

SHORT ARTICLE

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# Safe surgery checklist: surgeons' perception about their importance and the challenges in its performance

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# Introduction

Patient safety during the provision of care in the health area should be a priority, as stated in the National Patient Safety Program implemented in Brazil in 2013 through Ordinance No. 529, of April 1, 2013 [1]. It is understood as the "reduction, to an acceptable minimum, of the risk of unnecessary harm associated with health care" [1], therefore, it is the duty of health institutions and professionals to properly implement and use technologies/barriers to promote the safety of the patient and prevent harm associated with health care [2]. Following the formation of the World Alliance for Patient Safety formulated by the World Health Organization, six international patient safety goals were established in addition to three global challenges [3-4].

The fourth goal, which is "Ensure surgery in the correct intervention site, procedure and patient" and the second challenge launched in 2008 "Safe Surgery Saves Lives" mention the use of the safe surgery checklist in order to ensure patient safety during performing surgeries [4-5]. The checklist must be performed verbally by the team (surgeon, anesthesiologist and nursing team) in three moments, namely, before anesthetic induction, before the surgical incision and before the patient leaves the operating room [5].

Thus, the objective this study was to understand the perception of surgeons about the importance of using the safe surgery checklist and the challenges in its performance.

# Methods

**Study Design and Development** 

Qualitative field study carried out with surgeons

operating in a special hospital in northwestern São Paulo. This hospital is a reference for 102 municipalities, has 25 operating rooms, provides an average of 146,467 consultations/year and performs an average of 40,820 surgeries/year. Following CNS Resolution nº 466, of December 12, 2012, data collection only started after authorization from the study institution.

#### **Ethical Approval**

This study was approved by the CEP/CONEP Research Ethics Committee in accordance with CNS resolution  $n^{\circ}$  466/12 under registration  $n^{\circ}$  4.657.937.

#### **Data Collection**

The data collection instrument was a semistructured interview that was audio-recorded, with an average duration of two minutes and contained seven questions addressing the reason for using the checklist, challenges encountered in use, advantages or positive points in using this tool, which of the three moments of using the tool is the most important and which is the most challenging and, finally, if you have already experienced any complications that could have been avoided with the use of the checklist. To determine the individuals who would participate in the study, the snowball technique was used, and to determine the sample size, the data saturation technique was used. For analysis and writing of the results, Bardin's discourse analysis (content analysis) was performed and the MAXQDA 2020 program was used as support for data analysis.

# **Results and Discussion**

Five surgeons were part of the sample, their answers were categorized according to each question. In the question about the reasons for using the safe surgery checklist, two main categories emerged, increasing patient safety and decreasing medical errors, as observed in the speeches "To increase patient safety" and "To reduce avoidable errors". When approached about the challenges to carry out the checklist, the categories, inadequate use, lack of adherence by the team and difficulties in relation to the patient emerged, as observed in the speeches "(...) it is the adherence of the team itself, especially the team medical" and "Because of my area, which is neurosurgery, the patient is often not conscious, so we do not have the patient's participation, (...)". As for the advantages of the safe surgery checklist, the categories, patient and team safety emerged, as observed in the speech "We reduce errors, punctuate possible avoidable errors, patient and team safety as well".

When asked which of the phases is the most important, the one that was most mentioned among the participants was the first, before anesthetic induction", but there were also reports of all phases, the second and the last (before leaving the room), as can be seen in, "Before induction, the others not so much" and "I think they are all important, but as a surgeon before the incision, the surgeon has the most important role". The phase considered as the most challenging is the last, but there were also reports of the first and none, as observed in the reports "Postoperatively, because everyone is more dispersed" and "(...) I think that before the anesthetic induction, because it is the moment when the patient is awake, it is clear to him which procedure he is going to undergo (...), I think this is the most challenging for me". Finally, when asked about the complications that could be avoided with the use of the safe surgery checklist, the ones that were most mentioned were, no error, the laterality error and lack of material, as pointed out in the reports "no, I never had" and "operating on the wrong side is a common occurrence".

# Conclusion

All participants involved in the research were aware of the safe surgery checklist, and there is a large use of the term patient safety and avoidance of medical errors. Everyone realizes the importance of using this tool and mentions that it promotes integration between the multidisciplinary team, the main challenges were the adherence of the team itself and some particularities of the patient. The most important phase in these professionals' view is the first, that is, before anesthetic induction, and the most challenging is the last, that is, before the patient leaves the operating room. Most professionals reported having witnessed some adverse event that could have been avoided with the use of the tool, mainly related to laterality error. These results can help to improve the realization of this tool, as it can direct services and managers to adapt the protocol, correcting the main difficulties faced by professionals.

**Keywords:** Checklist. Time Out. Healthcare. Patient Safety. Surgery Department. Hospital. Operating Rooms.

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Nil.

#### **Ethical approval**

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#### **Informed consent**

The patient signed the consent form.

#### Funding

Not applicable.

# **Data sharing statement**

No additional data are available.

#### **Conflict of interest**

The authors declare no conflict of interest.

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#### References

- Brasil. Portaria nº 529, de 01 de abril de 2013. Institui o Programa Nacional de Segurança do Paciente (PNSP). Ministério da Saúde. 2013.
- Vilela RPB, Jericó MC. Implementing Technologies to prevent medication erros at a high-complexity hospital: analysis of cost and results. Einstein (São Paulo): 2019; 17(4):1-7.
- Nascimento JC, Draganov PB. History of Quality of Patient Safety. Hist Enferm Rev Eletrônica. 2015; 6(2):299-309.
- Brasil. Gestão de Riscos e investigação de Eventos Adversos relacionados à Saúde. Brasília: ANVISA; 2017.



5. World Health Organization. Safe Surgery Saves Lives. World Alliance for Patient Safety: the second global patient safety challenge; 2008.



