

ORIGINAL ARTICLE

PATIENT SAFETY CULTURE DIAGNOSIS
DIAGNÓSTICO DE CULTURA DE SEGURANÇA DO PACIENTE
DIAGNOSTICO DE CULTURA DE SEGURIDAD DEL PACIENTE

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ABSTRACT



Objective: to conduct a survey of the patient safety culture diagnosis to investigate the perception of the multi-professional team of a habitual risk maternity ward on patient safety. **Method:** this is a quantitative, descriptive, cross-sectional study with professionals from a usual risk maternity hospital. Data was collected through the application of 98 questionnaires Safety Attitudes Questionnaire - short form 2006. **Results:** it was observed that only 47 (87.03%) questionnaires were valid and, of the 47 questionnaires analyzed about safety culture evaluation, the domains were below the points average considered adequate (≥ 75) in: Job Satisfaction (70.10%); Teamwork climate (62.68%) and Stress perception (57.19%); the Perceptions of Sector Management and General Management (46.49%) and Working Conditions domains had the lowest study average (44.61%). **Conclusion:** it is understood that the institution studied has a fragile safety culture and is in a pathological stage in relation to the patient safety culture maturity model. **Descriptors:** Patient Safety; Maternity; Multiprofessional Team; Safety Culture; Diagnosis of Culture and Adverse Events.

RESUMO

Objetivo: realizar um levantamento do diagnóstico de cultura de segurança do paciente para investigar a percepção da equipe multiprofissional de uma maternidade de risco habitual sobre a segurança do paciente. **Método:** trata-se de estudo quantitativo, descritivo, transversal, com profissionais de uma maternidade de risco habitual. Coletaram-se os dados por meio da aplicação de 98 questionários *Safety Attitudes Questionnaire - short form 2006*. **Resultados:** observou-se que somente 47 (87,03%) questionários eram válidos e, dos 47 questionários analisados sobre a avaliação da cultura de segurança, os domínios ficaram abaixo da média de pontos considerada adequada (≥ 75) em: Satisfação no trabalho (70,10%); Clima do trabalho em equipe (62,68%) e Percepção do estresse (57,19%); os domínios Percepção da gerência do setor e gerência geral (46,49%) e Condições de trabalho obtiveram a média mais baixa do estudo (44,61%). **Conclusão:** entende-se que a instituição estudada possui uma cultura de segurança frágil e encontra-se em estágio patológico em relação ao modelo de maturidade de cultura de segurança do paciente. **Descritores:** Segurança do Paciente; Maternidade; Equipe Multiprofissional; Cultura de Segurança; Diagnóstico da Cultura e Eventos Adversos.

RESUMEN

Objetivo: realizar una encuesta sobre el diagnóstico de la cultura de seguridad del paciente para investigar la percepción del equipo multiprofesional de una sala de maternidad de riesgo habitual sobre la seguridad del paciente. **Método:** este es un estudio cuantitativo, descriptivo, transversal con profesionales de un hospital de maternidad de riesgo habitual. Los datos se recolectaron mediante la aplicación de 98 cuestionarios *Safety Attitudes Questionnaire - short form 2006*. **Resultados:** se observó que solo 47 (87.03%) cuestionarios eran válidos y, de los 47 cuestionarios analizados sobre la evaluación del cultivo de seguridad, los dominios estaban por debajo del promedio de puntos considerado adecuado (≥ 75) en: Satisfacción laboral (70,10%); Clima de trabajo en equipo (62.68%) y Percepción de estrés (57.19%); las Percepciones de los ámbitos de gestión del sector y gestión general (46,49%) y Condiciones de trabajo tuvieron el promedio de estudio más bajo (44,61%). **Conclusión:** se entiende que la institución estudiada tiene una cultura de seguridad frágil y se encuentra en una etapa patológica en relación con el modelo de madurez de la cultura de seguridad del paciente. **Descritores:** Seguridad del Paciente; Responsabilidad Parental; Cultura de Seguridad; Diagnóstico de la Cultura y Eventos Adversos.

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INTRODUCTION

It is understood that although the term "patient safety" may be considered current, it was already introjected into the subconscious in the early days of patient care. It is reported that more than two thousand years ago Hippocrates had said "first, do no harm," but until recently, errors associated with care were considered an inevitable "byproduct" of modern medicine or a misfortune from poor providers of these services.¹

It is noted that this thinking began to change from 1999 onwards, with the study entitled "Making a mistake is human", published in 2000 by the US Institute of Medicine (IOM). In the report, patient safety issues are highlighted. The result of the study showed a number of patient deaths caused by adverse events, ranging from 45,000 to 100,000 per year. It is clear from this discussion that adverse events related to care can be considered frequent (around 10%) in the world literature.²

In Brazil, a recent survey of three teaching hospitals in Rio de Janeiro identified an incidence of 7.6% of patients with adverse events, of which 66.7% had preventable adverse events.³

In 2013, the Ministry of Health initiated the National Patient Safety Program, through Ordinance 529 and Resolution of the Collegiate Board (RDC) No. 36, regulating actions for patient safety in health services and making the implementation of Patient Safety Centers (NSPs) mandatory in health organizations. One of the functions of the program is to promote safety culture through the implementation of Safety Plans, safe care and involving all social actors, such as patient and caregivers in the care provided.^{4,5}

Patient Safety Nuclei (PSNs) need to be organically linked to management and have constant availability of general management, technical / medical management, nursing coordination and other instances that manage health care.⁵⁻⁶

In addition, although the increase in adverse events has led to international debates, due to the relevance of the issue and the relationship with the increase in morbidity and length of hospitalization, burdening health care costs, it is clear that many Initiatives have emerged in recent decades to promote strategies to ensure safer healthcare.² However, little is believed about the implementation of measures to reduce risks and increase safety in maternal and neonatal care institutions.

It is noted that although adverse events in obstetrics and neonatology may be considered relatively rare, the absolute number can be very significant given the number of women and

children receiving care. About 2% of obstetric patients are estimated to have some adverse event with damage during delivery.⁷

In a research conducted in Brazil, through a systematic review of the national and international literature, the analysis of data from the Brazilian adverse event reporting system (2007 to 2013) and the study of the influence of adverse events (AE) were presented in early neonatal death in a public maternity hospital in the city of Rio de Janeiro. According to research, the most common types of incidents in a neonatal intensive care unit (NICU) are those related to errors or failures in the use of medications, healthcare-related infections, skin lesions, mechanical ventilation, and intravascular catheters.⁸

In addition, the most relevant adverse events in the Brazilian notification system during the study period were: thermoregulation disorder (29%); blood glucose disorder (17%); upper respiratory tract infections of hospital origin (13.5%); unscheduled extubation (10%); death (6.2%); nasal septum lesion related to the central venous catheter (6%); hypotension (4.1%); renal failure (4%); convulsions / convulsive condition (1.6%); necrotizing enterocolitis (1%); intraperiventricular hemorrhage (0.5%); pneumothorax (0.5%) and thrombus (0.5%). It was also demonstrated, among adverse events, by the study that unscheduled extubation was a cause of death influence in this study group.⁸

Regarding obstetric and neonatal care, the high incidence of unnecessary and potentially dangerous interventions (eg, cesarean section, indiscriminate oxytocin use, routine episiotomy, etc.) can be discussed.⁷

It was evidenced, in a study conducted through a research in Belo Horizonte, between 2011 and 2013, through a survey on childbirth and birth, that, even in institutions that engage in practices of safe obstetric care model, the Intervention practices considered harmful, such as lying down (66.8%) and Kristeller (9.3%), are still present. In addition, practices considered inappropriate if employed without criteria, such as amniotomy (67.1%), oxytocin (41.7%) and episiotomy (8.4%), are used indiscriminately.⁸

From the human, cultural, social and emotional aspects involved in the process of pregnancy and childbirth, negative or positive experiences for the woman and her family that can last for a lifetime can be brought. It is a physiological process and not an expression of disease, so pregnancy and childbirth arouse positive expectations as to its results. Due to this expectation, it is difficult for everyone and professionals to deal with adverse events that may occur.⁷

The promotion of patient quality and safety in maternal and neonatal care is considered, considering the peculiarities intrinsic to the reproductive process and the care received by women and their children, of a particular character, and some specific and relevant questions should be pointed out in the implementation of the patient safety program in institutions that provide care for pregnant women and their children.⁷

It is pointed out that maternity care means caring for two or more lives (the mother and her child or children) and, in many situations, conflicts of interest arise between them in which a decision must be taken to the detriment of one for the benefit from the other. A classic example is cesarean section due to severe fetal growth restriction when there is no problem with the mother.⁷

Therefore, it is necessary to develop individual and group values, attitudes, competences and behavior patterns in institutions to disseminate, in health professionals, the perception of patient safety and, consequently, generate commitment and safe culture in the health institutions. Organizations with a positive safety culture are characterized by communication based on mutual trust through a common perception of the importance of safety and recognition of the effectiveness of preventive measures.¹

It is warned, considering the specificity that permeates a maternity, that epidemiological studies related to patient safety culture in maternity hospitals are still scarce and there is the importance of a strong safety culture in the institution studied, so the aim of this study was to perform a survey of the patient safety culture diagnosis through the application of the Safety Attitudes Questionnaire - short form 2006 instrument, translated, adapted and validated to Portuguese by Carvalho and Cassiani, 2012,¹⁰ to investigate the professionals' perception of safety of the patient of a maternity of habitual risk of the metropolitan region of Belo Horizonte.

OBJECTIVE

- To conduct a survey of the patient safety culture diagnosis to investigate the perception of the multi-professional team of a habitual risk maternity ward on patient safety.

METHOD

It is a study of a quantitative, descriptive, cross-sectional study. It is shown that it is a field study as a prerequisite of the Postgraduate Course in Obstetric and Neonatal Nursing of Santa Casa BH Teaching and Research.

To participate in the study, the professionals of a maternity at usual risk in the metropolitan

region of Belo Horizonte were listed. All professionals were invited to participate, both the care team and the diagnostic and administrative support team, except the professionals of hospital hygiene and cleaning. It is explained that hospital hygiene employees were not included in the study because they are a team of outsourced companies, in the process of adaptation and in a constant process of fluctuation.

It was decided to invite both the team that acts directly in the assistance as the administrative and support staff, because, knowingly, when it comes to patient safety, the whole team is involved, and from a problem in the equipment to a prescription error may endanger patient safety.

The inclusion criteria were: being a public maternity professional with a permanent or contracted relationship. All participants consented to participate through the Free and Informed Consent Term (FICT).

Data was collected from January 15, 2019 to February 5, 2019 by applying the Safety Attitudes Questionnaire (SAQ) translated and culturally adapted to the Brazilian reality¹⁰. 98 questionnaires were distributed, but only 54 (55.10%) were returned. In the analysis, only 47 (87.03%) questionnaires were valid, as the remaining (seven = 2.09%) were incomplete or incorrectly completed or without the signed Free and Informed Consent Term, being dropped from the study.

SAQ is used to evaluate safety culture in health institutions. This instrument is divided into two parts. The first consists of 41 questions divided into six domains: Teamwork climate; Job satisfaction; Perception of sector management and general management; Safety climate; Working conditions and stress perception. It consists of the second part of the professional data, gender, professional category and length of work.¹⁰

The answer to each question occurred as follows: Totally disagree = zero point; (B) Partially disagrees = 25 points; (C) Neutral = 50 points; (D) Partially agree = 75 points; (E) Strongly Agree = 100 points and (X) Not Applicable. The final score varies from zero to 100, where zero corresponds to the worst and 100 corresponds to the best perception of the patient's safety climate, and the scores considered positive are those that reached a value equal to or greater than 75 points.¹⁰

The development of the research was guided by the ethical precepts, according to the Guidelines and Regulatory Norms for Research involving Human Beings, provided for in Resolution No. 466/12 of the National Health Council.⁹ The study was approved by the Research Ethics Committee (REC) of Santa Casa BH

Teaching and Research and the Research Ethics Committee of the research reference municipality under the CAAE 02941618.5.0000.5138 and Opinion Number: 3.106.050. Servants were invited to participate in the study, and acceptance had as a prerequisite the signing of the Free and Informed Consent Term in two copies, one being with the main researcher and the other with the participant.

Data was collected and analyzed for statistical analysis using the STATA software program (Stata Corporation, College Station, Texas), version

12.0, and graphs in Excel 2016, considering a 5% level of significance.

RESULTS

98 questionnaires were distributed, but only 54 (55.10%) were returned. In the analysis, only 47 (87.03%) questionnaires were valid and the remaining (7 = 12.09%) were incomplete or incorrectly completed.

Table 1 shows the information regarding the participants.

Table 1. Profile of survey participants. Belo Horizonte (MG), Brazil, 2019.

Variables		n	%
Had you previously completed this instrument?	Yes	1	2.13
	No	46	97.87
Care Team	Nurse	2	7.14
	Nursing Technician	14	50.00
	Nursing assistant	5	17.86
	Pediatrician or Neonatologist	1	3.57
	Obstetrician Gynecologist	1	3.57
	Anesthetist	1	3.57
	Speech therapist	1	3.57
	Physiotherapist	1	3.57
	Pharmacist	1	3.57
	Others	1	3.57
	Receptionist	2	11.11
	Health Support Officer	3	16.67
	Nutrition and Dietetics Service	2	11.11
Administrative and support team	Clothing	5	27.78
	Human resources	1	5.56
	Reception and Lobby	4	22.22
	Others (Sanitizing Agent)	1	5.56
Gender	Man	9	20
	Woman	36	80
Time in specialty / acting at the Institution.	6 to 11 months	2	4.17
	1 to 2 years	1	2.08
	3 to 4 year	2	4.17
	5 to 10 year	9	18.75
	10 to 20 year	12	25
	21 years or more	22	45.83

Below are the answers according to each domain of the Safety Attitudes Questionnaire.

♦ Category 1: Climate Perception and Teamwork Satisfaction

It is generally described that the participants agreed with the statements related to the teamwork climate domain and favorably positioned themselves regarding satisfaction and pride in working in the institution and in the health area, according to tables 2 and 3.

Table 2. Climate perception and teamwork satisfaction. Belo Horizonte (MG), Brazil, 2019.

Variables		n	%
P1 - The nurse's suggestions are well received in this area.	Disagree	3	6
	Neutral	12	24
	Agree	28	56
	Strongly agree	7	14
	Strongly disagree	7	13.21
P2 - In this area it is difficult to speak openly if I perceive a problem with patient care.	Disagree	13	24.53
	Neutral	9	16.98
	Agree	20	37.74
	Strongly agree	4	7.55
	Strongly disagree	4	7.55
P3 - In this area, disagreements are resolved appropriately (eg not who is right, but what is best for the patient).	Disagree	8	15.09
	Neutral	18	33.96
	Agree	19	35.85
	Strongly agree	4	7.55
	Strongly disagree	4	7.84
P4 - I have the support I need from other staff members to care for patients.	Disagree	5	9.80
	Neutral	4	7.84
	Agree	30	58.82
	Strongly agree	8	15.69
	Strongly disagree	2	3.92
P5 - It's easy for practitioners in this area to ask questions when there is something they don't understand.	Disagree	3	5.88
	Neutral	12	23.53
	Agree	28	54.90
	Strongly agree	6	11.76
	Strongly disagree	6	11.11
P6 - The doctors and nurses here work together as a well-coordinated team.	Disagree	9	16.67
	Neutral	13	24.07
	Agree	21	38.89
	Strongly agree	5	9.26
	Strongly disagree	2	3.70

Table 3. Domain: Teamwork climate is right, but what is best for the patient. Belo Horizonte (MG), Brazil, 2019.

Variáveis		n	%
P15 - I like my job.	Neutral	3	5.56
	Agree	21	38.89
	Strongly agree	28	51.85
	Strongly disagree	3	5.77
P16 - Working here is like being part of a big family.	Disagree	2	3.85
	Neutral	4	7.69
	Agree	28	53.85
	Strongly agree	15	28.85
P17 - This is a good place to work.	Disagree	4	7.55
	Neutral	1	1.89
	Agree	32	60.38
	Strongly agree	16	30.19
P18 - I am proud to work in this area.	Disagree	1	1.89
	Neutral	9	16.98
	Agree	24	45.28
	Strongly agree	19	35.85
	Strongly disagree	6	11.76
P19 - The morale in this area is high.	Disagree	10	19.61
	Neutral	15	29.41
	Agree	18	35.29
	Strongly agree	2	3.92

♦ Category 2. Safety Climate Perception

Regarding the Safety Climate, 48.08% of the participants disagreed about the statement “I receive the appropriate return on my performance”, as shown in Table 4.

Table 4. Perception about the safety climate. Domain: Safety climate. Belo Horizonte (MG), Brazil, 2019.

Variables		n	%
P7 - I would feel safe if treated here as a patient.	Strongly disagree	6	11.32
	Disagree	2	3.77
	Neutral	9	16.98
	Agree	28	52.83
	Strongly agree	8	15.09
P8 - Errors are handled appropriately in this area.	Strongly disagree	3	5.56
	Disagree	12	22.22
	Neutral	18	33.33
	Agree	21	38.89
P9 - I know the proper ways to address patient safety issues in this area.	Strongly disagree	4	7.69
	Disagree	17	32.69
	Neutral	12	23.08
	Agree	16	30.77
	Strongly agree	3	5.77
P10 - I get appropriate feedback on my performance.	Strongly disagree	9	17.31
	Disagree	25	48.08
	Neutral	9	17.31
	Agree	6	11.54
	Strongly agree	3	5.77
P11 - In this area, it's hard to argue about mistakes.	Strongly disagree	8	14.81
	Disagree	15	27.78
	Neutral	20	37.04
	Agree	8	14.81
	Strongly agree	3	5.56
P12 - I am encouraged by my colleagues to report any concerns I may have about patient safety.	Strongly disagree	7	13.76
	Disagree	11	21.57
	Neutral	8	15.69
	Agree	20	39.22
	Strongly agree	5	9.80
P13 - The culture in this area makes it easy to learn from the mistakes of others.	Strongly disagree	3	5.77
	Disagree	8	15.38
	Neutral	19	36.54
	Agree	16	30.77
	Strongly agree	6	11.54

In the “Safety” domain, it is positively noted that 67.92% of participants strongly agree or agree that they would feel safe if treated at the institution as patients (P7) and 49.02% have the same opinion about being encouraged by colleagues to report any concerns they may have regarding patient safety (P12).

In this criterion, items P8 and P9 should be evaluated: in P8, 27.78% participants strongly disagree or disagree about the errors being properly treated in this area and 23.08% manifest as neutral; In addition, item P9, which deals with the knowledge of appropriate means to address patient safety issues in this area, presented 40.38% unfavorable answers and 23.08% neutral answers, demonstrating the team's lack of knowledge about adverse events, their notification and dealings with the institution.

The items P11 and P13 address the difficulty of debating errors and the culture of learning from them, a neutral result with a higher percentage.

♦ **Category 3. Stress perception X Working condition**

Table 5. Perception of stress X Working condition. Domain: Perception of stress. Belo Horizonte (MG), Brazil, 2019.

Variables		n	%
P20 - When my workload is excessive, my performance is impaired.	Strongly disagree	4	7.84
	Disagree	9	17.65
	Neutral	7	13.73
	Agree	22	43.14
	Strongly agree	9	17.65
P21 - I'm less efficient at work when I'm tired.	Strongly disagree	2	3.85
	Disagree	11	21.15
	Neutral	2	3.85
	Agree	29	55.77
	Strongly agree	8	15.38
P22 - I'm more likely to make mistakes in tense or hostile situations.	Strongly disagree	2	3.77
	Disagree	7	13.21
	Neutral	7	13.21
	Agree	26	49.06
	Strongly agree	11	20.75
P23 - Tiredness impairs my performance during emergency situations (eg bleeding, cardiorespiratory resuscitation, seizures).	Strongly disagree	3	6.38
	Disagree	11	23.40
	Neutral	11	23.40
	Agree	15	31.91
	Strongly agree	7	14.89

Table 6. Perception of stress X Working condition. Domain: Working conditions. Belo Horizonte (MG), Brazil, 2019.

Variables		n	%
P30 - This hospital does a good job of training new staff members.	Strongly disagree	7	12.96
	Disagree	20	37.04
	Neutral	12	22.22
	Agree	12	22.22
	Strongly agree	3	5.56
P31 - All the information needed for diagnostic and therapeutic decisions is routinely available to me.	Strongly disagree	6	12.77
	Disagree	11	23.40
	Neutral	18	38.30
	Agree	10	21.28
	Strongly agree	2	4.26
P32 - Interns in my profession are adequately supervised.	Strongly disagree	5	11.11
	Disagree	8	17.78
	Neutral	22	48.89
	Agree	8	17.78
	Strongly agree	2	4.44

♦ Category 4: Industry Management Perception and General Management

In the domain Perception of sector management and general management, most respondents disagreed with the statements, for example, 55.56% disagree with the statement “In this area, the number and qualification of professionals are sufficient to deal with number of patients ”, and this assessment can be seen in table 7.

Table 7. Perception of sector management and general management. Belo Horizonte (MG), Brazil, 2019.

Variables		n	%
P14 - My security suggestions would be put into action if I expressed them to management.	Strongly disagree	4	8
	Disagree	5	10
	Neutral	22	44
	Agree	13	26
	Strongly agree	6	12
P24 - Management supports my daily efforts (Adm. Unit).	Strongly disagree	6	11.76
	Disagree	6	11.76
	Neutral	19	37.25
	Agree	16	31.37
	Strongly agree	4	7.84
P25 - Administration does not knowingly compromise patient safety (Adm. Unit).	Strongly disagree	5	10.20
	Disagree	16	32.65
	Neutral	18	36.73
	Agree	6	12.24
	Strongly agree	4	8.16
P26 - Management is doing a good job (Adm. Unit).	Strongly disagree	4	7.69
	Disagree	6	11.54
	Neutral	16	30.77
	Agree	23	44.23
	Strongly agree	3	5.77
P27 - Troubled staff members are constructively treated by our management (Adm. Unit).	Strongly disagree	7	13.46
	Disagree	16	30.77
	Neutral	21	40.38
	Agree	7	13.46
	Strongly agree	1	1.92
P28 - I receive appropriate and timely information about events that may affect my work at: (Adm. Unit).	Strongly disagree	4	7.69
	Disagree	14	26.92
	Neutral	16	30.77
	Agree	18	34.62
	Strongly agree	1	1.85
P29 - In this area, the number and qualification of professionals is sufficient to cope with the number of patients.	Strongly disagree	11	20.37
	Disagree	30	55.56
	Neutral	8	14.81
	Agree	4	7.41
	Strongly agree	1	1.85

DISCUSSION

It is pointed out by the result of the research that, in the health institution studied, the patient safety theme is still unknown to most professionals and is not a widely used management tool for the quality of care to users of health services. . It is clear how the theme is moving slowly, considering that the theme for patient safety started in the late 1990s in the United States of America; In addition, when implemented, the Patient Safety Centers are performed without previously evaluating the patient's safety perception and culture in the team that makes them up, hindering their effective planning and execution.¹¹

It is noteworthy that another point that reinforces how patient safety is still incipient in the institution studied is that more than 80% of the research participants have five years or more of professional experience and yet they are unaware of this tool.

It is noted that although the object of study of this research was the multidisciplinary team, the results were compared with other studies conducted in Brazil and that the team profile was predominantly composed of nursing. Seven studies in Brazil and one in Argentina were analyzed and only two studies involved the multidisciplinary team, however, no study conducted the

questionnaire to measure patient safety with the support and administrative team.¹¹⁻¹⁹

It becomes expressive, even the research being conducted with multi-professional team, the participation of the Nursing team, because, among the care team, 7.14% were nurses; 50%, Nursing technicians and 17.86%, Nursing assistants, which directly influences the expressive result of 80% of women in the research. In studies, it is pointed out that the health profession, in particular, Nursing, is typically female and can be confirmed with statistical data, as available in research conducted by the Oswaldo Cruz Foundation (FIOCRUZ) and the Federal Nursing Council (COFEN). in 2013, where 84.7% of nursing professionals were female.²⁰⁻²

Of the 47 questionnaires analyzed on safety culture assessment, the domains were below the average score considered adequate (≥ 75) in: Job satisfaction (70.10%); Teamwork climate (62.68%) and Perception of stress (57.19%). Perception of Sector Management and General Management (46.49%) and Working Conditions domains, the lowest average of the study (44.61%) was obtained, that is, the domain “Satisfaction at work” was the best rated, while the “Working Conditions” and “Perception of Sector Management and General Management” domains were the worst rated.

In all items of the domain “Job Satisfaction”, favorable results were obtained above 80% of the answers, except for item P19, related to professional morale, which obtained a favorable result above 35%.

It reveals itself in a succinct concept of morality, which is a set of beliefs and norms that guides both individual and collective behavior in a society, parameter between right or wrong action according to the values, beliefs and culture of the individual and the environment in which he is inserted.²²

The positive results of items P1 (70%), P4 (74.51%) and P5 (66.66%) were positively highlighted when the results “agree” and “strongly agree” were added. These items, respectively, address the acceptance of nurses' suggestions in this area, the support, when necessary, of other team members to care for patients and the ease of professionals asking questions when there is something they do not understand.

Other items that stand out for their percentage of neutral answers are described as questions P3 and P6; in the first, 33.96% of the participants do not express a favorable or unfavorable opinion when asked about the disagreements being resolved appropriately, and in the second, 24.07% manifest as neutral about the doctors and nurses of the institution working together as a well-coordinated team.

It is noteworthy that the score refers to job satisfaction, a fact that is evident from the good rapport and bonding of the team, because as it is a team that has experience and has been working together for a considerable time, there is confidence and security on the work team.

It is shown, in a study cited in other works, approximate result to this in relation to satisfaction in nursing work, a result considered positive, because job satisfaction is directly related to the quality of care provided and institutions that have, in their framework of employees, predominance of job dissatisfaction have high turnover rates and, as a consequence, higher occurrences of adverse events.²³

In a study conducted in the United States, 41% of the nurses were dissatisfied with their work; in Canada, this frequency was only 17%; In England, the percentage of nurses intending to leave the profession is 38.9%, and in Norway, the percentage was 26%. Salary and autonomy are some of the factors that can influence the satisfaction of nursing professionals, and nurses who have the opportunity for professional growth in their work are more satisfied with the profession and have a greater intention to stay in the institution.²³

Studies show that, in Brazil, the accumulation of activities and the low expectations of continuing the process of obtaining new knowledge are causes of dissatisfaction among nursing professionals and are also factors that affect quality and performance of the professional, compromising patient safety.²³

This results in a favorable working climate, however, with some weaknesses related to problem solving, such as adverse events and communication between the care team.

Although the subject of patient safety is still shy in Brazilian health institutions, it is measured by several studies, patient safety in Brazil and in other countries. Research in these studies has shown that patient safety scores were poor, reporting to other similar studies.¹¹⁻⁵

James Reason developed in the late twentieth century the theory of human error as an unintended consequence of executing an incorrect or inadequate plan of a planned action, ie the plan may be appropriate, but the actions do not occur as planned or not sufficient to achieve the proposed objectives.²⁴

It is assumed by reason that human errors can be dealt with in two ways: one centered on people with a personal, punitive approach, emerging in this model the culture of fear, where human error is assumed as a moral issue, that the cause of the error stems from incorrect mental processes, inattention and caution.²⁴

On the other hand, this is the systemic approach, that is, the systemic and error-leading model, contradicting the first strand in the system-centered approach, assuming that human beings fail and errors are predicted and are systemic models, which allow failures in the process and procedure development chain. In this model, we work with the just culture, that is, the culture of learning from mistakes. It seeks to identify, when a human error occurs, where the process or barrier has failed, and to correct that failure, and on this premise does not mean to neglect the individual, but to make him or her more vigilant and accountable for their actions.²

This study presents, by the result, a perception of safety climate still very weak in the studied environment, with some weaknesses related to the demystification of adverse events, as well as their dealings, which should focus on the work process and not on the individual.

Regarding the stress perception domain, 43.14% agree that “when the workload is excessive, performance is impaired”, while in the Working Conditions domain, 48.89% are neutral in regarding “trainees of my profession are adequately supervised”; 38.30% also say they are neutral in the statement “all the information needed for diagnostic and therapeutic decisions is

routinely available to me" and 37.04% disagree that "this hospital does a good job of training new staff members." Generally speaking, poor working conditions increase the stress of professionals.

There is the influence of the neoliberal model in the country as one of the factors that contribute to the increasingly precarious working conditions in health institutions. This model presents, as a principle, the reduction of public machines and financial transfers to these institutions, but without reducing demands and offers of health services, that is, productivity and automatism of work are prioritized. This makes health care organizations more precarious in the availability of human, material and structural resources.²⁵

Therefore, they become reflections of a neoliberal structure, an undersizing of the health team, causing strangulation of all care activities, work overload, multitasking, the absence of a continuing education that supports updates and the acquisition of new knowledge for teams.²⁵

Neurocognitive functions can be affected in sleep deprivation and fatigue caused by excessive hours worked without adequate rest, exponentially increasing the risk of incidents with or without harm to patients and staff at each subsequent hour of work.²⁷⁻⁸

Performance is impaired by fatigue, interfering with the mechanism of attention and reaction time, clinical judgment and clinical conduct. Fatigue can lead to wasted time in decision making at critical times, increasing the risk of error. Through exhausting and long working hours, it contributes to the onset of fatigue, which promotes the reduction of vital energy and the increase of anxiety, depression and anger.²⁵

Therefore, in this study, it is emphasized that the result presents a perception of stress and unfavorable working conditions and weaknesses that may result in risks and adverse events.

Therefore, a perception of sector management and weak general management was identified in the study, suggesting that there is a gap between teams and their hierarchies, and that failures in patient safety culminate in a punitive culture for professionals, nullifying the prerogative to learn from the mistakes cultivated in a strong safety culture. The weakness in relation to the support of managers at the assistance level is evidenced, when the work climate proposed by the management does not favor the safety culture and planning and quality improvement goals can be demotivated and lost within the work units, compromising its effectiveness.¹¹

The management of health services also follows the models with vertical, centralized and hierarchical structures, where there is a predominance of greater supervision of workers,

greater control of actions and decisions of workers tend to be nullified. These models contribute to a weakened patient safety culture.²⁵

Managers are responsible for the quality and safety of patient care, and it is well known that new management, education and evaluation structures are essential for improving the quality of care and promoting patient safety, but not enough for good results and collaboration and shared efforts are challenges to be met to improve security.

CONCLUSÃO

It is concluded that the studied institution has a fragile safety culture that is at a pathological stage in relation to the patient safety culture maturity model, which is a stage where there are no actions in the patient safety area in the organization.

It is known that the theme patient safety culture brings, in its nuance, the need to change the model of managing errors and adverse events in health services, because the premise of punishment used in institutions, in addition to being ineffective for the patient. The growth and development of organizations refers to institutions with a weak safety culture that can make patient care more prone to error.

This study shows a culture of fragile patient safety, indicating that changes are necessary in this studied institution and, as proposals, the implementation of a Patient Safety Center proposed by the World Health Organization and encouraged by ANVISA.

The need to implement the Patient Safety Center is pointed out, with a more innovative and efficient management and methodology, with flexible and horizontal proposals, which encourage both professionals and managers in its implementation.

Therefore, efficient management that includes the expected patient safety competencies, the implementation of the Patient Safety Nucleus (PSN) and its stages of growth and improvement become essential and necessary, based on basic protocols established by the World Health Organization (WHO) for patient safety in all health institutions, including those providing maternal and neonatal care.

In addition, it is necessary to develop individual and group values, attitudes, competences and behavioral standards in institutions to disseminate, in health professionals, the perception of patient safety and, consequently, to generate commitment and a safe culture in health institutions. Organizations with a positive safety culture are characterized by communication based on mutual trust through a common perception of

the importance of safety and recognition of the effectiveness of preventive measures.

REFERENCES

1. Wachter RM. Compreendendo a segurança do paciente. 2nd ed. Porto Alegre: AMGH; 2013.
2. World Health Organization. Patient Safety: a world alliance for safer health care [Internet]. Geneva: WHO; 2009 [cited 2018 Apr 10]. Available from: <http://www.who.int/patientsafety>
3. Ministério da Saúde (BR), Fundação Oswaldo Cruz, Agência Nacional de Vigilância Sanitária. Documento de referência para o Programa Nacional de Segurança do Paciente [Internet]. Brasília: Ministério da Saúde; 2013 [cited 2018 Aug 10]. Available from: <https://www20.anvisa.gov.br/segurancadopaciente/index.php/publicacoes/item/documento-de-referencia-para-o-programa-nacional-de-seguranca-do-paciente>
4. Ministério da Saúde (BR), Fundação Oswaldo Cruz, Sistema único de Saúde. Resolução da Diretoria Colegiada da ANVISA - RDC nº 36, de 25 de Julho de 2013. Institui ações para a segurança do paciente em serviços de saúde e dá outras providências [Internet]. Brasília: Ministério da Saúde; 2013 [cited 2018 Aug 10]. Available from: <http://portaldeboaspraticas.iff.fiocruz.br/biblioteca/resolucao-da-diretoria-colegiada-rdc-no-36-de-25-de-julho-de-2013/>
5. Ministério da Saúde (BR), Gabinete do Ministro. Portaria n. 529, de 1º de abril de 2013. Institui o Programa Nacional de Segurança do Paciente (PNSP) [Internet]. Brasília: Ministério da Saúde; 2013 [cited 2018 Aug 10]. Available from: <http://bvsms.saude.gov.br/bvs/saudelegis/gm/2013/>
6. Ferraz CA, Gomes ELR, Mishima SM. Health services management challenges in theory and practice. Rev Bras Enferm. 2004 July/Aug; 57(4):395-400. DOI: <http://dx.doi.org/10.1590/S0034-71672004000400002>
7. Ministério da Saúde (BR), Agência Nacional de Vigilância Sanitária. Serviços de atenção materna e neonatal: segurança e qualidade [Internet]. Brasília: Ministério da Saúde; 2014 [cited 2018 Aug 10]. Available from: <https://www20.anvisa.gov.br/segurancadopaciente/index.php/publicacoes/item/servicos-de-atencao-materna-e-neonatal-seguranca-e-qualidade>
8. Sousa AMM, Souza KV, Rezende EM, Martins EF, Campos D, Lansky S. Practices in childbirth care in maternity with inclusion of obstetric nurses in Belo Horizonte, Minas Gerais. Esc Anna Nery Rev Enferm. 2016 Apr/June;20(2):324-31. DOI: [10.5935/1414-8145.20160044](https://doi.org/10.5935/1414-8145.20160044).
9. Ministério da Saúde (BR), Conselho Nacional de Saúde. Resolução nº 466, de 12 de dezembro de 2012. Diretrizes e Normas Regulamentadoras de Pesquisa Envolvendo Seres Humanos [Internet]. Brasília: Ministério da Saúde; 2012. Available from: http://bvsms.saude.gov.br/bvs/saudelegis/cns/2013/res0466_12_12_2012.html
10. Carvalho REFL, Cassiani SHB. Cross-cultural adaptation of the Safety Attitudes Questionnaire - Short Form 2006 for Brazil. Rev Latino-Am Enfermagem. 2012 May/June;3(20):1-8. DOI: [10.1590/S0104-11692012000300020](https://doi.org/10.1590/S0104-11692012000300020)
11. Batalha EMSS, Melleiro MM. Hospital management and patient safety culture in the perception of the nursing team. Rev Baiana Saúde Pública. 2017 Sept;40(1):109-23. DOI: [10.22278/2318-2660.2016.v40.n0.a2670](https://doi.org/10.22278/2318-2660.2016.v40.n0.a2670).
12. Bohrer CD, Marques LGS, Vascocelos RO, Oliveira JLC, Nicola AL, Kawamoto AM. Communication and patient safety culture in the hospital environment: vision of multiprofessional team. Rev Enferm UFSM. 2016 Jan/Mar;6(1):50-60. DOI: <http://dx.doi.org/10.5902/2179769219260>
13. Raquel DCM, Eliane FAL, Maria CRC, Elizabete RAO, Franciele MCL, Candida CP. Patient safety culture from the perspective of nurse. Cogitare Enferm. 2016;21(Spe):1-9. DOI: <http://dx.doi.org/10.5380/ce.v21i5.45408>
14. Mello JF, Barbosa SFF. Patient safety culture in an intensive care unit: the perspective of the nursing team. Rev eletrônica enferm. 2017;19a:07. DOI: <https://doi.org/10.5216/ree.v19.38760>
15. Schwonke CRGB, Lunardi Filho ED, Lunardi GL, Silveira RS, Rodrigues MCS, Guerreiro MO. Safety culture: the perception of intensivists nurses. Enferm Glob [Internet]. 2016 Jan;41:220-32. Available from: http://scielo.isciii.es/scielo.php?script=sci_arttext&pid=S1695-61412016000100012
16. Batalha EMSS, Melleiro MM. Patient safety culture: perceptions of the nursing staff.
17. HU Revista [Internet]. 2016 July/Aug [cited 2019 Feb 18];42(2):133-42. Available from: <https://periodicos.ufjf.br/index.php/hurevista/article/view/2518/872>
18. Bampi R, Lorenzini E, Krauzer IM, Ferraz L, Silva EF, Dall'Agnol CM. Perspectives of the nursing team on patient safety in an emergency unit. J Nurs UFPE on line. 2017 Feb;11(2):584-91. DOI: [10.5205/reuol.10263-91568-1-RV.1102201713](https://doi.org/10.5205/reuol.10263-91568-1-RV.1102201713)
19. Carvalho PA, Göttems LBN, Pires MRGM, Oliveira MLC. Safety culture in the operating room of a public hospital in the perception of healthcare professionals. Rev Latino-Am Enfermagem. 2015 Nov/Dec;23(6):1041-8. DOI: [10.1590/0104-1169.0669.2647](https://doi.org/10.1590/0104-1169.0669.2647)
20. Conselho Federal de Enfermagem. Perfil da Enfermagem no Brasil [Internet]. Brasília: COFEN; 2019. Available from: <https://periodicos.ufpe.br/revistas/revistaenfermagem/index>

2015 [cited 2018 Aug 10]. Available from: <http://www.cofen.gov.br/perfilenfermagem/>

21. Fronza FCAO, Teixeira L. Profile of health professionals working in hospitals: relationship between musculoskeletal symptoms and quality of life. *Rev Bras Ciênc Saúde*. 2010 Apr/June;8(24). DOI:

<http://dx.doi.org/10.13037/rbcs.vol8n24.1057>

22. Rigobello MCG, Carvalho REFL, Cassiani SHB, Galon T, Capucho HC, Deus NN. The climate of patient safety: perception of nursing professionals. *Acta Paul Enferm*. 2012;25(5):728-35. DOI: <http://dx.doi.org/10.1590/S0103-21002012000500013>

23. Romero MP, González RB, Calvo MSR, Fachado AA. Patient safety, quality of care and ethics of health organizations. *Rev Bioét*. 2018 Oct/Dec;26(3):333-42. DOI:

<http://dx.doi.org/10.1590/1983-80422018263252>

24. Souza NVDO, Golçalves FGA, Pires AS, David HMSL. Neoliberalist influences on nursing hospital work process and organization. *Rev Bras Enferm*. 2017 Sept/Oct;70(5):961-9. DOI:

<http://dx.doi.org/10.1590/0034-7167-2016-0092>

25. Sugden C, Athanasiou T, Darzi A. What are the effects of sleep deprivation and fatigue in surgical practice? *Semin Thoracic Surg*. 2012;24(3):166-75. DOI:

[10.1053/j.semtcvs.2012.06.005](http://dx.doi.org/10.1053/j.semtcvs.2012.06.005)

26. Sinha A, Singh A, Tewari A. The fatigued anesthesiologist: a threat to patient safety? *J Anaesthesiol Clin Pharmacol*. 2013 Apr/June;29(2):151-9. DOI: [10.4103/0970-9185.111657](http://dx.doi.org/10.4103/0970-9185.111657)

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