RESEARCH

DOI: 10.9789/2175-5361.rpcfo.v13.9739

EVALUATION OF PATIENT SAFETY CULTURE IN THE PEDIATRIC INTENSIVE THERAPY UNIT IN A PUBLIC HOSPITAL

Avaliação da cultura de segurança do paciente em unidade de terapia intensiva pediátrica em hospital público

Evaluación de cultura de seguridad del paciente en unidad de atención intensiva pediátrica un hospital público

Lívia Teixeira Tavares[1], Girlane Santiago dos Santos Silva[2], Lívia Leite da Silva Macêdo[3], Marina Aguiar Pires Guimarães[4], Tatiane Falcão dos Santos Albergaria[5], Elzo Pereira Pinto Junior[6]

ABSTRACT

Objective: to evaluate the patient safety in a Pediatric Intensive Care Unit. **Method:** cross-sectional study carried out with 50 professionals from a multidisciplinary team in a Pediatric Intensive Care Unit in a public hospital in the interior of Bahia. An instrument with sociodemographic and professional variables and the Hospital Survey on Patient Safety Culture (HSOPSC) questionnaire adapted for Brazil were used. Descriptive analysis was performed, classifying the dimensions in areas of strength or critical to patient safety. **Results:** among the patient safety dimensions analyzed in this study, "Organizational learning" (60.0%) and "Teamwork within the units" stood out positively. **Conclusion:** the identification of strengths and weaknesses is an important tool for achieving a culture of positive safety and the development of safe health actions.

DESCRIPTORS: Patient safety; Organizational culture; Critical care; Quality of health care; Pediatric assistants.

1   Physiotherapist. Specialist for the Residency Program in Neonatal and Pediatric Hospital Physiotherapy - Faculdade Adventista da Bahia (FADBA). Specialist in Intensive Care Therapy with expertise in neonatology and pediatrics - COFFITO. Salvador - BA - Brazil.

2   Physiotherapist. Specialist in Intensive Care with area of expertise in neonatology and pediatrics - COFFITO. Children's State Hospital (HEC), Feira de Santana - BA - Brazil.

3   Nurse. Post-Graduation in Public Health and Preceptory at SUS. Hospital Estadual da Criança (HEC), Feira de Santana - BA - Brazil.

4   Physiotherapist. Specialist in Intensive Care with area of expertise in neonatology and pediatrics - COFFITO. PhD in Child and Adolescent Health from the Programa da Pós Graduação em Saúde da Criança e do Adolescente da Universidade Federal de Minas (UFMG), Salvador - BA - Brazil.

5   Physiotherapist. Specialist in Intensive Care with expertise in neonatology and pediatrics - COFFITO. PhD student in Interactive Processes of Organs and Systems at Universidade Federal da Bahia (UFBA). Lecturer at the Physiotherapy Course at the State University of Bahia (UNEB), Salvador - BA - Brazil.

6   Physiotherapist. Master in Collective Health from the State University of Ceará (UECE). PhD in Public Health from the Universidade Federal da Bahia (UFBA), Salvador - BA - Brazil.

DOI: 10.9789/2175-5361.rpcfo.v13.9739 | Tavares LT, Silva GSS, Macêdo LLS, et al. | Evaluation of patient safety culture...

R. pesq.: cuid. fundam. online 2021 jan/dez 13: 974-981

UNIRIO
Universidade Federal do Estado do Rio de Janeiro

Doutorado
PPgEnfBio

MESTRADO EM ENFERMAGEM
PPGENF
UNIVERSIDADE FEDERAL DO ESTADO DO RIO DE JANEIRO

974

RESUMO

Objetivo: avaliar a segurança do paciente em Unidade de Terapia Intensiva Pediátrica. **Método:** estudo transversal realizado com 50 profissionais de uma equipe multiprofissional em uma Unidade de Terapia Intensiva Pediátrica em hospital público do interior da Bahia. Utilizou-se instrumento com variáveis sociodemográficas e profissionais e o questionário *Hospital Survey on Patient Safety Culture* (HSOPSC) adaptado para o Brasil. Realizou-se análise descritiva, classificando as dimensões em áreas de força ou críticas para a segurança do paciente. **Resultados:** dentre as dimensões de segurança do paciente analisadas nesse estudo, destacaram-se positivamente "Aprendizado organizacional" (60,0%) e "Trabalho em equipe no âmbito das unidades". **Conclusão:** a identificação de potencialidades e fragilidades é importante ferramenta para o alcance de uma cultura de segurança positiva e desenvolvimento de ações seguras em saúde.

DESCRITORES: Segurança do paciente; Cultura organizacional; Cuidados críticos; Qualidade da assistência à saúde; Assistentes de pediatria.

RESUMEN

Objetivo: evaluar la seguridad del paciente en una unidad de cuidados intensivos pediátricos. **Método:** estudio transversal realizado con 50 profesionales de un equipo multidisciplinario en una Unidad de Cuidados Intensivos Pediátricos en un hospital público del interior de Bahía. Se utilizó un instrumento con variables sociodemográficas y profesionales y el cuestionario Encuesta hospitalaria sobre cultura de seguridad del paciente (HSOPSC) adaptado para Brasil. Se realizó un análisis descriptivo, clasificando las dimensiones en áreas de fuerza o críticas para la seguridad del paciente. **Resultados:** entre las dimensiones de seguridad del paciente analizadas en este estudio, "Aprendizaje organizacional" (60.0%) y "Trabajo en equipo dentro de las unidades" se destacaron positivamente. **Conclusión:** la identificación de fortalezas y debilidades es una herramienta importante para lograr una cultura de seguridad positiva y el desarrollo de acciones de salud seguras.

DESCRIPTORES: Seguridad del paciente; Cultura organizacional; Cuidados críticos; Calidad de la atención de salud; Asistentes de pediatría.

INTRODUCTION

Patient safety has been a major concern for health care institutions around the world, especially since the publication of the report "To err is human: building a safer health system", prepared in 1999 by the U.S. Institute of Medicine (IOM), which drew attention for associating welfare errors with a high risk of death.[1]

In this context, since 2013, the National Program for Patient Safety (NPPS) instituted by the Ministry of Health (MH) has had the role of contributing to the qualification of health care. One of the initiatives of the NPPS focused on safety culture, present in the DRC no. 36, of July 25, 2013, was the mandatory implementation of Patient Safety Centers (PSC), an instance that promotes the prevention, control and mitigation of incidents, especially adverse events, in all health establishments in the national territory.[2-3]

Stimulating a safety culture is essential for improving the health care system and preventing adverse events, becoming one of the major challenges for hospital institutions. Safety culture is considered a basic component of the structure of health care organizations, and is conceptualized as the values, attitudes, behaviors, individual or collective perceptions that determine an organization's commitment to health and safety management.[4]

The assessment of a patient's safety culture is one of the essential aspects of providing safe healthcare, as it describes the current state of the culture with information reported by employees regarding their perceptions and safety-related behaviors.[4, 5-6] The measurement of safety culture can be performed quickly and reliably using an instrument developed by the Healthcare Quality and Research Agency (HQRA), called Hospital Survey on Patient Safety Culture/HSOPSC, which is used worldwide and available to health services.[7-8]

Studies carried out in Brazilian hospitals have been able to identify weaknesses and potentialities through the HSOPSC questionnaire, contributing with more knowledge about factors that influence the safety culture.[9-10] Thus, assessing the safety culture may allow the detection of dangerous situations and errors present in pediatric intensive care units and it is necessary since these sectors are more prone to errors, since they are more serious patients, subject to imminent risk of death, besides complex, uninterrupted care and immediate decisions.[1, 11]

OBJECTIVE

The objective of this study was to evaluate patient safety in the context of a pediatric intensive care unit.

METHOD

A cross-sectional epidemiological study was carried out in a Pediatric Intensive Care Unit (PICU) of a reference State Hospital for Child Health Care, located in a city in the interior of Northeast Brazil. According to data from January 2019 of the National Registry of Health Establishments (NRHE),[12] this hospital is considered a large hospital, which provides public care focused on outpatient pediatric specialties, of medium/high complexity and has 20 beds of Pediatric Intensive Care Unit. In addition, it has an adverse event notification system and an Internal Core of Patient Safety implemented in 2013.

The study population was composed of professionals who worked in the Pediatric Intensive Care Unit, in the assistance field, and who were in direct contact with the patients, such as: doctors, nurses, physiotherapists, psychologists, nutritionists, speech therapists, occupational therapists and nursing technicians. Those who had at least 6 months of admission to the unit and were in full professional practice during the collection period were included, excluding those who withdrew the Free and Informed Consent (FIC) after signing and those who filled in less than half of the data collection instrument.

Health professionals were approached individually in the work environment, in the morning/winter shifts, for the invitation and clarifications about the research. Those who agreed to participate were given the questionnaire and

two copies of the informed consent form (FIC) in a sealed, unidentified envelope. To ensure the confidentiality of the responses, the professionals were directed to place the envelope with the instrument and a copy of the completed FIC in a box that was available in each unit and that was collected by the researchers at the end of the day.

Data collection took place between the months of June and July 2018 during the subjects' working hours. For data collection, a questionnaire with two blocks of questions was used: One referred to identification (marital status, children) and characterization of work (work shift, change of shift, reason for working in ICU, existence of another employment relationship), and the other contained the "Hospital Survey on Patient Safety Culture" (HSOPSC), which requested the opinion of employees on patient safety, errors associated with health care and notification of events in their hospital in addition to containing variables such as area/unit of work, gender, age, position/function, level of education. This questionnaire was developed by the Health Care Quality and Research Agency (AHRQ) at the U.S. Department of Health and Human Services in 2004 and was adapted and validated for Brazil in 2013, with permission from the AHRQ, entitled "Research on Patient Safety in Hospitals".[13, 5, 7]

HSOPSC is self-applicable and evaluates important points related to patient safety on 50 items in total, 44 of which are related to specific safety culture issues that comprise 12 dimensions (Chart 1) and 6 items are related to personal information.

Table 1 - Dimensions and definitions of HSOPSC

Dimensions (D)	Definitions
D1.Expectations and actions to promote safety of supervisors/managers	Assesses whether supervisors and managers consider employee suggestions to improve patient safety.
D2.Organizational learning and continuous improvement	It assesses the existence of learning from the mistakes that lead to positive changes and evaluates the effectiveness of the changes that have occurred.
D3.Teamwork within units	It defines whether employees support each other, treat each other with respect, and work together as a team.
D4.Opening of communication	Evaluates whether hospital staff talk freely about errors that may affect the patient.
D5.Return of error information and communication	Evaluates the perception of hospital staff if they notify errors that occur, implement changes and discuss strategies to avoid errors in the future.

Dimensions (D)	Definitions
D6 Non-punitive responses to errors	Evaluates how employees feel about their mistakes.
D7.Suitability of professionals	Evaluates whether employees are able to handle their workload.
D8. Hospital management support for patient safety	It assesses whether for the administration and management of the hospital the safety of the patient is a priority issue.
D9.Teamwork between units	It assesses whether hospital units cooperate and coordinate with each other to provide high quality care for patients.
D10.On duty/shifts and internal transfers	Evaluates whether important information about patient care is transferred through hospital units and during on-call or shift changes.
D11 General perception of patient safety	Evaluates existing systems and procedures in the health care organization to prevent the occurrence of patient safety problems in hospitals.
D12.Frequency of notified events	It relates to the report of possible patient safety problems.

Source: Reis et al., 2013.

Most items were answered using a five-point Likert scale in order to assign a numerical value to the answers given by the subjects of the study, with categories of answers in degree of agreement or from a frequency scale.[11]

A database created in the Microsoft Office Excel® program was fed, followed by verification and correction of inconsistencies. The analysis of the data was carried out from elements of descriptive statistics, so that the measures of frequency, central tendency and dispersion of the socio-demographic, occupational characteristics and training profile of the professional were calculated and the percentage of positive responses in relation to the safety culture was calculated. The qualitative variables were presented in frequencies and percentages. The analyses were performed in the Stata Software, v.12.

The percentages of positive responses in each dimension were considered. Items with 75% or more positive responses were considered "strong areas of patient safety" and those with 50% or less positive response percentages were considered "weak areas of patient safety".[5]

This study was developed in accordance with the ethical precepts established in Resolution no. 466/2012 of the National Health Council, and was approved by a Research Ethics Committee through opinion no. 2,710,269/ 2018 on June 13, 2018.

RESULTS

Of the 72 professionals, 22 (30.55%) refused to participate in the study, totaling 50 (69.44%) participants. Of these, there was a predominance of women 44 (89.8%), single 27 (54%), who occupied the position of nursing technician 22 (44%), with an average age of 33.84 years (±6.49).

Among the respondents, 45 (95.7%) reported enjoying working in the Intensive Care Unit and 29 (59.2%) having chosen pediatrics as their area of specialization. Regarding the quality of services provided in the unit, the majority 36 (72%) rated it as good (Table 1).

Table 1 - Sociodemographic and work characteristics of professionals in a public hospital. Feira de Santana, BA, Brazil, 2018

VARIABLES	n	%
Marital Status		
Single	27	54.0%
Married	18	36.0%
Divorced	2	10.0%
Sex		
Female	44	89.8%
Male	5	10.2%
Fixed working hours		
No	22	45.8%
Yes	26	54.2%
There is the possibility of changing shifts		
No	10	20.0%
Yes	40	80.0%
Work in the best mood		
No	18	37.5%
Yes	30	62.5%
You work in this ICU because:		
You have chosen this area of expertise	29	59.2%
There was no vacancy in another sector	2	4.1%
Was relocated out of necessity	11	22.4%
Other	7	14.3%
Likes to work in ICU		
No	2	4.3%
Yes	45	95.7%

| VARIABLES	n	%
Has another employment relationship		
No	12	24.0%
Yes	38	76.0%
Quality of services provided in this unit		
Great	13	26.0%
Good	36	72.0%
Regular	1	2.0%

Table 2 shows that eight dimensions were considered fragile for patient safety: Openness of communication (D4), Feedback of information and communication about errors (D5), Non-punitive responses to errors (D6), Adequacy of professionals (D7), Teamwork between hospital units (D9), Passages on duty/shifts and internal transfers (D10), General perception of patient safety (D11) and Frequency of reported events (D12).

Table 2 - Mean of positive responses in the safety culture dimensions of the patient in a public hospital. Feira de Santana, BA, Brazil, 2018

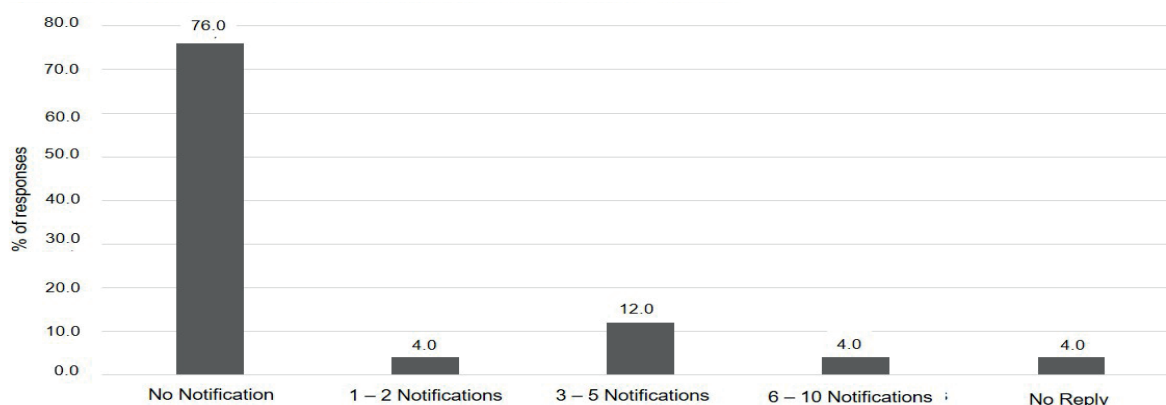| Dimensions (D)	%
D1. expectations and actions to promote safety of supervisors and managers	55.5
D2. Organizational Learner	60.0
D3. Teamwork within the units	57.4
D4. Opening of communication	42.0
D5. Feedback of information and communication about errors	34.7
D6. Non-punitive responses to errors	34.0
D7. Suitability of professionals	33.5
D8. Hospital management support for patient safety	51.3
D9. Teamwork between hospital units	46.0
D10. On duty/shifts and internal transfers	44.0
D11. General perception of patient safety	45.5
D12. Frequency of reported events	48.0

As for the overall patient safety score, 22 (44%) participants rated it as very good and nine (18%) did not (Figure 1).

Figure 1 - Patient safety note according to professionals at a public hospital. Feira de Santana, BA, Brazil, 2018
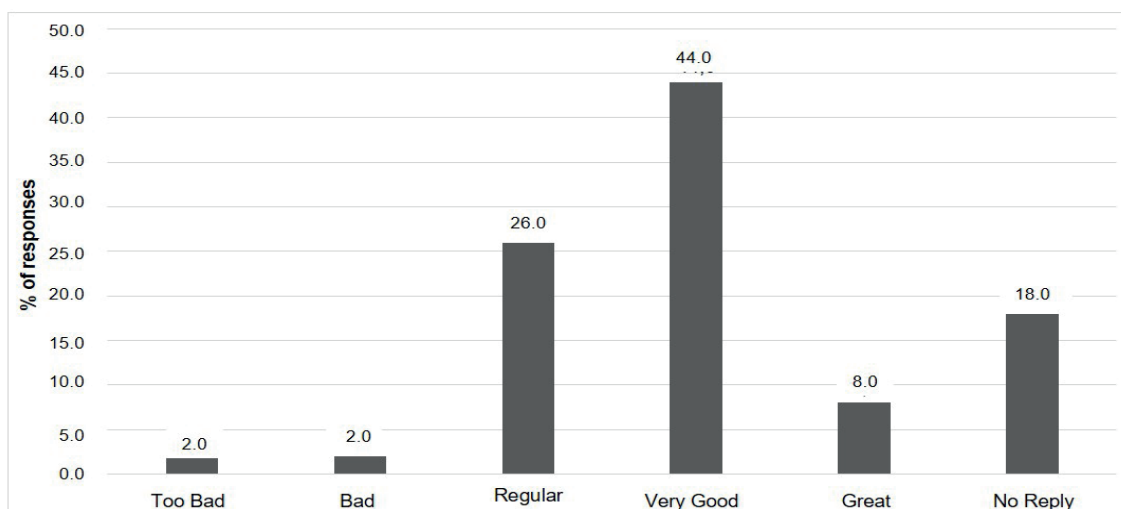
Survey participants were asked about the number of event notifications they had made in the past 12 months, 38 (76%) reported no event notifications in the past 12 months (Figure 2).

Figure 2 - Number of events notified in the last 12 months according to professionals at a public hospital. Feira de Santana, BA, Brazil, 2018

DISCUSSION

This study provided information that allowed to assess the dimensions of the patient safety culture in the ICU-P studied, identifying their strong and fragile areas through the assessment of HSOPSC, one of the best tools for assessment of the patient safety culture in the hospital setting.[14]

This survey did not obtain any dimension classified as "strong" for patient safety, i.e., with a positive response rate above 75%, according to AHRQ guidelines.[5] These results may reflect a culture of patient safety under construction, reinforced by the management of an emerging Patient Safety Center, which has been structured in the service since 2013, a milestone of patient safety in the Brazilian health system.[2, 15]

However, positive points were highlighted in the scope of the safety culture within the institution, such as: organizational learning; teamwork within the units; expectations and actions to promote safety of supervisors and managers and support from hospital management for patient safety.

Organizational learning, the highest score in the research in question, represents the learning culture, analysis of errors, philosophy of continuous improvement, where there is involvement of all employees, engagement of leaderships, which generates positive changes in the industry and consolidates the local safety culture.[10]

A study conducted in hospitals in Saudi Arabia also considered the organizational learning dimension as a strong area for patient safety and linked this result to the continuing education departments within these institutions.[16]

In the literature, higher percentages for this size can be found in ICU-P, and this result is associated with the hospital accreditation process.[17] Accreditation organizations require patient safety culture assessments, which allows health care organizations to develop a clearer view of the areas where they need to focus their attention as part of their efforts to strengthen the patient safety culture. In addition, when hospitals conduct these assessments, they can also compare

their findings with similar initiatives conducted in their country or internationally.[18]

In order to achieve a better patient safety culture in the studied unit, in addition to the positive points identified, the current study also discovered weaknesses that require interventions to ensure safe care and strengthen the safety culture in the hospital, namely: open communication, feedback of information and communication about errors, non-punitive responses to errors, suitability of professionals, teamwork between hospital units, on-call/off-call tickets and internal transfers, general perception of patient safety and frequency of reported events.

The dimension "suitability of professionals", evaluated with a lower positive score in this study, reflects whether the quantity of professionals is sufficient for the demands in the sectors evaluated and whether the number of hours worked is adequate. Job satisfaction has direct impact on the safety culture.[11,19] A cohort study carried out in intensive care units of two highly complex university hospitals revealed that overload of nursing work was associated with increased risk of mortality of patients and alerted to the need for an adequate number of professionals, understanding and involvement of managers in organizational processes to promote better results within the culture of patient safety.[20]

Similar results to this study were found by researchers who analyzed the patient safety culture, using HSOPSC, in obstetrics, gynecology and neonatology units in Lithuania, where most of the interviewees evaluated the organizational learning dimension with high percentages of positive responses and the adequacy dimension of professionals as a critical area.[21]

Although most dimensions were considered critical areas in this survey, the health care team's assessment of patient safety was positive and the "very good" assessment prevailed. These data may suggest that although there are points to be improved, professionals perceive a favorable safety climate in the institution, which may be attributed to the hospital's management and policies regarding patient safety. A study conducted in different sectors of a hospital institution pointed out that pediatric units strive for a more humane and safe care and have the best evaluations regarding patient safety.[22]

Research conducted with the same instrument in three countries showed that most respondents in hospitals in the United States rated patient safety in their area of work as "excellent" or "very good," but more than half of respondents in the Netherlands and Taiwan rated it "acceptable. The more positive response from respondents in the US may reflect safer healthcare in that country, as it is considered one of the first to initiate a patient safety movement around the world.[23]

In this study, it can be seen that the rate of event notification is low, since most of the interviewees (76%) did not notify any event in the last 12 months, despite the presence of the Security Nucleus and the notification system in the evaluated institution. These results corroborate with a survey from Paraná, in which approximately 56.6% of the professionals reported not having notified an events.[24]

Event notification is an indicator of the quality of health services, which enables organizational learning and the adoption of preventive measures, being a key factor in solidifying the culture of patient safety.[25] In view of this, it is up to managers of health care institutions to promote periodic training with the team and provide guidance on the importance of performing the notification with complete data in order to develop an efficient communication routine.[19, 26]

As for the socio-demographic characteristics of professionals, it was observed that the majority of respondents were female. This may be justified by the continuous growth of women in the health sector.[27] In relation to the professional category, there was emphasis on the nursing team, which makes up the majority of health teams in Brazilian hospital institutions, thus in relation to strategies to improve patient safety, the nursing team is the professional category that most needs to be worked on, because they are the ones who have direct contact with patients for the longest time.[6, 15, 26] Most participants liked to work in the intensive care unit and opted for the pediatric area. A study conducted in three hospitals in Turkey, which assessed the patient safety culture, observed that having the option to choose the professional unit is a factor that influences the patient safety culture.[28]

In contrast, in this study, 76% of respondents stated that they had another employment relationship. The work overload may contribute negatively in the quality of care offered to the patient, favoring the occurrence of adverse events.[29]

The study presented as limitations the high percentage of not returning the questionnaires by professionals, which may affect the results. In this context, the percentage of response reflects the level of institutional safety culture, because the stronger the safety culture, the more its employees are motivated to participate in surveys like this one, thus, for a greater involvement of professionals it is necessary to engage NSP in this aspect.[30]

CONCLUSIONS

Promoting a patient safety culture within hospital institutions is a challenging, complex phenomenon that requires commitment and dedication from leadership and its employees. The study demonstrated a patient safety culture with potential for improvement in all dimensions, serving to instrumentalize the planning of strategies for patient safety in this institution. The results point to the need to strengthen and stimulate the recording of adverse events at the unit.

For future surveys, it is recommended the insertion of other units of the hospital and initiatives to increase the adherence of health professionals, increasing the percentage of interviewees in order to obtain even more consistent results. It is suggested that the questionnaire be reapplied periodically in the pediatric intensive care unit of the current study, as a form of evaluation and monitoring of possible improvements in the service. The safety culture assessment promotes understanding of the current safety culture scenario and may provide subsidies for health care qualification.

REFERENCES

1. Oliveira EM. Segurança do paciente em unidades de terapia intensiva: ambiente das práticas profissionais de enfermagem e satisfação profissional na ocorrência de eventos adversos. [Doutorado em Ciências]. São Paulo (Brasil): Universidade de São Paulo; 2015. [acesso em 08 de janeiro 2018]. Disponível em: https://www.teses.usp.br/teses/disponiveis/7/7139/tde-11052015-153627/pt-br.php

2. Agência Nacional de Vigilância Sanitária (BR). Implantação do Núcleo de Segurança do Paciente em Serviços de Saúde – Série Segurança do Paciente e Qualidade em Serviços de Saúde/Agência Nacional de Vigilância Sanitária [Internet] – Brasília: Anvisa; 2016. [acesso em 11 de fevereiro 2018]. Disponível em: http://portal.anvisa.gov.br/documents/33852/3507912/Caderno+6+-+Implanta%C3%A7%C3%A3o+do+N%C3%BAcleo+de+Seguran%C3%A7a+do+Paciente+em+Servi%C3%A7os+de+Sa%C3%BAde/cb237a40-ffd1-401f-b7fd-7371e495755c

3. Agência Nacional de Vigilância Sanitária (BR). Resolução Nº 36 de 25 de julho 2013. Ações para a segurança do paciente em serviços de saúde e dá outras providências. Diário Oficial da União julho 2013; Seção 1.

4. Costa DC. Cultura de segurança do paciente sob a ótica da equipe de enfermagem em serviços hospitalares. [Mestrado em Ciências]. Ribeirão Preto (Brasil): Universidade de São Paulo; 2014. [acesso em 10 de janeiro 2018]. Disponível em: https://teses.usp.br/teses/disponiveis/22/22132/tde-06022015-192856/pt-br.php

5. Reis CT, Laguardia J, Vasconcelos AGG, Martins M. Reliability and validity of the Brazilian version of the Hospital Survey on Patient Safety Culture (HSOPSC): a pilot study. Cad. Saúde Pública [Internet]. 2016 [cited 2018 fev 18]; 32(11). Available from: https://doi.org/10.1590/0102-311x00115614.

6. Carvalho REFL, Arruda LP, Nascimento NKP, Sampaio RL, Cavalcante MLSN, Costa ACP. Avaliação da cultura de segurança em hospitais públicos no Brasil. Rev. latinoam. Enferm [Internet]. 2017 [acesso em 11 de janeiro 2018]; 25. Disponível em: https://doi.org/10.1590/1518-8345.1600.2849.

7. Hodgen A, Ellis L, Churruca K, Bierbaum M. Safety Culture Assessment in Health Care: A review of the literature on safety culture assessment modes. ACSQHC [Internet]. 2017 [cited 2018 fev 5]. Available from: https://www.safetyandquality.gov.au/sites/default/files/migrated/Safety-Culture-Assessment-in-Health-Care-A-review-of-the-literature-on-safety-culture-assessment-modes.pdf

8. European Agency for Safety and Health at Work (EU-OSHA). Occupational Safety and Health culture assessment - A review of main approaches and selected tools [Internet]. 2011 [cited 2018 mar 11]. Available from: https://osha.europa.eu/en/publications/occupational-safety-and-health-culture-assessment-review-main-approaches-and-selected.

9. Batista J, Cruz EDA, Alpendre FT, Paixão DPSS, Gasparia AP, Mauricio AB. Cultura de segurança e comunicação sobre erros cirúrgicos na perspectiva da equipe de saúde. Rev. gaúch. Enferm. [Internet]. 2019 [acesso em 02 de fevereiro 2019]; 40. Disponível em: https://doi.org/10.1590/1983-1447.2019.20180192.

10. Abreu IM, Rocha RC, Avelino FVSD, Guimarães DBO, Nogueira LT, Madeira MZA. Cultura de segurança do paciente em centro cirúrgico: visão da enfermagem. Rev. gaúch. enferm. [Internet]. 2019 [acesso em 01 de maio 2019]; 40. Disponível em: https://doi.org/10.1590/1983-1447.2019.20180198.

11. Minuzzi AP, Salum NC, Locks MOH. Avaliação da cultura de segurança do paciente em terapia intensiva na perspectiva da equipe de saúde. Texto & contexto enferm.[Internet]. 2016 [acesso em 01 de abril 2018]; 25(2). Disponível em: http://dx.doi.org/10.1590/0104-07072016001610015.

12. Cadastro nacional de estabelecimentos em saúde [Internet] [acesso em 05 de janeiro 2019]. Disponível em: http://cnes.datasus.gov.br.

13. Rockville W, Sorra J, Yount N, Famolaro T, Gray L. AHRQ Hospital Survey on Patient Safety Culture: User's Guide. Rockville, MD: Agency for Healthcare Research and Quality [Internet]. 2016 [cited 2018 ago 10]. Available from: https://www.ahrq.gov/sops/surveys/hospital/index.html.

14. Akbari N, Makek M, Ebrahimi P, Haghani H, Aazami S. Safety culture in the maternity unit of hospitals in Ilam province, Iran: a census survey using HSOPSC tool. Pan African Medical Journal [Internet]. 2017 [cited 2018 mar 03]; 27:268. Available from: https://doi.org/10.11604/pamj.2017.27.268.9776.

15. Macedo TR, Rocha PK, Tomazoni A, Souza S, Anders JC, Davis K. Cultura de segurança do paciente na perspectiva da equipe de enfermagem de emergências pediátricas. Rev. Esc. Enferm [Internet]. 2016 [acesso em 01 de abril 2018]; 50(5). Disponível em: https://doi.org/10.1590/s0080-623420160000600007.

16. Alqwez N, Cruz JP, Almoghairi AM, Al-otaibi RS, Almutari KO, Alicante JG et al. Nurses' Perceptions of Patient Safety Culture in Three Hospitals in Saudi Arabia. J. nurs. Scholarsh [Internet]. 2018 [cited 2019 jan 05]; 50(4). Available from: https://doi.org/10.1111/jnu.12394.

17. Santiago THR, Turrini RNT. Cultura e clima organizacional para segurança do paciente em Unidades de Terapia Intensiva. Rev. Esc. Enferm. [Internet]. 2015 [acesso em 01 de fevereiro 2019]; 49. Disponível em: https://doi.org/10.1590/S0080-623420150000700018.

18. Ali H, Ibrahem SZ, Al Mudaf B, Al Fadalah T, Jamal D, El-Jardali F. "Baseline assessment of patient safety culture in public hospitals in Kuwait". BMC health serv. res. [Internet]. 2018 [cited 2019 mar 10]; 18(1). Available from: https://doi.org/10.1186/s12913-018-2960-x.

19. Borba FC, Severino FG. Resultados da avaliação da cultura de segurança em um hospital público de ensino do Ceará. Rev. bras. promoç. Saúde. [Internet]. 2016 [acesso em 01 de junho 2018]; 29(3). Disponível em: https://doi.org/10.1186/s12913-018-2960-x.

20. Novaretti MCZ, Santos EV, Quitério LM, Daud-Gallotti RM. Sobrecarga de trabalho da Enfermagem e incidentes e eventos adversos em pacientes internados em UTI. Rev. bras. enferm. [Internet]. 2014 [acesso em 01 de junho 2018]; 67(5). Disponível em: https://doi.org/10.1590/0034-7167.2014670504.

21. Ribeliene J, Blazeviciene A, Nadisauskiene RJ, Tameliene R, Kudreviciene A, Nedzelskiene I, et al. Patient safety culture in obstetrics and gynecology and neonatology units: the nurses' and the midwives' opinion: Patient safety culture. The Journal of Maternal-Fetal & Neonatal Medicine. [Internet]. 2018 [cited 2019 dec 02]; 32(19). Available from: https://doi.org/10.1080/14767058.2018.1461831.

22. Silva-Batalha EMS; Melleiro MM. Cultura de segurança do paciente em um hospital de ensino: diferenças de percepção existentes nos diferentes cenários dessa instituição. Texto & contexto enferm. [Internet]. 2015; [acesso em 1 de junho 2018]; 24(2). Disponível em: https://doi.org/10.1590/0104-07072015000192014.

23. Wagner C, Smits M, Sorra J, Huang CC. Assessing patient safety culture in hospitals across countries. Int.j. qual.health care. [Internet]. 2013 [cited 2019 apr 02]; 25(3) Available from: https://doi.org/10.1093/intqhc/mzt024.

24. Cruz EDA, Rocha DJM, Mauricio AB, Ulbrich FS, Batista J, Maziero ECS. Cultura de segurança entre profissionais de saúde em hospital de ensino. Cogitare enferm. [Internet]. 2018 [acesso em 06 de fevereiro 2019]; 23(1). Disponível em: http://dx.doi.org/10.5380/ce.v23i1.50717.

25. Furini ACA, Nunes AA, Dallora MELV. Notificação de eventos adversos: caracterização dos eventos ocorridos em um complexo hospitalar. Rev. gaúch. enferm. [Internet]. 2019 [acesso em 08 de outubro 2019]; 40. Disponível em: https://doi.org/10.1590/1983-1447.2019.20180317.

26. Costa DB, Ramos D, Gabriel CA, Bernardes A. Cultura de segurança do paciente: avaliação pelos profissionais de enfermagem. Texto & contexto enferm.[Internet]. 2018 [acesso em 01 de fevereiro 2019]; 27(3). Disponível em: https://doi.org/10.1590/0104-070720180002670016.

27. Notaro KAM. Avaliação da cultura de segurança do paciente em unidades de neonatologia na perspectiva da equipe multiprofissional. [Mestrado em Enfermagem]. Belo Horizonte (Brasil): Universidade Federal de Minas Gerais; 2017. [acesso em 12 de fevereiro 2018]. Disponível em: https://repositorio.ufmg.br/handle/1843/ANDO-AUUNPX.

28. Rizalar S, Topcu SY. The patient safety culture perception of Turkish nurses who work in operating room and intensive care unit. Pak J Med Sci.[Internet]. 2017 [cited 2019 apr 02]. Available from: https://doi.org/10.12669/pjms.332.11727.

29. Magalhães FHL, Pereira ICA, Luiz RB, Barbosa MH, Ferreira MBG. Clima de segurança do paciente em um hospital de ensino. Rev. gaúch. enferm. [Internet]. 2019 [acesso em 15 de fevereiro 2019]; 40. Disponível em: https://doi.org/10.1590/1983-1447.2019.20180272

30. Andrade LEL, et al. Cultura de segurança do paciente em três hospitais brasileiros com diferentes tipos de gestão. Ciênc Saúde Colet. [Internet]. 2018 [acesso em 05 de fevereiro 2019]; 23(1). Disponível em: https://doi.org/10.1590/1413-81232018231.24392015.

Corresponding author
Lívia Teixeira Tavares
Address: Rua Carlos Maron, 62, Edifício Candeal
Avenida, Candeal, Salvador/BA, Brazil
Zip code: 40.296-220
Email address: liviateixeiratavares@gmail.com

**Disclaimer: The authors claim to
have no conflict of interest.**