



WOMEN'S SAFETY CULTURE IN CHILDBIRTH AND RELATED INSTITUTIONAL FACTORS

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ABSTRACT

Objective: to analyze the safety culture of women in childbirth and related institutional factors based on the perceptions of nursing and medical professionals.

Methods: a mixed, sequential explanatory study, conducted with nursing technicians, nurses and physicians of the obstetric center of a public maternity hospital in the city of Rio de Janeiro. Data collection took place from May to July 2018. The Hospital Survey on Patient Safety Culture questionnaire and descriptive statistical treatment were applied. Then, 12 semistructured interviews and thematic content analysis were applied and, finally, this data set was integrated.

Results: most of the dimensions of the safety culture are weakened, especially in the areas of institutional organization, and the team lacks knowledge about the actions of the Patient Safety Center in the institution, the uniformity of care is deficient and the number of personnel for care is limited. The safety management process and work organization need adaptations.

Conclusion: the safety culture of women requires improvements in team training, skilled care, work organization, and commitment of local management to qualified and safe care in hospital births.

DESCRIPTORS: Patient safety. Delivery. Safety culture. Organizational culture. Obstetric nursing.

HOW CITED: Nicácio MC, Pereira ALF, Neto MO, Almeida LF, Penna LHG. Women's safety culture in childbirth and related institutional factors. Texto Contexto Enferm [Internet]. 2020 [cited YEAR MONTH DAY]; 29:e20190264. Available from: https://doi.org/10.1590/1980-265X-TCE-2019-0264





CULTURA DE SEGURANÇA DAS MULHERES NO PARTO E FATORES INSTITUCIONAIS RELACIONADOS

RESUMO

Objetivo: analisar a cultura de segurança das mulheres no parto e os fatores institucionais relacionados a partir das percepções dos profissionais de enfermagem e medicina.

Métodos: estudo misto, sequencial explanatório, realizado com técnicas de enfermagem, enfermeiras e médicas do Centro Obstétrico de uma maternidade pública do município do Rio de Janeiro. A coleta de dados ocorreu de maio a julho de 2018. Aplicaram-se o questionário *Hospital Survey on Patient Safety Culture* e o tratamento estatístico descritivo. Em seguida, realizaram-se 12 entrevistas semiestruturadas e análise de conteúdo temática e, por fim, esse conjunto de dados foi integrado.

Resultados: a maior parte das dimensões da cultura de segurança está fragilizada, sobretudo nas áreas da organização institucional, e há desconhecimento da equipe sobre as ações do Núcleo de Segurança do Paciente na instituição, deficiência na uniformidade da assistência e quantitativo limitado de pessoal para os cuidados. Adequação do processo de gestão da segurança e organização do trabalho são necessárias.

Conclusão: a cultura de segurança das mulheres requer melhorias na capacitação da equipe, adequação da assistência, organização do trabalho e no comprometimento da gestão local com a assistência qualificada e segura ao parto hospitalar.

DESCRITORES: Segurança do paciente. Parto. Cultura de segurança. Cultura organizacional. Enfermagem obstétrica.

CULTURA DE SEGURIDAD DE LAS MUJERES EN EL PARTO Y FACTORES INSTITUCIONALES RELACIONADOS

RESUMEN

Objetivo: analizar la cultura de seguridad de las mujeres en el parto y los factores institucionales relacionados a partir de las percepciones de los profesionales de enfermería y medicina.

Métodos: estudio misto, secuencial explanatorio, desarrollado con técnicas de enfermería, enfermeras y médicas del Centro Obstétrico de una maternidad pública del municipio de Rio de Janeiro. Los datos fueron recolectados de mayo a julio de 2018. Se aplicaron el cuestionario *Hospital Survey on Patient Safety Culture* y el tratamiento estadístico descriptivo. A seguir, se llevaron a cabo 12 entrevistas semiestructuradas y análisis de contenido temático y, al final, ese conjunto de datos fue integrado.

Resultados: la mayor parte de las dimensiones de la cultura de seguridad está fragilizada, sobretodo en las áreas de la organización institucional, y hay desconocimiento del equipo sobre las acciones del Nucleo de Seguridad del Paciente en la institución, deficiencia en la uniformidad de la atención y número limitado de personal para los cuidados. Son necesarias adecuación del proceso de gestión de la seguridad y organización del trabajo.

Conclusión: la cultura de seguridad de las mujeres requiere mejoras en la capacitación del equipo, adecuación de la atención, organización del trabajo y comprometimiento de la gestión local con la atención cualificada y segura al parto hospitalario.

DESCRIPTORES: Seguridad del paciente. Parto. Cultura de seguridad. Cultura organizacional. Enfermería obstétrica.

INTRODUCTION

Health care is still concentrated on the curative focus of diseases and is characterized by the increasing use of biomedical techniques and technologies and invasive diagnostic and clinical procedures in patients, which has increased their complexity and, consequently, the risk of care-related events and damage.¹

In the area of maternal health, this curative and intervention perspective with regard to healthy pregnant women has been questioned due to its potential to cause more harm than benefits, such as the routine of cesarean sections without clear indications and unfit conducts, such as zero diet; oxytocin; episiotomy; Kristeller's maneuver, which lack scientific evidence to justify their indication for this clientele without associated morbidity.^{1–2}

These practices may also involve disrespectful attitudes that cause pain, fear, and traumatic experiences for pregnant women, especially during childbirth, and also cause harm to the physical and mental health of mother and baby. Pregnant women tend to express the desire to get respect for their autonomy and to feel safe in childbirth, which corroborates the World Health Organization's recommendations regarding the promotion of quality of care for safe motherhood.^{3–4}

Safety is one of the crucial attributes for the quality of health care and is a global priority. The safety culture aims to prevent errors in the care process and the damage or adverse events caused to patients as a result of these errors, in order to provide safe care to health service clients.⁵

The patient safety culture is a dimension of the organizational culture, as it is the result of individual and group values; beliefs; attitudes; perceptions; norms; procedures; competencies and behavioral patterns that determine the institutional commitment to safety management. This culture can be impaired due to poor communication; failures in leadership and teamwork; lack of reporting systems; inappropriate analysis of adverse events; and improper knowledge of the team about patient safety.⁶

The health organization consists of departments, units, or wards where the groups of professionals work, and these differentiated units develop specific types of subcultures and correspond to these groups' working environment. Subcultures can favor the reduction of errors, failures and adverse events, besides improving the results and satisfaction with the care provided. Their values may vary though, and they may act as driving forces for organizational change or as covert countercultures that silently undermine new initiatives. Therefore, the organization can be seen as a dynamic cultural system.⁷

A North American study considers that there is a lack of research on patient safety initiatives in specialized obstetric care hospitals. When analyzing the safety initiatives at these hospitals, gaps were identified in some of them, such as the absence of or limitations in the use of evidence-based practices; simulated obstetric emergency practices; regular reviews of morbidity or mortality cases; protocols or audits of cases of failure to progress and abnormal fetal cardiac frequency; delay in safety and quality management activities, such as monitoring of indicators and regular team training on effective communication.⁸

Brazilian research has been developed in general and teaching hospitals, and sometimes with a focus on the nursing team. These studies found unsatisfactory results regarding the safety climate; weaknesses in the organizational culture related to the workload; hierarchical communication; problems in supervision and management leadership; and difficulty of professionals to admit the possibility of errors due to fear of punishment.^{9–10}

These results clarify some of the challenges for the creation of a safety culture in health institutions and indicate the need to advance knowledge on this topic in the area of hospital-based obstetric care, especially concerning the Brazilian reality. In view of these challenges and imperatives

for improving the quality and safety of obstetric care, the following research question was proposed: How do nursing and medical professionals evaluate the safety culture of women in childbirth, and how do they perceive the institutional factors related to this culture?

The study was aimed at analyzing the safety culture of women in childbirth and related institutional factors based on the perceptions of nursing and medical professionals.

METHOD

This is a mixed study with a sequential explanatory design. Mixed studies are characterized by the combination of quantitative and qualitative methods in the same research. The sequential design refers to the implementation of two distinct stages, one initial and the other subsequent, and the explanation indicates that one stage is used to explain the findings generated by the other stage. The combination of these two methods in the same research permits deepening and broadening the understanding of the problem.¹¹

In the sequential explanatory design, the initial stage of the research occurs through the quantitative method and provides objective findings on the research problem. The second stage is guided by the qualitative method, as this makes it possible to explain the initial quantitative results. At the end, the results of the quantitative and qualitative stages are integrated and interpreted to understand the problem in a more comprehensive and detailed way.¹²

The study was developed at the Obstetric Center (CO) of a public maternity hospital in the city of Rio de Janeiro between May and July 2018. This institution was selected because it is a reference hospital for the care of habitual-risk pregnant women, with nurse-midwives for normal birth care. It also figures on the list of health institutions that had a Patient Safety Center in 2017, as recommended by the National Health Surveillance Agency.¹³

It is noteworthy that this public maternity hospital is administered by a Social Health Organization and that its entire staff works under the Consolidation of Labor Laws. In 2017,5,329 births were attended,3,830 by normal birth and the remainder by cesarean section. The nurse-midwives were responsible for almost half of the normal births according to institutional data.

The participants were the nursing and medical professionals working in the OC of the maternity hospital, considered, for the purposes of this research, as the professional team directly engaged in this unit of the institution. The OC consists of a ward with operating rooms and another designated as a Normal Birth Center, where the habitual-risk parturients remain in individual *boxes* during labor and normal birth, and the nurse-midwives provide their care. This OC has 24 nurses, 18 nurse-midwives and the other general care nurses, in addition to 36 nursing technicians and 60 physicians, with 40 obstetricians and 20 pediatricians, totaling 120 professionals in this sector. Most of these professionals work on a shift regimen.

The first stage of the mixed research was a survey, conducted through the application of the Hospital Survey on Patient Safety Culture (HSOPSC), which was validated and cross-culturally adapted for the Portuguese language and Brazilian reality.¹⁴

The HSOPSC questionnaire makes it possible to evaluate the safety culture of the hospital as a whole, of a hospital unit or sector and of a professional category that integrates the staff, such as nursing for example. This tool consists of 42 items, intended to measure each respondent professionals' opinion or perception regarding each dimension (D) of the patient safety culture.

The 12 dimensions of the patient safety culture measured by the HSOPSC are: D1 - Supervisor/manager expectations and actions promoting patient safety; D2 - Teamwork within units; D3 - Organizational learning and continuous improvements; D4 - Communication openness; D5 - Information

feedback and communication of errors; D6 - Non-punitive response to errors; D7 - Staffing; D8 - Teamwork across units; D9 - Management support for patient safety; D10 - Handoffs and transitions; D11 - Overall perceptions of patient safety; and D12 - Frequency of events reported.

These dimensions are distributed in four sections of the HSOPSC questionnaire. The first section contains questions about the professionals' sociodemographic data; the second includes questions about the hospital unit where they work regarding the first seven dimensions, from D1 to D7; the third investigates the organization of the hospital and corresponds to three dimensions, from D8 to D10, and the last focuses on the latter two dimensions that assess the results of the safety culture, D11 and D12, adding questions about the number of events reported in the past 12 months, and the overall assessment of the safety culture, with answers ranging from "excellent" to "poor".

The HSOPSC questionnaire presents items with five-point Likert responses, ranging from "I totally disagree" to "I totally agree" and from "never" to "always". Some items are worded positively and the concordant answers are considered positive for the safety culture, while other items are worded negatively and the discordant answers are also considered positive for the safety culture.

As the study was restricted to the nursing and medical professionals from the maternity's OC, the seventh question of the questionnaire regarding the respondent professional's position or function had to be adapted, as its original version includes answers concerning the other professional categories, such as nutritionist, social worker, among others.

In the quantitative stage of the research, nursing and medical professionals working in the maternity hospital's OC who provided direct care to women in labor and childbirth were included, while those with less than one year of experience in this care were excluded. This was based on the premise that professionals with less than one year of work in the maternity hospital are adapting to the organizational culture of the institution.

The professionals eligible for the study were captured in the work environment. A previous meeting was held, in which one of the researchers of this study, the immediate managers and the OC professionals participated, to promote the study and its objectives. These professionals received clarifications about the goals of the study, at the beginning or end of the day and night shifts. Although different days and times were available to complete and hand in the questionnaire, few professionals answered it, with the main justification of having little time in view of the work demand at the sector.

In view of these difficulties, the research team chose to study an intentional and therefore non-probabilistic sample. The primary researcher applied the HSOPSC questionnaire to the professionals who agreed to participate in the research. The participants answered the questionnaire and returned it at the beginning or end of the shift, before or after the day and night handoff, or during the breaks of their work, so as to avoid data production losses. Thirty-three questionnaires were distributed, but the respondents did not return five, and two were discarded due to incomplete filling.

The responses to the sections of the HSOPSC were analyzed in accordance with the recommendations of the *Agency for Healthcare Research and Quality*, the US agency that created this tool and recommends calculating the positive answers to the items in the twelve dimensions of the safety culture in accordance with the following percentages: 75% or more represent a strengthened safety culture; less than 75% and more than 50% indicate a neutral range with potential for improving the safety culture, and 50% or less correspond to a weakened culture of safety.¹⁵

In the qualitative stage, the participants who answered the HSOPSC were included, and the same inclusion and exclusion criteria adopted in the quantitative phase of this study were followed. The selection of the eligible participants was based on a name list of the nursing professionals and

physicians according to the work shifts at the OC, attempting to consider the representativeness of each professional category and work shift.

The qualitative data were obtained by applying individual interviews, recorded in digital media and conducted in a rest room of the team near the OC. The interviews were conducted with the support of a semi-structured script, consisting of two parts: the first with questions aimed at characterizing the participants and the second with open questions that asked the professionals about safe care for women in childbirth and the factors involved in the safety culture of this care in the OC.

The interviews were transcribed and analyzed according to thematic content analysis to discover the cores of meaning that made up the communication and how frequently they appeared, enabling the inference of knowledge related to the conditions of production or reception. The interviews stopped when no new codes or themes emerged during the analysis.

This analysis was completed in three stages: in the first, called pre-analysis, the interviews were transcribed, organized, and skimmed to identify the sections of text that are consistent with the purpose of the study; in the second stage, the material was explored based on semantic equivalence to group the Registry Units (RU) in accordance with the corresponding themes, which made it possible to construct the thematic categories – a researcher on the team who did not participate in the data collection reviewed this second stage of the analysis; finally, in the processing of the results, inferences and interpretations were made¹⁶ in accordance with the terms and assumptions of the Patient Safety Culture.^{3–8,13}

The study complied with the regulatory standards for research involving human beings. The participants were designated here by the professional category and the order in which the interviews were held.

RESULTS

In the quantitative stage, 26 (100%) nursing and medical professionals answered the HSOPSC, corresponding to a response rate of 21.6% of all OC professionals. Almost all respondents were female (96.2%) and only one nurse was male. Therefore, the professionals were designed by the female gender here.

This group of study participants consisted of nine (34.6%) nurses, nine (34.6%) nursing technicians and eight (30.8%) physicians working in the OC of the maternity hospital under investigation; and most of them (57.7%) work between 20 and 39 hours a week and from one to five years at the institution (88.5%).

All 12 safety culture dimensions the respondents assessed had less than 75% of positive responses. The mean response percentage was 48.14%, which suggests a weakened safety culture in this sector of the maternity hospital. The highest frequencies of positive responses were found in the dimensions Organizational learning and continuous improvement (70.4%); Teamwork within units (69.7%); and Non-punitive responses to errors (62.6%).

The lowest percentages were observed in the cultural dimensions: Overall perceptions of patient safety (31.8%); Staffing (31.5%); and Handoffs and transitions (30.6%). These data are displayed in Table 1.

Table 1 – Percentage of positive answers in the 12 dimensions of the patient safety culture in the Obstetric center of a public maternity hospital. RJ, Brazil, 2018. (n=26)

	Obstetric Team		
Dimensions	Negative Answer	Neutral Answer	Positive Answer
Supervisor/manager expectations and actions	43.1	15.0	41.9
Teamwork within units	12.3	18.0	69.7
Organizational learning and continuous improvement	13.9	15.7	70.4
Communication openness	34.6	13.9	51.5
Information feedback and error reporting	17.9	28.2	53.9
Non-punitive responses to errors	14.5	22.9	62.6
Staffing	41.2	27.3	31.5
Teamwork across units	38.5	27.7	33.8
Support from hospital management	27.0	21.9	51.1
Handoffs and transitions	54.5	14.9	30.6
Overall perceptions of patient safety	40.3	27.9	31.8
Frequency of events reported	34.4	16.7	48.9

Regarding incident reporting in the previous 12 months, 88.5% of the professionals answered that they had not reported any event. The participants most frequently evaluated patient safety in the OC as "regular" (42.3%), followed by "very good" (26.9%), "excellent (15.5%) and "very bad" (15.3%).

Twelve female participants took part in the qualitative stage of the study: five obstetric nurses, three nursing technicians, and four doctors, the latter being two obstetricians and two pediatricians. As for the length of experience in the institution, 10 participants had worked in the maternity hospital from one to five years, and two professionals for six years.

The content analysis of the interviews permitted the construction of the thematic categories described in Chart 1.

Chart 1 – Percentage of thematically grouped Recording Units and their corresponding categories. RJ, Brazil, 2018. (n=318)

Categories	Grouped Recording Units	%
Safe care for women during hospital birth	Incident prevention	28.9
	Skilled care	15.7
Restrictive factors of the safety culture in the Obstetric Center	Lack of knowledge on patient safety actions	26.5
	Lack of care uniformity	14.8
	Reduced number of staff	14.1

First category: Safe care for women during hospital birth

The nursing and medical professionals at the OC consider that safe care for parturient women occurs through the prevention of events, such as reducing errors and damage during the care process; performing technical care in accordance with care protocols; correctly identifying women and their infants; and preventing the occurrence of falls, as can be observed in the following statements: [...] It means providing care as safely as possible to avoid errors and minimize any problems that may occur due to human error in care (Nurse E4).

- [...] Safe care is appropriate care, which follows protocols [...] at public maternity hospitals. We follow national and international consensuses (Physician E10).
- [...] The entire team also gives instructions on patient safety, because the main thing for us is about the bathroom, which gets very wet sometimes. We advise her [patient] to wear slippers, not walk barefoot, to walk slowly and, if it is too wet, to warn us to call the cleaning staff to go there and dry it (Nurse E2).
- [...] First, the identification. That's the right name. Sometimes, there are patients with the same name, then we have to put the name, surname and date of birth (Nursing technician E3).

Second category: Restrictive factors of the safety culture in the Obstetric Center

The restrictive factors of the safety culture that emerged from the professionals' statements were the lack of knowledge of institutional actions regarding patient safety, deficiency in the uniformity of the behaviors the team adopted and limitations in the number of personnel in view of the care demand, as manifested in the following statements: [...] There must be one here, but I've never heard of the Patient Safety Group. I don't know it. But I think there is one, yes (Physician E5).

- [...] Patient Safety Group?! There... I've heard of it. Here at the maternity? We know it [...] but like [...] it is better to say that you know it and that it exists, you see?! But I've never seen it at work. Nobody comes, gives instructions, says anything (Nursing Technician E3).
- [...] There's a protocol here yes, there's the SOP (Standard Operating Procedure), a book with the Standard Operating Procedures, everything correctly. We follow [the SOP] but, of course [...], like, each shift varies a little (Nurse E2).
- [...] I think they lead to greater proneness to error: the great [care] demand and the small number of employees. This helps for mistakes to happen (Nurse E8).

DISCUSSION

The patient safety culture among health professionals has attracted the attention of researchers, managers and workers in Brazil. Self-applied questionnaires are widely used to analyze the dimensions of this culture and identify its main weaknesses and strengths but can take time and be dull for the respondents, which negatively affects the participants' response rate.¹⁴

In studies in Brazilian hospitals, the response rate of eligible professionals to the HSOPSC questionnaire ranged from 44.8 to 13.6%. In the quantitative stage of this mixed research, this rate corresponded to 21.6% of all nurses and physicians at the OC, suggesting that, in our midst, the application of this tool represents a challenge and requires strategies to raise the health professionals' awareness on the importance of their participation in the advancement of knowledge on the theme, as the response rate to the questionnaire can figure among the safety culture indicators. 14,17

Despite these limits imposed on the accuracy of this study in portraying the reality of the safety culture as perceived by nursing and medical professionals at the OC of the maternity hospital under investigation, however, the findings showed that none of the 12 dimensions measured reached the parameter of a strengthened safety culture. Similarly, in a Brazilian survey conducted with the health teams of one Intensive Care Unit and three general hospitals, weaknesses were identified in most dimensions of the safety culture evaluated, indicating that patient safety needs to advance in hospital units.^{17–18}

The study participants evaluated the dimensions of the safety culture related to their work unit as areas that can improve the safety culture, except for the staffing dimension. Among these potential areas, organizational learning and continuous improvement, teamwork within units, and non-punitive responses to errors stood out. These areas are the most favorable for the advancement of the safety

culture in the OC of the maternity hospital, because a work environment favorable to learning and team integration enhances the professionals' commitment to the cultural changes in health services.¹⁹

Despite these potentials, all relevant dimensions for the organization of the institution were weakened, with response percentages inferior to 50%, such as the support of supervisors/managers for patient safety; teamwork across units; handoffs and transitions. This same finding was verified in the two dimensions related to the result, which integrate the Overall perceptions of patient safety and the frequency of reported events. The fragility of these two dimensions was corroborated by the "regular" concept in the overall assessment of the safety culture and by the rarity of event reports in the previous 12 months.

Organizational commitment is fundamental for professionals to perceive patient safety as a priority in the institution, enabling them to create committed postures that confide in learning from safety events. Organizations with a positive safety culture have communication based on mutual trust; shared perceptions about patient safety; belief in the support of leaders and managers; and valuation of measures to prevent and predict events based on risk management, the monitoring process and a plan to intervene in the identified problems.^{5–6}

Culture within health organizations and cultural change are seen as strategic to manage to improve the quality of health care. In Brazilian obstetric care, cultural change has been a recurring theme because the predominant care culture is characterized by inadequacies and unnecessary interventions. This dominant obstetric culture is based more on the tradition of crystallized routines, habits, and practices than on actuals values, behaviors, and attitudes that are guided by scientific evidence and place the women at the center of the care relationship.^{1–2}

The nursing and medical professionals who participated in this research demonstrated knowing the basic attributes of safe care for women in childbirth, such as the care provided according to the care protocols and which is able to prevent the occurrence of errors and harm. They also mentioned two international safety goals, which are the correct identification of the patient and the prevention of falls. The statements suggest, however, that these goals were inserted in the care routine as a formality, because they did not refer to the other actions recommended for patient safety, such as event reporting, construction, and monitoring of indicators, and risk prevention and control measures.⁸

These professionals expressed ignorance about the existence and work of the Patient Safety Center at the institution. This organizational body was created in 2013 through the National Patient Safety Policy to promote and support the implementation of patient safety actions such as risk management, event reporting, institutional patient safety planning, elaboration of patient safety protocols, and monitoring of indicators, among other tasks.¹³ Therefore, this lack of knowledge may explain the incipient safety culture verified by the HSOPSC and may indicate possible challenges to operate and fulfill its tasks.

An integrative review showed factors associated with the implementation and success of quality improvement and risk management programs in hospitals. The following facilitators were identified: 1) governance through strong leadership, committed to the development of quality improvement actions; 2) quality management through a competent and multidisciplinary team, available to establish best practices in quality, culture, and patient empowerment projects; 3) work organization through the dissemination of recommendations; production of evidence-based protocols; professional training; integrated and collaborative teamwork; and the necessary material and financial resources.²⁰

In this research, areas with potential to improve the safety culture may be related to some of the factors described above. The professionals' statements also value the prevention of incidents and adequacy of care, indicating that the team obtained some achievements that need to be acknowledged in order to stimulate it to advance in the safety actions for women in childbirth.

The limiting factors in the implementation and success of quality improvement and risk management programs identified in the integrative review were: 1) failures in the local system in producing, disseminating, and appropriating best practice guides; 2) lack of material resources, time, and human capital; 3) difficulty in access and inadequacy of the information System; 4) lack of skill or knowledge; limitations in risk perception; denial of reality and of the patient's feelings.²⁰

Some of these limiting factors were also identified here, such as weaknesses in the safety culture dimensions related to the support of supervisors/managers; staffing; handoffs and transitions; teamwork across the units of the institution; and low frequency of reported incidents. In addition to these weaknesses, the professionals' statements highlighted the team's lack of knowledge about the patient safety actions; deficiency in the uniformity of care; and reduced staff in the OC of the maternity hospital investigated.

This set of weaknesses requires improvement of the management process and improvement in the work organization for the proper implementation of women's safety actions in childbirth. In addition, it requires advances in the elaboration, dissemination, and adherence to evidence-based protocols; continuous training of professionals; integrated and collaborative teamwork; and empowerment of women for the qualification and safety of obstetric care.^{5–6,20}

Another aspect to be emphasized is that the hospital culture can positively or negatively affects the teams' work in the units of the institution and, therefore, the quality and result of the care provided in the health services. Therefore, for cultural change to take place at the institution, you should have a systemic approach of the components, both internal and external to the organization, such as the logistics, the tools, and resources provided by the management of the health care network, as well as the involvement of the clients, team, and leaders of those services, so that they can clearly know how to achieve that change. This includes knowledge about the processes and tools to be adopted to improve the safety of women and their children during childbirth care.⁷

It is also highlighted that the health program to improve patient safety in the services of the Unified Health System is relatively recent in the country and the results described here suggest that safety actions are developing but are still incipient, calling on professionals, managers and users of the health unit to make efforts towards its full implementation through the effective performance of the Patient Safety Center in the service.

Thus, the implementation of patient safety measures can boost public actions aimed at changing the dominant obstetric culture in the country, as both initiatives involve change processes of the organizational culture, such as improving local governance, quality management, work organization, and care process to achieve more successful results.

Finally, it should be emphasized that this study presents limitations due to the fact that its results are not representative of the nursing and medical team of the OC studied and, therefore, should be assessed with caution and cannot be generalized to the other hospital units.

CONCLUSION

The mixed research found weaknesses in most dimensions of the safety culture evaluated, especially in the institutional organization areas, corroborated by the team's lack of knowledge about the actions of the Patient Safety Center; poor uniformity of care; and reduced staff to take care of the parturients in the OC of the maternity studied.

Despite these weaknesses in the safety culture, the team has notions of safe care for women in childbirth, characterizing it as care that prevents errors and harm and that is in accordance with the care protocols. This team acts in the correct identification of women and newborns and in the prevention of falls in the OC. The areas with potential for improvement are the dimensions of the

safety culture concerning the work unit, with better evaluation in the areas of Organizational learning, Teamwork within units and Non-punitive responses to errors.

The findings described here can contribute to add new perspectives on the organizational and patient safety culture regarding the specificities of the obstetric care culture during childbirth, as well as to sensitize the health professionals and motivate researchers for research the advance the knowledge on the theme and to be expanded to the other maternal healthcare segments, such as prenatal and postpartum care

REFERENCES

- 1. Portela MC, Reis LGDC, Martins M, Rodrigues JLDSQ, Lima SML. Obstetric care: challenges for quality improvement. Cad Saude Publica [Internet]. 2018 [cited 2019 June 30];34(5):e00072818. Available from: https://doi.org/10.1590/0102-311x00072818
- Monguilhott JJDC, Brüggemann OM, Freitas PF, d'Orsi E. Nascer no Brasil: the presence of a companion favors the use of best practices in delivery care in the South region of Brazil. Rev Saude Publica [Internet]. 2018 [cited 2019 June 30];52:1. Available from: https://doi.org/10.11606/ s1518-8787.2018052006258
- 3. Rönnerhag M, Severinsson E, Haruna M, Berggren I. Qualitative study of women's experiences of safe childbirth in maternity care. Nurs Health Sci [Internet]. 2018 [cited 2019 June 30]; 20(3):331-7. Available from: https://doi.org/10.1111/nhs.12558
- 4. Tunçalp Ö, Were WM, MacLennan C, Oladapo OT, Gulmezoglu AM, Bahl R et al. Quality of care for pregnant women and newborns: the WHO vision. BJOG [Internet]. 2015 [cited 2019 June 30]; 122(8):1045-9. Available from: https://doi.org/10.1111/1471-0528.13451
- 5. Farokhzadian J, Dehghan Nayeri N, Borhani F. The long way ahead to achieve an effective patient safety culture: challenges perceived by nurses. BMC Health Serv Res [Internet]. 2018 [cited 2019 Jul 2];18(1):654. Available from: https://doi.org/10.1186/s12913-018-3467-1
- Ammouri AA, Tailakh AK, Muliira JK, Geethakrishnan R, Al Kindi SN. Patient safety culture among nurses. Int Nurs Rev [Internet]. 2015 Mar [cited 2019 Jul 2];62(1):102-10. Available from: https://doi.org/10.1111/inr.12159
- 7. Mannion R, Smith J. Hospital culture and clinical performance: where next? BMJ Qual Saf [Internet]. 2018 [cited 2019 Jul 2];27(3):179-181. Available from: https://doi.org/10.1136/bmjqs-2017-007668
- 8. Lundsberg LS, Lee HC, Dueñas GV, Gregory KD, Grossetta Nardini HK, Pettker CM, Illuzzi JL, Xu X. Quality assurance practices in obstetric care: a survey of hospitals in California. Obstet Gynecol [Internet]. 2018 [cited 2019 Jul 2];131(2):214-23. Available from: https://doi.org/10.1097/AOG.00000000002437
- Schonke C, Lunardi WD Filho, Lunardi G, Da Silveira R, Rodrigues MC, Guerreiro M. Cultura de seguridad: la percepción de los profesionales de enfermería intensivista. Enferm Glob [Internet]. 2016 [cited 2019 June 17];15(41):233-43. Available from: http://scielo.isciii.es/pdf/eg/v15n41/ administracion3.pdf
- Toso GL, Golle L, Magnago TSBS, Herr GEG, Loro MM, Aozane F et al. Patient safety culture in hospitals within the nursing perspective. Rev. Gaúcha Enferm [Internet]. 2016 [cited 2019 Jul 2];37(4):e58662. Available from: https://doi.org/10.1590/1983- 1447.2016.04.58662
- 11. Creswell JW, Clark VLP. Projeto de pesquisa: métodos qualitativo, quantitativo e misto. Porto Alegre (RS): Penso; 2013.
- Oliveira JLC, Magalhães AMM, Matsuda LM. Mixed methods in nursing research: application possibilities according to Creswell. Texto Contexto Enferm [Internet]. 2018 [cited 2019 Jul 9]; 27(2):e0560017. Available from: https://doi.org/10.1590/0104-07072015000192014

- 13. Brasil. Agência Nacional de Vigilância Sanitária. Serviços de atenção materna e neonatal: segurança e qualidade. Brasília, DF (BR): Agência Nacional de Vigilância Sanitária; 2014.
- Reis CT, Laguardia J, Vasconcelos AG, Martins M. Reliability and validity of the Brazilian version of the Hospital Survey on Patient Safety Culture (HSOPSC): a pilot study. Cad Saude Publica [Internet]. 2016 [cited 2019 Jul 9];32(11):e00115614. Available from: https://doi.org/10.1590/0102-311X00115614
- 15. Sorra J, Gray L, Streagle S, Gray L, Streagle S, et al. AHRQ Hospital Survey on Patient Safety Culture: User's Guide. AHRQ Publication n. 18-0036-EF. Rockville, Maryland (USA): Agency for Healthcare Research and Quality [Internet]. 2018 [cited 2019 June 18]. Available from: https://www.ahrq.gov/sites/default/files/wysiwyg/professionals/quality-patient-safety/patientsafetyculture/hospital/userguide/hospitalusersguide.pdf
- 16. Bardin L. Análise de conteúdo. São Paulo, SP (BR): Edições 70; 2011.
- Andrade LEL, Lopes JM, Souza MCM Filho, Vieira RF Júnior, Farias LPC, Santos CCMD, Gama ZADS. Patient safety culture in three Brazilian hospitals with different types of management. Cien Saude Colet [Internet]. 2018 [cited 2019 June 18];23(1):161-72. Available from: https://doi. org/10.1590/1413-81232018231.24392015
- 18. Minuzzi AP, Salum NC, Locks MOH. Assessment of patient safety culture in intensive care from the health team's perspective. Texto Contexto Enferm [Internet]. 2016 [cited 2019 June 19]; 25(2):e1610015. Available from: https://doi.org/10.1590/0104-07072016001610015
- Lee SE, Scott LD, Dahinten VS, Vicente C, Lopez KD, Parque CG. Safety culture, patient safety, and quality of care outcomes: a literature review. West J Nurs Res [Internet]. 2019 [cited 2019 Jul 19];41(2):279-304. Available from: https://doi.org/10.1177/0193945917747416
- 20. Michel P, Roberts T, Porro Z, Es-seddiqi H, Saillour F, et al. What are the barriers and facilitators to the implementation and/or success of quality improvement and risk management in hospitals: a systematic literature review. J Epidemiol Public Health Rev [Internet]. 2016 [cited 2019 Jul 19];1(4):e8. Available from: https://doi.org/10.16966/2471-8211.123

NOTES

ORIGIN OF THE ARTICLE

Taken from the thesis - Safety culture of women in hospital childbirth: a mixed study of the perceptions of nursing professionals and physicians, presented to the Graduate Program in Nursing, University of the State of Rio de Janeiro, in 2019.

CONTRIBUTION OF AUTHORITY

Study design: Nicácio MC, Pereira ALF. Data collection: Nicácio MC, Neto MO

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FUNDING INFORMATION

The research received support from the Coordination for the Improvement of Higher Education Personnel - Brazil (CAPES) - Funding Code 001.

APPROVAL OF ETHICS COMMITTEE IN RESEARCH

Approved by the Research Ethics Committee of the Rio de Janeiro Municipal Health Department, opinion 2.588.977/2018, Ethical Assessment Certification 81896117.0.3001.5279.

CONFLICT OF INTERESTS

No conflict of interests.

HISTORY

Received: September 13, 2019. Approved: March 18, 2020.

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