

# PATIENT SAFETY: EVALUATION IN EMERGENCY CARE UNITS

*SEGURANÇA DO PACIENTE: AVALIAÇÃO EM UNIDADES DE PRONTO ATENDIMENTO*

*SEGURIDAD DEL PACIENTE: EVALUACIÓN EN UNIDADES DE URGENCIAS*

✉ *Jamile de Souza Pacheco Paiva*<sup>1</sup>, ✉ *Moniky Keuly Marcelo Rocha*<sup>2</sup>, ✉ *Anna Karuza Nogueira Feitosa*<sup>3</sup>,  
✉ *Natália Paes Belo*<sup>4</sup>, ✉ *Jamille Soares Moreira Alves*<sup>5</sup>, ✉ *Camila Peixoto de Lima Freire*<sup>6</sup> e  
✉ *Cleide Maria Carneiro da Ibiapaba*<sup>7</sup>

## ABSTRACT

To analyze the Patient Safety Culture in nine Emergency Care Units (UPAs) managed by the Institute of Health and Hospital Management in the year 2023. This is a descriptive, cross-sectional study with a quantitative approach. The instrument used was a questionnaire adapted from the Hospital Survey on Patient Safety Culture (HSOPSC) instrument. Its structure is divided into 12 dimensions. Regarding completion, a total of 77% responses were obtained from all employees. Thus, “Organizational learning/continuous improvement” stood out with the greatest potential, in which the professionals’ responses obtained an average of 87.44%, followed by “Expectations and actions of the management/supervision of the unit/service that favor safety (85,19%) and “Unit/service teamwork” (78,02%). Therefore, it is concluded that the HSOPSC technological instrument gained responses from employees along the path it took, achieving results to reinforce the organization's safety culture, bringing positive impacts on the life of society.

**Keywords:** *Patient Safety; Emergency Response Services; Organizational Culture.*

## RESUMO

Analisar a Cultura de Segurança do Paciente em nove Unidades de Pronto Atendimento (UPAs) geridas pelo Instituto de Saúde e Gestão Hospitalar no ano de 2023. Trata-se de um estudo descritivo, transversal, de abordagem quantitativa. O instrumento utilizado foi um questionário adaptado do instrumento *Hospital Survey on Patient Safety Culture* (HSOPSC), sendo sua estrutura dividida em 12 dimensões. Quanto ao preenchimento, obteve-se um total de 77% de respostas do total de colaboradores. Assim, destacaram-se com maior potencial: “Aprendizagem organizacional/melhoria contínua”, em que as respostas dos profissionais obtiveram uma média de 87,44%, seguida de “Expectativas e ações da direção/supervisão da unidade/serviço que favorecem a segurança (85,19%) e “Trabalho em equipe da unidade/serviço” (78,02%). Portanto, conclui-se que o instrumento tecnológico HSOPSC conquistou as respostas dos colaboradores pelo caminho que percorreu, alcançando os resultados para reforçar a cultura de segurança da organização, trazendo impactos positivos na vida da sociedade.


**Descritores:** *Segurança do paciente; Serviços de Atendimento de Emergência; Cultura Organizacional.*

## RESUMEN

Analizar la Cultura de Seguridad del Paciente en nueve Unidades de Atención de Emergencia (UPA) administradas por el Instituto de Gestión Hospitalaria y de Salud en el año 2023. Se trata de un estudio descriptivo, transversal y con enfoque cuantitativo. El instrumento utilizado fue un cuestionario adaptado del instrumento Encuesta Hospitalaria sobre Cultura de Seguridad del Paciente (HSOPSC). Su estructura se divide en 12 dimensiones. En cuanto a la finalización, se obtuvo un total de 77% de respuestas de todos los empleados. Así, destacó con mayor potencial “Aprendizaje organizacional/mejora continua”, en el que las respuestas de los profesionales obtuvieron un promedio de 87,44%, seguido de “Expectativas y acciones de la dirección/supervisión de la unidad/servicio que favorecen la seguridad (85,19). % y “Trabajo en equipo unidad/servicio” (78,02%). Por lo tanto, se concluye que el instrumento tecnológico HSOPSC obtuvo respuestas de los colaboradores a lo largo del camino recorrido, logrando resultados para reforzar la cultura de seguridad de la organización, trayendo impactos positivos en la vida de la sociedad.


**Descritores:** *Seguridad del Paciente; Servicios de Respuesta a Emergencias; Cultura de la Organización.*


<sup>1</sup> Instituto de Saúde e Gestão Hospitalar, Fortaleza/CE - Brasil. 


<sup>2</sup> Instituto de Saúde e Gestão Hospitalar, Fortaleza/CE - Brasil. 

<sup>3</sup> Instituto de Saúde e Gestão Hospitalar, Fortaleza/CE - Brasil. 

<sup>4</sup> Instituto de Saúde e Gestão Hospitalar, Fortaleza/CE - Brasil. 

<sup>5</sup> Instituto de Saúde e Gestão Hospitalar, Fortaleza/CE - Brasil. 

<sup>6</sup> Instituto de Saúde e Gestão Hospitalar, Fortaleza/CE - Brasil. 

<sup>7</sup> Instituto de Saúde e Gestão Hospitalar, Fortaleza/CE - Brasil. 

## INTRODUCTION

Patient safety is an increasingly present concern in health services, being defined by reducing the risk of unnecessary harm associated with health care to an acceptable minimum. In other words, it is the reduction of unsafe acts in care processes and the use of assertive practices, with the objective of achieving the best possible results for the patient<sup>1</sup>.

It is known that this theme gained more notoriety in Brazil with the creation of the National Patient Safety Program (PNSP), through Ordinance MS/GM No. 529, of April 1, 2013<sup>2</sup>. Its purpose is to contribute to the qualification of care in all health establishments in the national territory, both public and private.

The Patient Safety Culture (PHC), conceptualized as a set of values, attitudes, competencies and behaviors, determines patient safety<sup>1</sup>. Therefore, the evaluation of an organizational system makes it possible to measure conditions that require attention, through the identification of factors that increase the risk of harm to patients caused by failure in care. It is also a way of giving voice to each professional, introducing their expectations and feelings, and contributing to strengthening effective communication<sup>3</sup>.

The multidisciplinary teams of hospital urgency and emergency services, as well as emergency care units, develop their activities at an accelerated pace, due to the high flow of care, the severity of patients and sudden changes in clinical conditions. Thus, requiring a greater complexity of care focused on a systematized work<sup>4</sup>.

In this sense, identifying how the safety culture is found, in the context of urgency and emergency, proved to be challenging, but possible with the use of a tool adapted to contemplate the needs of the employees who make up the multidisciplinary team of the UPAs in Fortaleza.

In view of the above, the present study aims to know the results of the Patient Safety Culture, carried out in nine Emergency Care Units in the city of Fortaleza, identifying opportunities for improvement in the dimensions investigated.

## METHODS

This is a descriptive, cross-sectional study with a quantitative approach. The population consisted of all the employees of the Units, involving assistance, support and administrative sectors, representing a total of 1516. The final sample had the effective participation of 1175 employees. A percentage of 77% of the total responses received.

Data collection took place during the month of September 2023, in nine UPAs managed by the Institute of Health and Hospital Management, located in Fortaleza, Ceará. The following inclusion criterion was adopted: having a CLT link in the organization. Cooperative members, legal entities and outsourced workers are excluded.

Data collection was carried out using the Hospital Survey of Patient Safety Culture (HSOPSC), validated in Brazil in 2012. This instrument was analyzed and adapted by the Patient Safety and Management Center (NUGESP) of the UPAs and the Patient Safety Management and Quality Center (NGQS) to meet the needs of the employees who make up the multidisciplinary team of the UPAs in Fortaleza. The structure of the questionnaire is subdivided into sections and dimensions. The sections that compose it are: work area/unit; supervisor/chief; communication; frequency of

reported events; the unit; additional information about the service; general information and, finally, comments.

The 12 dimensions evaluated were: frequency of reported events; perception of safety; expectations and actions of the unit's supervision that favor safety; organizational learning/continuous improvement; unit/service teamwork; openness to communications; feedback and communication about errors; non-punitive response to errors; staffing sizing; unit management support for patient safety; Teamwork between units and problems in shift handover/shift and transfer.

The data collected in the questionnaires were recorded and tabulated in Microsoft®Excel® spreadsheets.

The study was evaluated and approved by the Research Ethics Committee of the Institute of Health and Hospital Management, under consolidated opinion No. 5,733,924.

The application of the patient safety culture assessment was divided into 3 stages, described below:

#### *1ST STAGE: COMMUNICATION OF THE CSP EVALUATION*

An invitation was made to the care coordinators of the UPAs, together with the participation of the members of the Patient Safety Commission (COSEP), requesting collaboration in the dissemination of the evaluation, as it is understood how crucial leadership is in the propagation of a fair and non-punitive culture, as well as in motivating people to believe that it is possible.

#### *2ND STAGE: DISCLOSURE OF THE EVALUATION AND PERIOD OF COMPLETION*

Carried out through banners, posters and the free and informed consent form, emphasizing the confidentiality and security of the data available in the tool itself.

#### *STEP 3: COMPLETION OF THE CSP QUESTIONNAIRE*

It was carried out through *QR codes* distributed in the form of a stopper for monitors and links for access by smartphone. The average completion time was calculated at 15 minutes.

In addition, face-to-face data collection was used as a strategy with tablets and smartphones available at the unit. The methodology brought the advantage of being able to perform the offline collection of employees already registered, updating the statistics in the system, with the return of internet access.

## **RESULTS**

Regarding the characteristics of the participants, most professionals worked between 6 and 10 years in the unit (62.2%), followed by 2 to 5 years (13.3%). Regarding the professional category, there was a predominance of nursing technicians (26.4%), followed by others (18.6%), which represents professionals in the administrative area. It is also observed that most of the study population works in the emergency sector (51.7%), followed by others (21.1%), as shown in Table 1.

Among the participants, in 87.8% of the positions held, there is interaction or direct contact with patients.

**Table 1: Number and percentage of participants according to the variables: professional category and length of time working in the institutions. Fortaleza-Ceará, 2023.**

Variables	N (%)	Total N (%)	
<b>Professional Category</b>	Nurse	186 (17,6%)	1055(100%)
	Nursing Assistant and Technician	282 (26,7%)	
	Other Technicians	95 (9%)	
	Doctors	171(16,2%)	
	Administration/Management	77 (7,3%)	
	Other health professionals	48 (4,5%)	
	Other	196 (18,6%)	
<b>Length of time working in the institution</b>	< 1 year	132 (13,7%)	768 (100%)
	2 - 5 years	166 (17,2%)	
	6 - 10 years	431 (44,8%)	
	11- 15 years	32 (3,3%)	
	>16 years old	7 (0,7%)	

Source: Own authorship.

Figure 1 shows the percentage of positive responses in relation to the twelve dimensions evaluated by the instrument. Percentages of positive responses > 75% are flagged in green, and percentages of positive responses < 50% are flagged in red.

The dimension with the fewest positive responses was the non-punitive response to error (34.5%).

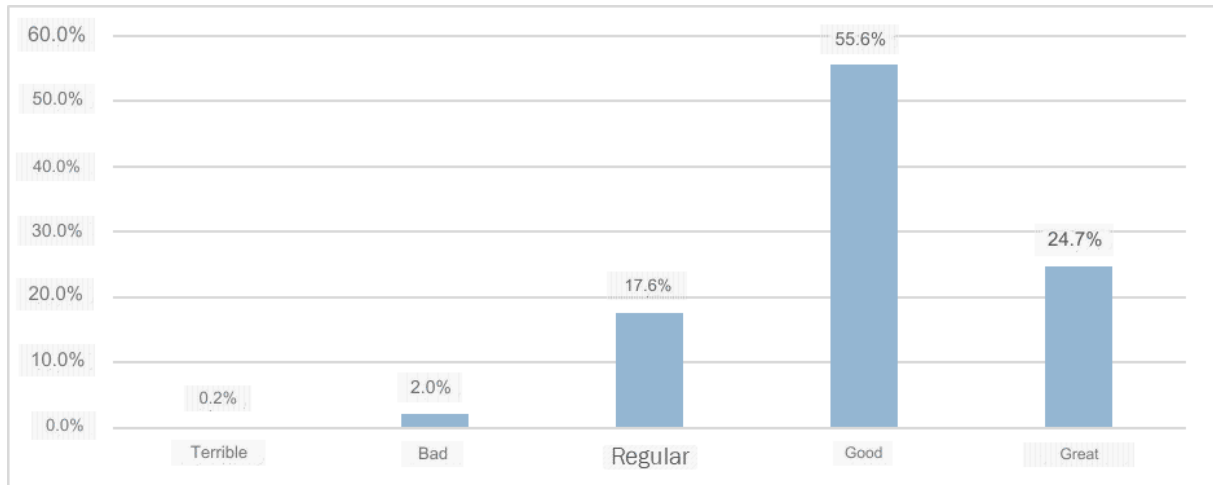
**Figure 1: Percentages of positive responses to the dimensions of patient safety culture in the UPAS. Fortaleza, Ceará, 2023.**

PATIENT SAFETY CULTURE ASSESSMENT 2023									
CATEGORY	UPA 1	UPA 2	UPA 3	UPA 4	UPA 5	UPA 6	UPA 7	UPA 8	UPA 9
1- Frequency of reported events	55.20%	54.60%	64.10%	59.50%	60.50%	60.90%	64.00%	64.30%	61.40%
2 - Perception of security	56.40%	49.70%	60.80%	55.20%	49.80%	50.30%	55.00%	57.40%	58.10%
3- Expectations and actions of the management/ supervision of the unit/service that promote safety	77.00%	79.50%	88.20%	86.30%	83.20%	89.60%	91.00%	82.90%	89.00%
4- Organizational learning/continuous improvement	88.00%	86.70%	87.50%	87.70%	85.70%	86.10%	90.40%	87.10%	87.80%
5- Teamwork in the unit/service	82.10%	77.70%	79.50%	81.20%	81.20%	85.00%	80.30%	79.50%	84.60%
6- Opening for communications	57.50%	62.40%	64.60%	60.90%	68.10%	66.40%	65.30%	59.20%	70.20%
7- Feedback and communication about errors	66.10%	65.60%	68.90%	68.60%	75.50%	71.80%	77.20%	65.90%	73.60%
8- Non-punitive response to errors	38.20%	32.40%	36.80%	29.80%	35.20%	40.70%	31.40%	27.60%	38.40%
9- Personnel sizing	50.00%	48.70%	61.70%	56.10%	53.70%	47.00%	51.60%	53.80%	44.00%
10- Support from hospital management for patient safety	77.90%	73.80%	88.00%	78.50%	68.80%	74.60%	83.00%	78.60%	81.80%
11- Teamwork between units	75.50%	74.60%	80.70%	78.90%	75.30%	79.60%	81.10%	75.00%	81.50%
12- Problems with shift changes and transitions between units/services	72.40%	66.90%	76.60%	74.50%	71.40%	68.30%	76.00%	69.30%	78.70%

Source: Own authorship.

Graph 1 shows the answers regarding the employee's perception of patient safety in the units evaluated. It can be inferred that the evaluation was positive, considering that the majority was concentrated in the categories Excellent and Good, totaling (80.3%).

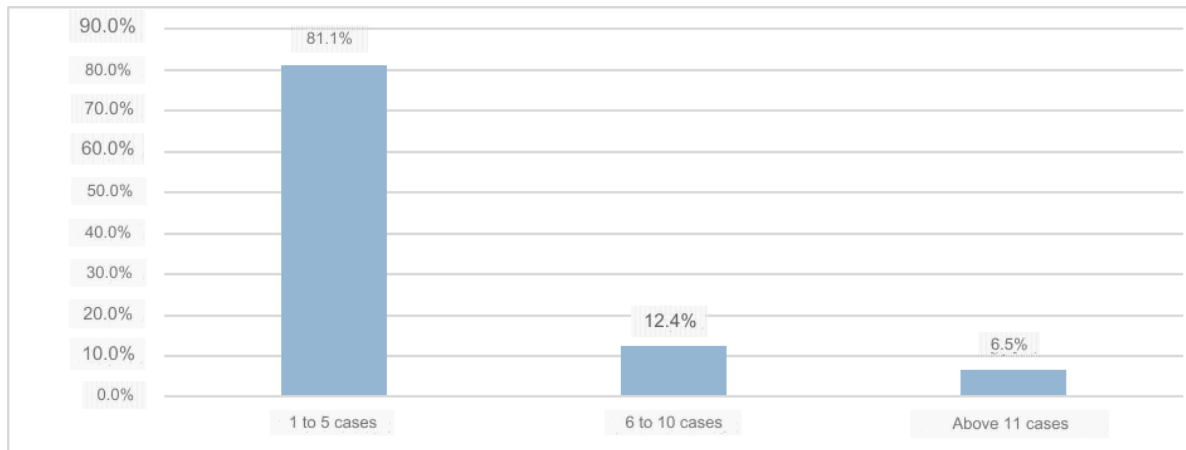
**Graph 1 - Percentage of responses on the perception of patient safety in the workplace in nine UPAS. Fortaleza-Ceará, 2023.**



**Source:** Own authorship.

When asked about the number of adverse events reported, the vast majority of responses were concentrated between 1 and 5 notifications, as shown in Graph 2.

**Graph 2 - Frequency of adverse event reporting in nine UPAS in the last 12 months. Fortaleza-Ceará, 2023.**



**Source:** Own authorship.

## DISCUSSION

The results showed, in general, that the evaluation of the collaborators on the dimension of patient safety in the UPAs is not positive, with an average result of 54.74%, and it is important to highlight the financial, social and psychological impacts that affect both the patient and the health institution. Therefore, the culture of patient safety plays a fundamental role in defining actions aimed at improving institutional quality.

A similar result was found in a Brazilian study conducted with Primary Health Care (PHC) professionals, which showed an overall positive response of less than 60%, which indicates the need for improvements to implement a positive safety culture in PHC teams and, thus, ensure safe and quality care for users<sup>5</sup>.

In Mexico, a study showed that the global safety culture indicator was not perceived as a strong point by the nursing team, with a result of 54.53%, which indicates that the safety culture should be strengthened within the organization<sup>6</sup>.

Studies point to a growing concern with patient safety, thus favoring a change in culture and in the management model in health institutions, emphasizing the fact that the responsibility belongs to everyone, it is not something of particular attitude, and goes beyond the user, including the safety of employees, family members, community and society. In this way, the work evolves from static to a dynamic process, which remodels the desired actions on a daily basis<sup>7</sup>.

Among the dimensions that presented the most negative evaluations by the professionals, the following stand out: punitive culture for errors; personnel sizing; perception of safety, frequency of notified events, openness to report errors and problems in shift changes and transitions between units/services.

An equivalent result can be evidenced in the study by Castañeda-Hidalgo et al<sup>6</sup>, who mentioned as dimensions evaluated with less than 50% of positive responses to the availability of personnel; non-punitive response to errors; support from hospital management; perception of safety; problems in shift/service changes and openness in communication.

In the reading of the dimension Punitive culture for errors and frequency of notified events, a negative factor is scored when employees believe that the institution has a punitive approach, leading to the omission of error records, limiting the opportunity to work on their prevention. It is necessary to change management models and search for standards that contribute to encouraging a culture of notification<sup>3</sup>.

Regarding personnel sizing, a study conducted at a university hospital in southern Brazil<sup>8</sup> shows that work overload leads to the incidence of some adverse events, such as falls from the bed, infection associated with the central venous catheter, absenteeism, and turnover. In addition, it impacts the formalization of notifications by professionals.

Regarding the dimension of openness to report errors, a study showed that an action plan is needed by managers to ensure open communication among all team professionals in the best possible way, with the objective of offering continuous care to patients, as well as security for professionals in the exchange of information<sup>9</sup>.

Regarding Problems in shift changes and transitions between units/services, studies reinforce that it is essential to have a systematized process for the transfer of shifts/shifts. This process must take place in a suitable place and at a pre-defined time. As recommended by the institution, this practice should be performed at the patient's bedside. The professionals involved in the shift change must be available for the time necessary to transmit the necessary information. In addition to the verbal exchange of information, it is important to record the most relevant items related to care<sup>10</sup>.

As a result of this dimension, there was the production of an information transfer instrument that aims to consolidate information inherent to patients, in order to strengthen the shift change between professionals.

We understand as a factor for reflection that the management model is essential for every organization to have a safety culture with transparent and fair attitudes. Managers must articulate strategies that solve internal crises when they exist, as well as

provide a safe environment for both the patient seeking care and the employee. This demonstrates the great challenge to improve patient safety in units that provide care to SUS users<sup>11</sup>.

In the data collection, in search of articles, it was observed that there are still few studies in the area of evaluation of the patient safety culture in an emergency care unit. Thus, it implies a complicating factor to compare results.

## CONCLUSION

Throughout this work, through the application of the safety survey, using the *Hospital Survey on Patient Safety Culture (HSOPSC)* tool, it was identified that a solid safety culture involves the participation of all members of the institution, from frontline care professionals to those who make up the administrative staff.

With health technologies and the implementation of the tool (questionnaire), it was possible to obtain *relevant information* about the perception of employees in relation to patient safety and to provide the articulation of improvement strategies for everyone who is part of the health scenario.

This study has the potential to enable the development of an action plan, based on the reflexive and critical analysis of the results, as well as to ensure the monitoring of its evolution, ensuring the breadth of processes and results with the engagement of stakeholders. As limitations, the refusal of professionals to participate in the research is pointed out, since it is a challenge for these professionals who work with urgency and emergency.

It is concluded that the research contributed to the identification of the safety culture in different contexts of health care in the organization; to reinforce understanding of patient safety; search for the prevention of adverse events and safety for the multidisciplinary team.

## FOMENTATION

UPAs Management - Institute of Health and Hospital Management.

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