RESULTS OF A SAFETY CULTURE SURVEY IN A TEACHING PUBLIC HOSPITAL IN CEARÁ

Resultados da avaliação da cultura de segurança em um hospital público de ensino do Ceará

Resultados de la evaluación de la cultura de seguridad en un hospital público de enseñanza de Ceará

Original Article

Fernanda Colares de Borba Netto[1,3]
Fernanda Gadelha Severino[2,3]

ABSTRACT

Objective: To evaluate the characteristics of the patient safety culture of a public teaching hospital, identifying its strengths and fragilities. **Methods:** Observational, cross-sectional, quantitative study, conducted between December 2014 and January 2015, through the application of the Portuguese-adapted version of the Hospital Survey on Patient Safety Culture (HSOPSC) questionnaire to employees of a referral hospital in Fortaleza, Ceará, Brazil. Data analysis was conducted by means of calculation of absolute and percentage values of positivity for each dimension of patient safety assessed in the instrument. **Results:** Expectations regarding the supervisor/chief and the actions promoting patient safety, and teamwork were the key points identified within the units, with 79% (n=380/484) and 73% (n=335/501) of positivity in the answers, respectively. In relation to the improvement opportunities, the main point identified was the non-punitive response to errors, which had the lowest percentage of positivity (18%, n=74/365). Other points to be improved that also stand out are shift changes/patient handover and staff adequacy (45%; n=225/470 and 36%; n=380/484). **Conclusion:** The safety culture of the evaluated hospital is characterized by the teamwork and present as fragilities the punitive issues, shift changes/patient handover and staff adequacy.

Descriptors: Patient Safety; Patient Harm; Quality Insurance, Health Care.

RESUMO

Objetivo: *Avaliar as dimensões da cultura de segurança do paciente de um hospital público de ensino, identificando suas áreas fortes e frágeis.* **Métodos:** *Estudo observacional, seccional, quantitativo, realizado entre dezembro de 2014 e janeiro de 2015, através da aplicação da versão adaptada para o português do questionário Hospital Survey on Patient Safety Culture (HSOPSC) com funcionários de um hospital de referência de Fortaleza, Ceará, Brasil. A análise dos resultados ocorreu por meio do cálculo dos valores absolutos e relativos de positividade para cada uma das 12 dimensões de segurança do paciente avaliadas no instrumento.* **Resultados:** *A expectativa sobre o seu supervisor/chefe e ações promotoras da segurança do paciente e o trabalho em equipe foram os principais pontos identificados dentro das unidades, com 79% (n=380/484) e 73% (n=335/501) de positividade nas respostas, respectivamente. Em relação às oportunidades de melhoria, o principal ponto identificado foi a resposta não punitiva aos erros, que teve o menor percentual de positividade (18%; n=74/365). Outros pontos a se melhorar que também merecem destaque foram a passagem de plantão ou de turno/transferências e a adequação dos profissionais (45%; n=225/470 e 36%; n=380/484).* **Conclusão:** *A cultura de segurança do hospital em questão é marcada pelo trabalho em equipe, tendo como pontos frágeis às questões punitivas, passagem de plantão e adequação dos profissionais.*

Descritores: *Segurança do Paciente; Dano ao Paciente; Garantia da Qualidade dos Cuidados de Saúde.*

1) Dr Waldemar Alcântara General Hospital (*Hospital Geral Dr. Waldemar Alcântara - HGWA*) - Fortaleza (CE) - Brazil

2) Institute of Health and Hospital Management (*Instituto de Saúde e Gestão Hospitalar - ISGH*) - Fortaleza (CE) - Brazil

3) University of Fortaleza (*Universidade de Fortaleza - UNIFOR*) - Fortaleza (CE) - Brazil

Received on: *06/02/2016*
Revised on: *07/10/2016*
Accepted on: *09/20/2016*

RESUMEN

Objetivo: *Evaluar las dimensiones de la cultura de seguridad del paciente de un hospital público de enseñanza identificando sus áreas fuertes y frágiles.* **Métodos:** *Estudio observacional, seccional y cuantitativo realizado entre diciembre de 2014 y enero de 2015 a través de la aplicación del cuestionario Hospital Survey on Patient Safety Culture (HSOPSC) en su versión adaptada para el portugués a empleados de un hospital de referencia de Fortaleza, Ceará, Brasil. El análisis de los resultados se dio a través del cálculo de los valores absolutos y relativos de positividad para cada una de las 12 dimensiones de seguridad del paciente evaluadas por el instrumento.* **Resultados:** *La expectativa sobre el supervisor/jefe y acciones de promoción de la seguridad del paciente y el trabajo en equipo fueron los principales aspectos identificados en las unidades con el 79% (n=380/484) y el 73% (n=335/501) de positividad en las respuestas, respectivamente. El principal aspecto identificado respecto las oportunidades de mejoría fue la respuesta no punitiva de los errores la cual tuvo el menor porcentaje de positividad (18%; n=74/365). Otros aspectos para mejorar y que también merecen atención fueron el cambio de guardia o de turno/transferencias y la adecuación de los profesionales (45%; n=225/470 y 36%; n=380/484).* **Conclusión:** *La cultura de seguridad del referido hospital está marcada por el trabajo en equipo con aspectos frágiles como las cuestiones de punición, el cambio de guardia y la adecuación de los profesionales.*

Descriptores: *Seguridad del Paciente; Daño del Paciente; Garantía de la Calidad de Atención de Salud.*

INTRODUCTION

The hospital area faces the challenge of constantly seeking changes that allow to rethink health in a broad way and guarantee the implementation of health promotion by combining strategies for healthy public policies, such as personal skills development, health system reorientation and the creation of healthy environments[1].

Hospital health units have become complex and vulnerable environments, which makes it increasingly necessary that the health work processes seek improvements with a focus on patient safety[2]. Health promotion, inserted in the perspective of a novel model of healthcare pursuing the quality of life of the population and understanding the result as a set of determinants of socioeconomic, political, cultural and emotional scope influencing individuals, and not merely limited to the biological field[1], is a powerful tool in the transformation of these environments.

The World Health Organization (WHO), in an international classification consensus for patient safety, has defined safety as the reduction in the risk of unnecessary harm to an acceptable minimum, and describes acceptable minimum as the collective notions of available knowledge and resources in the context where health is provided, counterbalanced by the risk of non-treatment or other treatment[3].

In recent years, discussions on how to improve patient safety and reduce unnecessary harm have been increasing and a number of measures have been adopted, among which is the establishment of the Patient Safety Plan for hospital units[2].

The National Patient Safety Plan (*Plano Nacional de Segurança do Paciente - PNSP*) consists in four fundamental pillars: stimulus to safe care practice; citizen involvement in safety; inclusion of patient safety in teaching; and incrementing research on this theme[2]. Moreover, a specific topic perpasses these pillars: the safety culture, which is defined by the Ministry of Health as "a set of values, attitudes, skills and behaviors that determine the commitment to health and safety management, replacing guilt and punishment by the opportunity to learn from failures and improve healthcare"[4].

One can realize that developing safety culture in health institutions is the way to guarantee a quality and safe care for all, having as first step the determination of the existing level of safety culture in the institution at which this work is directed, rendering it possible to identify and manage safety issues in work routines and conditions, to assess the employees' safety-related perceptions and behaviors, to identify strengths, opportunities for improvement and the most fragile areas, so that interventions can be planned and implemented, as well as to allow benchmarking with other health units[5].

This type of evaluation should occur periodically, and may have multiple proposals, depending on the moment the institution is currently going through. Thus, it can be aimed at diagnosing safety culture and employee awareness about the subject, evaluating the implemented interventions, longitudinal monitoring, and comparing internal and external data to the organization[6].

The Hospital Survey on Patient Safety Culture (HSOPSC), created by the Agency for Healthcare Research and Quality (AHRQ), is a widely used instrument in the world for this purpose[7].

In Brazil, the evaluation of safety culture in hospitals is incipient and recent, and it is crucial to carry out a diagnosis in the hospital units and to work on the subject with employees and patients.

The objective of this study was to evaluate the dimensions of the patient safety culture of a public teaching hospital, identifying its strengths and fragilities.

METHODS

This is a observational, descriptive, cross-sectional, quantitative study performed in a public hospital inserted in the health network of the State of Ceará, Brazil, located in Messejana, Fortaleza municipality, during the period from December 2014 to January 2015.

This unit is managed by a Social Health Organization and run with a state government funding on a nonprofit basis; it has 323 beds and a clinical staff formed by professionals hired under the Brazilian Consolidation of Labor Laws. In 2013, it was certified by the Brazilian Ministry of Education as a teaching hospital[8,9] and was certified as a Fully Accredited by the National Accreditation Organization (*Organização Nacional de Acreditação - ONA*)[10].

The study population consisted of a convenience sample made up by the professionals working in the hospital unit, who had direct contact, or interacted directly with the hospitalized patients. Additionally, professionals who did not have direct contact with the patient, but whose job functions directly affected the inpatient care (leaders, managers, supervisors and administrators), were also included in the study.

For participation in the study, these inclusion criteria were adopted: the professional should have a weekly workload of at least 20 hours per week in the hospital, and be present in one of the work shifts during the data collection period. And as exclusion criteria, failing to understand the instrument applied or not returning the questionnaire answered.

Professionals of different sectors were invited to participate in the study while in their work environment, at a time when they could give attention to the interviewer. The printed instrument was delivered to the participants to be answered and returned a posteriori, with date for completion previously defined by the researchers, at the end of the work shift; the answered questionnaires were placed, without identification, into a sealed urn placed in the Center for Studies of the said Hospital.

The study used a validated version of the transcultural adaptation to Portuguese of the Hospital Survey on Patient Safety Culture (HSOPSC)[11], originally developed by the Agency for Healthcare Research and Quality (AHRQ)[7].

A descriptive analysis of the culture evaluation instrument was carried out according to the original study of Brazilian Portuguese cross-cultural validation of the questionnaire[11], based on the original instructions of the HSOPSC questionnaire[7]. In addition, the questionnaire responses also had their internal reliability verified through the calculation of Cronbach's alpha.

The percentage of positive responses was calculated for the dimensions of the patient safety culture and for each item composing the dimension, defined as the mean percentage of positive responses, using the following formula: % of positive responses of dimension X = (A/B) x100 {Legend: A = number of positive responses to dimension X items or to dimension X; B = total number of valid answers to dimension X items or to dimension X (positive, neutral and negative, excluding missing data)}. The 12 dimensions of patient safety culture of the HSOPSC were investigated, namely: teamwork within the units, expectations regarding the supervisor/chief and actions promoting patient safety, organizational learning - continuous improvement, managerment support for patient safety, feedback in information and error communication, communication openness, frequency of error reporting, teamwork across the units, staff adequacy, shift changes/ patient handover, non-punitive responses to errors, besides the overall perception of the patient safety culture.

Positive answers were those in which options 4 or 5 (I agree/totally agree or almost always/always) were chosen for positively worded sentences, or options 1 or 2 (I disagree/ totally disagree or never/rarely) were picked in negatively constructed questions. Neutral answers refer to those where option 3 (neither disagree nor agree, or sometimes) was selected for any question. Negative answers refer to responses that had options 1 or 2 (I disagree/totally disagree or never/rarely) chosen in positively worded questions, or 4 or 5 (I agree/totally agree or almost always/always) in negatively formulated sentences.

The negatively worded sentences were these ones in Section A: 5/8/10/12/14/16/17; Section B: 3/4; Section C: 6; and Section F: 2/3/5/6/7/9/11.

From the data collection, a database was constructed using SPSS-14.0, in which the absolute and relative values for each dimension and respective items were calculated.

When analyzing the percentage of positive responses, one can identify the positive reaction in relation to the patient safety culture and point out the strengths and fragilities in patient safety. The "strong areas in patient safety" of the hospital were those whose positively worded items obtained 75% of positive responses ("totally agree" or "agree"), or those whose negatively worded items reached 75% of negative responses ("totally disagree" or "disagree"). Similarly, the "fragile areas of patient safety", which require improvements, were identified as those whose items reached 50% or less of positive responses[11].

The present study is in compliance with the ethical precepts of Resolution 466/12 of the National Health Council/Ministry of Health, which rules on research

involving human beings[12], and was approved by the Research Ethics Committee of the Health Secretariat of the State of Ceará (SESA/CE) under no. 048014/2015, being in conformity with all requested documents.

RESULTS

The study included 128 employees, distributed in different sectors (care and administrative units) and three hospital shifts (morning, afternoon and evening), which

Table I - Percentage of positivity to questions in the Hospital Survey on Patient Safety Culture (HSOPSC) questionnaire applied in a teaching hospital. Fortaleza, Ceará, 2015. Part I.

Variables	Positivity	n
a) Teamwork within units		
In this unit, people support one another	70%	127
When a lot of work needs to be done quickly, we work together as a team to properly complete it	76%	126
In this unit, people treat each other with respect	77%	127
When one area/unit of work gets overwhelmed, others help out	43%	121
Total in the dimension	73%	
b) Expectations regarding the supervisor/chief and actions promoting patient safety		
My supervisor praises when he sees work performed in accordance with established patient safety procedures	69%	120
My supervisor really takes into account staff suggestions (regardless of employment relationship) for improving patient safety	82%	119
Whenever pressure increases, my supervisor wants us to work faster, even if it means "taking shortcuts"	76%	124
My supervisor overlook patient safety problems that happen repeatedly	88%	121
Total in the dimension	79%	
c) Organizational learning - continuous improvement		
We are actively doing things to improve patient safety	92%	124
Errors, mistakes or failures have led to positive changes around here	66%	119
After we implement changes to improve patient safety, we evaluate their effectiveness	71%	122
Total in the dimension	71%	
d) Management support for patient safety		
Hospital management provides a work climate that promotes patient safety	62%	124
The actions of hospital management demonstrate that patient safety is the main priority	61%	121
Hospital management seems interested in patient safety only when an adverse event happens	59%	124
Total in the dimension	61%	
e) Feedback in information and communication about error		
We are given feedback about changes put into place based on event reports	54%	116
We are informed about errors that happen in this unit	53%	123
In this unit, we discuss ways to prevent errors from happening again	73%	128
Total in the dimension	54%	
f) Communication openness		
Staff (regardless of employment relationship) are free to speak up if they see something that can negatively affect patient care	71%	121
Staff (regardless of employment relationship) feel free to question the decisions or actions of their superiors	52%	126
Staff (regardless of employment relationship) are afraid to ask questions when something does not seem right	22%	127
Total in the dimension	52%	

is equivalent to 11.4% of the total number of hospital employees.

The questionnaire obtained good reliability by Cronbach's alpha, which was 0.77.

On the percentage of positive responses in each dimension and in each dimension question, the results found are distributed in the table below (Table I).

Thus, it can be observed that the institution has four dimensions as fragile points of the patient's safety culture, one as a strong point, and seven dimensions considered adequate (Table II).

Regarding the number of events reported by employees in the last year, it can be seen that most (59%, n=62) reported no events (Table III).

Table I - Percentage of positivity to questions in the Hospital Survey on Patient Safety Culture (HSOPSC) questionnaire applied in a teaching hospital. Fortaleza, Ceará, 2015. Part II.

Variables	Positivity	n
g) Frequency of errors reported		
When an error, mistake or failure occurs, but is perceived and corrected before affecting the patient, how often is this reported?	54%	114
When an error, mistake or failure occurs, but there is no potential to harm the patient, how often is this reported?	49%	115
When an error, mistake, or failure occurs that could harm the patient, but does not, how often is this reported?	53%	113
Total in the dimension	53%	
h) Teamwork across units		
Hospital units are not well coordinated with each other	39%	119
There is good cooperation among hospital units that need to work together	47%	121
It is often unpleasant to work along with professionals (regardless of employment relationship) of other hospital units	54%	122
Hospital units work well together to provide the best care for patients	65%	121
Total in the dimension	51%	
i) Staff adequacy		
We have enough staff (regardless of employment relationship) to handle the workload.	29%	126
In this unit, staff (regardless of employment relationship) work longer hours than would be the best for patient care	40%	117
We use more outsourced/temporary professionals than would be desirable for patient care	64%	120
We work on "crisis mode" trying to do a lot and very fast	32%	116
Total in the dimension	36%	
j) Shift changes/ patient handover	Positivity	N
The care process is compromised when a patient is transferred from one unit to another	44%	117
Loss of important patient care information during shift changes commonly occurs.	45%	120
Problems often occur in the exchange of information across hospital units	40%	120
In this hospital, shift changes are problematic for patients	63%	113
Total in the dimension	45%	
l) Non-punitive responses to errors		
Staff (regardless of employment relationship) feel like that their failures can be used against them	18%	122
When an event is reported, it seems that the focus is on the person rather than on the problem	35%	123
Staff (regardless of employment relationship) worry that their errors, mistakes or failures are recorded in their personnel files	8%	120
Total in the dimension	18%	
m) Overall perception of patient safety culture		
Erros, enganos ou falhas mais graves não acontecem por aqui apenas por acaso	42%	114
Patient safety is never compromised because of the greater amount of work to be done	38%	122
In this unit we have patient safety problems	46%	120
Our procedures and systems are adequate to prevent errors from happening	64%	122
Total in the dimension	44%	

Table II - Percentage of positivity in relation to each dimension of safety culture of the Hospital Survey on Patient Safety Culture (HSOPSC) questionnaire applied in a teaching hospital. Fortaleza, Ceará, 2015.

Dimension	Percentage of Positivity	Classification
a) Teamwork within units	73%	Suitable
b) Expectations regarding the supervisor/chief and actions promoting patient safety	79%	Strong
c) Organizational learning - continuous improvement	71%	Suitable
d) Management support for patient safety	61%	Suitable
e) Feedback in information and communication about error	54%	Suitable
f) Communication openness	52%	Suitable
g) Frequency of errors reported	53%	Suitable
h) Teamwork across units	51%	Suitable
i) Staff adequacy	36%	Fragile
j) Shift change/patient handover	45%	Fragile
l) Non-punitive responses to errors	18%	Fragile
m) General perception of patient safety culture	44%	Fragile

Table III - Number of events reported in the last 12 months in the Hospital Survey on Patient Safety Culture (HSOPSC) questionnaire applied in a teaching hospital. Fortaleza-Ceará, 2015.

Number of events reported	n	%
No report	62	59
1-2 reports	23	22
3-5 reports	11	10
6-15 reports	4	4
16-20 reports	2	2
≥21 reports	3	3

DISCUSSION

HSOPSC is a tool used in a variety of countries to evaluate safety culture in hospitals and has been translated into several languages and endorsed by the European Union Network for Patient Safety[13]. The studies generally demonstrate their results by means of the percentage of positivity in each dimension and in relation to the total number of events reported by the respondents[14,15].

For a hospital to solidify the safety culture, it needs to develop a fair culture, a notification culture and an organizational learning environment[16]. Therefore, the notification of incidents is regarded an essential factor for the establishment of safety culture. In the study in question, it can be seen that the reporting rate of incidents is low, as most respondents did not report any events in the last year. Moreover, it can be seen that the dimension with the lowest percentage of positivity was the non-punitive responses to errors. This suggests that the employees do not report incidents for fear of being reprimanded or punished for them, for fear of humiliation, or fear that the notification will not lead to any change in the organization[5].

It is emphasized that this result is frequently observed in other studies. The application of the HSOPSC questionnaire in Slovenia[17] showed 39% positivity in the item related to the non-punitive response to errors, which was explained by the existence, in this country, of a culture of fear and shame regarding errors, even when unintended, since there is a real possibility of legal proceedings and temporary suspension of the health professionals' licenses, in case these occur. In hospitals in Lebanon, Saudi Arabia and Turkey[5,14,18], the answer to items related to the non-punitive response to errors and incident reporting was also similar to that found in the present study, demonstrating that interventions should be worked out both among managers and employees in order to develop an environment of non-punishment and encouragement of notification, since underreporting poses a threat to patient safety[18].

Another point highlighted as an opportunity for improvement in the present study was the fragility in shift changes/patient handover. It is already well known that proper communication is essential to avoid threats to patients' safety, since communication failures are identified as contributing factors for the occurrence of events[19]. In a study carried out in Oakland, California[20], it was seen that, of 2,455 sentinel events reported to the Joint Commission on the Accreditation of Healthcare Organizations, the root cause in more than 70% of them was related to communication.

Therefore, investigating the communication in health units and seeking subsidies for attitude change in relation to this topic are strategies of utmost importance, with a view to improving communication lines, thus favoring the safety care for the patient[19].

The third point emphasized here for improvement was related to the staff adequacy. Professional satisfaction directly influences the safety culture and is related to the lower occurrence of adverse events[21].

Thus, perhaps greater attention to this point, with a greater attention to work processes, could improve motivation, and hence improve the safety culture[5].

The strongest point demonstrated in the current research in question is related to teamwork within the units. A well-coordinated team, with a good communication channel and working cooperatively, produces a more humanized care and avoids situations of discontinuity and high risk for the patient[21]. A literature review on teamwork and patient safety[22] states that several studies investigating the contributing factors to the occurrence of adverse events have demonstrated that teamwork plays a key role in causing and preventing these events. This suggests that the institution investigated in the present study is on the right path and that, by acting on the points suggested, it can improve and strengthen its safety culture even further.

According to the National Health Promotion Policy, the promotion of health aims at improving the living conditions of the population and the recognition of the right to citizenship. Therefore, health promotion emerges as an important way of restructuring the hospital healthcare model, which should be not merely focused on the disease, but also on the quality of life improvement, continuity of therapy, and social reintegration. In this way, safety culture and atmosphere must be part of the hospital environment, so as to provide safe conditions in planning continuous improvement actions with adequate physical infrastructure, human, materials, and equipment resources, for the safe development of health actions. For doing so, it is necessary to continuously evaluate the organizational safety culture, as well as the creation of systems for surveillance and monitoring of diseases and injuries, with the aim of continuously preventing and improving healthcare[1].

As limitations of the current study, one can cite the sample size. The sample corresponded to 10-15% of hospital employees, so the results found here can not be extrapolated. For future studies, it is suggested to increase this percentage, as well as to insert other hospital units, with a view to obtaining even more consistent results. It is suggested that the questionnaire be reapplied in the hospital of the current study after the implementation of the action plans focused on the improvement opportunities, as a form of evaluation of the improvements put into effect.

CONCLUSION

This study provided information that allowed to evaluate the dimensions of the patient safety culture of the hospital studied, identifying their strong and fragile areas. The patient safety culture of the investigated hospital is at a satisfactory level, since only four of the twelve dimensions assessed are below the acceptable minimum level. It stood out as strengths to be maintained the teamwork within the units, expectations regarding the supervisor/chief and actions promoting patient safety, and organizational learning - continuous improvement; and those points that should be worked as opportunities for improvement along the way to strengthen the safety culture, such as non-punitive responses to errors, staff adequacy and shift changes/patient handover.

REFERENCES

1. Pereira FGF, Matias EO, Ceatano JA, Lima FET. Segurança do paciente e promoção da saúde: uma reflexão emergente. Rev Baiana Enferm. 2015;29(3):271-7.

2. Ministério da Saúde (BR), Fundação Oswaldo Cruz, Agência Nacional de Vigilância Sanitária. Documento de referência para o Programa Nacional de Segurança do Paciente. Brasília: Ministério da Saúde; 2014 [accessed on 2015 Apr 28]. Available from: http://bvsms.saude.gov.br/bvs/publicacoes/documento_referencia_programa_nacional_seguranca.pdf.

3. World Health Organization. Conceptual Framework for the International Classification for Patient Safety Version 1.1. Final Technical Report. January 2009 [accessed on 2015 Apr 04]. Available from: http://www.who.int/patientsafety/implementation/taxonomy/icps_technical_report_en.pdf.

4. Ministério da Saúde (BR). Portaria nº. 529 de 01 de abril de 2013 [accessed on 2015 Apr 30]. Available from: http://www.saude.mt.gov.br/upload/controle-infeccoes/pasta2/portaria-msgm-n-529-de-01-04-2013.pdf

5. El-Jardali F, Dimassi H, Jamal D, Jaafar M, Hemadeh N. Predictors and outcomes of patient safety culture in hospitals. BMC Health Serv Res [Internet]. 2011 [accessed on 2015 Apr 28].];11:45. Available from: http://www.biomedcentral.com/1472-6963/11/45

6. Reis CT, Laguardia J, Martins M. Adaptação transcultural da versão brasileira do Hospital Survey on Patient Safety Culture: etapa inicial. Cad Saúde Pública. 2012;28(11):2199-210.

7. Sorra JS, Nieva VF. Hospital Survey on Patient Safety Culture [Internet]. AHRQ Publication Nº. 04-0041. 2004 [accessed on 2015 Apr 15]. Available from: http://proqualis.net/sites/proqualis.net/files/User%20guide%20HSOPSC.pdf

8. Ministério da Saúde (BR), Ministério da Educação. Portaria Interministerial nº 233. Brasília: Ministério da Saúde; 2013 [accessed on 2016 Sept 08]. Available from: http://bvsms.saude.gov.br/bvs/saudelegis/gm/2013/pri0233_14_02_2013_rep.html

9. Ministério da Saúde (BR), Ministério da Educação. Portaria Interministerial nº 148. Brasília: Ministério da Saúde; 2016 [accessed on 2016 Sept 07]. Available from http://sintse.tse.jus.br/documentos/2016/Fev/4/portaria-interministerial-no-148-de-2-de-fevereiro.

10. Instituto de Saúde e Gestão Hospitalar (ISGH). Histórico do ISGH [accessed on 2015 Apr 27]. Available from: http://www.isgh.org.br/site/index.php?option=com_content&view=article&id=77&Itemid=475.

11. Reis CT. A cultura de segurança do paciente: validação de um instrumento de mensuração para o contexto hospitalar brasileiro [tese]. Rio de Janeiro: Escola Nacional de Saúde Pública Sergio Arouca; 2013.

12. Conselho Nacional de Saúde (BR). Resolução nº. 466 de 12 de dezembro de 2012 - Regulamenta a Resolução nº. 196/96 acerca das Diretrizes e Normas Regulamentadoras de Pesquisas Envolvendo Seres Humanos [Internet]. 2012 [accessed on 2015 Jan 27]. Available from: http://conselho.saude.gov.br/resolucoes/2012/Reso466.pdf

13. Perneger TV, Staines A, Kundig F. Internal consistency, factor structure and construct validity of the French version of the Hospital Survey on Patient Safety Culture. BMJ Qual Saf. 2014;23:389-97.

14. 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 [Internet]. 2014 [accessed on 2015 May 02];14:122. Available from: http://www.biomedcentral.com/1472-6963/14/122

15. Santiago THR, Turrini RNT. Cultura e clima organizacional para segurança do paciente em Unidades de Terapia Intensiva. Rev Esc Enferm USP. 2015;49(Esp):123-30.

16. World Alliance for Patient Safety: Summary of the evidence on patient safety: implications for research. Geneva, Switzerland: World Health Organization; 2008 [accessed on 2015 Apr 20]. Available from: http://www.who.int/patientsafety/information_centre/20080523_Summary_of_the_evidence_on_patient_safety.pdf

17. Robida A. Hospital survey on patient safety culture in Slovenia: a psychometric evaluation. Int J Qual Health Care. 2013;25(4):469-75.

18. Günes ÜY, Öznur G, Sonmez M. A survey of the patient safety culture of hospital nurses in Turkey. Collegian. 2016;23(2):225-32.

19. Bohrer CD, Marques LGS, Vasconcelos RO, Oliveira JLC, Nicola AL, Kawamoto AM. Comunicação e cultura de segurança do paciente no ambiente hospitalar: visão da equipe multiprofissional. Rev Enferm UFSM. 2016;6(1):50-60.

20. Leonard M, Graham S, Bonacum D. The human factor: the critical importance of effective teamwork and communication in providing safe care. Qual Saf Health Care. 2004;13(Supl 1):85-90.

21. Carvalho PA, Göttems LBD, Pires MRGM, Oliveira MLC. Cultura de segurança no centrocirúrgico de um hospital público, na percepção dos profissionais de saúde. Rev Latinoam Enferm. 2015;23(6):1041-8.

22. Mansert T. Teamwork and patient safety in dynamic domains of healthcare: a review of the literature**.** Acta Anaesthesiol Scand. 2009;53(2):143-51.

Mailing address:
Fernanda Colares de Borba Netto
Hospital Geral Dr. Waldemar Alcântara/ Direção Geral
Rua Pergentino Maia, 1559
Bairro: Messejana
CEP: 60840-045 - Fortaleza - CE - Brasil
E-mail: fernanda@isgh.org.br