Revista de Enfermagem UFPE On Line
ISSN:1981-8963

J Nurs UFPE on line.
2021; 15: e245809
DOI: 10.5205 / 1981-8963.2021.245809
https://periodicos.ufpe.br/revistas/revistaenfermagem

QUALIDADE E SEGURANÇA NA ASSISTÊNCIA OBSTÉTRICA
QUALITY AND SAFETY IN OBSTETRIC ASSISTANCE
CALIDAD Y SEGURIDAD EN LA ASISTENCIA OBSTÉTRICA

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RESUMO

Objetivo*:** analisar a literatura científica sobre qualidade e segurança na assistência obstétrica. ***Método*:** revisão integrativa que seguiu as seis etapas metodológicas do referencial utilizado. Por meio das bases de dados *Medical Literature Analysis and Retrieval System Online* e Literatura Latino-Americana e do Caribe em Ciências da Saúde, recrutaram-se 606 publicações, das quais, nove compuseram a síntese do conhecimento. ***Resultados*:** os estudos incluídos eram transversais/quantitativos (55,5%) e com nível de evidência VII (55,5%). As evidências foram sintetizadas em três eixos condutores: Comunicação interprofissional e trabalho em equipe na assistência obstétrica; Práticas intervenientes na assistência obstétrica (in)segura; e Ações para melhoria da qualidade e segurança na assistência obstétrica. ***Conclusão: apesar de falhas na comunicação e no trabalho em equipe, além de diversos riscos à segurança assistencial, evidenciados pelo modelo intervencionista no cuidado obstétrico, existem ações políticas, técnicas e comportamentais que alavancam a qualidade e a segurança na atenção materno-infantil. ***Descritores*:** Obstetrícia; Segurança do paciente; Qualidade da assistência à saúde; Centros de assistência à gravidez e ao parto; Enfermagem obstétrica; Qualidade, Acesso e Avaliação da Assistência à Saúde.

ABSTRACT

Objective*:** to analyze the scientific literature on the quality and safety in obstetric care. ***Method*:** an integrative review using a six-step methodological framework was carried out. The Medical Literature Analysis and Retrieval System Online and the Latin American and Caribbean Health Sciences Literature databases were searched, and 606 publications were retrieved, of which nine comprised the knowledge synthesis. ***Results*:** the included studies were cross-sectional/quantitative (55.5%) and with evidence level VII (55.5%). The evidence was synthesized in three guiding axes: Inter-professional communication and teamwork in obstetric care; Intervening practices in (un)safe obstetric care; and Actions to improve the quality and safety of obstetric care. ***Conclusion: despite failures in communication and teamwork in addition to several risks to care security evidenced by

the interventionist model in obstetric care, there are political, technical, and behavioral actions that leverage quality and safety in maternal and child care.

Descriptors: Obstetrics; Patient Safety; Quality of Health Care; Birthing Centers; Obstetric Nursing; Health Care Quality, Access and Evaluation.

RESUMEN

Objetivo: analizar la literatura científica sobre calidad y seguridad en la atención obstétrica. ***Método:*** se realizó una revisión integradora utilizando un marco metodológico de seis pasos. Se realizaron búsquedas en el Medical Literature Analysis and Retrieval System Online y en la base de datos Latin American and Caribbean Health Sciences Literature y se recuperaron 606 publicaciones, de las cuales nueve compuso la síntesis de conocimientos. ***Resultados:*** los estudios incluidos fueron transversales / cuantitativos (55,5%) y con nivel de evidencia VII (55,5%). La evidencia se sintetizó en tres ejes: Comunicación interprofesional y trabajo en equipo en la atención obstétrica; Prácticas de intervención en la atención obstétrica (no) segura; y Acciones para mejorar la calidad y seguridad de la atención obstétrica. ***Conclusión:*** a pesar de las fallas en la comunicación y el trabajo en equipo, además de varios riesgos para la seguridad del cuidado que evidencia el modelo intervencionista en la atención obstétrica, existen acciones políticas, técnicas y conductuales que apalancan la calidad y seguridad en la atención materno-infantil.

Descriptores: Obstetricia; Seguridad del Paciente; Calidad de la Atención de Salud; Centros de Asistencia al Embarazo y al Parto; Enfermería Obstétrica; Calidad, Acceso y Evaluación de la Atención de Salud.

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How to cite this article
Snow IAR, Maia MCW, Do Canto DF, De Souza VS, Santarém MD, Oliveira, JLC. Quality and safety in obstetric assistance: Integrative literature review. J Nurs UFPE on line. 2021; 15: e245809 DOI: https://doi.org/10.5205/1981-8963.2021.245809

INTRODUCTION

Qualified and safe health care permeates the right to dignified human care in all life cycles and care contexts, which involve risks of errors and adverse events at different levels. In the

obstetric area, poorly conducted childbirth care contributes to the death of about 285,000 women a year worldwide and, in Brazil, there are about 60,000 adverse events in obstetrics per year.[1]

Even with the wide coverage in the rates of assistance to childbirth, Brazil still registers high maternal mortality rates, estimated at 64.8/100 thousand live births.[2] This denotes problems in maternal and perinatal care that, despite the significant coverage offered by the Unified Health System (SUS), have reflected many gaps regarding quality in various maternal and child care services.[3-6]

The contemporary obstetric model practiced in Brazil has a proportion of deliveries performed in hospitals exceeding 98%, having, in 2016, the rate of cesarean deliveries in the public-sector equivalent to 55.6%, in contrast to the recommendation of the World Health Organization (WHO) with a maximum rate of 15%.[7] This standard of care promotes the use of interventions on a routine basis, such as the use of oxytocin, episiotomy, in addition to cesarean sections, which should be performed only in necessary situations, due to the associated risks and considering the good practices based on safety and humanization.[2,5]

Another problem related to the quality of obstetric care refers to the coexistence, in a little integrated way, of the model of childbirth care, under the guidance of obstetric nurses and the traditional and interventionist model, under the guidance of doctors.[8] Furthermore, there are no strategies guaranteeing continuity of care per patient, and, therefore, communication about the condition of mothers and infants is precarious, which tends to weaken the quality of the obstetric care model.[8]

In political terms, it should be noted that strategies to improve the national obstetric scenario are effective.[6] In this regard, in 2000, the Brazilian Ministry of Health implemented the Humanization Program for Prenatal and Birth (PHPN in Portuguese), aiming to adopt measures that guarantee improvements in prenatal care and assistance in childbirth, puerperium, and the neonatal period.[9] In 2005, the National Policy for Obstetric and Neonatal Care[10] expanded the focus on the goals established by the National Pact for Obstetric and Neonatal Care, and also by the Technical Manual for Qualified and Humanized Care in the Prenatal Period and the Puerperium.[11]

In 2014, the National Health Surveillance Agency (ANVISA in Portuguese) published the Maternal and Neonatal Care Services: Safety and Quality Manual,[1] to reduce injuries related to the reproductive process and/or linked to the care process, increasing safety and humanization in care to promote improvements in patient safety and quality of services. Based on the guidelines contained therein, the maternal and neonatal care services were able to organize the construction of patient safety systems aiming at reducing errors and damages in the maternal and child care process.[1]

Ordinance No. 353, of February 14, 2017, which approved the National Guidelines for Assistance to Normal Childbirth, consolidated itself as another strategy for assessing the quality of care provided during a normal birth that brought the goal of systematically analyzing the available scientific information on the practice of childbirth and birth care, in addition to encouraging recommendations in the following areas: place of childbirth assistance; general care during pain relief during labor; assistance in the first period of childbirth; attention in the second period of childbirth; assistance in the third period of childbirth; maternal care immediately after delivery; and assistance to the newborn.[12]

Although the political and technical strategies aimed at obstetric professionals and services are relevant and necessary, it is known that the challenge of promoting more qualified and safe care is persistent.[8] Also, due to the model of obstetric care adopted in the country and recognized as highly interventionist, there is a high rate of cesarean deliveries which are naturally more exposed to risks. Brazil occupies, together with Nicaragua, a prominent position in the world ranking about this type of delivery.[13]

Given the undeniable risks to safety in obstetric care and the need to increase actions that enable more qualified and safe care, it is essential to analyze the available scientific evidence to synthesize the best practices and to examine those considered undesirable (a priori). Thus, this study was based on the following question: what is the evidence related to the quality and safety in obstetric care referred to in the scientific literature?

OBJECTIVE

To analyze the scientific literature on the quality and safety in obstetric care.

METHOD

An integrative literature review was conducted. This method allows the critical evaluation and synthesis of the available scientific evidence related to a certain subject/problem, whose final result is the expansion of the current state of knowledge about an investigated theme.[14] The study followed the steps proposed for integrative reviews[14,15]: identification of the theme and selection of the integrative review's hypothesis or research question; definition of inclusion and exclusion criteria for studies or literature search; establishment of the information to be extracted from the studies/categorization of the studies; evaluation of the studies included in the integrative review; interpretation of results; and presentation of the knowledge review/synthesis.

The following databases were searched: Virtual Health Library (VHL), Medical Literature Analysis and Retrieval System Online (MEDLINE), and Latin American and Caribbean Health Sicences

Literature (LILACS), between August and November 2019, using the following terms: Obstetrics, Quality Management, Patient Safety, and Quality of Healthcare in English. The Boolean operators AND and OR were used for crossing and the terms mentioned above were searched in the title and abstract screening.

The following inclusion criteria were used: scientific articles published in Portuguese, English, and Spanish, between the 2014 and 2019 (since in 2013, the National Patient Safety Program — PNSP was promulgated[16] and, in 2014, the Maternal and Neonatal Care Services: Safety and Quality Manual was published).[1] Full text articles available for free were selected if they had at least one of the terms mentioned above in the abstract or keywords. Subsequently, the abstracts that did not contain these descriptors in the keywords were screened. Duplicates, theses, dissertations, and/or editorials were excluded in addition to articles that did not address the research question.

The study selection process was illustrated using a flowchart divided into four phases, namely identification, screening, eligibility, and included, following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines.[17]

The information extracted from the selected articles was summarized in a table containing a code (in Roman numeral, randomly defined); authors and year of publication; journal; objectives; study design; level of evidence; main results; and conclusions. Then, the discussion of the findings was summarized in axes that lead to the synthesis of knowledge.

The level of evidence was classified according to a previous study that classifies the evidence from I to VII, in which: I) Evidence from a systematic review or meta-analysis of all relevant randomized controlled trials or evidence-based clinical practice guidelines based on systematic reviews of randomized controlled trials; II) Evidence obtained from at least one well-designed randomized controlled trial; III) Evidence obtained from well-designed controlled trials without randomization; IV) Evidence from well-designed case-control or cohort studies; V) Evidence from systematic reviews of descriptive and qualitative studies; VI) Evidence from a single descriptive or qualitative study; and VII) Evidence from the opinion of authorities and/or reports of expert committees.[18] The study is of a secondary nature and, therefore, does not disrespect the ethical principles of research involving human beings.

RESULTS

A total of 606 publications were identified and nine articles remained in the final sample for analysis (Figure 1).

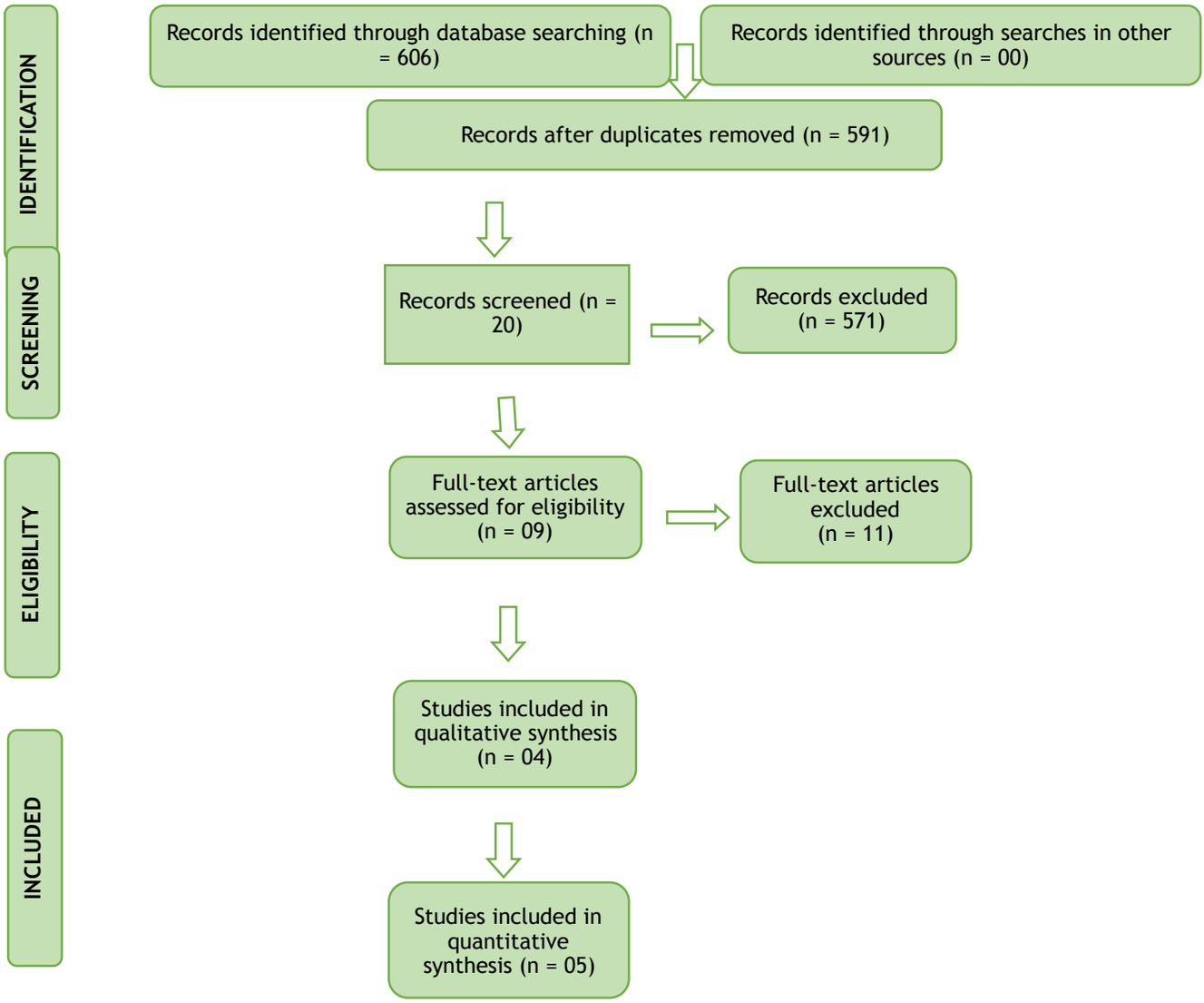

Figure 1. Flowchart for study selection (PRISMA, 2009). Brazil, 2019.

After the study selection stage, the information obtained from the articles was grouped in an illustrative table (Chart 1), organized in ascending order by year of publication, and randomized using Roman numerals.

Code	Authors /Year	Journal	Objectives	Design	Level of evidence*	Main results	Conclusions
I	Oliveira et al., 2015[19]	Rev Gaúcha Enferm.	To assess delivery and birth assistance in usual risk maternity hospitals in a capital city in southern Brazil	Evaluative, cross-sectional, retrospective study with a quantitative approach	VI	The "companion" pattern was not recorded in 83.3% of the medical records; The "partogram" pattern was present in 98.5% of the medical records; The "absence of stimulus to labor" pattern was not met in 69% of cases; Regarding the "non-supine delivery position" pattern, no record was found in 99% of the medical records; The "skin-to-skin contact" pattern was recorded in 75.1% of cases.	Only 0.2% of the medical records covered the five quality standards of the Bologna Score.

II	Marcolin, 2015[20]	Rev Bras Ginecol Obstet.	To address ways to redesign the obstetric care model	Critical comment	**VII**	Changes must be planned based on the definition of goals. Priorities must be set, such as defining the most frequent procedures, the high-risk situations, and the risk for complications. Structures, processes, and inter-related indicators must be considered for quality analysis.	The implementation of evidence-based clinical guidelines is crucial in promoting the quality of healthcare.
III	Padovani et al., 2018[21]	Rev Nursing	To identify factors that cause failures in obstetric care and compromise the safety of pregnant woman and infants	Integrative review	**V**	Failures in communication between team members are indicators of failures in healthcare. Induction of labor before 39 weeks can lead to uterine hyperstimulation, exhausting and prolonged labor, and increased maternal mortality. The selective use of episiotomy resulted in fewer complications and postpartum pain. Care practices contradicting the WHO recommendations, such as trichotomy, enema, and routine use of episiotomy are causes of failure.	Safety in obstetric care is linked to behavioral issues, not based on scientific evidence.
IV	Romão et al., 2018[22]	Revista de Enfermagem do Centro Oeste Mineiro	To identify the quality of care during normal childbirth, according to the Bologna Score	Descriptive, quantitative, cross-sectional study	**VI**	The presence of a companion, use of the partograph, and skin-to-skin contact within the recommendations of the World Health Organization were aspects identified. However, the adoption of non-supine positions in childbirth and the practice of episiotomy had rates above the recommended.	Important aspects of the WHO recommendations and humanization were met, but there is a need to reassess professionals' practices in adopting non-supine positions for childbirth and criteria for carrying out episiotomy.
V	Portela et al., 2018[8]	Cad Saúde Pública	To reflect on the challenges for improving the quality of obstetric care	Participatory action research	**VII**	The coexistence of interventionist models and childbirth care by obstetric nurses was identified as well as the lack of continuity of care strategies for pregnant women.	The is a need for investment in multi-professional teamwork and better definition of roles. Training focused on improving team communication is needed.
VI	Antony et al., 2018[23]	BMJ - British Medical Journal	To examine the effectiveness of quality improvement strategies on patient safety outcomes in obstetrics	Literature review	**I**	The insertion of patient safety programs, involving strategies aimed at health systems and health professionals, reduced the occurrence of adverse events in obstetrics.	Actions aimed at the education of health professionals can improve the safety of women and newborns during childbirth.
VII	Romijin et al., 2018[24]	BMJ - British Medical Journal	To understand how different obstetric care professionals evaluate interprofessional collaboration	Quantitative cross-sectional study	**VII**	Multiple discrepancies in the mutual perceptions of interprofessional collaboration between obstetricians, midwives, and nurses were found.	Successful interprofessional collaboration depends on expanding the social identity of professionals beyond the profession to a common, team-based identity.

VIII	Epiu et al., 2018[25]	Reproductive Health	To point out potentials for improvement in maternal and neonatal health outcomes by reinforcing perioperative care	Quantitative cross-sectional study	**VII**	Only 34.38% of hospitals used the WHO safe surgery checklist. The lack of availability of the checklist was the reason given for the lack of use.	There is a need to intensify the focus on international health goals concerning health discrepancies in low-income countries to move towards safe motherhood.
IX	Moraes et al., 2019[26]	Cuidarte Enfermagem	To describe the adverse events that occurred in the maternity hospital of a teaching hospital	Quantitative cross-sectional study	**VII**	Eighty-nine adverse events related to seven incidents were found: nipple trauma, communication failure, medication failure, identification failure, fall, hemorrhage, and phlebitis.	Even with the notification of adverse events, there is a lack of indicators recommended by the Maternal and Neonatal Care Services: Safety and Quality Manual by ANVISA.
*Level of Evidence[18]							

Chart 1. Summary of articles according to authors, year of publication, journal, objectives, design, levels of evidence, main results, and conclusions. Brazil, 2019.

Three guiding axes were created after successive readings of the selected studies to synthesize the literature review findings: Inter-professional communication and teamwork in obstetric care; Intervening practices in (un)safe obstetric care; and Actions to improve the quality and safety of obstetric care. This summary is presented next.

DISCUSSION

Interprofessional communication and teamwork in obstetric care

Studies III[21], V[8], and VIII[25] pointed out the lack of interprofessional communication as an aggravation of teamwork failures. The absence of communication, the absence of multidisciplinary interaction, the presence of fear, and fear of provoking conflicts are indicators of unsafe care, even in the obstetric environment.[8]

The poorly harmonized coexistence of distinct obstetric care models with excessively interventional medical practices by obstetrical nurses makes it difficult for pregnant women to continue their strategies and impairs communication between doctors, nurses, and midwives.[8]

Communication failure was identified as the main cause (72%) of death or perinatal disability in the root analysis of 47 cases. In most cases, the failure in communication was attributed to the organization's culture, hierarchy, and teamwork development.[27]

Differences between professional cultures can be a barrier to effective interprofessional collaboration. Although different professional cultures in obstetric care are well known, little is known about discrepancies in collaboration mutual perceptions.[24] In multidisciplinary teams, ideas about patient care needs and perceptions of collaboration between care professionals need to be aligned to ensure patient safety.[28]

A research[24] codified as study VII analyzed the perceptions about an interprofessional collaboration among obstetric care professionals. The authors concluded that there are relevant

discrepancies in mutual perceptions of collaboration in obstetric care in the Netherlands, where the study was conducted.[24]

In the study[26] (code IX), communication was identified as responsible for 25.8% of adverse events, such as nipple trauma, communication failure, incorrect medication, inadequate identification, falls, hemorrhage and phlebitis. Failures in this regard ranged from faulty prescriptions with poor handwriting to incorrect documentation and transcriptions.[26] A study carried out in a maternity ward in the Southern Region of Brazil pointed out the need for improved communication in the shifts, in the organization, in the medical records, and in the laboratory results' agility.[29]

Healthcare is characterized by important peculiarities and the execution of teamwork is of fundamental importance for adequate assistance. A collective conception of work is crucial to provide quality and efficiency in the assistance, which is expected to be more efficient than that achieved by watertight individualized actions. Teamwork and frank communication generate benefits for both the team and the public served, thus, cohesion in the team's internal relationship provides an environment of trust and mutual respect, which positively influences the safety of healthcare including obstetric care.[30]

Regarding interprofessional collaboration, the evaluations of study VII were satisfactory. However, obstetricians rated collaboration with clinical midwives, nurses, and primary care midwives more positively than these three groups rated collaboration with obstetricians. Inter-professional collaboration between clinical midwives, nurses, and midwives in primary care indicated fewer significant discrepancies.[24]

Primary care midwives assist low-risk women. These women are referred to a hospital if the risks to maternal and fetal health are high or if complications arise during pregnancy or childbirth. At the hospital, obstetricians assume responsibility and care in collaboration with nurses and hospital midwives, also called "clinical midwives".[31] The organization of this system has the consequence of a high rate of referral of women, in which close collaboration and frank communication are essential.[24]

A common characteristic is related to doctors' positive perception about their collaboration with nurses than nurses' perceptions.[32] In other words, according to study VII,[24] doctors had a more optimistic perception about their contribution with other members of the team, while the nurses narrated this contribution as less collaborative.

Health professionals need to develop the competence of communication and trust, free from perceptions of inferiority concerning another professional category to dialogue with different areas in different situations that may jeopardize patient safety. In the obstetric scope, it was seen that

postures of frank, qualified, and active listening, in addition to teamwork, certainly have repercussions favoring the quality of care and safety of women and newborns.

Intervening practices in (un)safe obstetric care

In this axis, studies I[19], II[21], and IV[22] were brought together. These studies mention practices that interfere in the quality and safety of obstetric care. Among such practices, it was found that humanized actions in childbirth significantly influence the quality of childbirth and maternal and perinatal health, with a consequent reduction in mortality rates and reduction and optimization of costs.[22]

Study IV[22] used the Bologna Score to analyze the quality of care during labor and delivery. In this scoring instrument for childbirth assessment, five parameters are used: the presence of a companion during childbirth; use of the partogram; absence of stimulation in labor; delivery in the non-supine position; and skin-to-skin contact between mother and child.[22,33]

In a study carried out with 82 puerperal women in the rooming-in sector of a hospital in the interior of Minas Gerais, Brazil, no cases were reported in which the absence of a companion occurred due to the hospital's refusal to respect this right, reaching a 87% compliance.[22] This is considered a positive finding since a companion's presence is one of the recommendations regarding humanization in childbirth and is, therefore, seen as an indicator of quality in obstetric care.[1,5]

Regarding the use of the partogram, this resource's use was observed in 100% of analyzed medical records.[22] In contrast, the use of stimuli for labor and the use of episiotomy obtained a frequency of 28%,[22] which is contrary to the recommendations by the WHO that this rate does not exceed 10% since it does not prevent severe perineal laceration and is linked to maternal dissatisfaction and pain in the puerperal period, in addition to the risk of infection.[34]

Regarding the non-supine delivery position, which influences the progression of delivery with less dystocia, an occurrence of 7% was observed.[22] Regarding "skin-to-skin contact", a study found an index of 95%, indicating a favorable obstetric care,[22] higher than the rate found (51.6%) in another investigation carried out in Bahia, Brazil.[5] The research attested the need to evaluate the use of episiotomy, as well as the supine position in childbirth, whose indexes showed need for improvement.[22]

Study I[19] carried out in three maternity wards belonging to the SUS health system surveyed pregnant women of habitual risk linked to the "*Mãe Curitibana*" Program in Paraná, Brazil. In it, data from 406 medical records of puerperal women attended during normal delivery at the maternity hospital were analyzed using the Bologna Score with the following results: regarding the presence of the companion, there was no record in 83.3% of the medical records; the use of the partogram was present in 98.5% of the records; the absence of stimulus to labor was not met in 69%

of the medical records; the non-supine delivery position was not identified in 99% of the medical records; and regarding skin-to-skin contact, no record was found in 75.1% of the documents analyzed.[19]

The research mentioned above concludes that the frequencies referring to the five quality standards of the score used was low, suggesting that the institutions did not adopt the recommended practices and evidence-based actions in childbirth and birth care, related to the Bologna Score.[19] Results from other studies that used the same instrument were better[5,22] and the need to propose evaluative strategies in obstetric care services was evidenced to rationalize the improvement in the quality of care. Despite this, it is worth relativizing that structural and work organization issues tend to be intervening in assessing the quality of obstetric care,[4] which denotes the need for a systemic look at the matter.

Study III[21] identified the following practices and behaviors as intervening in safe/unsafe maternal and perinatal care: team integration; team communication with parturient and family members; promotion of skin-to-skin contact; early clamping of the umbilical cord; elective induction of labor before 39 gestational weeks; routine episiotomy; and immediate aspiration of the newborn's airways, when necessary. Given the above, the research indicated that even with professionals who defend childbirth humanization, practices persist that put safety in obstetric care at risk.[22]

Compared to medical practices, obstetric nurses' practices were analyzed in a quantitative, descriptive, and cross-sectional study[35] conducted in a university hospital in Mato Grosso, Brazil. The study was carried out in the prepartum/delivery/postpartum unit, and the maternal well-being resulting from this assistance was evaluated. The practices evaluated were use of non-pharmacological methods; use of oxytocin; amniotomy; childbirth positions; episiotomy; immediate clamping of the umbilical cord; skin to skin contact mother and child; and breastfeeding encouragement.[35]

The study pointed out the following findings: use of non-pharmacological methods by 97.2% of births monitored by nurses and 76.7% of births monitored by physicians, in which oxytocin was used in 30.8% of cases. Amniotomy was identified in 27.8% of births assisted by obstetric nurses and 50% of births assisted by physicians. Regarding delivery positions, 100% of births accompanied by obstetric nurses occurred in vertical positions, while in the births accompanied by physicians, 16.7% were in horizontal positions. Episiotomy was not practiced in deliveries accompanied by obstetric nurses and was adopted in 8.3% of deliveries accompanied by physicians. Immediate cord clamping occurred in 5.6% of births accompanied by obstetric nurses and 35% of births assisted by physicians. Skin-to-skin contact between mother and child occurred in 88.9% of births accompanied by

obstetric nurses and in 55% of births assisted by physicians, and the breastfeeding encouragement occurred in 91.7% of births accompanied by obstetric nurses and 81.7% of births assissted by physicians.[35]

Given the results highlighted in the previous paragraph, the researchers concluded that the practices carried out by obstetric nurses were based on scientific evidence and national recommendations. In this context, the nurse emerges as a trained professional that offers humanized care during childbirth encouraging the autonomy and the role of women in the parturition process.[35]

A systematic review[36] published in the Cochrane Library suggested that childbirth assistance to low-risk women by obstetric nurses resulted in lower intervention rates, reduced episiotomy and instrumental delivery rates, and increased chance of spontaneous delivery controlled by the parturient. There was also a greater opportunity for women to be assisted in the beginning of breastfeeding by the same professional involved in the delivery.[36]

Childbirth care policies, both national and international, have highlighted the importance of the obstetric nurse's role in changing the care model.[19] In the context of healthcare quality and patient safety, this professional is recognized as a strategic actor in the quality management of programs/systems in addition to constantly advocating for patient safety.[37]

Actions to improve quality and safety in obstetric care

Programs to improve the quality of obstetric and neonatal care should include outcome indicators of the efficiency of the care offered, indicators of structure, processes, and outcomes, and relate them to each other to obtain a systemic quality analysis consistent with the reality.[4,26]

An example of a structure indicator is the availability of pre-delivery, delivery, and post-delivery rooms as a process indicator (number of women giving birth in these rooms).[1,26] In this sense, studies[29,38] have found that situations such as hygiene, frequent use of bathrooms, availability of beds in the obstetric center, better accommodation for companions, and correct identification of rooms and beds are considered important during childbirth, presenting a close relationship with the satisfaction of parturients.[29,38]

Concerning the outcome indicator, the cesarean section's rate is internationally recognized as a metric of interest to obstetric quality.[13]

An instrument was validated in Distrito Federal, Brazil,[39] to verify health professionals' adherence to safe obstetric practices in childbirth care. A Likert-type scale with 50 items was divided into three evaluative dimensions: organization of the care network for pregnancy, childbirth, and birth; obstetric practices based on scientific evidence; and health work processes.[39]

This is, therefore, a systematic possibility for assessing the quality and safety of obstetric care, which corroborates the elementary principles of quality management.[37]

Study IX[26] analyzed the quality and safety in maternal and child health by assessing 89 notified events. Among the reports of adverse events carried out, the following were obtained: nipple trauma (30.3%); communication failure (25.8%); medication errors (20.2%); inadequate identification (14.6%); fall (3.3%); hemorrhage (3.3%); and phlebitis (2.2%).[26]

The following sentinel events are listed in the Maternal and Neonatal Care Services: Safety and Quality Manual by ANVISA: maternal death; elective delivery; undiagnosed breech presentation; shoulder dystocia; unplanned maternal readmission within 14 days; resuscitated maternal cardiopulmonary arrest; in-hospital antibiotic initiation 24 hours or more after vaginal delivery; removal, injury or unplanned repair of an organ (including hysterectomy); hemorrhage, requiring transfusion; eclampsia; unplanned return to the delivery or surgery room for any intervention; 3rd or 4th degree perineal lacerations; venous thromboembolism; uterine rupture; anesthetic complications; and admission to the ICU.

Other aspects of obstetric care that may become indicators of services include prophylaxis of venous thromboembolism, appropriate use of antibiotic prophylaxis within an hour before the cesarean section, intrapartum use of antibiotics for prophylaxis of neonatal sepsis by group B Streptococcus, incidence of episiotomy, and recurrence of cesarean section.[1]

In study VIII[25], 64 Ugandan hospitals were selected, including public and private hospitals. Only 34.38% used the WHO checklist for surgical obstetric care. The study found no statistically significant difference in using the checklist between government and private hospitals. The lack of availability of the checklist was the main reason given for not using it. Finally, the authors stated that it is urgent to make WHO checklists available to strengthen security in obstetric perioperative care.[25]

A Canadian study (code VI)[23] conducted from 10 randomized clinical studies on obstetric patient safety initiatives pointed out that many studies covered the professional education component that, combined with other strategies, can improve care outcomes. It is noteworthy that this was the study with the highest level of evidence in this review (level I). The other studies were evidence level VII (55%), which indicates, possibly, that there is still ample space for the development of robust studies on quality and safety in the obstetric area.

Corroborating the above, study III[21] concluded that obstetric safety is permeated by behavioral aspects and technical knowledge, which need to be based on the best scientific evidence.

Among obstetric safety actions, the need to intensify the focus on international health goals and health discrepancies in low-income countries is highlighted to move towards safe motherhood, strengthen health systems, design and implement local and international policies in order to achieve equity in maternal and child healthcare.[25]

Study code II[20] mentions an important Brazilian project entitled "Parto Adequado", a joint initiative of the National Health Agency (ANS), Hospital Israelita Albert Einstein, and the American Institute for Healthcare Improvement (IHI), with support from the Brazilian Ministry of Health, in order to generate changes in the delivery care model, through evidence-based practices, in order to promote improvements in the quality and safety of care, encouraging normal delivery and reducing unnecessary cesarean sections.[20]

In summary, the main strength of quality and safety in obstetric care found in the literature was the growing incentive for obstetric nurses' participation in national and international public policies for childbirth assistance, commonly represented by the conformity of quality and safety standards. On the other hand, the main weaknesses found were communication failure, behavioral aspects of the health team, and excessive interventionist procedures. The use of indicators and measures that make concrete actions for improvement feasible seems to emerge as beneficial strategies for improving quality and safety in obstetric care.

It became evident that there is still evidence of obstetric care characterized by a model of care that differs from the global and national proposals for humanized childbirth and from the World Health Organization quality standards. Thus, the strategies mentioned in the studies for improving quality and safety in the obstetric area are reinforced and investments in training health professionals to incorporate evidence-based practices valuing each member of the multidisciplinary team are needed.

The most evident limitation of this study was the idiomatic restriction and the established time frame, in addition to the small number of databases searched. However, it is believed that this synthesis can contribute solidly to the valuation of the topic of quality and safety in obstetric care, especially as it culminates with the principles of evidence-based practice.

It should be noted that there is still ample space for research with higher levels of evidence. The Nursing area seems to emerge in scientific production about obstetric quality and safety, at least concerning the national context. This reinforces the nurse's position as a strategic actor in the planning and management of quality and safety actions, which, in the obstetric area, must permeate practices that promote changes in the care model towards national and global proposals for humanized childbirth incorporating the principles of quality and safety.

CONCLUSION

Despite inadequacies in communication and teamwork, in addition to evident risks to care safety, illustrated mainly by the interventionist model in maternal and child care, there are political, technical-instrumental, and behavioral actions that tend to leverage for the rationality of assistance towards improvements in the quality and safety of obstetric care.

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Submission: 05/20/2020
Accepted: 03/10/2021