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# Patient safety culture in the perception of health professionals: A mixed methods research study

Cultura de segurança do paciente na percepção dos profissionais de saúde: pesquisa de métodos mistos

La cultura de seguridad del paciente según la percepción de profesionales de la salud: una investigación de método mixto

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# **ABSTRACT**

**Objective:** To analyze the patient safety culture perceived by health professionals working in a hospital and to understand the elements influencing it.

**Methods:** A sequential explanatory mixed methods study, conducted in 2017 in two interrelated stages in a hospital. The quantitative stage was carried out by applying the questionnaire to 618 professionals and the qualitative stage, with ten, using the focus group technique. The analysis was descriptive statistics for the quantitative data and of content for the qualitative data. Subsequently, the data were submitted to integrated analysis.

**Results:** Of the 12 dimensions, seven were considered weak, the most critical being "non-punitive response to error" with 28.5% of positive answers. Bureaucratic, poorly designed and uncoordinated processes, regional decisions, communication failures, hierarchy, overload, punishment and judicialization were related to the perception.

**Conclusions:** The patient safety culture was considered weak, and elements related to work organization, people management and legal risk influenced this negative perception.

**Keywords:** Patient safety. Organizational culture. Safety management. Quality assurance, health care. Hospital services. Quality of health care.

## RESUMO

**Objetivo:** Analisar a cultura de segurança do paciente percebida pelos profissionais de saúde de um hospital e compreender os elementos que a influenciam.

**Métodos:** Misto sequencial explanatório, conduzido em duas etapas conectadas, em hospital, em 2017. A etapa quantitativa ocorreu mediante aplicação do questionário a 618 profissionais e a qualitativa, com dez, pela técnica de grupo focal. A análise foi descritiva para dados quantitativos e de conteúdo, para os qualitativos. Posteriormente, os dados foram submetidos à análise integrada.

**Resultados:** Das 12 dimensões, sete foram consideradas frágeis, sendo a mais crítica "resposta não punitiva aos erros", com 28,5% de respostas positivas. Processos burocratizados, mal desenhados e descoordenados, decisões regionais, falhas de comunicação, hierarquia, sobrecarqa, punição e judicialização foram relacionados à percepção.

**Conclusão:** A cultura de segurança do paciente foi considerada frágil e os elementos relacionados à organização do trabalho, à gestão de pessoas e ao risco jurídico influenciaram essa percepção negativa.

Palavras-chave: Segurança do paciente. Cultura organizacional. Gestão da segurança. Garantia da qualidade dos cuidados de saúde. Servicos hospitalares. Qualidade da assistência à saúde.

## RESUMEN

**Objetivo:** Analizar la cultura de seguridad del paciente percibida por los profesionales de la salud y comprender los elementos que influyen en ella

**Métodos:** Estudio de método mixto explicativo secuencial, realizado en dos etapas interrelacionadas en un hospital en el año 2017. La etapa cuantitativa se realizó mediante la aplicación del cuestionario a 618 profesionales y la etapa cualitativa, con diez, mediante la técnica de grupo focal. El análisis fue estadística descriptiva para los datos cuantitativos y de contenido para los datos cualitativos. Posteriormente, los datos se sometieron a análisis integrado.

**Resultados:** De las 12 dimensiones, siete se consideraron débiles, siendo la más crítica la "respuesta no punitiva a los errores". Los procesos burocráticos, mal diseñados e descoordinados, decisiones regionales, fallas de comunicación, jerarquización, sobrecarga, castigo y judicialización se relacionaron con la percepción.

**Conclusiones:** La cultura de seguridad del paciente se consideró débil y elementos relacionados con la organización del trabajo, la qestión de personas y el riesgo legal influyeron esta percepción negativa.

Palabras clave: Seguridad del paciente. Cultura organizacional. Administración de la seguridad. Garantía de la calidad de atención de salud. Servicios hospitalarios. Calidad de la atención de salud.

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# **■** INTRODUCTION

The global patient safety movement has as its confluence the publication of the report entitled "To Err is Human: building a safer health system" in 1999, which estimated an alarming number of deaths due to failures resulting from care in American hospitals<sup>(1)</sup>. Despite efforts and important advances over the years, the work to make patient care safer progressed slower than expected and, according to a panel of experts, the health system continues to operate with a low degree of reliability, often showing unnecessary harms to patients, especially in developing countries<sup>(2–3)</sup>.

In the search for strategies that guarantee safe care, building and promoting a culture that recognizes the challenges of patient safety and implements viable solutions emerge as essential requirements to be developed by the health organizations<sup>(4)</sup>. Patient Safety Culture (PSC) is defined as the product of values, attitudes, perceptions, skills and patterns of individual and group behavior, which determine the commitment, style and proficiency of an organization's administration with safety management<sup>(5)</sup>.

A health institution with a safety culture is recognized when all workers assume responsibility for the safety of colleagues, patients, family members and themselves; safety is prioritized over financial and operational goals; professionals are encouraged and rewarded to identify, notify and resolve safety issues; organizational learning is promoted in the event of incidents; and when resources, structure and accountability are made available for the effective maintenance of safety<sup>(6)</sup>.

Analyzing the PSC in health institutions has been a proposal globally encouraged by the scientific community and international hospital accreditation organizations. Based on the professionals' perception of the culture shared in the organization, there is access to safety-related behaviors, as well as to the weakest areas and dimensions, contributing to the planning and implementation of assertive interventions for patient safety<sup>(5–6)</sup>.

In Brazil, research studies focusing on the assessment of the PSC are mostly restricted to quantitative methods to evaluate a specific hospital unit or sector, with a sample composed of healthcare professionals, especially physicians and nurses<sup>(7-9)</sup>.

The need to understand the cultural aspects to make patient safety a priority in the health system, added to the gaps identified in the literature on this subject matter, resulted in the following research question: What is the perception of the professionals working in hospitals about the patient safety culture and which elements influence this perception? From this question, this study aimed at

analyzing the patient safety culture perceived by the health professionals of a hospital and to understand the elements that influence it.

#### **METHODS**

A mixed methods sequential and exploratory research study<sup>(10)</sup>, conducted in two connected stages: first a quantitative stage, with a cross-sectional observational study design, using the Hospital Survey on Patient Safety Culture (HSOPSC), in its Brazilian version<sup>(11)</sup>, to identify the perception of the PSC; and a qualitative stage, using the focus group technique, to explore the results of the previous stage and the elements that influence the professionals' perception.

The study was carried out in a large, private, general hospital located in the Brazilian South region, with a capacity of 320 beds, including clinical-surgical and intensive care units. Data collection for the quantitative stage took place in all the work shifts during April and May 2017; in relation to the qualitative stage, it was conducted in two focus group sessions in October 2017, each meeting lasting two hours.

The population consisted of professionals from the health care (Nursing, Medicine, Physiotherapy, Psychology, Pharmacy, Nutrition and Social Service) and administrative technical support (financial, billing, cleaning, surveillance, engineering and administration) areas, totaling 1,714 professionals. For this population, the minimum sample for the quantitative stage consisted in 432 participants, considering an estimated outcome percentage of 60%<sup>(12)</sup>, a 95% confidence level and a margin of error of 4%. In the quantitative stage, the inclusion criterion was being employed or working as a preceptor in the residency program for more than six months. The sample consisted of 618 professionals, a number higher the minimum established, as a result of the adherence of the professionals to the study, randomly selected (manual draw, at the time of application of the questionnaire, after identifying the eligible professionals), considering the proportions of each professional category, ensuring their representativeness.

Collection of the quantitative data was conducted by the research team, in all the work shifts, with the participants themselves filling out the data collection instrument. The instrument contained the variables related to the HSOPSC<sup>(11)</sup>, sociodemographic and labor variables of the participants, and two questions about the professionals' perception of the work environment and the number of events reported in the last year. The HSOPSC<sup>(11)</sup>, which version validated in Brazil presented a Cronbach's alpha of 0.91, assesses 12 dimensions of patient safety culture, containing 50 items in total and

most answered on a Likert-type scale, with a variation of 5 perception levels, from "Totally disagree" to "Totally agree" and from "Never" to "Always".

In the qualitative stage, the participants that would comprise the focus group were defined after a preliminary analysis of the quantitative data. To avoid the bias that could arise due to the professional hierarchies (schooling level and managerial positions), graduate and/or postgraduate healthcare professionals who did not occupy a managerial or supervisory position were invited to this stage, and the inclusion criterion was having completed the questionnaire from the previous stage. Thus, to compose the focus group sample, an invitation was sent via a computerized system (institutional communication tool), presenting the objectives and methodology to be used. Ten professionals agreed to participate in the study, being five nurses (representatives of the inpatient, intensive care and intermediate care units, the operating room and recovery room, emergency and Diagnostic and Therapeutic Support Services), one intensive care physician, one physiotherapist, one pharmacist, one social worker and one nutritionist. Two focus group sessions were held in October 2017, each meeting lasting two hours.

The first meeting aimed at presenting and discussing the results of the quantitative stage, exploring the elements that influence the professionals' perception of the patient safety culture. In the second meeting, the objective was to discuss the internal Patient Safety Policy and to list improvement opportunities for the institution. The sessions were audio-recorded and the literal transcription of the conversations was emailed to the participants to validate its authenticity.

Double entry was performed, regardless of the quantitative data, after analysis and correction of inconsistencies. Subsequently, a descriptive statistical analysis was carried out, using simple (n) and relative (%) frequencies for categorical variables; and mean and standard deviation or median and interquartile range for continuous variables, according to distribution symmetry analysis (Shapiro-Wilk or Kolmogorov-Smirnov test). The internal consistency analysis was measured by Cronbach's Alpha coefficient and showed a result of 0.876 for the complete instrument and variations between 0.490 and 0.873 in the dimensions (Teamwork within units: 0.788; Supervisor/Manager expectations and actions promoting patient safety: 0.698; 0.698; Organizational learning – continuous improvement: 0.621; Management support for patient safety: 0.671; Overall perceptions of patient safety: 0.493; Feedback and communication about error: 0.653; Communication openness: 0.560; Frequency of events reported: 0.873; Teamwork across units: 0.530; Staffing: 0.490; Handoffs and transitions: 0.646; Non-punitive response to error: 0.492). The main outcome was the perception of the patient safety culture by analyzing the percentage of positive answers in each dimension of the HSOPSC, using the following formula: [number of positive answers to the item in the dimension assessed / total number of valid answers to the items in the dimension assessed (positive, neutral and negative, excluding missing data)] x 100<sup>(11)</sup>.

Positive answers refers to those in which the "Agree"/"Totally agree" or "Almost always"/"Always" option was marked for the sentences formulated in a positive way or in which "Disagree"/"Totally disagree" or "Never"/"Rarely" was marked in the questions formulated negatively. The percentage of positive answers represents a positive reaction in relation to the patient safety culture and allows identifying strong and weak areas for patient safety. Conceptually, "strong patient safety areas" were those whose positively written items obtained 75% of positive answers, or those whose negatively written items obtained 75% of negative answers. Similarly, "weak patient safety areas" in need of improvement are those whose items obtained 50% or less of positive answers.

The content analysis method proposed by Minayo<sup>(13)</sup> was used to analyze the information generated by the focus group, based on the thematic categories that emerged. Thus, the transcripts underwent pre-analysis through skimming of the text, which sought to constitute the content corpus, observing the qualitative validity criteria. The coding stage followed, in which the units of meaning considered most relevant in the previous stage were categorized by reducing the text to meaningful words and expressions. Finally, in the treatment of the results stage, inferences and interpretations were made, inter-relating them with the research objectives. It is emphasized that, in the presentation of the qualitative results, language vices were corrected, without, however, changing the essential content.

In order to meet the methodological assumptions of mixed methods sequential explanatory research, the process of integrating quantitative and qualitative results was marked by the movement of "coming and going" between the data, aiming at a better understanding of the phenomenon, which is presented in the form of joint displays<sup>(10)</sup>.

The ethical precepts were respected and the research was approved according to Certificate of Presentation for Ethical Appreciation No. 63334616.4.0000.5347. The Free and Informed Consent Form was presented and handed in to the participants of both research stages.

# **RESULTS**

# **Stage 1 – Quantitative Approach**

Of the 618 participants included in the quantitative stage, 315 were from health care and 303 from technical-administrative support. The sample was predominantly female (69.1%), the professionals' mean age was 38.1 years old (+10.4), and the median of the time in the profession was 7 years (3-17). Table 1 shows the participants' sociodemographic and work profile.

The analysis of the distribution of professionals regarding the professional category showed that, among the healthcare work component, nursing technicians

comprised the majority of the sample (35.4%), followed by physicians (9.9%) and nurses (6.8%). Among the professionals who did not work in the healthcare area, the category formed by other administrative technical support professionals was the most frequent (22.2%), followed by administrative technicians (7.1%).

The professionals' perception about the PSC, assessed from the mean percentage of positive answers in the HSOPSC dimensions, is presented in Table 2. None of the 12 dimensions was considered strong for patient safety, and seven (58.3%) were judged as weak areas for the PSC. The most critical dimension was "Non-punitive response to error", with 28.5% of positive answers, followed by "Handoffs and transitions", with 32.3%.

**Table 1** – Sociodemographic and work variables of the professionals who participated in the quantitative stage (n=618). Rio Grande do Sul, Brazil, 2017

Variables	n	%
Schooling level		
Complete Elementary School	24	3.9
Incomplete High School	31	5.0
Complete High School	265	42.8
Incomplete undergraduate studies	111	18.0
Complete undergraduate studies	48	7.8
Graduate studies (Specialization)	109	17.6
Graduate studies (Master's degree or PhD)	19	3.1
Not reported	11	1.8
Time working in the hospital (years)		
< 1	67	10.8
1 - 5	283	45.9
6 - 10	134	21.7
11 - 15	41	6.6
16 - 20	27	4.4
≥ 21	62	10.0
Not reported	4	0.6
Time working in the sector (years)		
< 1	101	16.3

Table 1 – Cont.

Variables	n	%
1 - 5	302	48.9
6 - 10	107	17.3
11 - 15	34	5.5
16 - 20	24	3.9
≥ 21	43	7.0
Not reported	7	1.1
Weekly workload (h/week)		
< 20	24	3.9
20 - 39	219	35.4
40 - 59	329	53.3
60 - 79	18	2.9
80 - 99	5	0.8
≥ 100	4	0.6
Not reported	19	3.1

Source: Research data, 2017.

**Table 2** – Mean percentage of positive answers of the patient safety culture dimensions, according to HSOPSC (n=618). Rio Grande do Sul, Brazil, 2017

Dimensions	% of positive answers
Organizational learning and continuous improvement	66.9
Supervisor/Manager expectations and actions promoting PS <sup>‡</sup>	63.6
Teamwork within units	63%
Management support for PS <sup>‡</sup>	57.2
Frequency of events reported	54.3
Feedback and communication about error	49.5
Overall perception of PS <sup>‡</sup>	48.5
Communication openness	48.2
Staffing	43.6
Teamwork across units	36.6
Handoffs and transitions	32.3
Non-punitive response to error	28.5

Source: Research data, 2017.

‡ Patient Safety.

The research participants also evaluated their work field/unit, attributing them a rating (excellent, very good, fair, poor or very poor). Of the 573 professionals who answered this question, the majority (58.7%) assessed it as fair; 33.2% as excellent or as very good; and 8.1% considered the sector poor or very poor.

In the item about the number of events notified over the course of a year, there were answers from 592 professionals and the majority (51.5%) reported that they did not make any notifications; 37.7% notified one to five events; and 10.8% recorded more than six events in the last 12 months from the date the instrument was completed.

# **Stage 2 – Qualitative Approach**

In the qualitative stage, based on the focus group, it was sought to understand the results found in the previous stage and to identify the elements that could explain the professionals' perception of the PSC. The material produced from the conversations shared in the focus group was organized and grouped in the "Elements that explain our status quo" category and in the "Weaknesses of the patient safety culture" subcategory.

Poorly designed, uncoordinated and bureaucratized processes, associated with work overload, communication failures, regional decisions, hierarchy gradients and the risk of judicialization, were pointed out by the professionals during the focus group discussions as contributors to the perception of a weak culture. The existence of a punitive culture, sometimes veiled, added to the difficulty of implementing a "just culture", were also pointed out in the discussions as elements present in this context. The participants' statements, according to the analysis category, are presented in Figure 1.

# Interpretation of the quantitative and qualitative data combined

In the integration of the results and in compliance with the assumptions regarding mixed methods sequential explanatory research, the joint display of the main results, which refer to the weakened dimensions of the patient safety culture and to the elements that influence this perception, is found in Figure 1.

# DISCUSSION

The mixed methods approach of this study allowed going beyond the quantitative diagnosis provided solely by the application of the HSOPSC and to show that the professionals perceived the patient safety culture as weak. Convergences of

perceptions were identified, mainly regarding the existence of a punitive culture in the work environment and poorly designed processes for handoffs and communication in the work unit. Overall perceptions of patient safety was also pointed out as a weak dimension in both approaches.

Although none of the dimensions of the HSOPSC were considered strong for patient safety, the quantitative stage showed a higher mean percentage of answers in the items concerning expectations about the leader, organizational learning and management support for patient safety. In contrast, the qualitative approach highlighted regional decisions and hierarchy gradients as weak dimensions.

In general, the professionals perceived a weakened patient safety culture, according to the HSOPSC dimensions, not differing from the literature that points to the predominance of studies that reveal weak patient safety cultures<sup>(7-9,14)</sup>.

A systematic review that analyzed 33 studies published around the world, using the HSOPSC, showed that "teamwork within units", "organizational learning – continuous improvement", "communication openness" and "supervisor/manager expectations and actions promoting patient safety" were the only dimensions that proved to be strong for the patient safety culture. The others were identified as weak, the most critical ones being the following: "non-punitive responses to error", with rates ranging from 3.5% to 47% of positive answers, "staffing" (14%-45%), "handoffs and transitions" (24.6%-49.7%) and "teamwork across units" (24.6%-44%)<sup>(14)</sup>.

"Staffing" was perceived as a weak dimension of patient safety in 60% of the studies included in this systematic review<sup>(14)</sup>, suggesting that the professionals feel overloaded due to inadequate staffing, which can affect the quality of the care provided. "Teamwork within units" was considered weak in 30% of the studies, and "handoffs and transitions", in 36%, the latter being considered a critical point due to the high risk of incidents, loss of information and care fragmentation at moments of care transition<sup>(14)</sup>. Finally, a punitive culture seems to exist in hospitals in general, as "non-punitive response to error" was considered a weak dimension in 70% of the studies<sup>(14)</sup>, which discourages the reporting of incidents by the teams, thus making it difficult to analyze the causes and preventing learning from the errors.

Corroborating the results of this systematic review<sup>(14)</sup>, the four dimensions mentioned were the weakest for the PSC in this research, which denotes that these aspects are really paradigms in the health area and challenges to be overcome.

In the comparison of the results of this research with the Agency for Healthcare Research and Quality (AHRQ) database<sup>(12)</sup>, it was observed that the perception of the patient safety culture is stronger in American hospitals. The biggest difference observed between the AHRO database and this

# PROFESSIONALS' PERCEPTION ABOUT THE PATIENT SAFETY CULTURE ACCORDING TO HSOPSC



#### Weak Dimensions (Positive Answers ≤ 50%)

Overall perceptions of patient safety (48.5%)

Feedback and communication about error (49.5%)

Communication openness (48,2%)

Teamwork across units (36.6%)

Staffing (43.6%)

Handoffs and transitions (32.3%)

Non-punitive response to error (28.5%)

# Elements contributing to this Perception:

#### Work overload

- We have a very large overload of patients, so that thing of talking to the patient, to the family, to properly assess the risk of falling, is a weak spot.
- If you're running, you can't handle the handoffs properly, inform what you needed, there's a gap there... I think staffing influences that too.
- I think it's because of the overload of all professionals that safety fails.

Focus Group, 10/05/2017 and 10/19/2017

# Poorly designed, uncoordinated and bureaucratized

- Our handoffs are not quite standard (...).
- There are processes that involve many people and many steps (...), at some point the information is lost.
- (...) non-standardized medication is a problem.
- Sometimes we have to fight with the other service to remember that the patient is hospitalized and that he/she cannot wait three, four days for an exam.

  Focus Group, 10/19/2017

## Regional decisions (absence of a systemic perspective)

- We often see decisions taken regionally. Sector X assesses its need, adjusts as it thinks important, but then the patient goes to sector Y, where the need is not the same as in sector X and then we often have friction between the teams from sector X and sector Y (...) the areas have different needs.
- If everyone thought about who the next in the care line will be, if I did my job knowing that I'm going to hand it over to the next girl and say, look, now it's up to you, it would be easier and safer for the patient.

Focus Group, 10/05/2017

#### Communication failures

- I think that we have a big communication problem between the units regarding the new routines, it's difficult to get to the end.
- The way in which information is disseminated is very difficult.
- There are times when I receive new information related to my work from peers that work in other sectors, information which my boss has not yet given me.

Focus Group, 10/05/2017

#### Hierarchy gradients

- But then there are also the issues of airs and graces, like "I do", "I perform".
- I often see a game of power, a lot, a lot of power, of who can do more... I wonder if the actions taken are in accordance with the needs of the sector or with my needs... this impacts a lot and the biggest harm falls on the patient. Focus Group, 10/19/2017

#### Punitive culture

- It's cultural, you have to punish someone for what happened rather than thinking about avoiding what happened, about training. This comes from the top down, I often don't want to punish, but I'm
- asked to do it.
- I agree with punishing, but in certain situations (...)

Focus Group, 10/05/2017

#### Legal risk

- (...) nowadays, if you don't offer a glass of water, it can turn into a legal process.
- We refrain from doing things that we think are important because of this fear of judicialization.

Focus Group, 10/19/2017

# Cooperation, coordination, respect and empathy

- Depending on the person who assists you, they will make your life easier, even if the patient is not theirs, they will help you, they will solve it. But it's unusual.
- The professionals don't respect each other.
- We have a lot of insubordination down here
- There's lack of collaboration among peers (...) we need to rescue the issue of respect, appreciation, partnership.

Focus Group, 10/05/2017

Figure 1 – Weakened dimensions for the patient safety culture and elements contributing to this perception. Rio Grande do Sul, Brazil, 2017

Source: Research data, 2017

research was in the "teamwork across units" dimension, in which the percentage of positive answers was 36.8% in this study and 61% in the AHRQ database, showing that support among the professionals, mutual respect and teamwork are more developed among Americans. It is also noteworthy that only the "non-punitive response to error" and "handoffs and transitions" dimensions showed to be weak for patient safety in US hospitals.

In Brazil, a study that analyzed the perception of 215 heal-thcare professionals (physicians, nurses, pharmacists and others) in three hospitals, with different types of management (federal, state and private), showed that: a) in the private hospital, five dimensions were considered strong for patient safety: "management support for patient safety" (90.2%); "organizational learning – continuous improvement" (87.6%); "supervisor/manager expectations and actions promoting safety" (86.4%); "teamwork across units" (77.3%); and "teamwork within units" (76.8%); b) in the state hospital, all dimensions were considered weak, with positive answer rates ranging from 19.7% for the "handoffs and transitions" dimension to 50.0% for "supervisor/manager expectations and actions promoting safety"; and c) in the federal hospital, half of the dimensions were considered weak(9).

Mixed methods research was recently used to evaluate the patient safety culture in a European institution with hospital accreditation<sup>(15)</sup> and pointed out divergences in the findings of each approach, unlike the results of this research, in which, in both approaches, a weak culture was evidenced. While the quantitative stage evidenced satisfactory scores in five of the six domains evaluated, the qualitative analysis elucidated gaps in patient safety with regard to interpersonal relationships, work environment and training to avoid errors<sup>(15)</sup>.

The patient safety culture is a well-known theme in Nursing and has been previously studied in Brazil. Thus, another study evidenced a significant association between workload and patient safety in clinical and surgical inpatient units of a university hospital in the Brazilian South region<sup>(16)</sup>. In that study, the increase in the number of patients assigned to the Nursing team per day was significantly associated with the increased incidence of falls, central-line associated infections, absenteeism, professional turnover and reduced patient satisfaction with the Nursing team.

In addition to adequate staffing, communication is admittedly fundamental for strengthening patient safety, in addition to actions to promote open communication, systematize feedback through error reporting and encourage notification of incidents<sup>(17)</sup>.

Communication failures lead to severe implications in internal handoffs and transitions. Gaps in this process, such as lack of standardization, interruptions, side conversations, early entries and exits, quality of information provided and staff qualification directly interfere with the quality of handoffs and, consequently, in care continuity<sup>(18)</sup>.

Under-notification of safety incidents, reported in several studies, including in this research, is rooted in the punitive culture, still prevalent in the health services (14,17). Talking about errors is a taboo both among the professionals and in society, because mistakes are associated with feelings of shame, guilt and fear<sup>(19)</sup> and are seen as something that deserves punishment, when, in fact, it is an unintentional act. From the systemic point of view, the approach to errors is based on the premise that human beings are flawed and, thus, errors are expected, even in the best organizations<sup>(20)</sup>. Errors are seen as consequences rather than as causes and, when they do occur, the overriding issue is not finding who made a mistake, but how and why the barriers failed. The patient safety movement points to the system's deficit, in design, organization and operation, as the main responsible for the occurrence of incidents, as opposed to blaming the professional alone; after all, the human condition cannot be changed, but it is possible to modify the working conditions, creating defenses in the system<sup>(20)</sup>.

Legal risk was a factor pointed out by the focus group participants as contributing to a more negative perception of the issues related to patient safety. The phenomenon of the judicialization of health has been growing rapidly and, every year, there is an increase in the number of lawsuits. Fear of a lawsuit and the intimidation perceived by the professionals make them adopt defensive postures and behaviors, have difficulties in speaking and assuming their own mistakes, and establish a relationship of distrust in the provision of care. To the present day, legal risk has not been evidenced in the literature as an element associated with the perception of the patient safety culture.

From the perspective of a mixed approach, the analysis of the PSC allowed the reflections of the focus group to elucidate the quantitative results and the emergence of the elements, sometimes veiled, that explain the professionals' perception. This research envisioned the possibility of contributing to the construction and consolidation of the patient safety culture in health institutions, deepening knowledge about the dimensions that make up this culture, and understanding the elements that influence the professionals' perception.

Through two complementary approaches, the findings indicate the critical points of the safety culture in the context

of the researched institution and, according to the results of similar studies, they can be used as important guides for the analysis of the patient safety culture in other hospital organizations. The dissemination of these aspects to health care and support professionals, as well as to managers, has great potential to foster the establishment of priority areas for the implementation of change actions, in an interprofessional and collaborative perspective, which results in effective changes in the scenario of quality health care.

# CONCLUSION

The results evidence a weak culture for patient safety, according to the HSOPSC dimensions. In the professionals' perception, the punitive culture is still prevalent in the organization and there are safety problems during handoffs and transitions, in teamwork across units, in communication openness and in staffing.

Elements related to work organization (bureaucratic, poorly designed and uncoordinated processes, regional decisions, communication failures), added to the elements of people management (leadership, hierarchy gradients, work overload, high turnover, production pressure, punishment, respect and empathy), and judicialization, contribute to and explain the professionals' perception about the patient safety culture present in this organization.

The study limitations include carrying out the research in a certain period of time and in a single hospital (evidencing local and temporal diagnosis) and the fact that the understanding of the elements that influence the professionals' perception about the safety culture were obtained from the perspective and experiences of the care teams at the operational tactical level, which can be different from those who work in management.

Despite these limitations, the results found show innovations and contributions to the understanding of the complex patient safety culture, especially with regard to the analysis of the safety context in a private institution, involving not only healthcare professionals but also administrative ones, as well as the mixing of methods to deepen the understanding of the factors involved in the safety perceived by the participants.

Finding a limitation is also an opportunity for future research study. Thus, new research studies may explore the theme in different contexts, in the same or in other institutions, in the replication of the focus group with other groups of professionals or in the definition of another research method; after all, the complexity of the phenomenon allows for multiple forms of study approaches to understand the theme and advance knowledge.

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