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Surgical adverse events in audiovisual media: a documentary study

Eventos adversos cirúrgicos divulgados na mídia audiovisual: um estudo documental

Eventos quirúrgicos adversos en medios audiovisuales: estudio documental

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ABSTRACT

Objective: to analyze surgical adverse events reported by a Brazilian media. **Method:** documentary and qualitative research. The source of information consisted of audiovisual reports on damages resulting from surgical interventions, reported in a Brazilian media. For searches on the electronic portal, those published until June 2019 were considered. Bardin's framework was used in the thematic analysis. The aforementioned incidents were classified according to the safety barriers contained in the Surgical Safety Checklist (SSC) of the World Health Organization. **Results:** a total of 16 cases presented through 17 reports were analyzed. Of the total number of failures committed (n = 16), the majority (n = 13) could be prevented by checking items contained in the SSC. In the thematic analysis, three categories emerged: i. incident related to surgical intervention; ii. physical, psychological and socioeconomic resulting damage; iii. ethical-professional and/or legal consequences. **Conclusion and implications for the practice:** the adverse surgical events disclosed by the reports greatly impacted on the lives of patients, in physical, emotional and socioeconomic aspects. They also brought implications for the professionals and health institutions involved. It is believed that the safety barriers contained in a globally recognized verification instrument are important tools to be used to promote the safety of surgical patients and save lives.

Keywords: Surgical Operative Procedures; Patient Harm; Audiovisual Media; Checklist; Patient Safety.

RESUMO

Objetivo: analisar os eventos adversos cirúrgicos divulgados por uma mídia brasileira. **Método**: pesquisa documental, qualitativa. A fonte de informação consistiu em reportagens audiovisuais sobre danos decorrentes de intervenções cirúrgicas, noticiadas em uma mídia brasileira. Para as buscas no portal eletrônico, consideraram-se as publicadas até junho de 2019. O referencial de Bardin foi empregado na análise temática. Os incidentes mencionados foram classificados segundo as barreiras de segurança contidas na Lista de Verificação de Segurança Cirúrgica (LVSC) da Organização Mundial da Saúde. **Resultados**: foram analisados 16 casos apresentados através de 17 reportagens. Do total de falhas cometidas (n=16), a maioria (n=13) poderia ser prevenida através da checagem de itens contidos na LVSC. Na análise temática, três categorias emergiram: i. incidente relacionado à intervenção cirúrgica; ii. danos físicos, psicológicos e socioeconômicos decorrentes; iii. consequências ético-profissionais e/ou jurídicas. **Conclusão e implicações para a prática:** os eventos adversos cirúrgicos divulgados pelas reportagens impactaram sobremaneira a vida dos pacientes, nos aspectos físicos, emocionais e socioeconômicos. Ainda trouxeram implicações para os profissionais envolvidos e instituições de saúde. Acredita-se que, as barreiras de segurança contidas em instrumento de verificação mundialmente reconhecido, são importantes ferramentas a serem empregadas para promover a segurança do paciente cirúrgico e salvar vidas.

Palavras-chave: Procedimentos Cirúrgicos Operatórios; Dano ao Paciente; Mídia Audiovisual; Lista de Checagem; Segurança do Paciente.

RESUMEN

Objetivo: analizar los eventos quirúrgicos adversos reportados por un medio brasileño. **Método**: investigación documental, cualitativa. La fuente de información consistió en reportajes audiovisuales sobre daños resultantes de intervenciones quirúrgicas, reportados en un medio brasileño. Para las búsquedas en el portal electrónico, se consideraron las publicaciones realizadas hasta junio de 2019. En el análisis temático se utilizó el marco de Bardin. Los incidentes mencionados fueron clasificados de acuerdo a las barreras de seguridad contenidas en la Lista de Verificación de Seguridad Quirúrgica (LVSC) de la Organización Mundial de la Salud. **Resultados:** se analizaron 16 casos presentados a través de 17 informes. Del total de fallas cometidos (n = 16), la mayoría (n = 13) podría evitarse mediante la verificación de los elementos contenidos en el LVSC. En el análisis temático surgieron tres categorías: i. Incidente relacionado con la intervención quirúrgica; ii. daño físico, psicológico y socioeconómico resultante; iii. Consecuencias ético-profesionales y / o legales. **Conclusión e implicaciones para la práctica:** los eventos quirúrgicos adversos reportados por los informes impactaron enormemente en la vida de los pacientes, en los aspectos físicos, emocionales y socioeconómicos. También trajeron implicaciones para los profesionales involucrados y las instituciones de salud. Se cree que las barreras de seguridad contenidas en un instrumento de verificación reconocido mundialmente son herramientas importantes que se utilizarán para promover la seguridad de los pacientes quirúrgicos y salvar vidas.

Palabras clave: Procedimientos Quirúrgicos Operativos; Daños al Paciente; Medios Audiovisuales, Lista de Verificación; Seguridad del Paciente.

INTRODUCTION

Adverse events in perioperative care can be understood as injury or unintentional complication, resulting from an event or omission related to a procedure, care or health management not related to the patient's underlying disease, which can result in disability, prolonged hospital stay or mortality.[1]

Data from the World Health Organization (WHO) show that postoperative complications occur in up to 25% of the patients and the mortality rate varies between 0.5% and 5%. In industrialized countries, at least half of the cases in which surgery led to harms, these were considered preventable. A contributing factor is that surgical safety measures are applied inconsistently, even in places with adequate infrastructure.[2]

In Brazil, there is a scarcity of studies that address the occurrence of adverse surgical events at the national level, since the existing ones portray only the local-regional reality.[3,4] The underreporting of these incidents by hospitals occurs because they have to deal with the exposure of flaws and weaknesses in the health care system and processes, which can contribute to the fact that these data are not sufficiently addressed in the available scientific publications.[5]

In order to mitigate adverse surgical events and improve surgical patient safety, since 2009, the WHO recommends incorporating the Surgical Safety Checklist (SSC) in the operating room.[2] Since then, it has been gradually implemented by the hospitals.[6] Despite this advance, it is believed that until there is a consolidation of the safety culture in the health services, when reporting adverse events related to health care, the media can contribute to the scientific community to develop research studies that seeks to understand the reasons for these failures and mitigation strategies.

In addition, the media can play a fundamental role in the debate and social mobilization in favor of building a culture of patient safety, because it exposes the dramatic reality of patients, arising from adverse surgical events and their implications and exerts and influence on the health system, not only with regard to seeking care, but in planning future medical interventions.[7,8] Given the above, the present study aims to analyze the surgical adverse events reported by a Brazilian media.

METHOD

Descriptive and documentary research with a qualitative approach. In the study, reports from the G1 online news portal, linked to the Rede Globo television station, were used. This data source was chosen for being a free access website with major national and international repercussion.

In order to define the reports/articles, the search was carried out on the digital platform, by means of the locator available on the website's homepage (https://www.globo.com/), using the terms "surgical errors" and "error and surgery", occurred in the Brazilian territory and reported in multimedia format, with written material and audiovisual production. It should be noted that, initially in the search process on the portal the keywords used were the following: "adverse events" and "surgical adverse events"; however, with these terms it was not possible to retrieve any reports. In view of this limitation, the terms used were those that contained the word "error", despite the understanding that most of the recovered reports portray evidence of error and not error, as this refers to the deemed act. Time delimitation came from the search results, which defined it from 2012 to 2019. In addition, all the reports related to surgical adverse events with involvement (suspected or confirmed) of the multi-professional team – surgeon, anesthetist and nursing team – were considered.

Due to the limitations of search resources and ordering of the results found in this process, the reports were classified by themes and selected by reading the headline, eye and *lead*, which comprise the terms that designate the highlighted phrase and the first paragraph of the report, which answer the basic questions to keep the reader informed. Initially, 95 reports were found, and the description of the exclusions is shown in Figure 1.

In the data collection stage, the following procedure was undertaken to allow the analysis: each of the 17 selected reports was watched several times to identify the speech of all the individuals involved and, thus, enable the complete transcription of the content. Subsequently, a spreadsheet was built to characterize each report in relation to the following variables: title, year of publication, location, health service involved, type of adverse event, characterization of the victims, professional

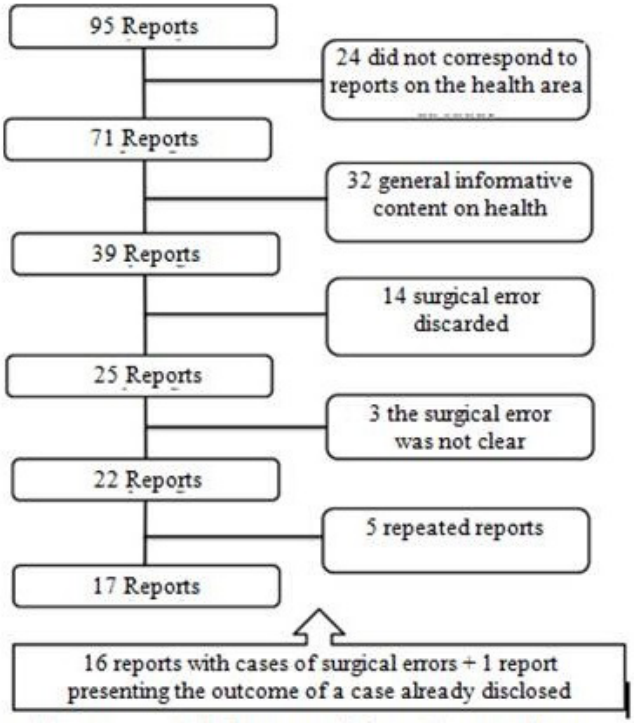

Figure 1. Flowchart for the selection of the reports. Brazil, 2019

*Source: Elaborated by the authors.

category involved, outcomes, video, photo, length of the video and images released.

Each surgical adverse event was classified according to the safety barriers contained in the SSC proposed by the WHO as a way of preventing the adverse event, namely: safety barriers related to the period prior to anesthetic induction (entry), period prior to the surgical incision (surgical pause) and period immediately after closing the surgical incision (exit).[2]

Then, the thematic analysis of the content of the reports was used according to Bardin's theoretical framework: 1) pre-analysis; 2) exploration of the material; and 3) inference and interpretation.[9] In the pre-analysis stage, exhaustive readings of the content of reports were carried out in order to allow immersion in their content, allowing for greater apprehension of the whole presented. In the material exploration stage, the raw data were coded and transformed into meaningful information that gave rise to the registration units. Then, through thematic analysis, the nuclei of meaning were generated, considering their appearance and repetition. As the nuclei were brought together to approximate their meanings, the categories emerged, namely: i. Incident related to the surgical intervention; ii. Physical, psychological and socioeconomic resulting harms; iii. Ethical-professional and/or legal consequences. Finally, in the inference and interpretation stage, based on the speeches, the interpretations were elaborated.[9] Additionally, in category one, the types of incidents were based on the conceptual framework for the international classification of patient safety.[1]

Regarding the ethical aspects, as the information is contained in a public domain website, there was no need for a formal ethical review. As a guarantee of anonymity, the names of the victims and professionals were concealed in the data analysis, and the excerpts from the reports were coded by numbers.

RESULTS

Regarding the characterization of the reports, the cases were disclosed between 2012 and 2019. The victims covered the different life cycles, with predominance of adults (75.0%), eight women and four men. The news were more frequent in the Southeast (56.3%). The dissemination format included text, photos and videos, with the duration of the videos varying between 1'48" and 5'24", totaling 39' and 18", as shown in Table 1.

Table 1. Characterization of the reports on surgical adverse events published in a Brazilian media. Brazil, 2019.

Variables	Reports (N = 17)*	%
Year of disclosure		
2012	1	5.0
2014	3	15.0
2015	1	5.0
2017	4	20.0
2018	7	35.0
2019	1	5.0
Life cycles		
Child	1	6.2
Adolescent	2	12.6
Adult	12	75.0
Older adult	1	6.2
Regions		
Midwest	3	18.7
Northeast	2	12.5
North	2	12.5
Southeast	9	56.3
South	-	
Format**		
Video	11	-**
Text	17	-
Photos	32	-

* 16 cases of surgical adverse events disclosed through 17 reports were analyzed. ** Does not apply, as the number of different formats in each report exceeds the total number of reports. Source: Elaborated by the authors.

Incident related to the surgical intervention

Regarding the first category of analysis, the types of incidents covered the following: a) Clinical process/procedure (n=14/cases 1 to 6 and 9 to 16), in which wrong procedure (n=2/cases 10 and 11), wrong side (n=2/cases 9 and 16), wrong place and identification not performed (n=1/case 1), not done when indicated – surgical items count (n=6/cases 2, 3, 6, 13 to 15)and inadequate (n=3/cases 4, 5 and 12) were involved; b) Medical devices/equipment (n=1/case 7), which involved failure/damage/malfunction; c) Nutrition (n=1/case 8), related to the wrong diet.

In addition, the types of incidents were related to the safety barriers contained in the SSC which, when used, contribute to the prevention of adverse events. Cases 4, 5 and 12 addressed the surgical adverse event related to the surgeon's imprudence, malpractice or negligence during the surgery. In these circumstances, the SSC safety barrier at the exit stage would provide the surgeon with an opportunity to review with the entire team essential concerns for the recovery and management of the patient, as shown in Chart 1.

Physical, psychological and socioeconomic resulting harms

In this category, in all the cases analyzed (n=16), the surgical adverse event resulted in physical harm to the patients. The harms included intense pain, difficulty in eating, inability to move, bronchoaspiration, removal of a healthy organ and cardiopulmonary arrest, which required additional surgery and/or additional therapy (drug therapy, additional tests, intensive

Chart 1. Type of incident related to the surgical procedure and correspondence with the safety barriers contained in the SSC. Brazil, 2019.

Cases Year	Category 1- type of incident	Synthesis of the matter	Safety barriers (SSC)*
1 (2012)	Clinical administration:Patient identification-not performed when indicated	Surgical approach occurred on the shoulder instead of removing synthesis material on the wrist	Entry– Identification: Identity, surgical site and procedure
	Clinical process/procedure: wrong place		Pause– Confirmation: Surgical site and procedure
2 (2014)	Clinical process/procedure: not performed when indicated	Retention of compress in cavity after cesarean section	Exit– Adequate counts of surgical instruments, compresses and needles are correct.
3 (2014)	Clinical process/procedure: not performed when indicated	Gauze retention in cavity after bariatric surgery and evolution to death	Exit– Adequate counts of surgical instruments, compresses and needles are correct.
4 (2014)	Clinical process/procedure: inadequate	Sciatic nerve injury after extraction of leg tumors	Exit– The surgeon reviews essential concerns for the patient's recovery and management.
5 (2015)	Clinical process/procedure: inadequate	Carotid obstruction after thyroidectomy and evolution to death	Exit– The surgeon reviews essential concerns for the patient's recovery and management.
6 (2017)	Clinical process/procedure: not performed when indicated	Retention of compress in cavity after cesarean section and evolution to death	Exit– Adequate counts of surgical instruments, compresses and needles are correct.
7 (2017)	Medical devices/equipment: failure/damage/malfunction	Defect in the intragastric balloon	Pause - Nursing team review: existence of questions to be verbalized about materials/ equipment
8 (2017)	Nutrition: Wrong diet	Death due to bronchoaspiration during ophthalmic surgery, the baby was not fasting	Entry – verification of aspiration risk
9 (2017)	Clinical process/clinical procedure: wrong side	Removal of the wrong kidney	Entry– Identification: Surgical site
			Pause– Confirmation: Surgical site
10 (2018)	Clinical process/procedure: wrong procedure	Performing sterilization instead of removing glands in the groin area	Entry– Identification: Surgical site and procedure
			Pause– Confirmation: Surgical site and procedure
11 (2018)	Clinical process/procedure: wrong procedure	Gallbladder removal instead of hernia	Entry– Identification: Surgical site and procedure
			Pause– Confirmation: Surgical site and procedure
12 (2018)	Clinical process/procedure: inadequate	Perforated femoral vein during femur surgery	Exit– The surgeon reviews essential concerns for the patient's recovery and management.
13 (2018)	Clinical process/procedure: not performed when indicated	Drill retention in cavity after elbow surgery	Exit– Adequate counts of surgical instruments, compresses and needles are correct.

*Surgical Safety Checklist.
Source: Elaborated by the authors.

Chart 1. Continued...

Cases Year	Category 1- type of incident	Synthesis of the matter	Safety barriers (SSC)*
14 (2018)	Clinical process/procedure: not performed when indicated	Compress retention in abdominal cavity after exploratory laparotomy	Exit– Adequate counts of surgical instruments, compresses and needles are correct.
15 (2018)	Clinical process/procedure: not performed when indicated	Retention of gauze in the abdominal cavity after colostomy	Exit– Adequate counts of surgical instruments, compresses and needles are correct.
16 (2019)	Clinical process/procedure: wrong side	Removal of wrong ovary	Entry– Identification: Surgical site
			Pause– Confirmation: Surgical site

*Surgical Safety Checklist.
Source: Elaborated by the authors.

care to save lives, among others) or an increase in the length of hospital stay, and even the occurrence of death.

With the exception of four cases (1, 2, 7 and 15), the others (n=12) mentioned psychological harms such as suffering, impotence, pain due to loss and grief, sadness, nervousness, despair, disbelief, embarrassment, emotional exhaustion and outrage.

In addition, two cases (9 and 14) showed socioeconomic repercussions. These were characterized by the impossibility of returning to work and the cost of complementary treatment, which had a financial impact on the individual's life, as shown in Chart 2.

Ethical-professional and/or legal consequences arising

In this category, the ethical-professional consequences (n=7/ cases 1, 2, 3, 5, 6, 7, 8) consisted of diligences and acts that aimed at verifying the truth of facts alleged by the body of the medical council. And, in six cases (3, 6, 7, 8, 10, 12), the report mentioned that the hospital involved opened an administrative process (investigation) to investigate the functional infractions and institute penalties, if applicable.

In the legal aspect, a police report was filed (n=4/cases 1, 7, 9 and 12) to formalize the occurrence to the police authority. The opening of a police investigation took place in five cases (2, 3, 5, 7, 10) to ascertain the real truth of the allegedly criminal fact. The legal action process was mentioned in four cases (4, 13, 14 and 16), three cases (4, 13 and 16) are in progress and one (case 14) resulted in a judicial conviction where the sentence applied resulted in compensation to the victim. And, only one case (case 15) did not mention any legal referral, as shown in Chart 3.

DISCUSSION

Surgical assistance is essential. However, according to the reports analyzed, the adverse surgical events that occurred showed an unsafe care practice, as it resulted in significant and sometimes irreversible harms to the patients and their families, in addition to consequences for the professionals involved and organizational outcomes.

In a study that aimed to know the experiences of victims of adverse events that occurred in health care and to understand how they faced the challenges imposed, the authors highlighted the patients' perplexity in finding themselves victims and the difficulty in accepting themselves as such, in addition to the physiological impact. The changes imposed by the adverse events led to behavioral and attitudinal changes, such as lack of confidence in the medical professionals. In addition, suffering and negative feelings become part of the experience of these people and suggest that it is necessary to create strategies that allow help and care for the mental health of people who have suffered harms.[10]

Most of the surgical adverse events evidenced in the reports (n=12) consisted of inadvertent retention of items (n=6), followed by wrong procedure (cases 10 and 11) and wrong side (cases 9 and 16). It is noteworthy that, in the analysis based on safety barriers, the SSC is an important strategy for the prevention of surgical adverse events, which reinforces the importance of its use.

Similarly to the results obtained, surgical sentinel events analyzed between 2016 and 2019 point to the predominance of inadvertent retention of foreign bodies, followed by surgery in the wrong place, surgical and postoperative complications, wrong procedure and wrong patient.[11] In this perspective, verbal confirmation of the patient, of the procedure, and of the surgical site before anesthetic induction, provided in the SSC, is reinforced as a barrier against the occurrence of such adverse events. This must be performed verbally with the presence of the multidisciplinary team in the operating room, involving the patient in the process.[2]

Another safe practice guided by protocols would be the safe demarcation of the limb, preferably while the patient has not yet received anesthetics to obtain verbal confirmation and thus involve the patient with their own safety. In this sense, it is clear

Chart 2. Physical, psychological and socioeconomic harms resulting from surgical adverse events reported in a Brazilian media. Brazil, 2019.

Cases	Category 2- Physical, psychological and/or socioeconomic	Excerpts from the report
1	**Physical:** Skin, muscle and bone injury	[...] *The surgery would be to remove synthetic material on the wrist, but the surgical approach was on the shoulder*[...]
2	**Physical:** Infection	[...] *Technical report confirmed infection due to surgical cloth forgotten during cesarean section*[...]
3	**Physical:** Pain/Difficulty in eating/Re-surgery/Generalized infection/Death **Psychological:** Suffering/Pain from loss/grief	[...] *gauze was left in the stomach, complained of pain and difficulty in eating after the intervention. Another surgery performed to remove the material. The young woman evolved with generalized infection and death. The mother grieves the death*[...]
4	**Physical:** Sciatic nerve injury. Left lower limb atrophy **Psychological:** Suffering	[...] *After the surgery, my leg shrank, the exam proved the damage to the sciatic nerve...I depend on the medical expertise to reduce my suffering*[...]
5	**Physical:** Stroke/Brain death/ Death **Psychological:** Suffering/Pain from loss/grief	[...] *when they said stroke, which has nothing to do with thyroid, in the exam it was found cerebral thrombosis, the lack of cerebral blood flow, caused her to have cerebral death*[...]
6	**Physical:** Pain/Re-surgery/Sepsis/ Death **Psychological:** Suffering/Revolt/ Pain from loss/grief	[...] *My daughter couldn't stand the pain, they did a laparotomy and identified the compress and abdominal sepsis focus, she evolves with sepsis and death. The family expresses pain and revolt*[...]
7	**Physical:** Surgical complications/ Cardiopulmonary arrest/Death	[...] *The gastric balloon, but it had a problem, the methylene blue leaked into the organism, when the doctor was going to remove the balloon, it did not pass through the trachea and suffocated her and she had cardiac arrest, she was resuscitated and sent to the Intensive Care Unit but didn't resist*
8	**Physical:** Bronchoaspiration/ Cardiopulmonary arrest/Death **Psychological:** Suffering**/** Impotence. Pain from loss/grief	[...] *She had breastfed because we did not know when the procedure would be performed...with bronchoaspiration, the father...says that the baby suffered 8 cardiac arrests and ended up not resisting. For the family, it remains the difficult task of learning to deal with the lack of the daughter. I am speechless, there is nothing to say. What they did...she will never come back*[...]
9	**Physical**: Intense pain **Psychological:** Suffering **Socioeconomic:** Impossibility to work/Cost of the treatment	*I feel a lot of pain...I hope the Justice makes this doctor return everything I have already spent paying for the treatment Due to the pain he feels,he had to leave his job.*
10	**Physical:** Pain/Surgical complications/Re-surgery **Psychological:** Embarrassment/ Emotional wear out	[...] *In addition to the wrong surgery, M.A had complications and started to feel pain. She had to undergo another operation...she says she had difficulties and was very embarrassed at the hospital and INSS*[...]*"*
11	**Physical:** Removal of healthy organ/Surgical pathology was not treated. **Psychological:** Indignation/ Emotional wear out	[...] *The surgeon said that, before the hernia surgery, he realized that my gallbladder had a problem and decided to do the removal, he said he did me a 'brother's favor'. He removed my organ without authorization, without. "I'm outraged, I suffered physical and emotional harm, for me and for my whole family. In the end, I didn't operate the hernia*[...]

Chart 2. Continued...

Cases	Category 2- Physical, psychological and/or socioeconomic	Excerpts from the report
12	**Physical:** Venous perforation/ Risk of limb amputation **Psychological:** Despair	[...] *Perforation of vein in the leg with risk of amputation...Now, she fights for her life. The father of the ten-year-old girl is desperate!* [...]
13	**Physical:** Intense pain/Re-surgery **Psychological:** Psychological trauma	[...] *After the operation to put pins in the elbow, he felt a lot of pain, it was a fright, a trauma when he discovered the existence of the object retained in the elbow. He removed a 6 cm drill*[...]
14	**Physical:** Pain/Re-surgery **Psychological:** Suffering **Socioeconomic**: Impossibility to work/Own cost of re-surgery	[...] *feeling severe pain, he needed a new surgery to extract the material, in addition to the emotional shock, he was unable to work. The intervention cost the patient R$ 17,175*[...]
15	**Physical**: Pain/Dehiscence/Re-surgery/Death	[...] *After the surgery, a lot of pain, the cut opened, revealing the gauze on the belly. He underwent another surgery to remove the material, then was admitted to the ICU...evolving to death*[...]
16	**Physical:** Intense pain/Untreated surgical pathology **Psychological:** Sadness/ Nervousness/Despair/Suffering/ DisbeDespair/ suffering/disbelief	*[...] I got really nervous and said to him: 'for God's sake, how did you remove the right ovary? I said it was the left that had a problem. I found myself lost, I continued in pain and no one believed in me. I have no words to express the sadness and everything I feel[...]*

Chart 3. Ethical-professional and/or legal consequences arising from surgical adverse events reported in a Brazilian media. Brazil, 2019.

Cases*	Category 3: Ethical-professional and/or legal consequences	Excerpts from the report
1	Police Report/Inquiry by the Regional Council of Medicine	[...] *Filed a Police Report for medical failure being investigated by the police.The Regional Council of Medicine spoke up and said they would open an investigation* [...]
2	Police inquiry/Inquiry by the Council of Medicine/ Internal investigation by the city hall	[...] *The civil police investigates. The investigation by the Council of Medicine is confidential. The city hall informed that the internal investigations also continue*[...]
3	Police investigation/Hospital investigation/ Inquiry by the Council of Medicine to start	[...] *The Civil Police investigates. The delegate said that if it is proven, the doctor will be charged for negligent homicide, a penalty of 4 to 12 years in prison. The Council of Medicine awaits to be notified by the police or family to open an investigation* [...]
4	Legal action in progress	[...] *Went to the Justice against the hospital and doctor. The judge asked for technical expertise* [...]
5	Suspension/Police investigation/Inquiry by the Regional Council of Medicine	[...] *The doctor was suspended from the health unit. The Civil Police investigates the death. Inquiry opened by the Council of Medicine* [...]
6	Hospital administrative process	[...] *hospital director will open administrative process and they may even be fired*[...]
7	Police report/Police investigation/Hospital Inquiry (to be started)/Inquiry by the Council of Medicine	[...] *Police report was filed. The Civil Police must open an investigation. The hospital said they would investigate what happened. The Regional Council of Medicine of the State of São Paulo will establish an inquiry to investigate the death* [...]
8	Hospital investigation	[...] *The Hospital opened an investigation* [...]

*Case 15: there is no mention of any legal referral in the report.

Chart 3. Continued...

Cases*	Category 3: Ethical-professional and/or legal consequences	Excerpts from the report
9	Police report/Police investigation/Regional Council of Medicine awaits information to position itself.	[...] *According to the police report, by the exams, there was no need to remove either kidney. The Civil Police is investigating the case.The Medical Council will take a position as soon as it becomes aware of the indication of medical error* [...]
10	Police investigation/Hospital investigation	[...] *Civil Police established an inquiry to investigate possible bodily injury and medical negligence. The hospital is also investigating* [...]
11	Medical-administrative inquiry	[...] *I will go to the Justice. The hospital will open an investigation to find out what happened.*
12	Police report/Hospital investigation	[...] *the family filed a Police Report. The hospital direction started an investigation* [...]
13	Legal action against the State and hospital	[...] the *family went to the Justice against the hospital and the State* [...]
14	Judicial conviction	[...] *The judge condemned the State and doctor for the damages, compensation of R$ 20,000.*
16	Legal action: indemnity action in progress	[...] *Entered the Judiciary with a compensation action for moral and aesthetic damages.*

*Case 15: there is no mention of any legal referral in the report.

that the implementation of SSC promotes the practice of safe surgery and presents itself as a tool for mitigating care failures.[2]

In six cases, there was inadvertent retention of surgical items (gauze and compresses) in the patient's cavity. In this sense, a number of studies indicate an incidence between 0.15% and 0.2% of postoperative retention of foreign bodies, mainly in abdominal surgeries, which can generate major complications and risk to the patient's life, with mortality between 10% and 18%.[12]

In order to avoid the occurrence of cases of material neglect in the patient's cavity, the literature suggests the classical method of counting the materials used in the surgical field at the beginning and at the end of the surgery. However, it is known that there is a possibility of failure during the counting of materials, as pointed out in an investigation that demonstrated that, in 88% of the cases of objects retained in the patients' cavities, there were reports in medical records that there was correct counting of the materials.[13] As a strategy to mitigate such failure, the WHO recommends that the surgeon should perform a methodical exploration of the wound before closing any anatomical cavity, although the procedure does not replace the process of counting the materials to be performed and recorded, involving different professionals, circulating, surgical scrubber and surgeon.[2]

It should be noted that the beneficial potential of SSC for the safety of surgical patients is undeniable; however, in hospitals, the implementation of SSC is a complex and challenging process that requires the involvement of all health professionals responsible for patient care during the intraoperative period. This is because it requires the understanding that SSC is not a mere exercise in marking items and it is an instrument that aims to stimulate communication and teamwork, with the irreplaceable verbal checking of items among the participants. For successful implementation, there is a need for effective leadership, clear delegation of the responsibilities of each professional, collaboration among team members and institutional support by making available human and material resources necessary for daily use.[14]

Regarding the ethical-professional outcomes resulting from the surgical adverse event, a study conducted pointed to the fact that the accountability of the professionals must follow the ethical-legal procedures, but it must be remembered that there is an apparent blame for individuals without showing concern for the processes by which the failures are triggered, which denotes a wrong way of approaching the adverse event.[15]

In the legal aspect, similarly to the results, a documentary study characterized processes with judicial decisions (n=31) for errors involving Nursing professionals. In eight cases the victim died, in half of them, they had temporary disability (17=50%), and seven people had permanent disability. The most frequent error involved medication administration (38.71%), followed by childbirth assistance error (19.35%) and surgery (n=5; 16.13%), which included positioning of the cautery (burn) 3 (9.68%), material count (gauze in cavity) 1 (3.23%)

and neglect of postoperative care 1 (3.23%). In more than half of the cases, the police report was filed by the victim himself. The professionals were convicted in 22 cases. The greatest number of convictions involved institutions, which justifies the participation/support of high institutional management and the search for self-preservation.[16]

CONCLUSION AND IMPLICATIONS FOR THE PRACTICE

The surgical adverse events in the reports greatly impacted on the lives of the patients in physical, emotional and socioeconomic aspects. They also brought implications for the professionals and health institutions involved.

It should be noted that the analysis of the reports was restricted to those published in a Brazilian media; therefore, this reality is not representative of the country. In addition, the reports produced may have had their material edited. Thus, these are aspects that can represent a limitation for the study.

Despite this, this study can support the filling of a knowledge gap, as it allowed knowing the unacceptable existence of surgical adverse events from the perspective of some patients and family members who had their case disclosed in a media. In this context, the media is a relevant tool that gives voice to users of the Brazilian health system, exposing aspects of a dramatic reality of citizens who, when seeking surgical assistance to solve their health problem, felt the consequences of an unsafe service generating harms.

In addition, it is believed that, if the safety barriers contained in the SSC were strictly adopted in the clinical practice, most of the reported surgical adverse events could have been avoided. In this regard, it is hoped that this study may contribute for the health services to revisit their surgical care protocols, in order to ensure patient safety and save lives.

AUTHOR'S CONTRIBUTIONS

Study design. Maritya Mayumi Isiri Tada. Larissa Cristina Gazola de Paulo · Verusca Soares de Souza

Data collection. Maritya Mayumi Isiri Tada. Larissa Cristina Gazola de Paulo · Verusca Soares de Souza

Data analysis. Maritya Mayumi Isiri Tada. Larissa Cristina Gazola de Paulo · Verusca Soares de Souza. Maria Fernanda do Prado Tostes. Aline Barbieri. Mayane Magalhães Santos

Results interpretation. Maritya Mayumi Isiri Tada. Maria Fernanda do Prado Tostes. Aline Barbieri. Mayane Magalhães Santos

Writing and critical review of the manuscript. Maritya Mayumi Isiri Tada· Larissa Cristina Gazola de Paulo · Verusca Soares de Souza. Maria Fernanda do Prado Tostes. Aline Barbieri. Mayane Magalhães Santos

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Responsibility for all aspects of the content and integrity of the published article.

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