

Evaluation of safe practices in a public hospital in the northeast of Brazil

Avaliação das práticas seguras em hospital público do nordeste brasileiro

Evaluación de prácticas seguras en un hospital público en el noreste de Brasil

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ABSTRACT

Objective: to evaluate a hospital institution regarding the implementation of safe practices. **Method:** descriptive and observational study, conducted in 2019, in a public hospital in northeastern Brazil. A 40-item Health Care Risk Management Assessment (AGRASS) questionnaire was used and a script for non-participant observation. Sample consisted of one risk manager, three pharmacists, four nurses, nine nursing technicians and two pharmacy technicians. **Results:** in the assessment of the degree of implementation of risk management, a total of 22 items with positive answers were obtained, indicating the complete adherence of this practice by more than 50%. In the field observation, weaknesses were found in most findings, especially hand hygiene and prescription, use and administration of medications. **Conclusion:** the potentialities and weaknesses regarding the observed practices require continuous educational actions and improvement of risk management to fully reach the safety culture.

Descriptors: Patient safety; safety management; delivery of health care; risk management.

RESUMO

Objetivo: avaliar instituição hospitalar quanto à implantação das práticas seguras. **Método:** estudo descritivo e observacional, realizado em 2019, em hospital público do nordeste do Brasil. Utilizou-se o questionário Avaliação da Gestão de Riscos Assistenciais em Serviços de Saúde (AGRASS), com 40 itens, e roteiro para a observação não participante. Amostra foi constituída por um gestor de risco, três farmacêuticos, quatro enfermeiros, nove técnicos de enfermagem e dois de farmácia. **Resultados:** na avaliação do grau de implantação da gestão de riscos, foi obtido um total de 22 itens com respostas positivas, indicando a completa adesão desta prática em mais de 50%. Na observação de campo, encontraram-se fragilidades na maioria dos achados, destacando-se a higienização das mãos e prescrição, uso e administração de medicamentos. **Conclusão:** as potencialidades e fragilidades referentes às práticas observadas exigem ações educativas contínuas e melhoria da gestão de riscos para alcance pleno da cultura de segurança.

Descritores: Segurança do paciente; gestão da segurança; assistência à saúde; gestão de riscos.

RESUMEN

Objetivo: evaluar una institución hospitalaria con respecto a la implementación de prácticas seguras. **Método:** estudio descriptivo y observacional, realizado en 2019, en un hospital público del noreste de Brasil. Se utilizó un cuestionario de evaluación de gestión de riesgos de atención médica (AGRASS) de 40 ítems y un guión para la observación no participante. La muestra consistió en un gerente de riesgos, tres farmacéuticos, cuatro enfermeras, nueve técnicos de enfermería y dos técnicos de farmacia. **Resultados:** en la evaluación del grado de implementación de la gestión de riesgos, se obtuvieron un total de 22 ítems con respuestas positivas, lo que indica la adherencia completa de esta práctica en más del 50%. En la observación de campo, se encontraron debilidades en la mayoría de los hallazgos, especialmente la higiene de manos y la prescripción, el uso y la administración de medicamentos. **Conclusión:** las potencialidades y debilidades con respecto a las prácticas observadas requieren acciones educativas continuas y la mejora de la gestión de riesgos para alcanzar plenamente la cultura de seguridad.

Descriptores: Seguridad del paciente; gestión de la seguridad; prestación de atención de salud; gestión de riesgos.

INTRODUCTION

The implementation of safe practices is directly related to risk management, focusing on patient safety (PS) and the quality offered in health services, as it includes the necessary frequent review of work processes and their alignment with standards. considered safe¹.

Results obtained from the use of evaluation tools can guide decision making and corrective action planning². Thus, our work aims to evaluate hospital institution regarding the implementation of safe practices.

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LITERATURE REVIEW

PS has become a priority, based on studies that pointed out the magnitude of the occurrence of adverse events (AE) caused by unsafe practices, mobilizing several countries for these issues³⁻⁶. Actions within healthcare institutions should be effective to minimize the risks associated with patient care⁷.

One of the most important initiatives adopted by Brazil, with emphasis on PS, was the publication of the documents: Resolution of the Collegiate Board (Resolução da Diretoria Colegiada - RDC), of the National Health Surveillance Agency (ANVISA), No. 63, November 25, 2011, Ordinance No. 529, April 1, 2013, which establishes the National Program of PS (NPPS), and ANVISA's RDC, No. 36, July 25, 2013, which establishes actions for PS in health services. Subsequently, Ordinance No. 2.095, September 24, 2013, approved the protocols: Fall prevention; patient identification and safety in prescribing and medication use and administration. In 2015, the Integrated Plan for Health Management of PS in Health Services was prepared, which inserts the process of monitoring the deployment of security practices⁸.

Safe practices should be effective in reducing the chance of harm to the patient and applicable at different levels of care for different types of patients and can be used by healthcare professionals, paying sources, and researchers⁹. The health institutions should develop actions to create a quality policy involving structure, process and outcome in their management of services aimed at assessing the quality of care. The diffusion of concepts among the entire professional team, adherence to safe practices and institutional commitment are essential for the implementation of the NPPS in our country¹⁰.

METHODOLOGY

Descriptive, observational study, conducted in a public hospital in Ceará, unit of the Unified Health System (SUS) of medium size, and level of secondary complexity; reference for eight municipalities. It has 151 beds distributed in the following care units: Medical, surgical, obstetric, and pediatric and physiological clinics; emergency and neonatal care. It has 934 employees making up a multiprofessional team.

The sample consisted of one risk manager, three pharmacists, four nurses, nine nursing technicians and two pharmacy technicians, totaling 19 professionals, selected as key informants to verify the existence of safe practices in the institution.

Data collection was performed through triangulation, with primary and secondary data. Primary data were collected through structured interview and non-participant observation, and secondary data were obtained through research in documents requested from risk management at the time of the interview, with supporting purposes for affirmative responses to the used instrument¹¹.

For the interview, we used the 40-item Health Care Risk Management Assessment Questionnaire (Avaliação da Gestão de Riscos Assistenciais em Serviços de Saúde - AGRASS), which describes the degree of implementation of health care risk management, from two dimensions: *structure* and *process*, constituting an assessment for the safe management practices. This questionnaire was developed through a partnership between ANVISA, Pan American Health Organization (PAHO) and Federal University of Rio Grande do Norte (UFRN)¹¹.

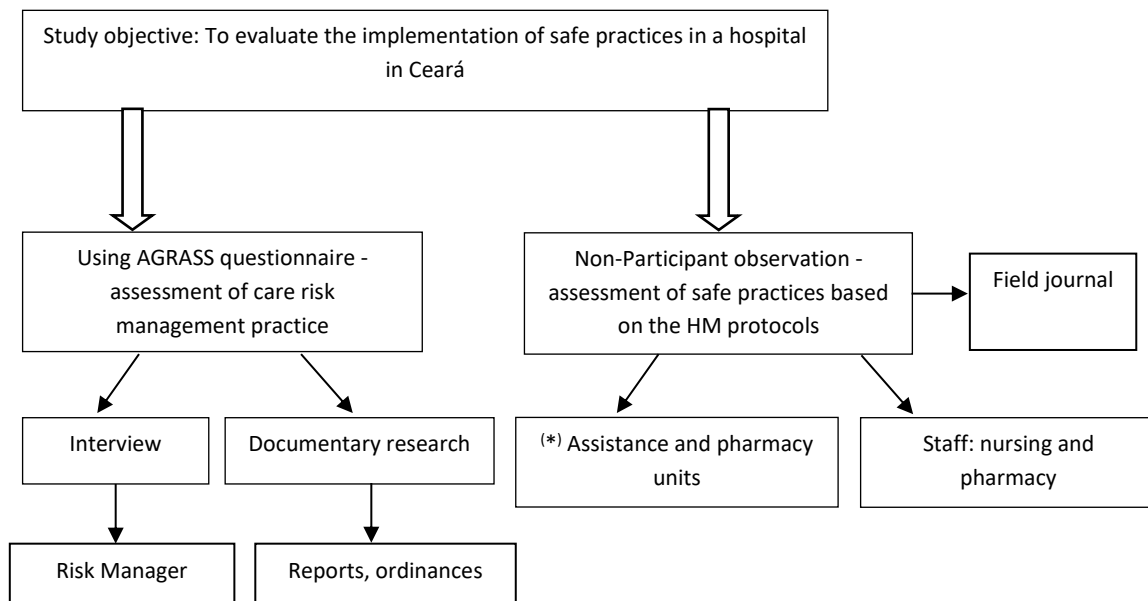
For the non-participant observation, a script was elaborated based on the PS protocols elaborated by the Ministry of Health (MS)¹². The observations occurred on alternate shifts and days, through bedside checking, in nursing the posts and in the pharmacy service, verifying the practices performed by the nursing and pharmacy teams. Care was taken in all situations in order to observe different teams, so that one could capture different perspectives expressed by professionals at different times in their practices. The inpatient units selected were two open clinics - medical and surgical, and two closed clinics - neonatal intermediate care unit and emergency care unit.

The practices performed by the professionals were recorded reliably to what happened. Quantitative data were submitted to statistical analysis, describing absolute frequencies and percentages. The study was approved by the Ethics Committee of the Federal University of Ceará. 79883517.5.0000.5054).

The study steps are illustrated in Figure 1.

RESULTS AND DISCUSSION

In the assessment of care risk management, the dimensions of *structure* and *process*, evolve 40 questions and most of the answers, 22 (55%), were positive, as shown in Table 1.



(*) Assistance units: Medical and surgical clinics; emergency treatment unit and neonatal care unit.

FIGURE 1: Study Design

TABLE 1: Assessing dimensions and sub-dimensions for care risk management (AGRASS) applied in a public hospital in northeastern Brazil, 2019

Dimensions	No. of items	Answer Yes	
		f	%
Structure			
Awareness	2	2	100
Accountability	3	3	100
Qualification	4	3	75
PSC promotion	3	1	33
Total	12	9	75
Process			
Identification of risks	13	4	31
Analysis and evaluation of risks	4	2	50
Risk treatment	3	2	67
Risk communication	5	4	80
Process integration	3	1	33
Total	28	13	46

Structural dimension

In this dimension, of the 12 questions involved, 9 (75%) were positive, highlighting the sensitization and accountability sub-dimensions, which obtained the maximum percentage, while the safety culture promotion sub-dimension displayed the lowest percentage as shown in Table 1.

This latter sub-dimension can best be understood by researching the institution's documents and excerpts from the risk manager interview:

Question: Have you evaluated the patient safety culture (PSC) in the past year?

Passage: We passed now recently, it was accomplished.

Question: Did you communicate the results of the PSC assessment to leadership and care professionals? Have you implemented any interventions to improve the evaluation results?

Passage: No, the results are under analysis.

The sub-dimensions with the best percentages of positive responses in this dimension were: Awareness and accountability. The first concerns the involvement of professionals in general, so that the organization is committed to the management of care risks, and the second deals with the definition of an organizational structure responsible for the management of care risks and accountability of their activities.

The following excerpts highlight that the institution has been concerned with these issues:

Question: Has the institution promoted any awareness rising for PS in the last 12 months?

Passage: Yes, we did a bigger event which was the PS forum. Usually, our actions are two per year. We raise awareness in the sectors [...]we focuse on PS goals and with a six month interval we make the same awareness, but only with the focus on notifications, sensitizing the professionals.

Question: Are there posters, leaflets, posters or videos in the institution calling attention to PS?

Passage: There are. We have in all care units an A4 poster [...]emphasizing the types of events [...]the confidentiality of the notification [...]Pharmacovigilance alerts that Anvisa has launched.

Question: Is there an organizational unit responsible for coordinating PS actions?

Passage: There are. There is the Risk Management that works as a physical location and there is the proper Security Center, it is, through an ordinance appointed by the hospital ... our ordinance is in place since 2013 [...]and then we have been updating the nomination of the members.

Several strategies have been developed to promote safety and quality in health care, such as: Involvement, commitment and teamwork, combining superior management and its employees; the latter, however, is the most relevant in promoting positive results in PS assistance¹³⁻¹⁵.

Dimension process

The hospital has more weaknesses in this dimension. Of the 28 questions, 13 (46%) were positive: Risk identification and process integration were the most fragile, while the Risk Communication sub-dimension obtained the best percentage, according to Table 1.

To advance the improvement of quality and the implementation of safe practices, the effective integration of risk management into the organizational process and a safety culture that assesses the care risk management is necessary¹⁶. In fact, the Patient Safety Center is the first instance to manage the risk by analyzing and reviewing the work processes, aligning them with safety practices⁷⁻⁸. In this focus, the AGRASS instrument is innovative because it brings the participation of the ombudsman as a source of risk identification, allowing the knowledge of users and patients opinions to identify failures, helping in planning and decision making¹⁷.

The following excerpts reinforce the fragile aspects identified in this subdimension:

Question: Do you use an internal incident notification system?

Passage: Specific system we do not have, what we use is a form that we provide in the units, but the professionals do not notify much, we have underreporting [...]

Question: Monitor indicators of adherence to PS international goals?

Answer: Hand hygiene, this indicator stays with the Hospital Infection Control Commission (HICC) I believe they do not monitor. There are only awareness actions [...]. We monitor the percentage of unidentified patients correctly and disclose [...]we also have pressure injury and phlebitis which are indicators of the nursing process [...]the others we do not monitor.

Question: Do you use complaints and notifications (ombudsman) to identify risks?

Passage: We even tried together with the Ombudsman, but it is not a well systematized thing not [...]It is not in the service routine.

Observed Practices

The descriptive aspects of the safe practices observed from the work activities of the teams revealed that the institution did not fully implement these practices, according to Figure 2. Other studies already conducted show the non-adherence of these practices in hospital institutions, attributing as causes the undeveloped safety culture, fragile personal and collective engagement and ineffective communication in the health team.

De modo semelhante aos nossos achados, estudo realizado em um hospital universitário, em unidades de internação, relacionado com a prática de higienização das mãos, encontrou problemas de infraestrutura que comprometeram a efetiva adesão a essa prática e ressaltou a importância de instrumentos normativos tais como protocolos, procedimentos operacionais padrão e fluxogramas para a adoção desta prática no âmbito hospitalar²¹.

Safe practices (*)	Observations
<i>Hand hygiene</i>	1. Inadequate hand hygiene; 2. Insufficient sinks in wards;
<i>Patient identification</i>	1. Not using the identification bracelet and therefore the non-implementation of the protocol;
<i>Effective communication</i>	1. Lack of presentation of professionals to patients, but one observed the transfer of information to patients about the procedures to be performed. 2. Registration made in single sheets for later insertion in the medical record.
<i>Fall prevention</i>	1. Actions were observed: Registration of patients at risk of falling; the floors are non-slip; good lighting; beds with locking system on wheels, grid and appropriate height. 2. Absence of information and warnings about the risk of falls to patients and caregivers.
<i>Pressure Injury Prevention (PIP)</i>	1. Actions were observed: Maintenance of body hygiene, maintenance of clean and dry skin; use of moisturizers and diapers. 2. The practice of repositioning patients was not observed every 2h.
<i>Prescription, use and administration of drugs</i>	1. Drug prescription a) computerized: they contained items such as the patient's full name, bed and ward number, dose, pharmaceutical form, route of administration and dosage of medication, but they did not have institution identification, infusion time and speed, nor medical record number. b) Handwritten: They were not legible. 2. Potentially hazardous medications are identified with red warning labels. 3. Monitoring of antimicrobial use: Together with the Hospital Infection Control Commission (HICC), with standardized form. 4. Storage environments and drug preparation environments of each unit: a) partially suitable; b) drugs are identified with a white tape containing the bed number and the schedule time, fixed on the packages; c) In the process on preparing and administering drugs no hand hygiene was observed correctly; d) lack of drug checks with prescription and patient identification data at bedside; e) lack of information to the patient about the administration of the drug; f) schedule of time was obeyed in all clinics.

(*) according with the protocols of HM/Brazil¹²

FIGURE 2: Field observations made in the evaluated clinics. Public Hospital, Northeast of Brazil, 2019.

The results point out weaknesses in the implementation of effective communication, calling attention to the records of the procedures performed on single sheets, only to be later inserted in the medical record, which may lead to loss of information, exchanges or absence of registration. According to the RDC 63/2011²², it is up to health professionals to make the appropriate medical record, and the health service must ensure that it contains records regarding the identification and all procedures provided to the patient²². Effective communication is still a challenge and should be grounded in clear, structured language and using correct techniques, occurring verbally and non-verbally. To be effective, it is necessary to involve the appropriate management, professionals, human, material and financial resources²³⁻²⁶.

The process of patient identification in the investigated institution is not effective. The protocol recommends wearing bracelets on all patients and checking data before performing any procedure, which was not observed in the study. It is important to define clear and simple routines for correct patient identification and to train practitioners on potential errors related to misidentification. Educational measures are fundamental for the consolidation of the practices proposed in the protocols, so that the PS can be optimized^{1,27,28}.

The practice of prescription, use and administration of medications, showed several nonconformities. The steps in the medication use process - prescription, dispensing, administration, monitoring and use - can lead to a number of safety issues. Errors that occur in the process of using medicines can appear in any of these steps and have different typologies.^{29,30}

Situations such as illegibility and abbreviations in the prescriptions; inadequate and erroneous drug dispensation; drugs prepared and administered incorrectly; adverse reactions and drug interactions may come to occur if proper follow-up does not occur.

Potentialities and weaknesses

Facilitating and hindering aspects were identified that allow a better understanding about the implementation of safe practices in the institution. The following facilitating and hindering aspects that allow for a better understanding about the implementation of safe practices in the institution are highlighted, PSC assessment; and have an organizational unit responsible for coordinating PS actions. These actions point out to a path taken by the institution towards quality and safety in patient care, transforming practices where all professionals are responsible³¹.

As hindering factors, there is the fact that the results of the PSC assessment were not disclosed, and interventions were not made, from the identification of fragile areas, aiming to subsidize the planning. Diagnosis is important, but it should come with an improvement plan. Also noteworthy is the lack of a system to monitor adherence indicators to PS targets.

The use of questionnaires and non-participant observation proved to be able to delineate a hospital profile regarding the implementation of safe practices, becoming an important management tool. In this context, AGRASS has proved to be an easy-to-use instrument with comprehensive questions, ranging from sensitizing professionals to PS issues to integrating care risk management processes, enabling more accurate data.

This study has limitations because it does not involve other professional categories regarding the adoption of safe practices and because it represents only a local reality. However, it offers subsidies for comparative purposes with other nosocomial scenarios with similar profiles.

CONCLUSION

The studied hospital institution showed potentialities and weaknesses regarding the implementation of safe practices, with greater difficulties in aspects related to the process. This leads us to infer that this practice is under construction, with some initiatives already consolidated, but others that need improvement.

Knowing the reality guides changes in practices aimed at patient safety, guiding the paths that affect the development of safety culture, and the behavior of professionals aiming at adhering to these practices, incorporating them into daily life.

Adherence to safe practices corroborates the reduction and prevention of harm to the patient, contributing to improving the care quality.

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