el trabajo en equipo, ha demostrado ser esencial para el cumplimiento de las buenas prácticas y para mejorar los resultados maternos y neonatales. Conclusión: Las enfermeras especialistas en salud materna v obstétrica desempeñan un papel fundamental en la promoción de un parto seguro y humanizado. Se destaca la necesidad de formación continuada, entrenamiento clínico y meiores condiciones institucionales para garantizar la seguridad y calidad de la atención obs-

**Descriptores:** Administración de la Seguridad; Enfermería Obstétrica; Estrategias de Salud; Parto; Trabajo de Parto.

# Introduction

Childbirth and the first 24 hours after birth constitute a critical period for both the mother and the newborn<sup>(1)</sup> since the associated mortality constitutes one of the main priorities worldwide. Every year there are more than 130 million births in the world and approximately 287,000 maternal deaths, 1 million stillbirths and 3 million neonatal deaths<sup>(2)</sup>. These results occur mainly in underdeveloped and developing countries, and most of these deaths could be avoided. The United Nations Sustainable Development Goals include specific targets to reduce the maternal mortality rate to less than 70 deaths per 100,000 live births and the neonatal mortality rate to less than 12 deaths per 1000 live births by 2030<sup>(3)</sup>.

The high frequency of births in health facilities and the fact that they involve complex processes and involve not just one patient, but a dyad (mother and baby), make maternal and neonatal care a priority in terms of quality of care and patient safety<sup>(4)</sup>. In 2008, the World Health Organization (WHO) developed the Safe Childbirth Checklist, a quality improvement tool made up of 27 items, with the aim of mitigating adverse events during childbirth<sup>(5)</sup>. This list is organized into four sections and addresses the main global causes of maternal death, such as hemorrhage, infections, difficulty in labor progression, hypertensive disorders and fetal complications such as prematurity, intrapartum stillbirth and neonatal death<sup>(2)</sup>. This tool aims to make it easier for health professionals to adhere to essential practices, based on scientific evidence, which contribute to reducing maternal and neonatal morbidity and mortality $^{(3)}$ .

Thus, the improvement of care provided during childbirth in health facilities is currently a key strategy for reducing maternal and neonatal mortality globally<sup>(6)</sup>. The WHO Quality of Care Framework for Maternal and Newborn Health defines quality care as safe, effective, timely, efficient, equitable and person-centered<sup>(1)</sup>.

According to the Order of Nurses, the Specialist Nurse in Maternal and Obstetric Health Nursing plays a central role in this process, being responsible for providing qualified and continuous care to women throughout the pregnancy-puerperium cycle, especially during labor and delivery itself. Their advanced training gives them specific skills that enable them to carry out clinical surveillance of the mother and fetus, identify signs of risk, apply appropriate interventions and promote the empowerment of pregnant women, respecting their rights and choices<sup>(7)</sup>.

Considering the global context of maternal and neonatal mortality and the importance of qualified care, this integrative review aims to analyze the role of the Specialist Nurse in Maternal and Obstetric Health Nursing in promoting safe childbirth, highlighting their competencies, interventions and contributions to improving maternal and neonatal outcomes.

The general aim of this integrative review is to analyze the scientific evidence on the intervention of Specialist Nurses in Maternal and Obstetric Health Nursing in promoting safe childbirth.

# Methodology

This article consists of an Integrative Literature Review and, according to Toronto and Remington<sup>(8)</sup> it is characterized by a comprehensive and detailed approach, which allows studies with different methodologies (qualitative, quantitative and theoretical) to be included, with the aim of synthesizing existing knowledge on a given topic in a holistic and complete way.

#### Research question

The following research question guided this integrative review: What role does the Specialist Nurse in Maternal and Obstetric Health Nursing play in promoting safe childbirth?

After defining the research question based on the participants, intervention and outcome (PIO), the population (P) considered Specialist Nurses in Maternal and Obstetric Health Nursing. With regard to the intervention (I), the intervention of the EHSO and the outcome (O) is the promotion of safe childbirth. As described in Table 1.

#### Table 1: Research question.

"What role does the Specialist Nurse in Maternal and Obstetric Health Nursing play in promoting safe childbirth?"

- P Specialist Nurses in Maternal and Obstetric Health Nursing
- I The intervention of the Specialist Nurse in Maternal and Obstetric Health Nursing
- O Promoting safe childbirth

#### Search strategy and identification of studies

With regard to the search strategy, the validated descriptors in health sciences (DeCS/MeSH) were used to ensure a more comprehensive search in the databases, "obstetric nursing", "safety management", "parturition", "health strategies" and "labor, obstetric".

Electronic databases such as MEDLINE Ultimate, CINAHL Ultimate, Directory of Open Access Journals, through EBSCOhost and PUBMED were used to identify the studies. Using the descriptors combined with the Boolean operators "AND" and "OR" gave rise to the following Boolean equation [("obstetric nursing") AND ("Safety Management") AND ("parturition") AND ("Health Strategies") AND ("labor, obstetric")]. The research was carried out in April 2025, with language limitations in English, Portuguese and Spanish. Articles from the last 10 years were analyzed in full text and free access.

#### Inclusion and exclusion criteria

In preparing this integrative review, inclusion and exclusion criteria were established in order to select the most relevant studies on the subject under study. The following inclusion criteria were established: published studies with full text available; studies in English, Portuguese and Spanish; qualitative and quantitative methodology studies published between 2015 and 2025. Exclusion criteria were quantitative or qualitative studies that did not directly address the subject under study.

#### Study Selection/Source of Evidence

After applying the inclusion and exclusion criteria and search limiters, a total of 276 articles were obtained, of which: (PUBMED) n=28; (MEDLINE complete) n=113; (CINAHL complete) n=107 and

(Directory of Open Access Journals) n=28. The collected bibliography was uploaded to Rayyan (Qatar Computing Research Institute, Doha, Qatar), an initial screening was carried out, eliminating n=20 duplicate articles, by two independent reviewers who assessed the remaining articles n=256 through the titles and abstracts in order to verify compliance with the inclusion and exclusion criteria, and they were classified as "included", "excluded" or "uncertain". The full texts of the studies classified as "included" and "uncertain" were then assessed by the two reviewers on the basis of the inclusion criteria.

Disagreements between the reviewers during the selection process were resolved through discussion between the two reviewers and the presence of a third reviewer. The flowchart of the selection and screening process followed the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) method. The results of the search and the study inclusion process were comprehensively reported in this integrative review and presented using a PRISMA flowchart (Figure 1).

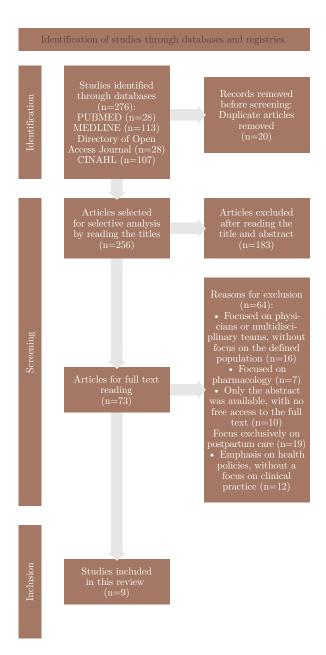


Figure 1: Study Selection Flowchart (PRISMA).

#### Level of Evidence/Methodological Quality Assessment

The levels of evidence, according to the Joanna Briggs Institute (JBI) model, represent a hierarchy of scientific reliability of the available studies. This model values the different types of study (quantitative, qualitative and opinion) and organizes them according to their methodological robustness<sup>(11)</sup>.

The methodological quality of the included studies was assessed using the JBI instruments, according to the type of study. The results of the assessment are shown in Table 2, indicating the percentage score and the respective level of evidence. No studies were excluded at this stage, as all the articles included had a methodological quality of 50% or more.

# Results

After 73 articles were read in full by the two reviewers, 9 articles were chosen that fit the research question. Data was extracted using a table with the following data: authors, year, country, study design and objective, participants/methods and interventions, results and conclusions, which are shown in Table 2.

The studies included included research from different geographical areas, with different socio-economic and cultural characteristics, taking place in Portugal, Brazil, Mexico, the United Kingdom, Tanzania, Sri Lanka, India and Ethiopia, over a period of 6 years (2017 to 2023), with the largest sample of 2707 deliveries and the smallest sample of 35 views of clinical files. Regarding the type of study, 7 were quantitative studies, 1 was a scoping review and 1 was an applied study with a mixed approach. All the studies analyzed focus on the need for interventions to promote safe childbirth, with the aim of reducing maternal and fetal mortality and morbidity and are categorized into four dimensions (Figure 2).

Table 2: Characteristics of the studies included in the review.						
Authors/Year/Countr	ry Study	Study Design/Objective	Participants, Method, Interventions	Results		Level of evidence/quality of the article (JBI Assessment (%))
M. C. Nicácio A. L. Figueiredo P. M. O. Neto L. F. Almeida L. H. G. Penna Brazil, 2020.	Women's Safety Culture in Childbirth and Related Institution al Factors.	Qualitative study with a descriptive and exploratory approach. To analyze women's safety culture in childbirth and related institutional factors, based on the perceptions of nurses and doctors.	Health professionals. Data collection took place from May to July 2018. The Hospital Survey on Patient Safety Culture questionnaire was applied and descriptive statistics were analyzed. Then, 12 semi-structured interviews were conducted, with thematic content analysis, and finally, this set of data was integrated.	teamwork and non-punitive responses to errors. Most professionals did not report incidents. There was also a lack of knowledge about the Patient Safety Center.	ledge of protocols and a reduced team.  Despite this, the professionals demons-	Appraisal Checklist for Qualitative
K. M. Sousa L. D. S. P. Pimenta M. F. Elorriaga P. J. Saturno-Hernandez T. M. S. S. Rosendo M. R. Pfeitas W. R. Medeiros Q. C. S. Martins Z. A. S. Gama Brazil e Mexico, 2019.	Multicentre cross-sectional study on adverse events and good practices in maternity wards in Brazil and Mexico: same problems, different magnitude.	Multicenter cross-sectional study. To evaluate the quality of childbirth care in maternity wards in Brazil and Mexico based on good practices and adverse events, with the aim of identifying priorities for improvement.	n=720 deliveries in Brazil and $n=2707$ deliveries in Mexico. Data collection from clinical records was carried out between 2015 and 2016 in 2 Brazilian and 5 Mexican maternial pospitals to compare maternal and neonatal indicators of good practice and adverse events, based on the WHO Safe Childbirth Checklist and standardized obstetric quality indicators.	Better adherence to good practices was observed in Mexico, especially in the use of the partogram, while Brazil had high rates of unnecessary casserans excitos (50.1½). Inadequate use of antibiotics and magnesium sulphate was identified, as well as undersee of practices such as the partogram. The study highlights the need to improve adherence to good practices and reduce adverse events in order to improve the quality of care.	improve the quality of health services, such as rationalizing the use of antibiotics, pro- moting the proper use of the partogram, improving the indication of caesarean	cross-sectional studies (%) – $9/11$
M. McCormick W. Pollock C. Care S. Kapp M. Gerdtz Australia and UK, 2020.	Organizational strategies to optimize women's safety during labor and birth: A scoping review.	nizational strategies implemen-	$\begin{split} &(n=35.70\%), \text{qualitative}  (n=4.8\%) \\ &\text{and mixed methods}  (n=11.22\%) \\ &\text{studies that reported on the multifaceted} \\ &\text{nature of safety reporting during labor} \end{split}$	It identified three categories of implemented strategies:  1 – clinical governance, which includes interventions such as patient safety programs, cheldist enforcement and audits.  2 – Models of care, which evaluates the difference in care provided by obstetric nurses and consultants. In this category there was no description of the inclusion of clinical management or training of team members in the implementation of intervention models.  3 – Team member training: application of multiprofessional training programs in the management of obstetric and neonatal emergencies.	a variety of strategies to increase women's safety during labour and childbirth. However, it was observed that the outcome measures used to evaluate these strategies were clinical in nature and did not focus on the safety perceptions of the service user, in this case women in labor, and a gap was observed between how user safety is perceived	Level of Evidence: 5. / JBI Critical Appraisal Checklist For Systematic Reviews And Research Syntheses $(\%) - 10/11 \ (91\%)$ .
D., Barnhart D. Spiegelman C. M. Zigler N. Kara M. M. Delaney T. Kalita P. Maji L. R. Hirschbom K. E. A. Semrau USA, 2020.	Coaching Intensity, Adherence to Essential Birth Practicos, and Health Outcomes in the BetterBirth Trial in Uttar Pradesh, India.	Randomized clinical trial.  To investigate the multiple dimensions of coaching intensity, providing information on the optimal coaching regimen for future interventions. Based on the results of the BetterBirth Trial, implemented by the WHO: Safe Childbirth Cheklist.	high maternal mortality (n = $258/100,00$ )	In the application of the BBT, the frequency of coaching was associated with a modest increase in the adoption of evidence-based practices. This correlation tends to be stronger when coaching is applied to the professional delivering the baby, rather than at facility level. Coaching, in general, was not associated with improvements in health outcomes, possibly due to the weak magnitude of the association between coaching and adherence to evidence-based practices.	increased adherence to evidence-based prac- tices among birth attendants at the BBT. Better results were obtained among birth attendants than at the facility level. Coaching was not generally associated with	Randomized Controlled Trial (%) -
H. Senanayak M. Patabendige R. Ramachandran Sri Lanka, 2018.	Experience with a context specific modified WHO safe childbirth checklist at two tertiary care settings in Sri Lanka.		The study was applied to two hospitals in Sri Lanka. At the University Midwifery Unit (DSHW), Colombo the WHO Safe	Adoption rates remained low in both hospitals (54.3 DSHW, and 18.8% at THMG). At DSHW, it showed more satisfactory adherence in the delivery room (over 70%), compared to the antenatal and postnatal inpatient units (less than 50%). At THMG, adherence was also higher in the delivery room than in the postnatal inpatient unit (less than 25%). Health professionals considered that filling in the safe childbirth checklist was a practical option (DSHW 100% and THMG 88.9%).	to its application: lack of human resources, lack of enthusiasm, lack of adequate accoun- tability for the items on the list, inadequate experience and lack of supervision. It can be concluded that adapting the safe	Critical Appraisal Checklist for Analytical Cross Sectional Studies
R. Molina B. J. Neal L. Bobanski V. P. Singh B. A. Neville M. M. Delaney S. Lipsitz A. Karlage M. Shetye K. E. A. Semrau India, 2020.	Nurses' and auxiliary nurse midwives' adherence to essential birth practices with peer coaching in Uttar Pradesh, India: a secondary analysis of the BetterBirth trial.	mized controlled trial of matched pairs.	health, primary health center and community health centers in the state of Uttar Pradesh, India, between 2014 and 2016. With a sample of $n=570$ birth attendants, including nurses ( $n=474$ ) and auxiliary nurse midwives ( $n=96$ ),	The nurses and auxiliary nurse midwives who received training adhered to the essential birth practices more than the control group.  Adherence to essential birth practices was similar among nurses and nurse assistants.  Adherence was higher after two months from the start of training, After 12 months, 49.2% of the nurse assistants demonstrated selherence to the essential practices, and the nurses 56.1%.	similarly to the training intervention, with a significant increase in adherence to essential practices at birth. Training proves to be an effective support strategy for certain aspects of birth attendants' competence.	
J. Thomas J. Voss, E. Tarimo. Tanzania, 2021.	Safe birth matters: facilitators and barriers to uptake of the WHO safe chilbirth checklist tool in a Tanzania Regional Hospital.	To test the World Health	analysis of $n=35$ files, with the aim of identifying the presence or absence of documentation aligned with the items on the WHO safe childbirth checklist. The stages of the study were divided		child birth checklist is possible in the regions of Tanzania and that the facilitators and	Appraisal Checklist for Quasi-
C. Brás M. Figueiredo M. Ferreira Portugal, 2023.	Safety Culture in Obstetric Nurses Clinical Practice.	Observational, analytical and cross-sectional study. To identify the dimensions of safety culture that influence the clinical practice of Specialist Nurses in Maternal and Obstetric Health Nursing.	and Obstetric Health Nursing responded	Safety culture was divided into 12 dimensions: teamwork within units, supervisor/manager expectations and actions that promote patients askety: cagnizational learning; feedback and communication about errors; communication/openness of communication; human resources; non-punitive response to error; management support for patient safety; teamwork between teams; transfers and transitions; overall perception of patient safety; and frequency of reported events. With regard to the dimensions of safety culture, the average percentage of positive responses was less than 50%. 40% of obstetric murses rated the level of safety as acceptable and 24.3% as weak or very weak. The majority of obstetric murses (85.5%) reported no events in the last 12 months.	The "teamwork in the units" dimension came out as the strongest dimension in promoting safety in maternity wards. Dimensions such as: non-punitive response, frequency of reported events, management support for patient safety, staff and overall perception of patient safety, stowed to be problematic and in need of intervention. The dimensions of safety culture influence each other and are also influenced by the training of obstetric nurses.  The data exposes washnesses in obstetric are institutions that compromise health professionals, managers and supervisors.	Level of Evidence: 3. / JBI Critical Appraisal Checklist for Analytical Cross Sectional Studies (%) – 7/10 (70%).
H., Nababan R. Islam S. Mostari M. Tariqujjaman M. Sarker M. T. Islam C. Moucheraud Bangladesh, 2017.	Improving quality of care for maternal and newborn health: a pre-post evaluation of the Safe Childbirth Checklist at a hospital in Bangladesh.			After the implementation of the WHO Safe Childbirth Checklist, there was an increase of appraximately 70% in the average number of safe childbirth practices. There was also a significant improvement in the active management of abor stages. There was no improvement with the introduction of the safe childbirth checklist in the proper management of newborn infection, checking special care for the newborn and practices such as newborn resuscitation.		Critical Appraisal Checklist for

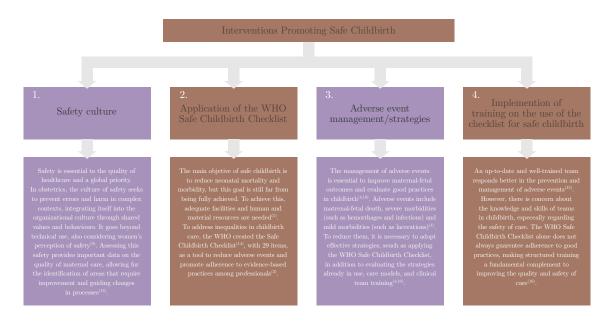


Figure 2: Interventions to promote safe childbirth

# Discussion of Results

Despite being a physiological event, childbirth is a complex situation with a high potential for adverse outcomes for both the woman and the newborn. In this context, it is imperative to ensure rigorous clinical surveillance, as well as the implementation of evidence-based practices that promote the safety of the care provided<sup>(4)</sup>. Patient safety has emerged in recent decades as a priority for health organizations worldwide and childbirth, as a critical moment, requires a systematic and multidimensional approach that includes not only clinical aspects, but also organizational, training and relational aspects<sup>(13)</sup>.

The culture of health safety is a structural pillar of quality care and is not limited to the technical execution of clinical procedures, but also encompasses the attitudes, values, perceptions and behaviors of professionals and institutions in relation to patient safety<sup>(17)</sup>. Studies included in this review<sup>(9,13)</sup> show that safety culture, when assessed using validated surveys, has significant gaps in maternal health services, particularly in the dimensions related to management support, teamwork and the overall perception of safety.

In the articles analyzed on the subject of safety culture, the authors sought to understand which factors influence it. The study<sup>(9)</sup> sought to analyze how institutional factors related to the perceptions of the Specialist Nurses in Maternal and Obstetric Health Nursing affect the perception of safety culture. The study<sup>(13)</sup> sought to identify the dimensions of safety culture that influence the clinical practice of obstetric nurses.

Both authors identified 12 dimensions of safety culture, according to the Hospital Survey on Patient Safety Culture:

- 1. expectations and actions of the supervisor in promoting patient safety;
- 2. teamwork in the units;
- organizational learning and continuous improvement;
- 4. openness in communication;
- 5. feedback of information and reporting of errors;
- non-punitive response to errors;
- 7. staffing;

- 8. teamwork between units;
- 9. management support for patient safety;
- 10. transfers and transitions;
- 11. overall perception of patient safety and
- 12. frequency of reported events $^{(9,13)}$ .

With regard to the results obtained, the study<sup>(9)</sup> found that less than 75% of the responses evaluated in the 12 dimensions suggested a weak safety culture in the maternity sector. The dimensions with the most positive responses were 3, 2 and 6 and those with the least positive responses were 7, 10 and 11.

The study<sup>(13)</sup> obtained the most positive results in dimensions 1, 2, 4 and 5, with the rest having values of less than 50%. It was observed that Specialist Nurses in Maternal and Obstetric Health Nursing rated patient safety as weak or very weak. Teamwork was the dimension with the most positive value, where factors such as good interaction between team members, mutual support and respect have an impact on the nursing care provided. Work between teams, on the other hand, showed lower values, demonstrating a lack of support and coordination between teams.

Although the studies took place in different contexts, weaknesses were identified in the dimensions of patient safety, which shows that the safety culture needs investment in the training of health professionals, as well as a better understanding of the safety culture on their part. Other studies state that in order for its potential to be fully realized, it is essential that healthcare organizations eliminate barriers to reporting, promoting a system that encourages professionals rather than penalizing them<sup>(18)</sup>.

The implementation of the WHO Safe Childbirth Checklist has proved to be an important tool in implementing good nursing practices, improving the care provided and, as such, improving its quality and safety.

In the articles analyzed, the implementation of the Safe Childbirth Checklist showed good adherence on the part of obstetric nurses. The study<sup>(2)</sup> observed 70% adherence in the delivery room and 50% in the antenatal and postnatal wards, and identified some

limitations to its use, such as: lack of staff, lack of motivation among health professionals, lack of training and lack of supervision.

The study<sup>(14)</sup> found differences in the provision of care before and after the implementation of the Safe Childbirth Checklist, with an increase in health professionals using the Safe Childbirth Checklist as clinical support in the provision of care. The study<sup>(5)</sup> observed an increase of around 70% in the number of safe delivery practices, and there were improvements in maternal counseling on admission, after birth and before discharge. One thing that was unanimous among the authors was the increase in the use of good practices by health professionals. However, it was found that adherence to these practices was uneven, being higher in some aspects than others (2,14,5). Newborn care was where there were shortcomings, with no improvement in the practices and care provided even with implementation, with regard to infections and newborns with special care $^{(5)}$ .

In general, the implementation of the Safe Child-birth Checklist is well accepted by obstetric nurses; it contributes to adherence to good practices, positively influencing the care provided. One aspect to highlight is the fact that it was in the delivery room that the best results were obtained and where the Safe Child-birth Checklist was applied the most, neglecting antepartum, postpartum and newborn care, and it can be seen that from the perspective of obstetric nurses it is during labor that the Safe Childbirth Checklist has the most significance.

The implementation of the Safe Delivery Check-list is also considered a good tool for preventing adverse events. The study<sup>(4)</sup> proposed its implementation in order to increase Specialist Nurses in Maternal and Obstetric Health Nursing adherence to good practices, thus reducing adverse events such as antibiotic management, unjustified episiotomy, instrumented deliveries and caesarean sections. He concluded that despite adherence to good practices, interventions need to be adapted to the context in which the service is provided in order to improve the quality of care and reduce adverse events.

Other more recent studies are in line with the results obtained previously, reporting that the Safe Childbirth Checklist, in terms of content, structure and implementation strategies, is a tool for improving the quality of care during childbirth in the health units that apply it, and also stating that professionals who follow this checklist can benefit from additional guidelines for optimal adaptation and implementation, according to the local context<sup>(19,20)</sup>.

The study<sup>(10)</sup> identified three categories of strategies implemented to optimize women's safety during labor and delivery. These were: clinical governance, which aims to implement patient safety compression programs, a checklist for standardizing care and auditing tools. Models of care (led by Specialist Nurses in Maternal and Obstetric Health Nursing) and training for professionals, which includes management training in obstetric emergencies. However, the effectiveness of this strategy has not been evaluated, as the evaluation measures used are based on clinical outcomes, such as maternal mortality, and do not include women's perception of safety.

Training health professionals is a strategy used to promote safety, as it allows for the improvement of knowledge and skills. The use of coaching programs has been applied with the aim of improving adherence to good practices and consequently safer care during childbirth<sup>(15)</sup>. Frequent coaching programs can improve health professionals' adherence to implementing good practices. However, a significant improvement in the quality of care, such as adherence to good practices, does not necessarily translate into a significant improvement in health outcomes, as it has been found that adherence to good practices decreases after the end of the coaching program<sup>(16)</sup>.

Both studies<sup>(15,16)</sup> agree on adherence to good practices, stating that this tends to decrease over the months following the implementation of coaching. They also point out that interventions such as assessing blood pressure on admission, hand hygiene after childbirth and newborn care did not show an increase in adherence, even with the application of the coaching program.

Other studies point out that competency-based training has been shown to have a positive impact on improving the performance of nurses and health professionals in the face of obstetric emergencies, reflected in significant gains in knowledge, attitude and clinical practice. Studies show that educational programs with simulation contribute to a statistically significant correlation between these domains, both post-intervention and at follow-up. In addition, there is evidence that short, practice-oriented trainings in Emergency Obstetric Care increase the availability and quality of this care, especially in low- and middleincome country settings, thus improving maternal and perinatal outcomes<sup>(21)</sup>. The long-term effectiveness of these interventions depends, however, on factors such as supportive working environments, efficient referral routes and ongoing opportunities for practical application of the skills acquired $^{(22)}$ .

There are many aspects to consider when it comes to safe childbirth, from concepts of safety culture, to the implementation of checklists, training and education of professionals. The management, prevention of adverse events and promotion of patient safety is also related to multidimensional factors such as the culture, beliefs and values of health professionals and institutions<sup>(9)</sup>.

The limitations found in this review were the lack of studies directly relating obstetric nurses' skills and interventions to the practice of safe childbirth. However, practically all the articles analyzed focused on obstetric nurses and the need to adopt good practices to promote safe childbirth. This highlights their fundamental role when it comes to the safety of women and children during labor and delivery.

# Conclusion

This integrative review has shown that the Specialist Nurses in Maternal and Obstetric Health Nursing plays a crucial role in promoting safe childbirth and is a key player in implementing good, evidence-based practices, managing adverse events and building a culture of safety centered on women. The use of the WHO Safe Childbirth Checklist has proven to be an

effective tool in improving the quality of care, especially during labor, although its adherence still faces challenges related to ongoing training, supervision and existing institutional conditions.

In addition, the studies analysed reinforce the importance of investing in strategies that include continuous training programmes, clinical coaching and strengthening teamwork, as essential means of ensuring safe and humanized obstetric care. Despite the scarcity of research directly addressing the specific competencies of the Specialist Nurses in Maternal and Obstetric Health Nursing in the context of safe childbirth, the existing literature clearly points to their relevance in reducing maternal and neonatal morbidity and mortality.

In this sense, it is imperative that health services value and promote the continuous training of these professionals, creating environments that favor safe practice, effective communication and the empowerment of women during the childbirth process. Future research should delve deeper into the relationship between Specialist Nurses in Maternal and Obstetric Health Nursing clinical skills and obstetric outcomes, contributing to the strengthening of evidence-based practice in the field of maternal health, in order to guarantee increasingly humanized, safe and quality care.

## References

- 1. Delaney MM, Maji P, Kalita T, Kara N, Rana D, Kumar K, et al. Improving adherence to essential birth practices using the WHO Safe Childbirth Checklist with peer coaching: Experience from 60 public health facilities in Uttar Pradesh, India. Glob Health Sci Pract. 2017;5(2):217-31. Available from: https://doi.org/10.9745/GHSP-D-17-00147.
- 2. Senanayake HM, Patabendige M, Ramachandran R. Experience with a context--specific modified WHO safe childbirth checklist at two tertiary care settings in Sri Lanka. BMC Pregnancy Childbirth. 2018;18:127. Available from: https://doi.org/10.1186/s12884-018-1747-5.
- 3. Gama ZA, Lima MT, Semrau KE, Tuller DE, Fifield J, Fernández-Elorriaga M, et al. Implementation of the WHO Safe Childbirth Checklist: a scoping review protocol. BMJ Open. 2025;15:e038719. Available from: https://doi.org/10.1136/bmjopen-2024-084583.
- 4. Sousa K, Pimenta ID, Saturno-Hernandez PJ, Elorriaga MF, Rosendo TM, Medeiros WR, et al. Multicentre cross-sectional adverse events and good practices in maternity wards in Brazil and Mexico: same problems, different magnitude. BMJ Open. 2019;9:e028401. Available from: https://doi.org/10.1136/bmjopen-2018-028401.
- 5. Nababan HY, Islam R, Mostari S, Tariqujjaman M, Sarker M, Islam MT, et al. Improving quality of care for maternal and newborn health: a pre-post evaluation of the Safe Childbirth Checklist at a hospital in Bangladesh. BMC Pregnancy Childbirth. 2017; 17:120. Available from: https://doi.org/10.1186/s12884-017-1327-2.
- 6. Semrau KE, Hirschhorn LR, Kodkany B, Spector JM, Tuller DE, King G, et al. Effectiveness of the WHO Safe Childbirth Checklist program in reducing severe maternal, fetal, and newborn harm in Uttar Pradesh, India: study protocol for a matched-pair, cluster-randomized controlled trial. Trials. 2016;17:354. Available from: https://doi.org/10.1186/s13063-016-1541-0
- 7. Ordem dos Enfermeiros. Padrões de qualidade dos cuidados especializados em enfermagem de saúde materna e obstétrica [Internet]. 2021 [accessed 2025 April 21]. Available from: https://www.ordemenfermeiros.pt/media/22610/ponto-3\_proposa-dos-padr%C3%B5es-qualidade-dos-cuidados-de-enfermagemespecializada-smo.pdf
- 8. Toronto CE, Remington R. A step-bystep guide to conducting an integrative review. USA: Springer; 2020.

- 9. Nicácio MC, Pereira AL, Almeida LF, Penna LH. Women's safety culture in childbirth and related institutional factors. Texto Contexto Enferm. 2020;29:e20180381. Available from: https://doi.org/10.1590/1980-265X-TCE-2018-0381.
- 10. McCormick M, Pollock W, Care C, Kapp S, Gerdtz M. Organizational strategies to optimize women's safety during labor and birth: A scoping review. Birth. 2021;48(3):307-16. Available from: https://doi.org/10.1111/birt.12527.
- 11. Zoe J, Lockwood C, Munn Z, Aromataris E. The updated Joanna Briggs Institute Model of Evidence-Based Healthcare. Int J Evid Based Healthc. 2019;17(1):58-71. Available from: https://doi.org/10.1097/ XEB.00000000000000155.
- 12. Joanna Briggs Institute. Critical Appraisal Tools [Internet]. 2020 [accessed 2025 May 10]. Available from: https://jbi.global/ critical-appraisal-tools
- 13. Brás CPC, Barbieri de Figueiredo MCA, Ferreira MMC. Cultura de segurança na prática clínica dos enfermeiros obstetras. Texto Contexto Enferm [Internet]. 2023 [accessed 2025 May 10];32:e20220330. Available from: https://doi.org/10.1590/1980-265X-TCE-2022-0330pt
- 14. Thomas J, Voss J, Tarimo E. Safe birth matters: facilitators and barriers to uptake of the WHO safe childbirth checklist tool in a Tanzania Regional Hospital. Afr Health Sci. 2021;21(2). Available from: https://doi.org/10.4314/ahs. v21i2.55.
- 15. Molina RL, Neal BJ, Bobanski L, Singh VP, Neville BA, Delaney MM, et al. Nurses' and auxiliary nurse midwives' adherence to essential birth practices with peer coaching in Uttar Pradesh, India: a secondary analysis of the BetterBirth trial. Implement Sci. 2020;15(1). Available from: https://doi.org/10.1186/s13012-019-0962-7.
- 16. Barnhart DA, Spiegelman D, Zigler CM, Kara N, Delaney MM, Kalita T, et al. Coaching intensity, adherence to essential birth practices, and health outcomes in the BetterBirth trial in Uttar Pradesh, India. Glob Health Sci Pract. 2020;8(1). Available from: https://doi.org/10.9745/GHSP-D-19-00216.
- 17. Félix L, Filippin LI. Cultura de segurança do paciente em uma maternidade de hospital universitário. Rev Bras Enferm. 2020;73(Suppl 6):e20200517. Available from: https://doi.org/10.1590/0034-7167-2020-0517.
- 18. Hassan NA, Rahman HA, Knights J, Hashim S, Sharbini S, Abdul-Mumin KH. Cultivating patient safety culture in midwifery practices through incident reporting. Br J Midwifery. 2024;32(7):388-94. Available from: https://doi.org/10.12968/bjom.2024.32.7.388.

- 19. Molina RL, Benski A-C, Bobanski L, Tuller DE, Semrau KE. Adaptation and implementation of the WHO Safe Childbirth Checklist around the world. Implement Sci Commun [Internet]. 2021 [accessed 2025 May 10];2:76. Available from: https://doi.org/10.1186/s43058-021-00176-z
- 20. Perry WRG, Bagheri Nejad S, Tuomisto K, Wall S, Day LT, Delaney MM, et al. Implementing the WHO Safe Childbirth Checklist: lessons from a global collaboration. BMJ Glob Health [Internet]. 2017 [accessed 2025 May 10];2:e000241. Available from: https:// doi.org/10.1136/bmjgh-2016-000241
- 21. Ameh CA, Mdegela M, White S, van den Broek N. The effectiveness of training in emergency obstetric care: a systematic literature review. Health Policy Plan. 2018;34(4):257-70. Available from: https://doi.org/10.1093/heapol/czz001.
- 22. El Sharkawy AT, Ali FK, Araby OA. The Effect of Simulation-Based Educational Program on Maternity Nurses' Performance regarding Obstetrical Emergencies during Pregnancy. Evid Based Nurs Res. 2019;2(4). Available from: https://doi.org/10.47104/ebnrojs3.v2i4.156.

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