



THE PATIENT SAFETY CULTURE: A VIEW OF THE NURSING TEAM IN THE INTENSIVE CARE UNIT



<https://doi.org/10.56238/levv16n47-045>

Submitted on: 03/16/2025

Publication date: 04/16/2025

Daniele Knuth Willrich¹, Priscila Farias Raffi², Luciene Smiths Primo³, Marlon Pereira de Oliveira⁴, Fabricio da Cunha Moraes⁵, Tamie Sofia Fronza Cronst⁶, Nívea Maria dos Santos Garcia⁷ and Luciano Samaniego Arrussul⁸

ABSTRACT

Objective: To investigate the culture of Patient Safety among the Nursing team of the Intensive Care Unit of a University Hospital in Pelotas. **Method:** Descriptive research with a quantitative approach, carried out in 2018 through the application of the "*Hospital Survey on Patient Safety Culture*" (HSOPSC) instrument adapted to Portuguese, to nurses and nursing technicians in the Intensive Care Unit. The sample consisted of 45 nursing professionals, of whom 28 were nursing technicians and 17 nurses. **Results:** Results showed that the nursing team reports that errors are used against them and when an event is reported, it seems that the focus falls on the person and not on the problem. The notifications in the last 12 months were one to two and the punitive culture predominates. **Conclusions:** The importance of planning and implementing actions aimed at patient safety within the intensive care unit is essential.

Keywords: Patient Safety. Nursing Care. Intensive Care Unit. Organizational Culture.

¹Graduated in Nursing

Catholic University of Pelotas, Pelotas, RS – Brazil

Orcid: <https://orcid.org/0009-0009-3367-7900>

²Graduated in Nursing

Catholic University of Pelotas, Pelotas, RS – Brazil

Orcid: <https://orcid.org/0009-0008-0403-2532>

³Master of Science in Nursing

Catholic University of Pelotas, Pelotas, RS – Brazil

Orcid: <https://orcid.org/0000-0001-8194-4860>

⁴Master of Science in Nursing

Federal University of Rio Grande do Sul – UFRGS, Porto Alegre, RS – Brazil.

Orcid: <https://orcid.org/0000-0002-2385-2738>

⁵Master of Science in Nursing

Federal University of Rio Grande do Sul – UFRGS, Porto Alegre, RS – Brazil

Orcid: <https://orcid.org/0009-0003-8131-1416>

⁶Graduated in Nursing

Universidade Federal de Ciências da Saúde de Porto Alegre – UFCSPA, Porto Alegre, RS – Brazil

Orcid: <https://orcid.org/0000-0002-5408-9712>

⁷Graduated in Nursing

Federal University of Rio Grande – FURG, Rio Grande, RS – Brazil

ORCID: <https://orcid.org/0000-0003-4532-7616>

⁸Master of Science in Nursing

Integrated University of Santa Maria – FISMA, Santa Maria, RS – Brazil

Orcid: <https://orcid.org/0000-0002-2476-9434>

INTRODUCTION

In recent years, there has been a growing need to offer quality health care to individuals, with a focus on safety, especially in view of the increase in life expectancy and the complexity of health care. The Institute of Medicine (IOM) of the United States of America (USA) defines "quality of care" as the degree to which health services increase the probability of achieving the desired results based on the available scientific knowledge¹.

With this, it is evident that health professionals have been looking for ways to offer quality care, prioritizing safety. In Brazil, in 2013, the National Patient Safety Program (PNSP) was created, considered a crucial action for improving the quality of health services².

Among the topics related to quality and patient safety, the concern with the occurrence of adverse events stands out. It is estimated that, in Brazil, approximately 1,377,243 hospitalized patients may be victims of at least one incident per year, compromising their lives, especially in hospitalization units that demand more complex care, such as Intensive Care Units (ICUs), which use advanced technologies and require rapid responses³.

ICUs are sectors that have high rates of adverse events, due to the severity of patients, the workload of professionals, the prolonged stay of patients, and the complexity of the care provided. In addition, there is the use of various technologies and the occurrence of related infections. Studies indicate that the probability of a patient suffering an adverse event reaches 10%, being more common among the elderly due to their pathophysiological conditions. A study conducted in Rio de Janeiro showed a rate of 9.3% of adverse events per 100 patients per day^{4, 5}.

In this context, it is observed that the safety culture is still fragile, especially in relation to punishment for mistakes, which leads professionals to omit information about the events that occurred, for fear of reprisals⁵.

The most widely used instrument to assess safety culture was developed by the U.S. Quality Agency, called Hospital Survey on Patient Safety Culture (HSOPSC), which was translated into Portuguese and validated in Brazil. This is a self-administered questionnaire that covers 12 dimensions related to patient safety culture, providing a comprehensive view of the care provided by professionals⁶.

Professionals' awareness of the patient safety culture is fundamental, as it allows for continuous improvements in communication, with clear and structured language, identifying weaknesses and potentialities in health care⁷.

Within these complex units, patient safety culture plays an essential role, requiring constant observation and evaluation of daily activities related to safety in care. This contributes to a better performance of care and educational actions, with a focus on training for the team and the promotion of a positive culture of patient safety^{8,9}.

Nursing plays a key role in implementing this culture of safety in the workplace, introducing methods that facilitate the search for safe care. Management and professional practice are scientifically intertwined, and a watchful eye is needed to avoid errors and promote patient safety¹⁰.

In this scenario, nurses become a central figure in the implementation of safety culture, guiding their team in the adoption of safe practices. This study aims to identify the perception of health professionals about the patient safety culture, in order to recognize the risk factors and incidents that occur during care, promoting specific improvements. The study aims, ultimately, to identify the culture of Patient Safety among the nursing team in the ICU of a University Hospital in Pelotas.

METHODOLOGY

This is a descriptive study with a quantitative approach based on a university hospital, which is a philanthropic one, which provides 211 beds for the care of patients through the Unified Health System, health insurance plans and private hospitals¹¹.

The study is nested in the research "Patient Safety Culture: View of the Nursing Team of a University Hospital of Pelotas", approved by the UCPel Ethics Committee under the opinion: 2.948.070, CAAE: 97774718.9.0000.5339.

The hospital has 75 nurses and 397 nursing technicians on staff. The sample size calculation of the research was carried out in the Open Epi program, using the module for cross-sectional studies. The estimated prevalence of the outcomes was 50%, a power of 80%, a significance level of 95%, an acceptable error of 5 percentage points, and 10% for losses and refusals. The sample consisted of 69 nurses and 216 nursing technicians.

For this study, a selection was made, where only professionals who work in the Intensive Care Unit were included, even those who agreed to participate and signed the ICF.

The instrument used for data collection was the HSOPSC, translated into Portuguese, available in Proqualis, a version validated by Reis, developed by the U.S. Agency for Research and Quality in Health (AHRQ). The questionnaire has 12 Dimensions of Safety Culture, of which seven refer to the work units within the hospital, three to hospital organization and two refer to outcome measures⁶.

Data collection was carried out in September and October 2018 in the three work shifts (morning, afternoon and night) when the researchers (nursing students) applied the instrument with the Nurses and Nursing Technicians who were randomly drawn to be part of the sample. The data were entered and analyzed using the SPSS statistical program, version 19.0, using simple variable frequency.

RESULTS

The sample consisted of 45 nursing professionals from the Intensive Care Unit. Of these, 28 nursing technicians and 17 nurses participated in the study, in which 37 (82.2%) were female, with a mean age of 35 years, and 42 (93.3%) reported having contact with the patient. Regarding the length of work in the hospital, 24 (53.3%) have been in the institution for between 1 and 5 years, 22 (48.9%) work in the Intensive Care Unit for 1 to 5 years, and the majority and 27 (60%) report dedicating 20 to 39 hours per work week.

Regarding adverse events, according to the professionals' responses, 17 (37.8%) did not report any in the last year and 14 (31.1%) reported 1 to 2 in the last 12 months.

Also, regarding the incidents that occurred, most professionals report that when an error occurs, but it is noticed and corrected before affecting the patient, "always or almost always" he is notified. And when an error occurs, but when there is no risk of harm to the patient, they also carry out notification.

Of the total sample, when asked about the grade that would give the patient's safety in the institution, the majority, 22 (48.9%) answered "regular", followed by 15 (33.3%) as "very good".

Below, tables 1, 2 and 3 present the results regarding Sections "A" which presents questions regarding the Intensive Care Unit, Section "B" in relation to supervision/heads, Section "C" about communication and Section "F" addresses issues related to the hospital. Negative Answers were considered: Disagree, strongly disagree; Neutral Answers: Do not agree/Do not disagree; Positive Responses: I agree, I totally agree.

Table 1 – **Section A – Note regarding agreement or disagreement about the Intensive Care Unit:**

Variables	No	%
In this unit, people support each other.		
Negative	6	13,3
Neutral	8	17,8
Positive	31	68,9
We have enough staff to handle the workload		
Negative	32	71,1
Neutral	6	13,3
Positive	7	15,6
When there's a lot of work to be done quickly, we work together as a team to get it done properly		
Negative	2	4,4
Neutral	1	2,2

Positive	42	93,4
In this unit, people treat each other with respect		
Negative	0	0
Neutral	9	20
Positive	36	80
The professionals in this unit work more hours than would be best for patient care.		
Negative	22	48,9
Neutral	14	31,1
Positive	7	15,5
We are actively doing things to improve patient safety.		
Negative	4	8,9
Neutral	9	20
Positive	32	71,1
We used more temporary/outsourced professionals than would be desirable for patient care.		
Negative	22	48,9
Neutral	10	22,2
Positive	12	26,7
Professionals consider that their mistakes can be used against them.		
Negative	9	20
Neutral	11	24,4
Positive	25	55,6
Mistakes have led to positive changes here.		
Negative	15	33,3
Neutral	14	31,1
Positive	16	35,6
And it is only by chance that more serious mistakes do not happen here.		
Negative	18	40
Neutral	13	28,9
Positive	13	28,8
When an area of this unit is overloaded, the other professionals in this unit help.		
Negative	6	13,3
Neutral	7	15,6
Positive	32	71,1
When an event is notified, it seems that the focus is on the person rather than the problem.		
Negative	6	13,3
Neutral	5	11,1
Positive	34	95,6
After implementing changes to improve patient safety, we evaluate effectiveness.		
Negative	7	15,5
Neutral	10	22,2
Positive	28	62,2
We work in a "crisis situation", trying to do too much and too fast.		
Negative	16	35,6
Neutral	11	24,4
Positive	18	40
Patient safety is never compromised due to a greater amount of work to be completed.		
Negative	16	35,5
Neutral	10	22,2
Positive	19	42,2
Professionals worry that their mistakes will be recorded in their functional records.		
Negative	11	24,4
Neutral	9	20
Positive	25	55,5
In this unit we have patient safety problems.		
Negative	25	55,5
Neutral	6	13,3
Positive	14	31,1
Our procedures and systems are adequate to prevent errors from occurring.		
Negative	9	20
Neutral	9	20
Positive	27	60
Total	45	100

Table 2 - Section B: Note regarding the agreement or disagreement of the nursing team in the Intensive Care Unit with their supervisor/immediate head or person to whom they report directly;

Variables	No	%
My supervisor/boss praises me when he sees work done in accordance with established patient safety procedures		
Negative	22	48,9
Neutral	10	22,2
Positive	13	28,9
My supervisor/boss really takes into consideration the suggestions of the professionals for the improvement of patient safety.		
Negative	11	24,4
Neutral	15	33,3
Positive	19	42,3
Whenever the pressure mounts, my supervisor/boss wants us to work faster, even if it means "skipping steps."		
Negative	24	53,4
Neutral	8	17,8
Positive	13	28,8
My supervisor/boss doesn't pay enough attention to patient safety issues that happen repeatedly		
Negative	21	46,6
Neutral	12	26,7
Positive	12	26,7
Total	45	100

Table 3 - Section C: Note in relation to communication in the Intensive Care Unit

Variables	No	%
We receive information about implemented changes from the event reports.		
Negative	15	33,4
Neutral	18	40
Positive	12	26,7
Professionals are free to say when they see something that may negatively affect patient care.		
Negative	1	2,2
Neutral	7	15,6
Positive	37	82,2
We are informed about the errors that happen in this unit.		
Negative	5	11,1
Neutral	18	40
Positive	22	48,9
Professionals feel free to question the decisions or actions of their superiors.		
Negative	14	31,1
Neutral	14	31,1
Positive	17	37,8
In this unit, we discuss ways to prevent mistakes from happening again.		
Negative	6	13,3
Neutral	10	22,2
Positive	29	64,4
Professionals are afraid to ask when something seems not to be right.		
Negative	22	48,9
Neutral	16	35,6
Positive	7	15,5
Total	45	100

Table 4 - **Section F: Note in relation to agreement or disagreement about the hospital**

Variables	nº %	
The hospital's management provides a work climate that promotes patient safety.		
Negative	10	22,2
Neutral	18	40
Positive	17	37,8
The hospital units are not well coordinated with each other.		
Negative	6	13,3
Neutral	20	44,4
Positive	18	40
The care process is compromised when a patient is transferred from one unit to another.		
Negative	7	15,6
Neutral	11	24,4
Positive	27	60
There is good cooperation between the hospital units that need to work together.		
Negative	16	35,5
Neutral	15	33,3
Positive	12	26,6
It is common to lose important information about patient care during shift or shift changes.		
Negative	20	44,4
Neutral	10	22,2
Positive	15	33,3
It is often unpleasant to work with professionals from other units of the hospital		
Negative	12	26,7
Neutral	12	26,7
Positive	20	44,5
Problems often occur in the exchange of information between hospital units.		
Negative	11	24,5
Neutral	15	33,3
Positive	19	42,2
The actions of the hospital management demonstrate that patient safety is a top priority		
Negative	13	28,9
Neutral	9	20
Positive	23	51,1
The hospital management only seems interested in patient safety when an adverse event occurs.		
Negative	12	26,6
Neutral	12	26,7
Positive	21	46,6
The hospital units work well together to provide the best care for patients.		
Negative	7	15,5
Neutral	19	42,2
Positive	19	42,2
In this hospital, shift or shift changes are problematic for patients.		
Negative	30	66,7
Neutral	9	20
Positive	6	13,3
Total	45	100

4 DISCUSSION

The sample of this study was composed of 45 nursing professionals who work in the Intensive Care Unit, most of whom were female, with a mean age of 35 years.

Based on the data obtained about the unit, it was possible to perceive that the professionals show mutual support, work as a team and maintain an environment of respect among themselves. A similar study carried out in an ICU in Minas Gerais also pointed to teamwork as one of the sector's strengths. The interaction between professionals

contributes directly to the organizational culture, improving communication and decision-making, which positively impacts patient safety¹².

Regarding the workload, although the professionals point out that there is a shortage of personnel to meet the demand, they say that the workload is not excessive, thus prioritizing patient safety. A study in ICUs in São Paulo revealed that work overload is associated with an increase in adverse events, which can prolong the length of hospital stay and increase the risk of mortality. When the workload is high, there is a negative perception of the safety climate^{13,14}.

Most professionals indicated that the mistakes made are used against them, and when an adverse event is reported, the focus falls on the professional and not on the problem. Many fear that their mistakes will be recorded in their functional files. Studies show that punitive culture is still prevalent in several institutions. A survey carried out in Minas Gerais showed similar results, showing that culpability was the worst dimension evaluated. Another study in Ribeirão Preto also identified the presence of a management that still adopts a punitive posture in the face of errors. This fear of reprisals may explain the low rate of adverse event notifications in ICUs, which compromises the quality of care and patient safety. Error notification should be seen as a tool for improving care conditions and preventing new incidents, and it is essential to foster a culture of support and learning within institutions^{12,15}.

In the dimension related to communication, most professionals stated that they feel comfortable reporting situations that may compromise patient care and that they are informed about errors that occur in the unit. This openness makes work easier, especially in a highly complex environment such as the ICU. The lack of communication between professionals makes it difficult to prevent adverse events, and feedback on errors is necessary so that interventions and preventive measures can be implemented. Mistakes should be seen as a learning opportunity, promoting effective management of the safety culture¹².

On the other hand, the professionals reported that they are not usually praised by their supervisors when they perform the work according to patient safety procedures. This makes many feel unmotivated and without support in the sector's routine. It is crucial for managers to recognize the importance of a safety climate, committing to building a work environment that values quality care and patient safety.

The results also indicated that professionals discuss error prevention strategies and do not hesitate to question situations that seem inappropriate. In addition, most see improvements and positive outcomes when changes focused on patient safety are

implemented. This perception contributes to the institution learning from care experiences, resulting in a more problem-solving practice based on the mistakes made¹².

More than half of the professionals reported that the care process is compromised when patients are transferred between units, possibly due to discontinuity of care or the loss of crucial information. It is essential to work on practices that encourage the team's cooperation and commitment, ensuring continuity of care. Effective communication, with clear and structured language, is essential in this process¹⁰.

Discussing errors within health institutions still causes discomfort, especially when it involves notifications that will be recorded. For managers, this practice is often seen in a negative way, which generates resistance to the adoption of this culture. Among the teams directly involved in patient care, the problem is even more serious, as the error represents a significant personal and professional loss, aggravated by the punitive culture maintained by the heads¹⁰.

Despite the fragility of the patient safety culture, recent years have brought positive changes in healthcare institutions. However, some research continues to point to managers and team leaders as co-responsible for the increased risk of errors, as they are the main responsible for implementing improvements in the safety culture within their units and institutions¹⁰.

In the present study, the professionals indicated that the institution's management demonstrates that it prioritizes patient safety. However, 46.6% believe that the management's interest is only evident after the occurrence of an adverse event. In addition, 40% of the participants maintained a neutral position in relation to the statement that "the hospital management provides a work environment that promotes patient safety", while 37.8% agreed positively.

It is still noticeable that the punitive culture persists among managers. However, there is evidence that health institutions have implemented improvements in the quality of care, focusing on patient safety goals. It is essential that professionals feel welcomed in their daily activities, since hierarchical distance is still reported as a problem. In the last ten years, with the expansion of the concept of avoidable harm, the high incidence of adverse events has become unacceptable due to the lack of compliance with basic patient safety goals¹⁶.

CONCLUSION

The data from this study pointed out positive aspects in relation to patient safety, such as the strengthening of teamwork, respect among professionals, continuous

discussion about error prevention, and the freedom to question when something seems inappropriate. These factors contribute to a culture of safety and favor a work environment that is more conducive to the reduction of adverse events.

On the other hand, the persistence of a punitive culture regarding error reporting and the absence of more supportive management continues to negatively impact the patient safety process.

In this scenario, the implementation of a positive culture in relation to errors becomes essential, ensuring permanent education and quality of care within the intensive care unit. A more judicious look is necessary, especially in emergency situations, where the environment is already naturally more stressful.

The investigation focused on the nursing team evidenced the professionals' concern with the promotion of safe care and the dissemination of the safety culture. It was also observed that effective communication is a key element to ensure continuity of care and to promote a more favorable work environment, benefiting patients, professionals and families.

As a limitation of this study, the fact that the research was carried out only with the nursing team is highlighted, and it is necessary to carry out new studies involving other professional categories, since everyone is responsible for the care and assistance to patients.

REFERENCES

1. Agência Nacional de Vigilância Sanitária. (2017). Assistência segura: Uma reflexão teórica aplicada à prática. Brasília, DF: Author.
2. Andrade, L. E. L., Melo, L. O. M., Silva, I. G., Souza, R. M., Lima, A. L. B., Freitas, M. R., Batista, A. M., & Gama, Z. A. S. (2017). Adaptação e validação do Hospital Survey on Patient Safety Culture em versão brasileira eletrônica. *Epidemiologia e Serviços de Saúde*, 26(3), 455–468. <https://doi.org/10.5123/s1679-49742017000300004>
3. Brasil, Ministério da Saúde. (2013). Programa Nacional de Segurança do Paciente (PNSP). Brasília, DF: Author.
4. Brasil, Ministério da Saúde. (2019). CNES – Cadastro Nacional dos Estabelecimentos de Saúde. Brasília, DF: Datasus.
5. Couto, R. C., Pedrosa, T. R., Daibert, P. B., Abreu, A. C. C., & Leão, M. L. (2018). Anuário da segurança assistencial hospitalar no Brasil. Belo Horizonte, Brazil: Faculdade de Medicina UFMG.
6. Françolin, L., Gabriel, C. S., Bernardes, A., Silva, A. E. B. C., Brito, M. F. P., & Machado, J. P. (2015). Gerenciamento da segurança do paciente sob a ótica dos enfermeiros. *Revista da Escola de Enfermagem da USP*, 49(2), 277–283. <https://doi.org/10.1590/S0080-623420150000200013>
7. Magalhães, F. H. L., Pereira, I. C. A., Luiz, R. B., Barbosa, M. H., & Ferreira, M. B. G. (2019). Clima de segurança do paciente em um hospital de ensino. *Revista Gaúcha de Enfermagem*, 40, Article e20180272. <https://doi.org/10.1590/1983-1447.2019.20180272>
8. Minuzzi, A. P., Salum, N. C., & Locks, M. O. H. (2016). Avaliação da cultura de segurança do paciente em terapia intensiva na perspectiva da equipe de saúde. *Texto & Contexto Enfermagem*, 25(2), Article e1610015. <https://doi.org/10.1590/0104-07072016001610015>
9. Notaro, K. A. M., Manzo, B. F., Corrêa, A. R., Tomazoni, A., & Rocha, P. K. (2019). Safety culture of multidisciplinary teams from neonatal intensive care units of public hospitals. *Revista Latino-Americana de Enfermagem*, 27, Article e3167. <https://doi.org/10.1590/1518-8345.2849.3167>
10. Novaretti, M. C. Z., Santos, E. V., Quitério, L. M., & Daud-Gallotti, R. M. (2014). Sobrecarga de trabalho da enfermagem e incidentes e eventos adversos em pacientes internados em UTI. *Revista Brasileira de Enfermagem*, 67(5), 692–699. <https://doi.org/10.1590/0034-7167.2014670504>
11. Pinheiro, M. P., & Silva Junior, O. C. (2017). Avaliação da cultura de segurança do paciente na organização hospitalar de um hospital universitário. *Enfermería Global*, 16(1), 309–352. <https://doi.org/10.6018/eglobal.16.1.238811>
12. Prates, C. G., Magalhães, A. M. M., Balen, M. A., & Moura, G. M. S. S. (2019). Núcleo de segurança do paciente: O caminho das pedras em um hospital geral. *Revista Gaúcha de Enfermagem*, 40(Special Issue), Article e20180150. <https://doi.org/10.1590/1983-1447.2019.20180150>

13. Santos, R. P., Lima, L. M., Borges, F., & Carvalho, A. R. S. (2017). Busca ativa contribui na identificação de eventos adversos e incidentes em unidade de terapia intensiva. *Enfermería Global*, 16(4), 162–189. <https://doi.org/10.6018/eglobal.16.4.269601>
14. Serafim, C. T. R., Dell'Acqua, M. C. Q., Castro, M. C. N., Spiri, W. C., & Nunes, H. R. C. (2017). Gravidade e carga de trabalho relacionadas a eventos adversos em UTI. *Revista Brasileira de Enfermagem*, 70(5), 942–948. <https://doi.org/10.1590/0034-7167-2016-0427>
15. Souza, V. S., Oliveira, J. L. C., Costa, M. A. R., Vicente, G., Mendonça, R. R., & Matsuda, L. M. (2019). Associação entre clima de segurança e a carga de trabalho da enfermagem. *Cogitare Enfermagem*, 24, Article e58976. <https://doi.org/10.5380/ce.v24i0.58976>
16. Vincent, C., & Amalberti, R. (2016). *Cuidado de saúde mais seguro: Estratégias para o cotidiano do cuidado*. Rio de Janeiro, Brazil: Proqualis.