#### **RESEARCH | PESQUISA**



# Contributions of healthcare staff to promote patient safety in intensive care

Contribuições da equipe de saúde visando à promoção da segurança do paciente no cuidado intensivo

Contribuciones del equipo de salud para la promoción de la seguridad del paciente en cuidados intensivos

Ana Paula Minuzzi<sup>1</sup>
Nádia Chiodelli Salum<sup>1</sup>
Melissa Orlandi Honório Locks<sup>1</sup>
Lúcia Nazareth Amante<sup>1</sup>
Eliane Matos<sup>1</sup>

1. Universidade Federal de Santa Catarina. Florianópolis-SC, Brazil.

#### **ABSTRACT**

**Objective:** Presenting the recommendations of health professionals from an Intensive Care Unit for the improvement of patient safety culture. **Methods:** Descriptive-exploratory study, with a quantitative approach, resulting from the application of the Survey about Patient Safety in Hospitals, 59 professional staff participated between November 2013 and January 2014. **Results:** Were obtained 124 recommendations, which were categorized according to aspects of the instrument. Highlighting recommendations related to the support of the hospital management to patient safety, in particular, the supply of material resources; and also to organizational learning and continuous improvement, with suggestions for training and implementation of protocols aimed at standardizing the assistance. **Conclusion:** The study permitted to list significant recommendations for improvements in patient safety, and made it possible to identify the dimensions of safety culture that have more vulnerabilities.

Keywords: Culture; Patient Safety; Intensive Care Units.

#### **R**ESUMO

Objetivo: Apresentar as recomendações dos profissionais de saúde de uma Unidade de Terapia Intensiva para a melhoria da cultura de segurança do paciente. Métodos: É um estudo descritivo-exploratório, com abordagem quantitativa, resultado da aplicação do questionário Pesquisa Sobre Segurança do Paciente em Hospitais com 59 profissionais da equipe, entre novembro de 2013 e janeiro de 2014. Resultados: Obteve-se 124 recomendações que foram categorizadas de acordo com os aspectos do instrumento. Destacando-se recomendações relacionadas ao apoio da gestão hospitalar para a segurança do paciente, em especial, ao suprimento de recursos materiais; e também ao aprendizado organizacional e melhoria contínua, com sugestões de treinamentos e implementação de protocolos, visando à padronização da assistência. Conclusão: O estudo permitiu elencar expressivas recomendações de melhorias da segurança do paciente, e possibilitou identificar as dimensões da cultura de segurança que apresentam mais vulnerabilidades.

Palavras-chave: Cultura; Segurança do Paciente; Unidades de Terapia Intensiva.

#### RESUMEN

Objetivo: Presentar las recomendaciones de los profesionales de salud de una Unidad de Cuidados Intensivos para la mejora de la cultura de seguridad del paciente. **Métodos**: Estudio descriptivo-exploratorio, con enfoque cuantitativo, resultado de la aplicación de la Encuesta Sobre la Seguridad del Paciente en Hospitales. Participaron 59 profesionales del equipo, entre Noviembre de 2013 y Enero de 2014. **Resultados**: Fueron obtenidas 124 recomendaciones, categorizadas de acuerdo con los aspectos del instrumento. Se destacan las recomendaciones relacionadas al apoyo de la gestión hospitalaria para la seguridad del paciente, especialmente las referidas al abastecimiento de recursos materiales; también las relacionadas al aprendizaje organizacional y a la mejora continua, con sugerencias de capacitaciones e implementación de protocolos, con la finalidad de uniformizar la asistencia. **Conclusión**: El estudio permitió enumerar recomendaciones significativas de mejora en la seguridad del paciente, posibilitando la identificación de dimensiones de la cultura de la seguridad, que presentan más vulnerabilidades.

Palabras clave: Cultura; Seguridad del Paciente; Unidades de Cuidados Intensivos.

Corresponding author:

Ana Paula Minuzzi. E-mail: annaminuzzi@yahoo.com.br

Submitted on 06/30/2015. Accepted on 12/24/2015.

DOI: 10.5935/1414-8145.20160017

## INTRODUCTION

The movement for safety and quality in health services has occupied a prominent position in the world. Although it is not a new subject, at no other time there were so many publications on this theme as in the 21st century.

The World Health Organization (WHO) already has this subject as a priority since 2002, however, in 2004, there was greater emphasis after the creation of the World Alliance for Patient Safety¹. In 2008, it is highlighted the pioneering and nursing's concern regarding the safety of the patient, which is expressed through the Brazilian Network of Nursing and Patient Safety, in order to strengthen safe nursing care and with quality². Currently, the creation of the National Patient Safety Program in 2013 comes to evidence, revealing an important governmental action towards patient safety in Brazil¹.

In order to facilitate the understanding of the following study, it was presented the definition of important terms related to patient safety. Thus, adverse event is defined by the WHO as an incident resulting in not-purposeful damage, arising from the assistance, and has no relation to the natural evolution of the patient's underlying disease. While error is recognized as the failure to execute a plan of action, as desired<sup>3</sup>.

Also according to the WHO, patient safety is to "reduce the risk of unnecessary injury associated with healthcare to a minimum acceptable"<sup>3:15</sup>. From this concept, it is inferred that it is the responsibility of every healthcare institution to reduce the probability of harm to patients, from the provision of healthcare.

In this context, there is the safety culture, in which the focus is on correcting the work processes through the adoption of a model of assistance based on the non-punitive principle, intending to prevent the recurrence of undesirable events, defending that, in most of cases, mistakes are the consequences of a sequence of events rather than a single isolated act.

Safety culture can be defined as attitudes and values incorporated to encourage and reward the identification, reporting and solving security issues; promoting organizational learning from the occurrence of incidents; and providing resources, structure and accountability for the effective maintenance of security<sup>4</sup>.

The safety of care provided is one of the indicators of greater impact on the quality of healthcare. There is no way to provide a quality medical assistance, if it is not held in a secure manner.

Among the different healthcare scenarios, the Intensive Care Unit (ICU), as a place where the adverse events (AE) happen, deserves special attention. The ICUs are recognized as vulnerable sectors of the occurrence of mistakes and AE, considering that the care of a critical patient is provided quickly, involving high technology and various procedures, with intense production of information<sup>5</sup>.

Several national<sup>6,7,8</sup> and international<sup>9,10,11</sup> studies have also pointed to the patient safety culture under/from the perspective of professionals of different environments, in which it provides healthcare, both presenting results according to its respective realities.

International studies have focused on measuring the injury and understanding the causes of adverse events. The realization of this research has been much higher in developed countries than in developing countries<sup>2</sup>. Talking about Brazil, among the many published studies in patient safety, some also have addressed the assessment of patient safety culture<sup>6,7,8,12</sup>. These studies present results in the medium and long terms that help to guide the direction of security policies and, consequently, improve patient safety in health institutions<sup>2</sup>.

Aiming the improvement of patient safety is essential to enable professionals to express their opinions regarding the patient safety culture. Understand and evaluate the institutional safety culture allows to identify possible weaknesses in the process and its potential, as well as to raise awareness among professionals on the subject<sup>9</sup>.

Therefore, it is important to carry out a diagnostic of the workplace, from the perception of the professionals involved in the process, making it possible to identify potential areas for improvement, in order to conduct a survey of the occurrences, for appropriate planning of safe assistance. To this end, the objective of this study is presenting the recommendations of health professionals in an Intensive Care Unit for the improvement of patient safety culture.

#### **METHODS**

Descriptive and exploratory study with a quantitative approach, carried out at the ICU of a public general hospital, of medium business, with tertiary level of complexity to the care of adults, reference in neurotraumatology in the state, located in the south of the country

As the inclusion criteria, were defined health professionals of both sexes who have been working in this ICU during the data collection period, providing direct assistance to patients and who had a time experience on this unit for at least six months. The exclusion criterion, it was defined not to include professionals who away from work in the data collection period because of health license issues, pregnancy or vacation. In these criteria, 67 health team professionals were able to participate in the research. Of which 59 replied to the questionnaire and of those, 41 have provided recommendations for improvements.

The data collection were realized between November of 2013 and January of 2014 through the questionnaire application Hospital Survey on Patient Safety (HSOPSC)<sup>12</sup> of a version translated and validated for Brazil. It is a questionnaire with closed and open questions covering the dimensions of patient safety culture and that allows the identification of the positive aspects and areas that require improvement.

The instrument was constituted by sociodemographic variables and 12 dimensions of patient safety culture which are subdivided in: dimension variables of safety culture within the unit (teamwork in the unit, expectations and actions to promote the manager's patient safety, organizational learning and continuous improvement, feedback and communication about

errors, opening for communications, personal and non-punitive responses to errors); dimension variables of safety culture within the hospital organization (hospital management support for patient safety, teamwork between hospital units, internal transfers and shift change); and result variables (general perception of patient safety and frequency of reported events)<sup>12</sup>.

The questionnaire also contained an open question, which asked to the subject to mention three recommendations to improve patient safety in the ICU. Thus, the present study explores and describes the recommendations identified by responding professionals concerning the improvement of patient safety, according to the 12 dimensions of patient safety culture.

To perform the data collection, health team members were invited, and after agreeing to participate in the research, signed a Term of Consent. The questionnaire was administered by the researcher, who provided a calm and reserved place to fill in the form, in order to guarantee the anonymity of respondents. The return of the instrument was given through the provision of an urn identified and sealed, which remained in the room of the ICU nursing leadership until the end of the survey.

From the reading of the information contained in the questionnaires, it was proceeded to the grouping of these recommendations by similarity, according to the 12 dimensions of safety culture, previously cited. The data collected were entered into the worksheet in the program Excel® for Windows® and, posteriorly, the frequency was calculated in absolute terms and percentages for each dimension. Descriptive analyzes of the data were performed. Regarding to the sociodemographic data, these were also analyzed using descriptive statistics.

For the assessment of the data, in order to preserve the anonymity of the participants, it was performed a grouping of professional categories in which there were only two respondents. Thus, it was formed three subgroups: nurses; doctors and physiotherapists; and technicians and nursing assistants.

The ethical aspects of research were respected based on the guidelines of Resolution Nº 466 of December 12th, 2012, of the National Health Council 13, being approved by Research Ethics Committees with Humans at UFSC, under the opinion Nº 388522/2013, on September 9th, 2013; and by the studied Hospital under the opinion paragraph Nº 2013/0027, on November, 11th, 2013.

# **RESULTS**

Of the 41 respondents, two were nursing assistants (4.87%), nine nurses (21.95%), two physiotherapists (4.87%), 11 doctors (26.82%) and 17 nursing technicians (41.46%), representatives of the multidisciplinary team of ICU, which were grouped into three subgroups, as described earlier.

As for the sociodemographic characteristics of the professionals of the health team, the results obtained are presented in Table 1.

The results point to the professional profile highlighting the age group between 31 and 40 years, with a predominance of females in the three subgroups. Related to working time in the hospital, and practice time in the ICU, it appears that approximately one third have less than a year of work in the institution and also in intensive care.

Relating to working time in the profession, there is a predominance of professionals with 6 to 10 years of work experience. Prevail professionals with working hours between 30 and 40 hours in the institution; with just one job; and degree of higher education to with postgraduate studies.

Regarding the recommendations of professionals, from reading and organization of responses, about 124 recommendations to improve patient safety in the ICU were obtained. These were categorized among the 12 dimensions of patient safety culture, as described in the following Tables 2, 3 and 4.

Table 2 presents the recommendations within the unit, divided into seven dimensions, especially those related to the dimension organizational learning and continuous improvement, followed by the personal dimension.

In Table 3 are described the recommendations of the health team within the hospital, which are distributed in three dimensions, presenting significant number of suggestions to the extent support of hospital management for patient safety.

Finally, Table 4 describes the recommendations in the results under the safety culture, which are presented in two dimensions, with an emphasis on suggestions regarding the general perception of patient safety.

## DISCUSSION

The analysis of the results, as the profile of the participants, demonstrates a contingent of young/mature professionals, with female predominance in the different categories. In relation to working time in hospital and acting time of ICU it was noted that approximately one third of the staff is new in the institution and in the same way in the ICU, which suggests that the admission of these professionals was made directly in this unit.

Relating these data to the working time in the profession, it has been a superior period, which indicates some professional experience, very relevant in intensive care sectors. Most professionals have only one job, and perhaps why perform a greater journey of weekly working hours. In terms of education level, there is emphasis on the large number of professionals with graduate degrees, denoting a team that seeks the formation beyond the requirement of its position.

In referring to the recommendations aimed at patient safety, participants of the study pointed out a high number of suggestions. In the analysis of these, there is a predominance of recommendations related to dimensions: support from hospital management to patient safety, organizational learning and continuous improvement, personal and general perception of patient safety.

**Table 1.** Sociodemographic characteristics of the professionals of the health team of an Intensive Care Unit of a hospital in the south region of Brazil, 2014

Sociodemographic Data	Nurses (9)	Doctors and Physiotherapists (13)	Technicians and Nursing Assistants (19)	Total (41)
Age Group				
Until 20 years	0	0	1 (5.26%)	1 (2.43%)
21 to 30 years	1 (11.11%)	2 (15.38%)	4 (21.05%)	7 (17.07%)
31 to 40 years	5 (55.55%)	5 (38.46%)	10 (52.63%)	20 (48.78%)
41 to 50 years	1 (11.11%)	4 (30.76%)	2 (10.52%)	7 (17.07%)
> 50 years	2 (22.22%)	2 (15.38%)	2 (10.52%)	6 (14.63%)
Gender				
Female	7 (77.77%)	7 (53.84%)	15 (78.94%)	29 (70.73%)
Male	2 (22.22%)	6 (46.15%)	4 (21.05%)	12 (29.26%)
Working time in hospital				
Less than 1 year	2 (22.22%)	4 (30.76%)	7 (36.84%)	13 (31.70%)
1 to 5 years	1 (11.11%)	3 (23.07%)	1 (5.26%)	5 (12.19%)
6 to 10 years	2 (22.22%)	2 (15.38%)	8 (42.10%)	12 (29.26%)
11 to 15 years	1 (9.99%)	0	0	1 (2.43%)
16 to 20 years	1 (9.99%)	2 (15.38%)	2 (10.52%)	5 (12.19%)
> 21 years	2 (22.22%)	2 (15.38%)	1 (5.26%)	5 (12.19%)
Working time in ICU				
Less than 1 year	2 (22.22%)	5 (38.46%)	7 (36.84%)	14 (34.14%)
1 to 5 years	2 (22.22%)	2 (15.38%)	3 (15.78%)	7 (17.07%)
6 to 10 years	2 (22.22%)	2 (15.38%)	8 (42.10%)	12 (29.26%)
11 to 15 years	0	0	0	0
16 to 20 years	1 (11.11%)	2 (15.38%)	1 (5.26%)	4 (9.75%)
> 21 years	2 (22.22%)	2 (15.38%)	0	4 (9.75%)
Weekly hours				
< 30 h/week	1 (9.99%)	7 (53.84%)	2 (10.52%)	10 (24.39%)
30-40 h/week	6 (66.66%)	2 (15.38%)	12 (63.15%)	20 (48.78%)
40-60 h/week	1 (9.99%)	4 (30.76%)	5 (26.31%)	10 (24.39%)
> 60 h/week	1 (9.99%)	0	0	1 (2.43%)
Working time in the profession	1			
1 to 5 years	2 (22.22%)	3 (23.07%)	4 (21.05%)	9 (21.95%)
6 to 10 years	3 (33.33%)	3 (23.07%)	5 (26.31%)	11 (26.82%)
11 to 15 years	1 (9.99%)	1 (7.69%)	5 (26.31%)	7 (17.07%)
16 to 20 years	0	3 (23.07%)	3 (15.78%)	6 (14.63%)
> 21 years	3 (33.33%)	3 (23.07%)	2 (10.52%)	8 (19.51%)
Level of Education				
Complete High School	0	0	10 (52.63%)	10 (24.39%)
Incomplete College	0	0	4 (21.05%)	4 (9.75%)
Complete College	1 (11.11%)	2 (15.38%)	3 (15.78%)	6 (14.63%)
Postgraduate studies	8 (88.88%)	11 (84.61%)	2 (10.52%)	21 (51.21%)

•			_		-
	1to r	nued	ISI	n	1
CUI	ILII	ıucu	ıaı	_	

Sociodemographic Data	Nurses (9)	Doctors and Physiotherapists (13)	Technicians and Nursing Assistants (19)	Total (41)
Employing links				
1 link	4 (44.44%)	2 (15.38%)	13 (68.42%)	19 (46.34%)
2 links	3 (33.33%)	5 (38.46%)	6 (31.57%)	14 (34.14%)
> 3 links	2 (22.22%)	6 (46.15%)	0	8 (19.51%)

Something that deserves emphasis on results is the fact that many of the recommendations made by professionals are related to scientific and ethical principles of the profession and that, therefore, should be implicit in the provision of health care.

It is demonstrated in the study, the scale support of the hospital management to patient safety, the relevance participants give to working conditions, the provision in quantity and quality of permanent material and consumption, as well as the need to readjust the physical space of the ICU, referring to patient safety. Such data appear in another study, which deals with the subject, in which professionals also suggest the need to improve the quantity, quality and maintenance of materials and equipment and improving the physical structure of the workplace<sup>7</sup>.

Among the features that have been listed as the primary to a safety culture to be effective, there is initially the engagement and support of leaders and managers, as there is an understanding that culture begins with leadership<sup>14</sup>. In this sense, it is believed that the involvement of managers with the routine situations, knowing the difficulties that the professionals face on a daily basis, it creates a more effective communication channel in solving problems and in the pursuit of patient safety.

In dimension organizational learning and continuous improvement, the significant recommendations of training and periodic exercise on patient safety, and the adoption of protocols and checklist, aimed at standardization of healthcare, has support in the scientific literature. Ensure and guarantee the use of protocols that standardize the health assistance are key elements for quality of services<sup>15</sup>. The use of physical and administrative barriers defense tends to trap the error and block the path of an incident.

As to the personal dimension, respondents suggest the expansion of the number of professionals, reducing work overload and decreased load time weekly. This condition has been present in several studies dealing with the work process in health and patient safety 9,10,16. Proper sizing of personnel is an important patient safety indicator.

On this aspect, a study conducted in India with 175 doctors and 60 nurses concluded that the point of view of 76% of respondents, work overload is a major reason for the occurrence of AE, and there is need for appropriate sizing of professionals who work in healthcare<sup>10</sup>.

Regarding the general perception of patient safety, the health team exposed the various recommendations aimed procedures and work processes, with a view to preventing and reducing AE. Indicating the understanding that the AE comes in multiple factors and therefore require different measures. In this sense,

the suggestions ranged from taking attitudes aimed at standardizing of procedures, the implementation of basic techniques and routines of care, and even awareness and team commitment in providing safe care.

This conception of the participants of the study meets of research<sup>5,16</sup> that address patient safety as a major challenge and argue that the cause of the errors and AE are multifactorial and that health professionals are susceptible to making mistakes, when the technical and organizational processes are complex and poorly planned. In this sense, the understanding that systems fail and permit professionals failures become AE, enables the hospital organization to review its processes and strengthen its defense barriers<sup>17</sup>.

As for the recommendations related to expectations and actions to promote patient safety supervisors/managers, professionals refer to the need for expansion the supervision and guidance of the technical staff chief, preparing to assume the position and the importance of leadership, promoting the recognition of professionals who carry out their activities with a view to the patient safety.

The motivation, example and compliment are fundamental resources leadership can use to promote patient safety. This, besides working as a communication channel between higher hierarchies and frontline professionals and vice versa, can play an important role with the teams, demonstrating attitudes focused on patient safety and encouraging safe care<sup>16</sup>.

Regarding the dimension teamwork in the unit, were listed recommendations that suggest the need to expand the commitment, cooperation, responsibility and respect among team members, observe the hierarchy, promote good communication between professionals and, consequently, harmony in the workplace.

Corroborating with this perception, a study in Taiwan with 788 professionals, pointed out that the fact that the professionals feel respected in their workplace, makes them more likely to cooperate with their colleagues for the good progress of work<sup>18</sup>. A harmonious atmosphere between the healthcare team is paramount to patient care is satisfactory. If staff feel important and respected on the team, they tend to provide quality care.

In dimension opening for communications, there were suggestions to improve the dialogue between the health team; for the promotion of interdisciplinarity, through meetings with the different occupational categories of ICU; and even for holding meetings between this team, in order to discuss clinical cases of patients of ICU.

**Table 2.** Recommendations of the professionals of healthcare team to improve patient safety within the unit, in an Intensive Care Unit in southern Brazil, in 2014

Dimensions	Recommendations	Mentions	Total of mentions - (%)
Organizational learning and continuous improvement	- Conduct regular training on patient safety;	13	
	- Develop and implement standard operating protocols and checklist for standardization routines;	7	
	- Improve training for new staff, with accountability of nurses in the transfer of routines;	3	25 (20.16%)
	- Develop manual on patient safety;	1	
	- Correct bad practice in service, preventing its adoption by newly hired professionals.	1	
	- Expand the amount of professionals;	7	
	- Reduce weekly work hours;	2	
	- Avoid duty shifts shorter than 6 hours and greater than 12 uninterrupted hours;	2	
Personal	- Reduce the turnover of professionals;	1	15 (12.10%)
rei sonai	- Improve the rate of pay of professionals;	1	13 (12.10%)
	- Promote equality of rights and duties between the professionals;	1	
	- Create regulations that govern the behavior of professionals in the workplace.	1	
	- Intensify the communication/dialogue between the team;	4	
	- Conduct regular meetings with the entire team;	3	
Opening for communications	- Promote interdisciplinary discussions of clinical cases;	2	10 (8.06%)
	- Conduct discussions regarding the AE on risk situations for patient safety.	1	
	<ul> <li>Commit to the team, cooperate, take responsibility and respect among professionals;</li> </ul>	4	
	- Improve the hierarchical relationships internally in nursing;	2	
Teamwork in the unit	<ul> <li>Promote good communication between professionals and harmony in the workplace;</li> </ul>	2	09 (7.26%)
	- Assegurar, através da supervisão a implementação dos cuidados prescritos pelo enfermeiro.	1	
Expectations and actions to promote patient safety supervisor/manager	- Expand the supervision of nurses and nursing leadership to technical team;	2	
	- Value the professionals who care about patient safety;	2	
	- Being able to take the supervisor post;	1	07 (5.65%)
	- Review the guidelines as to the rules and routines to other professionals;	1	
	- Support the implementation of measures related to patient safety.	1	
Feedback and communication	- Report adverse events;	1	02 (1.61%)
	- Perform feedback of occurrences.	1	
Non-punitive responses to errors	- Do not punish the professionals due to the reporting of adverse events.	2	02 (1.61%)

**Table 3.** Recommendations of the professionals of healthcare team to improve patient safety within the hospital, in an Intensive Care Unit in southern Brazil, in 2014

Dimensions	Recommendations	Mentions	Total of mentions - (%)	
	<ul> <li>Improve working conditions, providing permanent and consumption material with appropriate quality and in sufficient quantity;</li> </ul>	10		
	- Provide hospital beds to ensure patient safety;	8		
	- Exchange of infusion pumps used for better quality and security model for patients;	3		
	- Promote regular maintenance of equipment;	1		
Cupport of bospital management	- Acquire more secure transport brand;	1		
Support of hospital management for patient safety	- Create multidisciplinary Commission of patient safety in ICU;	1	28 (22.58%)	
	- Extend the distance between the beds in the unit;	1		
	- Facilitate the handling and preparation of medications directly into the patient's bathroom;	1		
	- Permanently train the professionals who occupy positions of leadership, direction and management;	1		
	<ul> <li>Approach the hospital direction to the ICU, in order to become familiar with the problems of the unit.</li> </ul>			
Internal transfers and shift changes	- Perform a quality shift on call;	3		
	- Provide safe care in transferring patients between sectors;	2	06 (4.83%)	
	- Perform the shift change of nursing technicians on call together with the nurses.	1	00 ( <del>4</del> .05/0)	
Teamwork between units	- No recommendations		0	

In this aspect, a positive point is presented, because it is important that professionals to act proactively and to realize that there is openness to collaborate with their comments, ideas and suggestions. Clear language, structured and with correct techniques of communication is essential to the promotion of patient safety culture<sup>14</sup>.

There were few recommendations on the dimension feedback and communication about the errors and these were related to the importance of this communication, as well as the return as the measures taken. In a study conducted in Lebanon it was possible to identify that the amplification of feedback, led to the increase in communication of AE $^{11}$ . Promote feedback and build trust between team members is an important property of safety culture  $^{7}$ .

In addition, the teamwork on the error can be an alternative to modify and transform the mistake into an opportunity to discuss and develop critical thinking about the care actions and professional attitudes in front of the own mistake and the colleague's mistake, in order to prevent new events related to the same cause<sup>6</sup>.

The dimension non-punitive responses to errors also presented a small number of recommendations. The punitive culture blocks communication of errors and, consequently, prevents the

process be reviewed and barriers are imposed. In healthcare, there is a tendency to notice the mistake as an irregularity in that the solution lies in blaming and shaming the individual who allegedly committed the fault, in order to ensure that the error does not happen again<sup>10</sup>.

Paradoxically, this approach not only discourages professionals to report the AE, but also diverts attention from systemic improvements, which may in fact reduce the incidents related to healthcare<sup>10</sup>.

The dimension teamwork between units, although it has not received any improvement recommendation, is an aspect that, the evaluation of the health team that ICU presents weaknesses such as a lack of respect, coordination and cooperation among professionals, basic prerequisites for the implementation of teamwork and safe care.

Similar findings were presented in a study that used this same instrument and was applied in a similar reality, indicating the need for interventions to improve communication and relationship between teams in different sectors of the hospital. It is essential to promote a good interaction between the different sectors of the hospital, with a view to providing safe and quality care to the patient.

**Table 4.** Recommendations of the professionals of healthcare team to improve patient safety within the results, in an Intensive Care Unit in southern Brazil, in 2014

Dimensions	Recommendations	Mentions	Total of mentions - (%)	
General perception of patient safety	- Pay attention to the five certainties in medication administration, noting the time, dilution and infusion time of these;	2		
	- Performing safe procedures to the patient;	1		
	- Have focused primarily on the patient and not the server;	1		
	- Take safety measures based on evidence and with the support of management;	1		
	- Educate professionals concerning patient exposure to contamination;	1		
	- Take care of hygiene and cleaning the environment, with special attention to the patient's bathroom;	1		
	<ul> <li>Keep care as the exchange of gloves and cleaning of hands on withdrawal of urine, to each patient;</li> </ul>	1	14 (11.29%)	
	- Perform changing decubitus at the indicated times;	1		
	- Perform tracheal suctioning the patient whenever necessary;	1		
	- Standardize the obligation to keep the grids of high beds;	1		
	- Establish Protocol for weaning patients from mechanical ventilation;	1		
	<ul> <li>Establish hygiene criteria of multiple trauma patients and/or intracranial hypertension;</li> </ul>	1		
	- Reduce the flow of visitors in the hospital.	1		
Frequency of reported events	- Elaborate printed communication of adverse events: clear, specific and easy to fill;	3	06 (4.84%)	
	- Stimulate and guide multidisciplinary team for reporting adverse events;	2		
	- Notify all adverse events that occurred in the ICU.	1		

Some professionals have expressed concerns with the dimension that covers the internal transfers and shift changes. Confirming that perception, another study shows that problems related to shift management and transfers are significantly associated with the increase in the occurrence of adverse events<sup>11</sup>. When working with different shifts and different hospital units, proper allocation of information about patients in intensive care are essential in the continuity of safe care.

It also presents the frequency of reported events, which was pointed out the need to stimulate the notifications of EA, and among the suggestions, the readjustment of the current instrument in order to make it more practical and dynamic.

A study conducted in a hospital in Saudi Arabia identified that the expansion of feedback and communication about the error increases adherence of professionals to report adverse events<sup>11</sup>.

In this sense, there is a need to instill health professionals to report AE, considering the positive impact of this attitude in

improving patient safety. Such a measure can happen, among other ways, from the reformulation of the notification form.

At the end of this analysis, it is inferred that it is essential to open space for placement of professionals, exposing their opinions and concerns with regard to patient safety. Thus, enabling the diagnosis of weaknesses as well as listing the recommendations aimed at promoting patient safety in that ICU, targeting improvements in the current scenario, in order to provide good and safe conditions to who receives the care and the caregiver.

# CONCLUSIONS AND IMPLICATIONS FOR PRACTICE

The results obtained in this study allowed to list significant recommendations to improve patient safety culture from the perspective of the health team of a UTI.

The categorization of those recommendations made it possible to identify areas that present more weaknesses and, therefore, require a closer look, such as in the case of dimension support of hospital management to patient safety, with suggestions for improvements in working conditions, in available material and physical space; and the scale organizational learning and continuous improvement, with training proposals on the subject, the adoption of protocols and checklist, aiming at the standardization of the assistance.

In sequence, there was also emphasis on the personal dimension, with the indication of expansion of staff, reduction work overload and decreased load time weekly; and the dimension general perception of patient safety, with several recommendations related to procedures and work processes focused on patient safety.

It has to be pointed out that this study presents a contextualized reality, making it impossible to generalize the data indicated. Therefore, it is recommend further research, that enumerate suggestions of other realities, according to its areas of strength and areas with potential for improvement, thus enabling, guide the actions and care targeted to its specific needs.

Finally, there is the understanding that the formation of a patient safety culture involves the engagement of the whole institution, starting from the problems in the search for its solutions, providing an environment where professionals feel empowered to participate, collaborating with your suggestions, and identifying the need to review the process, in order to secure assistance. That way, directing the actions and attitudes of the professionals in order to induce behavioral changes desirable, focusing on the patient safety culture.

# **REFERENCES**

- Ministério da Saúde (BR). Assistência Segura: uma reflexão teórica aplicada à prática. Brasília: DF; 2013.
- Ministério da Saúde (BR). Documento de referência para o Programa Nacional de Segurança do Paciente. Brasília: DF; 2014.
- World Health Organization. A World Alliance for Safer Health Care. More Than Words: Conceptual Framework for the International Classification for Patient Safety. Version 1.1. Final Technical Report. Geneva: Switzerland; 2009.
- 4. Portaria N. 529, de 1º de abril de 2013. Dispõe sobre o Programa Nacional de Segurança do Paciente (PNSP). Diário Oficial da República Federativa do Brasil, Brasília (DF): 1 de abril de 2013: Seção 1:1.

- Gonçalves LA. Segurança do paciente em unidade de terapia intensiva: carga de trabalho de enfermagem e sua relação com a ocorrência de eventos adversos e incidentes [tese]. São Paulo (SP): Escola de Enfermagem, Universidade de São Paulo; 2011.
- Paese F, Dal Sasso GTM. Cultura da segurança do paciente na atenção primária à saúde. Texto Contexto Enferm. 2013 abr; 22(2):302-10.
- Mello JF, Barbosa SFF. Cultura de segurança do paciente em terapia intensiva: recomendações da enfermagem. Texto Contexto Enferm. 2013 out/dez; 22(4):1124-33.
- 8. Tomazoni A, Rocha PK, Kusahara DM, Souza AlJ, Macedo TR. Evaluation of the patient safety culture in neonatal intensive care. Texto Contexto Enferm. 2015 jan-mar; 24(1):161-9.
- Nie Y, Mao X, Cui H, He S, Li J, Zhang M. Hospital survey on patient safety culture in China. BMC Health Serv Res [on line]. 2013 jun [citado 2014 dez 15]; 13:[aprox. 10 telas]. Disponível em: http://www.ncbi.nlm. nih.gov/pmc/articles/PMC3701538/pdf/1472-6963-13-228.pdf
- Chakravarty BA. A survey of attitude of frontline clinicians and nurses towards adverse events. Med. J. Armed. Forces India [on line]. 2013 out/ dez [citado 2015 jan 08]; 69(4): [aprox. 5 telas]. Disponível em: http:// www.mjafi.net/article/S0377-1237(13)00013-0/fulltext
- El-Jardali F, Sheikh F, Garcia NA, Jamal D, Abdo A. Patient safety culture in a large teaching hospital in Riyadh: baseline assessment, comparative analysis and opportunities for improvement. BMC Health Serv. Res [on line]. 2014 ago [citado 2015 jan 08]; 14: [aprox. 6 telas]. Disponível em: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3975247/?tool=pubmed
- Reis CT. A cultura de segurança do paciente: validação de um instrumento de mensuração para o contexto hospitalar brasileiro [tese]. Rio de Janeiro (RJ): Escola Nacional de Saúde Pública; 2013.
- 13. Ministério da Saúde. (BR). Conselho Nacional de Saúde, Comissão Nacional de Ética em Pesquisa. Resolução № 466, de 12 de dezembro de 2012: diretrizes e normas regulamentadoras de pesquisa envolvendo seres humanos. Brasília (DF): Ministério da Saúde; 2012.
- Sammer CE, Lykens K, Singh KP, Mains DA, Lackn NA. What is patient safety culture? A review of the literature. J. Nurs. Scholarsh. 2010 jun;42(2):156-65.
- Quadrado ERS, Tronchin DMR. Avaliação do protocolo de identificação do neonato de um hospital privado. Rev. Latino-Am. Enfermagem [on line]. 2012 jul/ago [citado 2014 dez 17]; 20(4): [aprox. 7 telas]. Disponível em: http://www.scielo.br/scielo.php?pid=S0104-11692012000400005&script=sci\_arttext&tlng=pt
- Mello JF. Cultura de segurança do paciente em unidade de terapia intensiva: perspectiva da enfermagem [dissertação]. Florianópolis (SC): Universidade Federal de Santa Catarina; 2011.
- Silva AEBC. Segurança do paciente: desafios para a prática e a investigação em Enfermagem. Rev. Eletr. Enf. [on line]. 2010 jul/set [citado 2014 dez 10]; 12(3): [aprox. 1 tela]. Disponível em: http://www.fen.ufg.br/fen\_revista/v12/n3/v12n3a01.htm
- Chen IC, Li HH. Measuring patient safety culture in Taiwan using the Hospital Survey on Patient Safety Culture (HSOPSC). BMC. Health Serv. Res. [on line]. 2010 jun [citado 2015 jan 18]; 10: [aprox. 9 telas]. Disponível em: http://www.ncbi.nlm.nih.gov/pmc/articles/ PMC2903582/?tool=pubmed