Patient safety: the importance of safe surgery in the obstetric center

ABSTRACT | Objective: To highlight the importance of the safe surgery checklist for patient safety within the obstetric center. Method: This is a bibliographic study, type integrative review. The search for articles was carried out; with delimitation in the last 5 years; in Portuguese, English and Spanish; available in full. In the following data platforms: BDENF, LILACS, MEDLINE/BVS, SciELO, MEDLINE/PubMed, and Science Direct. The data were organized and presented in figures and tables. Results: Of the 1563 studies found, 2 were available at BDENF, 2 at LILACS, 44 at MEDLINE/BVS, 1 at SciELO, 121 at MEDLINE/PubMed, and 1393 at Science Direct; however, after reading, only those who met the inclusion and exclusion criteria described in the methodology remained, totaling 7 studies. Conclusion: The results obtained instigate reflections and discussions as a relevant source of scientific knowledge in the field of health and nursing, for patient safety management.

Keywords: Checklist; Obstetrics; Patient Safety.

RESUMEN | Objetivo: Resaltar la importancia de la lista de verificación de cirugía segura para la seguridad del paciente dentro del centro obstétrico. Método: Trata-se de um estudo bibliográfico, tipo revisão integradora. Realizou-se a busca por artigos; com delimitação nos últimos 5 anos; em portugués, inglês e espanhol; disponíveis na totalidade. En las siguientes plataformas de datos: BDENF, LILACS, MEDLINE/BVS, SciELO, MEDLINE/PubMed y Science direct. Los datos fueron organizados y presentados en figuras y tablas. Resultados: De los 1563 estudios encontrados, 2 estaban disponibles en BDENF, 2 en LILACS, 44 en MEDLINE/BVS, 1 en SciELO, 121 en MEDLINE/PubMed y 1393 en Science Direct; sin embargo, después de la lectura, solo quedaron aquellos que cumplieron con los criterios de inclusión y exclusión descritos en la metodología, totalizando 7 estudios. Conclusión: Los resultados obtenidos suscitan reflexiones y discusiones como un aporte relevante del conocimiento científico en el campo de la salud y la enfermería, para la gestión de la seguridad del paciente.

Palabras claves: Lista de Verificación, Obstetricia, Seguridad del Paciente.

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INTRODUCTION

Safe surgery is part of the quality of health care and encompasses all processes that lead to healing, significant improvement in patients’ conditions, pain relief, improvement in well-being, items that represent a real value of the cost-employed. Its concept was generated by the American Academy of Orthopedic Surgeons (AAOS) responsible for the Wrong Site Surgery initiative in the mid-1980s, which aimed to sensitize the public, the media, the political and medical classes to the problem, publishing the first standards in 1984. (1)

The checklist is the fundamental tool for achieving safe surgery, an instrument known as a checklist of key items used before and after surgery. Approximately 234 million surgeries are performed each year worldwide and, of these, about seven million patients have serious complications and one million die during or shortly after surgery. (1,2)

The checklist for Safe Births was created by the world health organization (WHO), based on scientific evidence and aims to help prevent the causes of maternal death, stillbirths due to intrapartum and neonatal deaths in health units around the world. It aims to improve the quality of care provided to women who give birth. Each step on the list is an indispensable action that, if not taken, can cause serious harm to the mother, the newborn, or both. (1-3)

The implementation of the checklist is carried out quickly and has a low cost, and it is recommended that only one person is responsible for this application. Even if the nurse is the most suitable professional to guide the check, any professional who is part of the surgical procedure can coordinate the check. If necessary, this professional must have authority over the surgical process to interrupt or impede its progress, since, many times, it is the small details that go unnoticed. (2)

In Brazil, there are approximately three million births per year, six million patients (women and newborns) in need of assistance. Because of the large number of patients, the potential for adverse events to occur throughout the care process is strong, and it is essential that patient safety also reaches the maternal-infant context since, within this care area, a very serious adverse event still occurs: maternal mortality. A problem for health institutions and for society is the reduction of maternal mortality rates in Brazil. The high rates found (in 2010, the maternal mortality ratio was 68 per 100,000 live births) constitute a violation of the human rights of women and children, being considered a problem for public health. (3,4)

In Brazil, as in other developing countries, there is little evidence on the use of the Checklist. In general, studies show low adherence to the instrument, especially when assessing the quality/completeness of the check items. (5-8) Therefore, this study aims to highlight the importance of the safe surgery checklist for patient safety within the obstetric center.

METHOD

It is an integrative review covered with the following steps: elaboration of the guiding question and objective of the study; definition of inclusion and exclusion criteria for scientific productions; search for scientific studies in databases and virtual libraries; analysis and categorization of the productions found; results and discussion of findings. (9)

To raise the guiding question, the PICO strategy was used (P: Obstetrics Patients; I: Safe Surgery Checklist; Co: Patient Safety). Thus, the following
research guiding question was defined: “What is the importance of the safe surgery checklist for patient safety within the obstetric center?”.

For the selection of articles, the following inclusion criteria were used: to be an original article, available in full, with a delimitation in the last 5 years, published in Portuguese, English or Spanish, that met the objective of the study and that allowed access through the Virtual Private Network (VPN) of the University of Pernambuco (UPE). Gray literature, as well as repeated publications of studies in more than one database, articles that did not answer the study’s guiding question were excluded. The study in recent years is justified by looking for recent articles about the difficulties experienced by the female population with the lack of security at the time of childbirth.

Data collection took place during the month of January and February 2021 in the following Databases: Nursing Database (BDENF); Latin American and Caribbean Literature on Health Sciences (LILACS); Medical Literature Analysis and Retrieval System Online via the Virtual Health Library (MEDLINE/BVS), MEDLINE/PubMed, ScienceDirect and the Scientific Electronic Library Online (SciELO) virtual library.

The articles indexed from the Health Sciences Descriptors (DeCS) were searched: “Lista de checagem”, “Obstetrícia”, “segurança do paciente”. The respective terms from the Medical Subject Headings (MeSH) were used: “Checklist”, “Obstetrics”, “Patient Safety”. The operationalization and the search strategy were based on the combination with the Boolean operator AND and OR, carrying out the search jointly and individually so that possible differences could be corrected (Chart 1).

The selection of studies was based on Preferred Reporting Items for Systematic Review and Meta-Analyze (PRISMA), in order to assist in the development of articles. At first, duplicate studies were eliminated by reading titles and abstracts. Of these pre-selected ones, a full reading was carried out, in order to verify which ones meet the guiding question and the inclusion/exclusion criteria. The final sample was then constructed with studies relevant to the pre-established criteria (Figure 1).

### Chart 1. Database search strategy. Recife, Pernambuco (PE), Brazil, 2021.

<table>
<thead>
<tr>
<th>Databases</th>
<th>Search Terms</th>
<th>Results</th>
<th>Selected</th>
</tr>
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<tbody>
<tr>
<td>BDENF</td>
<td>(Checklist AND Obstetrics AND Patient Safety) OR (Checklist AND delivery rooms AND Patient Safety)</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>LILACS</td>
<td>(Checklist AND Obstetrics AND Patient Safety) OR (Checklist AND delivery rooms AND Patient Safety)</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>MEDLINE/VHL</td>
<td>(Checklist AND Obstetrics AND Patient Safety) OR (Checklist AND delivery rooms AND Patient Safety)</td>
<td>44</td>
<td>3</td>
</tr>
<tr>
<td>MEDLINE/PubMed</td>
<td>Checklist AND delivery rooms AND Patient Safety</td>
<td>121</td>
<td>1</td>
</tr>
<tr>
<td>Science Direct</td>
<td>Checklist AND delivery rooms AND Patient Safety</td>
<td>1393</td>
<td>1</td>
</tr>
<tr>
<td>SciELO</td>
<td>Checklist AND delivery rooms AND Patient Safety</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1563</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: Research data, 2021.

### Figure 1: Flowchart of the selection process for primary studies adapted from PRISMA, Recife, PE, Brazil, 2021.

- **Identification**
  - Publications identified in the databases (n = 1563)
  - BDENF – 2; LILACS – 2; MEDLINE/BVS – 44; MEDLINE/PubMed – 121; Science Direct – 1393; SciELO – 1
  - Excluded for being duplicates (n = 1001)

- **Selection**
  - Screened and Eligible Publications (n = 562)
  - Excluded after reading titles and abstracts (n = 250)

- **Eligibility**
  - Primary studies eligible for evaluation (n = 312)
  - Excluded for not answering the research question (n = 305)

- **Inclusion**
  - Primary studies included in the final sample (n = 7)

Source: Data research, 2021.
After reading the selected articles, the studies were categorized, classifying the knowledge produced in levels of evidence according to Melnyk and Fineout-Overholt: (12)
Level I - Systematic review, meta-analysis or clinical guidelines derived from systematic reviews of randomized controlled clinical trials; Level II - Randomized controlled clinical trial; Level III - Well-designed clinical trials without randomization; Level IV - Well-designed cohort and case-control study; Level V - Systematic review of descriptive and qualitative studies; Level VI - Descriptive or qualitative study; and finally, Level VI - Opinion of authorities and/or expert committee opinion.

The summary of information in the corpus was obtained through an instrument: identification of the original article; article authorship; year of publication; parents; methodological characteristics of the study; and study sample. The data were analyzed with the software Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires (IRAMUTEQ), version 7.0, which enabled the analysis of the Descending Hierarchical Classification (DHC).

Aiming at a better understanding and visualization of the main findings, the data were organized presenting them in figures and tables, exposed in a descriptive way.

**RESULTS**

In table 1, the studies surveyed are arranged showing their titles, authors, years of publication, design, location and language. Where it can be seen that most studies were international (n = 5), published in English, in the last 2 years (n = 5), two articles were national and one of these published in English.

After reading the selected articles, the studies were categorized, classi-

<table>
<thead>
<tr>
<th>Table 1: Results found in studies according to title, database, authors, year of publication, design, location and language. Recife, Pernambuco (PE), Brazil, 2021.</th>
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<tbody>
<tr>
<td><strong>Title/Databases</strong></td>
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<tr>
<td>1</td>
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Source: Data research, 2021.

<table>
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<tr>
<th>Table 2: Main results obtained in the studies according to the levels of evidence, objectives and conclusions. Recife (PE), Brazil, 2021.</th>
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<tr>
<td><strong>Level of Evidence</strong></td>
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Identify the application of the essential practices of the World Health Organization’s Safe Childbirth Checklist (WHO SCC) carried out at a University Hospital. It offers an opportunity for improvement and qualification of care, standardizing essential conducts, such as guidance on clinical signs and registration on the partograph, favoring the safety of the mother-infant binomial.

Investigate the use of obstetric anesthesia checklists in managing obstetric emergency scenarios. The use of the cesarean delivery checklist during simulations of peripartum and pre-eclampsia hemorrhage showed a significant improvement in the percentage of completed actions (pre-training 23% ± 6% for pre-eclampsia and 22% ± 13% for peripartum hemorrhage, post - 75% ± 9% training for pre-eclampsia and 69% ± 9% for peripartum hemorrhage [P < 0,0001, both scenarios; given as mean ± standard deviation]).

Guide the implementation of a surgical safety checklist in obstetric and gynecological practice. Implementing the guideline recommendations will improve the health and well-being of women undergoing obstetric or gynecological surgery.

Assess the importance of checklists as a cognitive aid in various high-risk environments to improve the reliability and performance of individuals and teams. In appropriately selected clinical circumstances, checklists are tools that can help standardize care, improve communication, and help teams perform optimally.

Highlight areas where the implementation of safe birth verification can potentially improve the quality of care, as well as areas that are not part of the safe birth verification but require improvement. Although our results indicate that implementing safe birth verification has the potential to improve the quality of maternal care and the overall childbirth experience, a more holistic understanding of women’s lived experiences and the dynamics of their interactions with health facilities, caregivers and their accompanying persons, can complement the implementation of the checklist.

To investigate the morbidity associated with postpartum hemorrhage before and after the implementation of a protocol based on an obstetric hemorrhage checklist. The implementation of a management protocol based on a checklist for postpartum hemorrhage has shown a promising trend in improving maternal morbidity, screening, early diagnosis and health care delivery for obstetric hemorrhage in our institution and has been approved for implementation in greater scale in our health care system.

Source: Data research, 2021.

fying the knowledge produced on the subject, in levels of evidence, mostly level VI - Descriptive or qualitative study. The main findings arranged in the objectives and conclusions are directly associated with health services, in particular obstetric centers where safe surgery checklists are implemented, as shown in table 2.

It was possible to evidence some benefits of the implementation of the safe surgery checklist in obstetric centers...
Private hospitals resist the implementation of the checklist, relying on their memory, without taking into account the fatigue caused by many hours of service.\(^{(20, 2)}\)

The use of the checklist, an instrument recommended by the WHO, is a relevant intervention in the work environment, as health professionals perform complex tasks in the hospital environment and are susceptible to the possibility of memory and human care failure, especially in routine situations that are usually neglected. The checklist will facilitate the execution of the tasks since the professional has the possibility to carry out a verification and checks of the care to be carried out, reducing the chances of errors, negligence and offering the opportunity to encourage and reinforce the discipline of high performance.\(^{(21-23)}\)

A study raised the implications of the implementation of the checklist for care practice in obstetrics, the results obtained instigate reflections and discussions as a relevant contribution of scientific knowledge reference in the field of health and nursing, for patient safety management. The main contribution is the possible introduction of the surgical safety checklist in cesarean section as a technology tool in the management of the care process, which promotes the desired benefit for the multidisciplinary team and users of the Brazilian health system.\(^{(24)}\)

Another study showed that the implementation of the postpartum hemorrhage checklist showed a promising trend in improving maternal morbidity, screening, early diagnosis and health care delivery for obstetric hemorrhage.\(^{(19)}\)

The checklist at the obstetric center allows investigating aspects of childbirth care. A tool developed to improve the quality of care provided to pregnant women during labor and postpartum, noting that its use has satisfactory results to maintain quality and safety in labor and postpartum, both for the pregnant, postpartum and newborn. Indicated to improve the quality and safety of the care provided, thus reducing obstetric and puerperal risks, as well as the complications of this moment.\(^{(25, 26)}\)

Thus, the work of nurses in the obstetric center is developed in the areas of care and administration, with a view to equipping the sector with the best conditions for patient care and work for the surgical team, aiming to offer better conditions for the development of the safe surgical act. It is in the obstetric center that the fear of dying, fear of losing the child and the fear of pain are intensified in women, and they can dominate this experience in a negative way, especially when associated with other feelings or factors such as stress, anxiety, fatigue, tension, cold, hunger, strange environment, social and emotional helplessness.\(^{(27-30)}\) The intersection of variables that enhance the vulnerabilities of women belonging to the lower social classes, mostly black and with low education, is also highlighted, reinforcing once again the importance of using the Checklist.\(^{(31)}\)

A limitation for the study was the sample size and the availability of scientific articles to compare the results. Although a large number of articles appeared as a result of the descriptors, few met the objective of the study. It is necessary to carry out more studies with a larger sample and enabling discussion about the benefits of implementing the safe surgery checklist in obstetric centers, including improvement in intraoperative care.

**CONCLUSION**

The integrative review elaborated made it possible to detect the benefits associated with the implementation
of the surgical surgery checklist in obstetric centers, and its importance for the quality of care provided to the patient. However, there are few studies that give the real importance to the implementation of the checklist in health services, especially obstetric centers, essential in prevention, health promotion, and continuing education.

Regarding the implications of this study for care practice in obstetrics, the results obtained instigate reflections and discussions as a relevant contribution of scientific knowledge reference in the field of health and nursing, for patient safety management. The main contribution is the insertion of the surgical safety checklist as a technology tool in the management of the care process, which promotes the desired benefit for the multidisciplinary team and users of the Brazilian health system.

References


