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RESEARCH

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SAFE SURGERY – ANALYSIS OF THE IMPLEMENTATION OF THE CHECKLIST BY SWOT MATRIX

Cirurgia segura – análise da implementação da lista de verificação através da matriz SWOT

Cirugía segura – análisis de la aplicación de la lista de verificación de la matriz DAFO

Laryssa dos Santos Pimentel¹, Luiza Bonfim Gomes², Angela Maria La Cava³, Deise Luci Batista Motta⁴

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ABSTRACT

Objective: This study intends to both understand and analyze the process of implementing the safe surgery checklist (SSC). **Methods:** This is a descriptive-exploratory study with both quantitative and qualitative approaches, which was carried out in the surgical center of a Federal Hospital in *Rio de Janeiro* city, *Rio de Janeiro* State, Brazil, through the use of a questionnaire. A sample of 56 participants was obtained. **Results:** The SSC was not implemented systematically and consistently. According to the study results, the SSC should be implemented in all surgical procedures with the involvement of the management staff. **Conclusion:** It was highlighted the importance attributed to the implementation of the SSC, which was considered as a strategy for improving patient safety and minimizing errors.

Descriptors: Quality of health care, surgery, patient safety, patient care team, checklist.

RESUMO

Objetivos: Conhecer o processo de implementação da lista de verificação de cirurgia segura e analisar o processo de implementação da lista de verificação de cirurgia segura em centro cirúrgico de um hospital federal, através da matriz SWOT. **Métodos:** Trata-se de um estudo descritivo e exploratório, com abordagem quanti-qualitativa. Os dados foram obtidos através de um questionário, com amostra de 56 participantes. O cenário foi o centro cirúrgico de um Hospital Federal situado no Município do Rio de Janeiro. **Resultados:** O processo de implementação da lista ainda não está implantado de forma sistemática e consistente; constatou-se a necessidade de implementação da lista em todos os procedimentos cirúrgicos, onde destaca-se as responsabilidades dos líderes e gestores na adoção de processo para cirurgia segura. **Conclusão:** Foi evidenciada a importância atribuída à implementação da lista de verificação de cirurgia segura, considerada como estratégia para melhoria da segurança do paciente e minimização de erros.

Descritores: Qualidade da assistência à saúde; Cirurgia; Segurança do paciente; Equipe de assistência ao paciente; Lista de verificação.

1 Nursing graduate by the *Universidade Federal do Rio de Janeiro (UFRJ)*, Resident Nurse at *HFSE/UNIRIO*.

2 Nursing graduate by the *Universidade Veiga de Almeida (UVA)*, Resident Nurse at *HFSE/UNIRIO*.

3 PhD in Nursing by the *Universidade Federal do Rio de Janeiro (UFRJ)*, Associate Professor at *UNIRIO*.

4 International Specialist Certificate in Health Quality and Patient Safety by the *Fundação Oswaldo Cruz (FIOCRUZ)*, MSc in Nursing by the *UNIRIO*, Coordinator of the Patient Safety Center at *HFSE/UNIRIO*.

RESUMEN

Objetivos: Conocer el proceso de implementación de la lista de verificación de cirugía segura y Analizar el proceso de implementación de la lista de verificación de cirugía segura en el centro quirúrgico de un hospital federal a través de la matriz SWOT. **Métodos:** Se trata de un estudio descriptivo y exploratorio, con abordaje cuantitativo. Los datos fueron obtenidos a través de un cuestionario, con una muestra de 56 participantes. El escenario fue el centro quirúrgico de un Hospital Federal situado en el Municipio de Río de Janeiro. **Resultados:** El proceso de implementación de la lista aún no está implantado de forma sistemática y consistente; se constató la necesidad de implementación de la lista en todos los procedimientos quirúrgicos, donde se destacan las responsabilidades de los líderes y gestores en la adopción de proceso para cirugía segura. **Conclusión:** Se evidenció la importancia atribuida a la implementación de la lista de verificación de cirugía segura, considerada como estrategia para mejorar la seguridad del paciente y minimización de errores. **Descriptor:** Calidad de la atención de salud; Cirugía; Seguridad del paciente; Grupo de atención al paciente; Lista de verificación.

INTRODUCTION

Acting as registered nurses in a surgical center from a federal public institution, intending to be among the best hospitals in Brazil, there has been provided the opportunity of discussing about the implementation of strategies aimed at safety in surgical procedures, which nationally and internationally, constituted challenges for all those interested in best practices in health services.

Patient safety has been gaining noticeable importance both for health care professionals and managers, as well as for patients and relatives, focusing on safe care.¹ Bearing in mind the aforesaid, the World Health Organization (WHO) has defined patient safety as reducing the risk of unnecessary harm associated with health care.²

The 55th World Health Assembly, which took place in May 2002 in Geneva, suggested that the WHO and Member States should address the problems related to patient safety. As a result, the WHO created the World Alliance for Patient Safety in October 2004, whose objective is to raise awareness among professionals, strengthen political commitment for better health care safety, and to help the Member States in developing public policies and practices focused on the issue.³ In 2005, the World Alliance for Patient Safety identified six areas of greatest concern that may put the patient at risk: (1) Identification of the Patient; (2) Effective Communication; (3) High-Surveillance Medicines; (4) Correct Surgical Intervention; (5) Reduction of Infection Risk; and (6) Injury due to Fall.⁴

The areas described above became known as International Patient Safety Goals (IPSG). According to the 4th goal, the professionals should “ensure that surgeries are performed correctly and on correct patients. Surgical errors are very common and as a way to prevent occurrences, many institutions have developed the Safe Surgery Protocol, which establishes the preparation of the surgical site, pre-anesthesia evaluation, final checklist, among other care practices”.⁴

The World Alliance for Patient Safety has Global Challenges for patient safety as a central component. This

study addresses the Second Global Challenge, whose theme is “Safe Surgeries Save Lives”. Created in 2009, it is aimed at expanding the quality standards in health care services worldwide by establishing practices for safe surgery.³

To meet the Second Global Challenge, political commitment and clinical will are necessary. One of its purposes is to reduce the surgical-related mortality rates worldwide by warning about inadequate anesthetic safety practices, surgical site infections, and poor communication among team members. It has been proven that these issues have been the most common, deadly and preventable problems in all contexts and countries.⁵

From this program, the Brazilian Ministry of Health created the Safe Surgery Protocol in 2013, which aims to establish measures to reduce the occurrence of adverse events and deaths during the surgical procedure, thus increasing surgical safety, especially by using the Safe Surgery Checklist (SSC).⁶

This list was created to help in the improvement of the team members working in the surgical centers for the benefit of patient safety, qualifying the professionals, causing improvement and the understanding of the indispensable actions for the consolidation of the patient safety systems, besides helping in the understanding of risks. This is the first step to change preventive measures.⁷

SSC is composed of three stages, known as checklists, and it was proposed to be employed in any hospital, regardless of its degree of complexity. Its objective is to help surgical teams to systematically follow critical safety steps.⁵

The three stages of the checklist are as follows: I - Before anesthetic induction; II - Before surgical incision; and III - Before the patient leaves the operating room. Each of the stages is equivalent to a certain moment of a surgical procedure (preoperative, trans-operative and post-operative phase), constituting a strategy to reduce risk factors.⁶

Since 2017 the SSC has been suspended in our practice scenario. The Patient Safety Center (PSC) was planning to start to implement the checklist among all the surgical staff members of the hospital from March 2018, since a pilot project was being implemented a few years ago, with the adherence of the departments of Orthopedics, Proctology, Pediatric Surgery and Neurosurgery. The goal of PSC was to use it in all surgical departments; however, the international consensus recommends that ensuring the correct site, correct procedure, and correct patient applies to all departments in which surgical and invasive procedures occur.

It should be noted that the SSC of the study hospital has been adapted, as described below.

In the first stage, which is before the induction of anesthesia, the nursing team must confirm the patient's identity (name and date of birth), the surgical site, the procedure that will be performed and whether the consent document is compatible with the procedure. By consulting the anesthesiologist, the team must also check whether the patient has any allergies, difficulties in accessing the airways or risk of aspiration, risk of blood loss, the patient's blood type, whether there is blood component supply, whether

there is a need for prophylaxis for venous thromboembolism, and whether the evaluation of the anesthetic procedure was concluded.

In the second stage, which starts before surgical incision, all team members (surgeon, anesthesiologist and nursing team) say their names and functions. The whole team verbally confirms the identification of the patient, the surgical site and the procedure. It is verified whether the antimicrobial prophylaxis was performed within the last 60 minutes and whether the images essential for the procedure are available. The surgeon must share the surgical plan with all the team members, including critical steps, possible difficulties, expected duration and expected blood loss. The anesthesiologist has to share any concerns regarding the patient. In addition, the nursing team has to report equipment issues, availability of instruments and prostheses during the sterilization period.

In the third stage, before the patient leaves the operating room, a nursing professional verbally confirms with the surgical team whether there is a record of the intraoperative procedure (including whether it was performed completely); the number of surgical instruments, material for compress and needles; and whether pathological anatomy is identified and adequately handled. Additionally, all surgical team members check whether there are any problems with equipment to be solved and if there are relevant concerns and guidelines for recovery and clinical management of the patient during the postoperative period.

The checklist should be filled out by one person, usually a member of the nursing team, with the contribution of the other professionals present in the surgical room. This person checks all the provided information before proceeding to the next step. If any problem is found, the process of filling the checklist should be stopped immediately and the patient will remain in the operating room until its solution.⁶ According to the checklist provided by the Brazilian Ministry of Health, the nursing staff may be included in all three phases of the process.

The Joint Commission International Accreditation Standards for hospitals describes many purposes and measurement elements for organizing and managing anesthesia and surgical care. It is emphasized that hospital managers and leaders should develop and implement a process to ensure that the surgical act is performed in the correct location, procedure and patient. Furthermore, surgical care for each patient should be planned and documented based on the results of clinical evaluation.⁸

The SWOT matrix analyzes the internal and external environment of an organization. This method contributes to the formulation of strategies by recognizing the strengths and weaknesses that are related to the internal environment, and the opportunities and threats that are related to the external environment. This analysis gives the manager a broad and critical view of the working environments.⁹ Thus, the internal environment is considered as the operating room and the external environment is considered as the institution.

Based on the aforementioned, this study meant to both understand and analyze the process of implementing the SSC in an operating room from a Federal Hospital by using the SWOT matrix.

METHODS

This is a descriptive-exploratory study with both quantitative and qualitative approaches, which was carried out in the Surgical Center of a Federal Hospital in *Rio de Janeiro* city, *Rio de Janeiro* State, Brazil.

The sample consisted of 56 surgeons from the following fields: orthopedics (6), vascular surgery (3), urology (6), general surgery (10) and anesthesiology (9). Eight nurses, 12 nurse technicians, and two resident nurses formed the nursing team.

The participants were health care professionals who were working in the Surgical Center. The inclusion criterion was employers working in the surgical center for at least 15 days. Exclusion criteria were undergraduate students in Nursing or Medicine and employers who were not members of the surgical center staff, such as those working in radiology, blood banks and laboratories.

The participants signed the informed consent document so that their anonymity could be preserved.

Data collection was performed employing a semi-structured questionnaire consisting of eight questions related to profession, clinic of origin, and whether the employers from this clinic routinely performed the checklist. The question regarding the knowledge about SSC, as recommended by the Brazilian Ministry of Health, contained three answer options: low knowledge (I have already heard about it, and/or I do not know it in depth); medium knowledge (I know about it; however, I understand it little); and high knowledge (I understand it and I know about it in depth). It was asked to mark at which moments the checklist should be applied, being the following answer options: preoperative, trans-operative, postoperative, all the previous options or none of the previous ones.

In the sixth question in the questionnaire, the participant had to detail the items relevant to each step of the SSC. Each question had five answer options: three options not conforming to the step and two options conforming to the step. Our intention with this question was to evaluate if the knowledge matched what the participants claimed to have.

The first step comprised of the following answer options: patient confirmed the surgical site; known allergy; removal of all accessories; checked whether the patient is on a zero-calorie diet; and surgical site was marked. The conforming options were: Patient confirms the surgical site and known allergy.

The second step comprised of the following options: verbal confirmation of the procedure name by the surgeon, anesthesiologist and nursing team; procedure name was recorded; risk of blood loss was checked; antimicrobial prophylaxis was performed within the last 60 minutes and

risk of aspiration was checked. The conforming options were: verbal confirmation of the procedure that will be performed by the surgeon, anesthesiologist, and nursing team; and antimicrobial prophylaxis within the last 60 minutes.

The third step comprised of the following options: right number of instruments and needles, as well as enough material for compress, were checked; name of the procedure was recorded; anesthetic safety procedure was performed completely; availability of essential images was checked and sample for pathological anatomy was identified. The conforming options were: number of instruments, material for compress and needles were checked; and sample for pathological anatomy was identified.

The seventh question was related to the external environment and was divided into two parts: the participant's opinion about the threats to implementing the checklist and his/her opinion about the opportunities to do so.

Concerning the threats, five answer options were provided, as follows: lack of professionals; lack of material (instruments); lack of professional training by the patient safety center; recurrent management changes within the hospital environment; and others. With regard to the opportunities, five answer options were proposed: continued education aimed at applying the checklist; being a teaching hospital; standardization according to the Brazilian Ministry of Health; it is a prerequisite for quality care; and others.

The eighth question addressed the internal environment and was divided into two parts: the participant's opinion about the weaknesses of applying the checklist and his/her opinion about the strengths of doing so.

Concerning the weaknesses, five answer options were given: little knowledge about the subject; in your opinion, it is not important; lack of time to fill out the checklist; surgical center management lacked professional training; and others. Regarding the strengths, five answer options were given: improvement of patient safety; minimizing errors; all team members are responsible for patient safety; team members can receive training; and others.

The data were analyzed using Microsoft Excel®. Simple descriptive statistical analysis was performed using the absolute and relative values for the categorical variables. The SWOT matrix was used to define the categories of data analysis: strengths, weaknesses, opportunities, and threats. This is a method used for supporting management and strategic planning. It is a simple technique that allows a more detailed analysis, besides allowing greater attention to the work environment.¹⁰ It was considered a 10% sample error and a 90% confidence level. Data collection was carried out in February 2018.

The study complied with the ethical standards of research involving human participants as established by the Resolution No. 466/2012 from the Brazilian National Council of Health. This research was approved by the Research Ethics Committee of the *Hospital Federal dos Servidores do Estado* under the *Certificado de Apresentação*

para Apreciação Ética (CAAE) [Certificate of Presentation for Ethical Appreciation] No. 80918617.6.0000.5252.

RESULTS AND DISCUSSION

The first question of the questionnaire was related to occupation. A total of 34 medical professionals participated in this study according to the following specialties: anesthesiology (16%), general surgery (17%), urology (11%), orthopedics (11%) and vascular surgery (5%). Twenty-two questionnaires were applied to the following members of the nursing staff: one head nurse nursing of the surgical center (2%); seven nurses (13%); two resident nurses (4%); and 12 nurse technicians (21%). A total of 56 questionnaires were applied.

According to the study results, there was a high number of nurses, and the questionnaire was answered by all nurses and a satisfactory number of nurse technicians in the Surgical Center. With regard to medical professionals, a large number of residents and a small number of permanent doctors were observed. In relation to the clinics, even taking into account that some of them had a higher number of workers, a high number of professionals from General Surgery and Anesthesiology was observed. Furthermore, there was a greater collaboration of the nursing team, being preceded by resident physicians. This indicates less collaboration from higher hierarchical positions.

When asked whether the clinic to which they belong applied the checklist, the following data were obtained: 64% of the participants said they did not perform it; 32% said they did and 4% did not answer. There is a low application of the SSC nowadays as a high rate of negative responses was obtained. This data corroborates the need for organization and institutional management to develop and implement a process to ensure the execution of the surgical act based on care practices that minimize errors.⁷ Thus, it is necessary to raise awareness among the professionals in regard to the importance of applying the list, especially through educational actions in the workplace.

One in every 25 people undergoes a surgery worldwide, which shows us the relevance of safe procedures since it is estimated that half of the performed surgeries caused some complication or death. Half of such cases could be avoided.¹¹

Thus, considering the high risk for the patient, the checklist should be applied before surgical and invasive procedures regardless of their complexity. It is aimed at improving assistance in surgical centers through safety actions that can be performed by all countries.¹²

With regard to the professionals' knowledge about the SSC, the following results were obtained: 16% of the participants answered that it was low, 45% answered that it was medium, 37% answered that it was high and 2% did not answer. A higher rate of medium knowledge was perceived, in other words, the participants had limited knowledge of the list. The second most marked option was "high knowledge

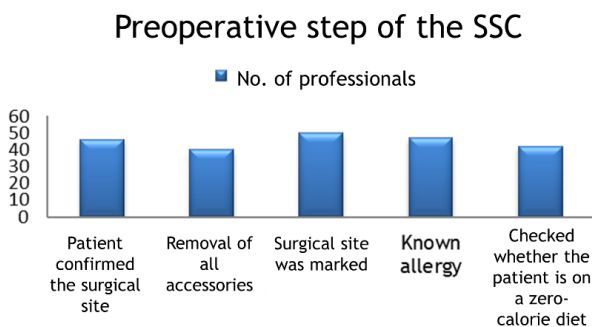
of the list”, indicating that they claimed to have a deep knowledge of the SSC.

Concerning the steps in which the SSC should be applied, the following results were obtained: 78% of the professionals answered that it must be applied during all steps (preoperative, trans-operative and postoperative steps), 16% answered that it must be applied only during the preoperative step, 2% answered that it must be applied only in the trans-operative step, 2% answered that it must be applied only in the postoperative step, and 2% did not answer. An adequate index was verified, and 78% of the participants answered the option “all options above” referencing the three steps.

The surgical care for each patient must be planned and recorded by medical and nursing professionals. There are actions to be implemented during each phase of the process, ensuring more effective performance and communication and the success of the intervention so that the patient’s health could be improved.

Figure 1 presents the participants’ answers regarding the knowledge of the items checked throughout the preoperative step of the SSC.

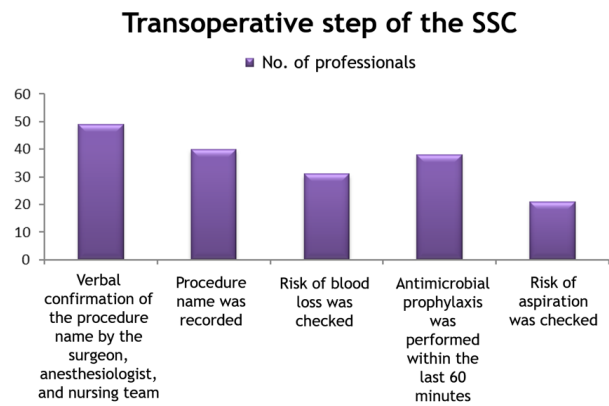
Figure 1 - Participants’ answers regarding the preoperative step of the SSC.



The results showed that 89% of the participants marked the option “surgical site was marked”; 84% marked the option “known allergy”; 82% marked the option “patient confirmed the surgical site”; 75% marked the option “checked whether the patient is on zero-calorie diet”; and 71% marked the option “removal of all accessories”. The conforming answers to this question were “patient confirmed the surgical site” and “known allergy”. Thus, 82% of the professionals were right about the patient confirming the surgical site and 84% were right about known allergies. Also, it is noted that no participants marked only conforming options.

Figure 2 presents the participants’ answers vis-à-vis the knowledge of the items checked throughout the transoperative step of the SSC.

Figure 2 - Participants’ answers regarding the transoperative step of the SSC.

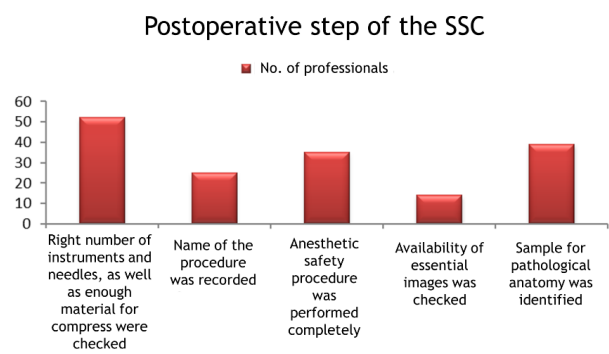


It was concluded that 88% of the participants marked the option “verbal confirmation of the procedure name by the surgeon, anesthesiologist, and nursing team”; 71% marked the option “procedure name was recorded”; 68% marked the option “antimicrobial prophylaxis was performed within the last 60 minutes”; 55% marked the option “risk of blood loss was checked”; and 38% marked the option “risk of aspiration was checked”.

The conforming answers to this question were “verbal confirmation of the procedure name by the surgeon, anesthesiologist, and nursing team” and “antimicrobial prophylaxis was performed within the last 60 minutes”. Thus, 88% and 68% of the professionals were right, respectively. In addition, no participant marked only the conforming options.

Figure 3 presents the participants’ answers concerning the knowledge of the items checked throughout the postoperative step of the SSC.

Figure 3 - Participants’ answers regarding the postoperative step of the SSC.



According to the study results, 93% of the professionals marked the option “right number of instruments and needles, as well as enough material for compress, were checked”; 70% marked the option “sample for pathological anatomy was identified”; 63% marked the option “anesthetic safety procedure was performed completely”; 45% marked the option “name of the procedure was recorded”; and 25% marked the option “availability of essential images was checked”. The conforming answer to this question was “right number of instruments and needles, as well as enough material for compress, were checked”, which was marked by 93% of the professionals, and “sample for pathological anatomy was identified”, which was marked by 70%. Additionally, no participant marked only the conforming options.

The study results made it possible to infer that none of the participants was able to mark all conforming options related to the three steps. The participants reported having knowledge of the SSC. Nonetheless, when they were asked specifically about the steps and the options belonging to each of them, there was great confusion, i.e., they could not distinguish the options according to the respective step. This demonstrates that they had little skill to apply the list because they do not use it routinely.

With regard to the threats and opportunities concerning the external environment (the institution), the answers of the questionnaire were divided into two aspects: “*What did they consider to be a threat to implement the SSC?*” and “*What opportunities did the institution create for its implementation?*”. The participants could mark more than one answer in addition to the option “others” so that they could make suggestions.

Concerning the threats, it can be concluded that 59% of the participants believed that the threat was the lack of professional training by the patient safety center; 54% believed that the threat was the lack of professionals; 39% believed that the threat was the recurrent management changes within the hospital environment; 23% believed that the threat was lack of material (instruments); 13% considered other situations as threats; and 2% did not answer. The other situations that were considered as threats were: lack of commitment; low team adherence; lack of coordination between the teams; absence of a person responsible for start the protocol in the operating room; lack of prior training; lack of interest and inadequate supervision; supply of forms for use in the operating room.

As seen above, 59% of the participants believed that the threat was the lack of professional training by the patient safety center. It is emphasized that the patient safety nucleus, according to Resolution of the Collegiate Board of Directors No. 36/2013, is “the instance of the health service created to promote and support the implementation of actions aimed at patient safety.”¹³

It is highlighted that “lack of professionals” was reported as the threat by 54% of the participants. Appropriate and adequate human resources are critical to patient care and planning (number, types, and desired qualifications),

which is carried out by service leaders and must comply with local laws and regulations.⁸

Due to limitations during the process of meeting the demand for human resources and infrastructure, some specialists have established that the ideal initial intervention would be to establish universal safety protocols for all surgical teams and operating rooms. These protocols are the implementation of the checklist and the establishment of operational protocols for surgeries.³

It can be inferred that participants felt the need for training. In addition, senior institutional management should define policies for implementing the 3 steps of the SSC.

Hospitals that develop best practices and seek certification should meet the standards that define the elements required for training professionals. This, it is highlighted the need for a defined process to ensure that the knowledge and skills of the clinical staff members are in accordance with the patients’ needs and for continued evaluation, ensuring that training occurs when needed.⁸

Health care professionals are often not trained to assess and prevent errors. Thus, continued education and hospital supervision are essential to enable these professionals to grow personally and professionally.¹⁴

In-service training for health care professionals should give priority to mechanisms for evaluating the quality of health care services, as well as encouraging the culture of preventing errors. Delivering systematic and consistent care is key to improving projects successfully.

It is also worth mentioning that one of the hospital senior management’s main responsibilities is to support the improvement of quality and patient safety through planning, adequate resources, and monitoring. It is important to emphasize the need for greater involvement of leaders to promote adequate safety to patients. The SSC is an instrument that minimizes risks to the patient, making the surgical act safe and well designed.⁸

As for the opportunities created by the institution for applying the SSC, 50% of the professionals marked the option “continued education aimed at applying the checklist”; 50% marked the option “standardization according to the Brazilian Ministry of Health”; 46% marked the option “being a teaching hospital”; 36% marked the option “it is a prerequisite for quality care”; and 5% did not answer.

Moreover, 5% of the participants cited other opportunities: “not knowing any opportunity created by the institution for implementing the list”; “no opportunities”; and “holding some meetings”.

As seen above, the most commonly found factors were as follows: “standardization according to the Brazilian Ministry of Health” and “continued education aimed at applying the checklist”. There were facilitators (provided by the institution) since the standardized form had already been used in the surgical center. In addition, there was a continued education team and the patient safety center, which were active and collaborative.

The 55th World Health Assembly established Resolution WHA 55.18 in 2002, which emphasized the concern about the incidence of adverse events, which was cited as an avoidable cause of human suffering and a high rate of financial loss, constituting a challenge to the quality of care. Recognizing the need to promote patient safety as a fundamental principle of all health care systems, it emphasizes the need for a quality program to develop global norms, standards, and guidelines for quality of care and patient safety, as well as the definition, measurement, and reporting of adverse events and near misses in health care.¹⁵

Considering the weaknesses and strengths regarding the internal environment (surgical center), they were also grouped according to two questions: “*What are the weaknesses of the SSC?*” and “*What are the strengths for implementing the safe surgery checklist?*”. The participants could mark more than one answer in addition to the option “others” so that they could make suggestions.

Observing the weaknesses of implementing the SSC, it was found that 59% of the professionals marked the option “little knowledge about the subject”; 46% marked the option “surgical center management lacked professional training”; 25% marked the option “lack of time to fill out the checklist”; 20% marked the option “others”; 7% did not answer. No participant answered that the list was unimportant. The professionals who marked “others” made the following suggestions: “discouragement due to lack of continuity”; “lack of professionals and “lack of real interest by the institution”; “lack of professionals”; “applying the checklist or not”, “it does not make demands”; and “adequate forms”. Of the professionals who marked “others”, 4% considered “lack of commitment” as a weakness, and another 4% considered “reduction of human resources” as a weakness.

The study results showed that the option with the highest incidence was “little knowledge about the subject” (59%), and “surgical center management lacked professional training” (46%). The greatest weakness pointed out by the participants was related to the considerable low knowledge about the list, which leads to a lack of interest. Besides, little training focused on the application of the SSC was performed.

With regard to the strengths for implementing the SSC, the following results were obtained: 89% of the professionals marked the option “improvement of patient safety”; 84% marked the option “minimizing errors”; 54% marked the option “all team members are responsible for patient safety”; 20% marked the option “team members can receive training”; and 2% (one professional) marked the option “others”. This professional reported that the strength for implementing the checklist is to meet the standards established by government agencies such as the *Agência Nacional de Vigilância Sanitária* (ANVISA) [National Health Surveillance Agency], as well as the Brazilian Ministry of Health.

The results that corresponded to a higher incidence of answers are positive and corroborate with the guidelines of national and international agencies, justifying the adoption of surgical practices to minimize errors and contribute to

patient safety. Such perception can be a motivating factor for participation in training and improvement projects.

CONCLUSIONS

This study showed that most professionals did not adhere to the SSC nor know all relevant actions to be performed in each stage.

The lack of training in implementing the checklist was cited as a threat and weakness. Moreover, lack of professionals was considered as a threat and the low knowledge of the subject as a weakness.

The opportunities cited by most professionals were continued education to implement the SSC, followed by the need for standardization. It is noteworthy that the patient safety center members, in partnership with some leaders, have already prepared the checklist for application in the hospital, as recommended by the Brazilian Ministry of Health. Nevertheless, it has not been used systematically and consistently. Other opportunities pointed out were the direct participation of educators, aiming at in-service educational actions, with emphasis on the performance of the SSC, and intervention of medical and nursing management in order to supervise the implementation of the checklist by all professionals involved.

This study showed the limitations encountered by the participants during the implementation of the list can improve patient safety and minimize errors.

According to the references used here, the first action for implementing quality actions in health care institutions is the adherence by managers and policymakers for ensuring the correct site, procedure, and surgery for a patient.

The objectives outlined here were achieved, and the SWOT matrix proved to be an efficient tool for data categorization and analysis.

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Corresponding author

Luiza Bonfim Gomes

Address: Avenida Maracanã, 1257, Tijuca

Rio de Janeiro/RJ, Brazil

Zip code: 20.511-000

Telephone number: +55 (21) 99477-6903

Email address: luiza_bonfim@hotmail.com

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