

Strategies for promoting patient safety: from the identification of the risks to the evidence-based practices

Estratégias para promover segurança do paciente: da identificação dos riscos às práticas baseadas em evidências

Estrategias para promover la seguridad del paciente: desde la identificación de riesgos hasta las prácticas basadas en evidencias

Roberta Meneses Oliveira¹
 Ilse Maria Tigre de Arruda Leitão¹
 Lucilane Maria Sales da Silva¹
 Sarah Vieira Figueiredo¹
 Renata Lopes Sampaio¹
 Marcela Monteiro Gondim¹

1. Universidade Estadual do Ceará.
 Fortaleza - CE, Brazil.

ABSTRACT

Objective: To identify and analyze strategies for promoting patient safety in the view of the nurses who are directly involved in patient care. **Methods:** A descriptive, qualitative study undertaken in a public hospital in Fortaleza, in the state of Ceará (CE). Data was collected through semi-structured interviews held with 37 nurses, analyzed using the framework of content analysis. The strategies identified for promoting patient safety were presented in three categories: 1. Identification of the main risks related to the nursing care, 2. Incorporation of safe, evidence-based practices and 3. Surveying of barriers to, and opportunities for, safe care. **Results:** The participants identified physical/chemical, clinical, assistential and institutional risks, as well as barriers and opportunities which entail the patient's safety or lack of safety. On the other hand, they mention practices based on international objectives disseminated by the World Health Organization (WHO). **Conclusion:** These professionals' inclusion and active participation in shared management is suggested, for the implantation of a culture of safety.

Keywords: Nursing; Patient safety; Safety management; Quality of health care.

RESUMO

O objetivo deste estudo foi identificar e analisar estratégias para promover a segurança do paciente na perspectiva de enfermeiros assistenciais. **Métodos:** Estudo descritivo, qualitativo, desenvolvido em hospital público de Fortaleza-CE. A coleta de dados procedeu-se mediante entrevista semiestruturada com 37 enfermeiros, analisada segundo o referencial da análise de conteúdo. As estratégias identificadas para promoção da segurança do paciente foram apresentadas em três categorias: 1. Identificação dos principais riscos relacionados à assistência de enfermagem, 2. Incorporação de práticas seguras e baseadas em evidências e 3. Levantamento de barreiras e oportunidades para um cuidado seguro. **Resultados:** Os participantes identificaram riscos físicos/químicos, clínicos, assistenciais e institucionais, além de barreiras e oportunidades que implicam na (in) segurança do paciente. Por outro lado, referiram práticas embasadas em metas internacionais divulgadas pela Organização Mundial de Saúde. **Conclusão:** Sugere-se a inclusão e a participação ativa destes profissionais em uma gestão compartilhada para a implantação da cultura de segurança.

Palavras-chave: Enfermagem; Segurança do paciente; Gerenciamento de segurança; Qualidade da assistência à saúde.

RESUMEN

Objetivo: Identificar y analizar estrategias para promover la seguridad del paciente desde la perspectiva de los enfermeros. **Métodos:** Estudio descriptivo, cualitativo, realizado en un hospital público de Fortaleza/CE. La recolección de datos se realizó a través de entrevistas semiestructuradas con 37 enfermeras, analizadas según el referencial de análisis de contenido. Las estrategias identificadas para promover la seguridad del paciente fueron presentadas en tres categorías: 1) Identificación de los principales riesgos; 2) Incorporación de prácticas seguras, basadas en evidencias; 3) Análisis de las barreras y oportunidades para un cuidado seguro. **Resultados:** Los participantes identificaron riesgos físicos/químicos, clínicos, asistenciales e institucionales, además de las barreras y oportunidades implicadas en la (in) seguridad del paciente. Por otro lado, reportaron prácticas basadas en objetivos internacionales reveladas por la Organización Mundial de Salud. **Conclusión:** Se sugiere la inclusión y la participación activa de los profesionales en la gestión compartida para implantación de la cultura de seguridad.

Palabras-clave: Enfermería; Seguridad del paciente; Administración de la seguridad; Calidad de la atención de salud.

Corresponding Author:

Roberta Meneses Oliveira.
 E-mail: menesesroberta@yahoo.com.br

Submitted on 01/15/2013.
 Resubmitted on 07/19/2013.
 Accepted on 08/13/2013.

DOI: 10.5935/1414-8145.20140018

INTRODUCTION

Initiatives for promoting the safety and quality of health-care are growing in number worldwide, with the involvement both of institutions' senior management and their staff. As a consequence, the aim of quality in the various services offered to society entails the optimization of the results.

More than ten years ago, a report publicized by the United States' Institute of Medicine (IOM) (To err is human: building a safer health system) analyzed the hospital records of 30,121 episodes of hospitalization and identified that serious iatrogenic harm had occurred in 3.7% of the hospitalizations (6.5% of which caused permanent dysfunction and 13.6%, the patient's death). Based in these results, it was estimated that the harms had contributed to the occurrence of 180,000 deaths per year in that country¹.

After that report's publication, reducing adverse events became an urgent need worldwide. Considering healthcare in Brazilian hospitals, it is believed that the errors and their consequences are considerably greater, due to the precariousness of the services provided, the lack of appropriate dimensioning of personnel, the excessive workload and the professionals' low pay¹.

In parallel, additional risks in healthcare provision have been attributed to the health services' complexity and the incorporation of technologies developed. However, simple and effective strategies can prevent and reduce risks and harm in these services, through the following of specific protocols, associated with safety barriers in the systems and continuing education.

Hospital institutions have incorporated this viewpoint with the objective of offering excellent care, reducing costs and ensuring the satisfaction of their clients. The aim is to institute safety in the health organizations as a cultural process, promoting greater awareness among the professionals regarding the culture of safety and an ethical dedication to risk management with consequent acquisition of safety for themselves and for the clients attended, overcoming the gap existing in relation to patient safety².

This gap may be observed in the care process, in which it is appropriate to emphasize the growing occurrence of adverse events (AE), that is, of non-intentional harm resulting in temporary or permanent disability and/or prolonging of the stay in the institution, or death, as a consequence of the healthcare provided³.

Adverse events are commonly associated with individual human errors, but work conditions, structural aspects and the complexity of the activities carried out must be taken into account as triggers. The situations which predispose to the risk of adverse events include technological advances with insufficient improvement of the human resources, demotivation, failure to apply systematization of the nursing care (SNC), delegation of care without appropriate supervision, and work burden⁴.

In the ambit of nursing care, the most frequent errors related to it occur in the administration of medications; in handing over patients and exchanging information; in team-working and communication; in the incidence of falls and pressure ulcers; in failures in the processes of identifying the patient, and in the incidence of nosocomial infection, among others⁵.

As a result, understanding the relation between risks, characteristics of healthcare and the contribution of the hospital network can provide nursing with important elements for improving care. Although the risks related to nursing care have been widely addressed in the literature, it is important to know how they are perceived and evaluated by the professionals involved in the direct care to the patient.

This knowledge is relevant to establish articulations between the hospital services, to trigger health education actions, to contribute to the reduction of mortality associated with serious adverse events, and to improve patients' and professionals' quality of life.

In the light of the problem shown regarding the culture of safety in the health organizations, this article examines phenomena and the assistential model of nursing which involve patient safety, based on the following question: what strategies are used by the nurses to promote patient safety in the hospital context?

Studies related to patient safety and to the participation of the nurse in implanting strategies for improving the quality and safety of the nursing care are necessary and, at the same time, are recent and innovative, and can help the professionals in the area to know the causes and effects affecting the patient's health, as well as making it possible to provide appropriate training for preventing further occurrences and implementing the culture of safety in the health services in general.

This study, therefore, aimed to identify and analyze strategies for ensuring the patient's safety from the viewpoint of the nurses directly involved in patient care, it being believed that it is these professionals who are closest to the patient, the aim being to manage and develop care which is ethical, technically trained and grounded in a culture of safety.

METHOD

This is a descriptive study with a qualitative approach, an excerpt from a multi-dimensional study on safety in the management of the nursing care carried out in the largest hospital in the public network in Fortaleza (CE), in the period November - December 2012.

As inclusion criteria for the professionals in the research, the following were considered: length of activity in the institution of at least one year; and being a nurse directly involved in patient care. Finally, the study was participated in by 37 nurses, a quantity established by theoretical saturation of the data collected in the interviews.

Data collection was undertaken in the hospital itself, after the shift, the professionals being invited to participate in the research and to go to a place set aside for responding to the semi-structured interview. This was composed of guiding questions on concepts and criteria for evaluating the physical, human and organizational structure necessary for the promotion of the patient's safety, as well as questions on the risks related to the nursing care.

With the professionals' authorization, the interviews were recorded, so as to ensure greater fluency, fidelity and speed in the process, as well as better interaction between interviewer and interviewee. The records were transcribed in full and, after this stage, underwent an analytical and descriptive process based on the framework of Content Analysis, which is considered one of the techniques best-suited to qualitative investigation⁶.

In this type of analysis, the different elements of the communication are classified based on readings which allow the identification of the meaning, placing the ideas expressed by the interviewees in order. This framework is made up of three phases: Pre-analysis; Exploration of the material; Treatment of the results, inference and interpretation⁶.

A categorization of the issues raised was made, which is a systematic procedure which allows the discovery of the "nuclei of meaning" expressed in the interviewees' accounts. In accordance with the framework adopted, the recording unit (RU) is the unit of significance to codify, and may be the theme, word or phrase. The *corpus* of this study was made up, therefore, of 37 interviews and 53 recording units, considering the phrase as the unit of significance.

The codes, analyzed in the light of the objective proposed, converged in three main thematic categories, which characterize the strategies for promoting patient safety in the nurses' understanding: 1. Identification of the main risks related to the nursing care; 2. Incorporation of safe, evidence-based practices; and 3. Surveying of barriers to, and opportunities for, safe care. These categories were presented in the results along with the RUs representing the themes surveyed.

So as to ensure the participants' anonymity, these were given codenames beginning with 'N' for 'Nurse', followed by an Arabic number in line with the order in which the interviews took place. It is stressed that only those nurses who -after the explanation of their rights and how they would participate - signed the Terms of Free and Informed Consent participated in the study.

The project followed all the recommendations and ethical precepts of Resolution 466/2012 of the National Health Council and was initiated only after being considered by Ceará State University's Research Ethics Committee (protocol N^o 181.754/12) and the authorization from the institution's Nursing Management.

RESULTS AND DISCUSSION

The study was participated in by 37 nurses, all directly involved in patient care, predominantly female (32 out of 37: 86.5%), approved by public examination by the Health

Department of the State of Ceará (SESA/CE), with a mean age range of 33 ± 7.3 years old.

Regarding training and professional work, the nurses interviewed represented a profile of professionals who had recently qualified in the area - the majority, 24 (64.9%), had qualified within the last 5 years; their length of work in the institution was also recent (1 to 5 years) (81.1%); the vast majority (75.7%) had post-graduate qualifications in various areas of work, including specialization in public health, medical-surgical nursing and occupational nursing, among other specialities.

They also worked in various sectors of the institution analyzed, mainly working in the inpatient units (72.9%), divided by specialized medical areas: internal medicine, surgery, obstetrics, neurology, nephrology, orthopedics and gastroenterology, among others.

The 53 RUs learnt in the 37 professionals' discourses were distributed in three thematic categories, being duly presented and analyzed below, in accordance with national and international benchmarks on patient safety.

Identification of the main risks related to the nursing care

This category brought together the majority of the RU (24), in which the nurses reported the main risks related to the nursing care in the institution, as well as the causes attributed:

(...) In receiving nursing care, the patient is submitted to physical and chemical risks... (N1)

The patient is subject to lack of safety in relation to the medication (there can be mixing-up of medications), and to falls (falls in the bathroom)... (N13)

While we take care of the priorities, the others are at risk of falling, for example. (N20)

(...) we have risks of burns, like, from the electrosurgery pads [return electrode/patient plate]; from the products which we use for asepsis, which can cause chemical burns; so we have to always be attent to care for these issues. (N35)

One can perceive, in the discourses, the nurses' concern with the existence of the physical, chemical and mechanical risks which affect the nursing care and which cause lack of safety for the patient assisted in the institution.

It has already been observed that physical risks, originating from outside the body, are transformed in internal processes on entering into contact with the body, and this must be a reason for the concern of the professionals providing direct care for the patient. The mechanical risks, in their turn, cause a break in the body's continuity, causing wounds and fractures, one of the most concerning, in the hospital context, being the risk of falls from the bed. The incidence of this is currently considered to be an indicator of the quality of the

nursing care, consisting of the number of falls from the bed (involuntary arrival on the ground) in relation to the number of patient-days in the month considered⁷.

The above-mentioned indicator covers the modes of falls from beds, cots, incubators and trollies, making it possible to assess the quality of the nursing care and favoring the adoption of preventive measures and monitoring on the part of the nurses to minimize the problem⁷.

Besides this, this indicator's results make it possible to analyze geographical variations in the distribution of the incidence of falls, identifying areas and groups at greater risk; guiding intervention measures such that the patients do not fall from bed inside the hospital; as well as supporting the process of planning, management and assessment of the nursing actions directed at the patients being assisted.

Risks of other types were also related by the nurses to the safety (and non-safety) of the patient - such as institutional risks, including work burden and communication failures on the part of team members:

Communication errors are common risks. (N12)

The risks which exist are lack of attention, tiredness... the nurse always works in two places, which facilitates the occurrence of the errors. (N2)

The nurses' conceptions corroborate with those of researchers who address failures in following routines, personality clashes and communication failures such as adverse events of the institutional type⁸, which must follow the same monitoring as is undertaken in the cases of clinical or assistential events.

Researchers have already asserted that communication problems entail disturbances in the team activities, leading the professionals to blame one another for the failures, which causes emotional strain, delays, and/or omissions in the administration of medications, as well as creating un-necessary expenditures for the hospital institutions⁹.

Other authors suggest, further, the use of notification bulletins regarding adverse events, with the aim of promoting the identification of these events and incidents, providing nursing with a practical means of communication regarding these unanticipated and unwanted facts, making it possible to explore the situations, construct a database on risks and problem-situations, and allow the carrying-out of the changes necessary or appropriate in the care process⁸.

What is perceived in the practice is the existence of a vicious circle which needs to be broken so that processes may be reviewed and strategies be implemented, with a view to improving communication and ensuring safe care for the patients.

In the process of administering medications, for example, this vicious circle starts with inadequate communication between the pharmacy professional who dispenses the medication, the doctor who prescribes it and the member of

the nursing team who administers it. In this procedure, communication failures are considered one of the main causes of errors, which are also not duly notified, analyzed and treated by those involved, resulting in further communication errors in the team's dynamics.

Regarding the identification of the workloads, it is important that, given the nursing team's precarious conditions of work, priority should be given to both the identification and combatting of all the physical, mechanical, chemical, biological and psycho-social factors which interfere in the well-being of the individuals who provide care.

The accounts below show that the nurses also identify assistential risks in the process of caring, principally those related to the inappropriate administration of medications:

There's the risk of contamination, of nosocomial infection, the risk of drug errors... (N5)

The risk of developing pressure ulcers; the risk of aspiration pneumonia; risks from negligence, from poor administration of antibiotics: medications by the wrong delivery route; equipment going wrong during the administration of medications... (N8)

Errors happen with doses of medication, and dilutions... (N32)

The risks are related to the patients' well-being, to procedure errors, and to medication errors.... (N24)

The care given to hospitalized patients is complex and needs to be undertaken with quality and without causing un-necessary harm to the individual. In the hospital environment, drug therapy is widely used to treat illnesses and to maintain health. However, patients who are hospitalized and using multiple medications are vulnerable to the occurrence of adverse events.

Studies have already addressed the problem of the incidence of adverse drug events (ADE)^{5,10}, suggesting that this is the 'tip of the iceberg' and that the implantation of the method of identifying ADE and the reviewing of the system of medication in the institutions favor the monitoring and implementation of defence, barrier and protection mechanisms directed at improving patient safety⁵.

It is added that the inappropriate use of the medication has been considered a public health problem prevalent around the world, increasing the costs for the institutions and creating lack of control of their budgets, which can impact negatively on the offering of services and materials for the care to be given¹¹.

In addition to identifying the mechanical, physical, assistential and institutional risks, one of the nurses added the clinical risks to which the patients are subjected:

[The patient is exposed to] the risk of thermal shock, hypovolemic shock, burns, and others. (N10)

Regarding the concern about clinical risks, such as hypovolemic shock, burns and hemorrhages, authors have already shown that the nurses and other health professionals tend to value the description of adverse events which compromise the patient's life, such as cases of hemorrhage and cardiac arrhythmias⁵. Such events derive from the existence of clinical risks in the provision of care which are not duly monitored and avoided.

On the other hand, the importance should be noted of establishing efficient communication starting from the identification of the risk or critical incident, from less to more serious, thus avoiding the occurrence of the adverse event and of the harm it causes. One should encourage not only the notification of the serious adverse event, but - principally - also of the risks, its causes, and the strategies implemented for treating it.

Finally, some discourses evidenced the nurses' perception regarding their colleagues' ethical infractions and the service's precarious structural conditions, which entail lack of safety for the patient and greater exposure to the above-mentioned risks:

The risks are from malpractice, I tell you! Some professionals, not just nurses, like doctors and auxiliary nurses, carry out procedures the wrong way and carelessly. (N15)

If the person isn't trained to do that care action, the risk of mixing up medications or doing the care badly is common. (N33)

... In Emergency Room, there's no support whatsoever for the patient's safety. There are beds in the middle of the corridor, the identifications are made on a piece of paper... it's sad! (N4)

There is no change from the supine position and, in this way, there's not much you can do [to prevent lesions] because the patient stays on a trolley. (N16)

Authors have already addressed the issue that it is essential to manage the professionals' work conditions and the responsibility of the companies which provide health services, taking into account the fact that the ethical occurrences exist when the professionals' actions are shown to be negligent, imprudent or, even, carried out without the necessary technical skill or knowledge for undertaking the nursing care safely¹².

The researchers¹² add that the prevention and control of the ethical occurrences require material and human investments and involve costs and political will to implement actions of changes in the dynamic and in the conditions of work. All the nurses' efforts would be insufficient for coping with nursing's ethical occurrences, if there were no process of partnership of the institution and the health professionals, in the sense of committing themselves ethically to an institutional goal of

making great efforts for safety, integrity and respect for the rights of the patient and the work-mate and one's own rights, as professionals and citizens.

On the other hand, it is noteworthy that because the nursing team is often held responsible for the errors, it fears judgments and reactions which may occur, which results in undernotification and failures in the following-up of the situations which result in errors. As a result, the need to develop educational programs which address types of errors and their causes is urgent, discussing scenarios to understand the causes of the problem and proposals for improvements¹⁰.

Thus, it falls to the managers and leaders to promote better integration with the professionals involved in direct patient care for planning and development of joint actions of shared management for the quality of the service.

Incorporation of safe evidence-based practices

In this category, most of the recording units (21) stood out, addressing safe, evidence-based practice as a strategy for promoting safety in the institution.

The nurses' concern with carrying out good practices can be observed in the discourses below:

... I believe that good practices are those which make the environment safe, calm, an environment of good work. (N1)

We try to allow the best comfort and safety for the patient, always observing the matter of the bed, of the bed-rails up (...) (N21)

(...) The nursing team must transport the patient in a wheelchair or on the trolley with the sides up for protection to reduce the risk of a fall. (N34)

... So as not to take infection to the other patients, it's always written in the patients' notes, we also have the small wipe-boards [indicating the types of isolation] on the beds; we fill out a printed sheet with the invasive procedures: catheter, venous access, (...). This is a way that we have to avoid these infections. (N35)

[A safe practice involves] the issue of patient transport, of the presentation of the patient, of checking if it's the correct patient, if it's the correct limb which will be operated on, following the protocols... (N22)

It can be perceived that the good practices mentioned refer mainly to the nurses' worry in relation to the frequent risk of falls, of the transmission of healthcare-related infections and adverse events related to surgical procedures in their work environment. These findings denote a concern with the development of evidence-based practices in their area of work.

In relation to this aspect, studies have strengthened the idea that the nurses are the principal people responsible for the incorporation of safe practices in the health services and

of indicators of the quality of the care given, which is related to the pursuit of efficiency and conformity of the care with the evidence available on patient safety¹³.

It is added that the undertaking of the correct care, at the right time, in the right way, with the right person, aiming to achieve the best results possible, is a principle which is the basis for the quality of the care. These are evidences which can direct the practice of nurses engaged in providing ethical and respectful care, based on the needs of the patient and his or her family, on clinical excellence, and on the best scientific information available¹⁴.

From another perspective, a recent study addressing evidence-based practice as a tool for the work of the nurse found that implementing the clinical evidence in practice is no easy task, suggesting some activities to be carried out to achieve success: developing competences to interpret the results of studies; creating a managerial and organizational culture which favors the use of research; ensuring human and financial resources which are compatible with what is necessary; and attempting to articulate the findings of the research to be implemented with the preference of the patients and their relatives¹⁵.

Some of the nurses interviewed emphasized, also, that the safe practices are in accordance with the international evidence which configures the goals for the safety of the patient, which have been disseminated continuously in the institution:

(...) We're working with the international goals for patient safety. (N11)

We're trying to implant the goals, which are: identification of patients, so there aren't cases of mistaken identity; safe surgery, and the prevention of falls (...) (N14)

(...) Among other actions which we carry out, we have a safe surgery check-list to see if the theater is prepared, if it is a safe environment, if there is an aspirator set up in the operating theater, the issue of equipment, if everything is okay before the surgery, the medications.... It's all checked! (N20)

The accounts demonstrate that these professionals are attentive to the incorporation of scientific evidence in their clinical practice, ensuring the offering of safe care, free from harm, and based on the best actions, translated into quality care.

The goals evidenced in the accounts cover some of the six areas of functioning which guide actions directed at Patient Safety, disseminated by the World Health Organization (WHO) since 2005. These were established to promote specific improvements in areas of care considered problematic, and have specific measurable elements which are evaluated in isolation in relation to the following standards: correct identification of patients; improvement in the effectiveness of the communication between the

care professionals; improvement of the safety in the use of high-risk medications; elimination of wrong side surgery, wrong patient, and wrong procedure; reduction of infection risks; reduction of the risks of harm/injury to the patient who is a victim of a fall^{3,13}.

One nurse emphasized:

If an error happens with me, I'll try to correct it, I'll try to cause the patient not to be harmed because of it. He ideal is that we always tell a colleague. (N6)

One can perceive the concern with appropriate communication regarding the event among the members of the team, this attitude also being considered a basic principle of nursing practice. In relation to this aspect, researchers guarantee that the documentation during the shift, the sharing of information and the reports of incidents are considered the most formal aspects of communication in nursing, with the purpose of guaranteeing its effectiveness¹⁶.

In their research, they publicize that the ideal culture is one in which communication takes place in an open and fair way, at the same time as providing accounts is congratulated and incentivized, and the individuals are neither blamed nor penalized for speaking on safety incidents or other related concerns.

When talking of good practices, one should remember that the health system has not been designed to promote them. This being so, there are few nursing professionals in the world who work in adequate conditions which allow them to carry out for their patients and their family members the nursing care which they learnt or idealized¹⁴.

Surveying the barriers to, and opportunities for, safe care

In this category, they discussed barriers and opportunities found at work for ensuring safe nursing care, found in only eight recording units.

As opportunities, they emphasized the closeness to the patient, the availability of materials, and the professional's concern with undertaking good practice in pursuit of better results, as may be ascertained in some discourses:

Everybody is well aware of the roles they perform here, and how to avoid errors. (N31)

... I consider ICU [Intensive Care Unit] to be safe, because there is all the material needed and, because there aren't many patients for each nurse, there is the advantage of you being closer to the patients and avoiding this happening. (N19)

One may verify, in these discourses of the ICU nurses, the recognition of some structures of the service as opportunities

for promoting safe care in the institution. Among these, the existence of competent professionals who are aware of their responsibilities regarding patient safety, the availability of materials, and the appropriate dimensioning of the nursing team stand out.

In relation to this last aspect, data from recent research evaluated the influence of the dimensioning of the nursing team on the quality of the care in ICU, and found that there is a relation between an under-calculated number of nurses and an increase in rates of infection, mortality, falls, ventilator-associated pneumonia, accidental extubation, and length of hospitalization¹⁷.

In addition to this, in the care of critically-ill patients, so as to prevent complications, reduce expenditure and costs and carry out quality care, the study suggested the dimensioning of the nursing team in line with the clients' needs and the seriousness of their illnesses. In this way, it concluded that the appropriate dimensioning of the nursing team influences the quality of the care given, as well as the occurrence of adverse events with critically-ill patients¹⁷.

As barriers, there was emphasis on the lack of materials, the poor maintenance of equipment, and care not undertaken because of excessive demands, among others, as may be seen from the following accounts:

... I think the lack of safety [in the Emergency Room] is related to the seriousness of the patients when they arrive, and the environment's lack of availability regarding administering medications. (N8)

I don't consider the hospital 100% safe, because of it dealing with emergencies. (N11)

... Because it's a public hospital, there are times when there are difficulties with some materials being in short supply, some equipment failing, although in theory, the hospital was planned to offer safety to the patient (N25)

The findings are similar to the results of recent research which surveyed the barriers or limitations of the setting which affect the carrying-out of the safety strategy in the view of nursing professionals. It was found that the principal threats detected in that study involved: the profession as a corporative barrier; the organization and infrastructure of the health care; clinical variability, scarce protocolization, and absence of leadership; scarce material resources; inadequate proportions of professionals and lack of team-working; assistential and time pressure; lack of incentives and motivation; and the absence of reliable indicators of safety¹⁸.

Therefore, it is of considerable relevancy to invest in the nurses who provide direct care to patients, allowing their participation in the processes of ongoing analysis of the work conditions, so that they may continue to identify risks and incorporate safe, evidence-based practices in the institution.

It is stressed that this study has limitations, which include, principally, the fact that it involved only the nurses directly involved in patient care from one public hospital in the city of Fortaleza (CE), making it impossible to generalize from the results. However, it contributed to the knowledge of the issue, above all regarding the observation that investigations on this matter are new and scarce in Brazil.

In addition to this, this research may support the proposing of further studies aiming to explore in greater depth the questions related to the strategies implemented by the nurses for ensuring patient safety in the hospital setting, especially when it is known that the work of this professional is essential in this context, requiring studies which are concerned with identifying the limits and potentials of the services and professionals for quality care.

FINAL CONSIDERATIONS

The present study allowed the identification and analysis of strategies to promote patient safety in the hospital context. These strategies were selected by nurses involved directly in patient care, emphasis being deserved to be placed on those related to: the careful identification of the risks to which the patients are subject during nursing care; the incorporation of good practices in direct and/or indirect care; and in the identification of the barriers and opportunities found regarding promoting safety in the institution.

It was possible to perceive that the nurses interviewed are able to identify the principal risks to which the patients under their care are exposed (physical, chemical, assistential, clinical and institutional), which must be the targets for attention. This attitude of the shared identification of risks may be considered the first strategy for establishing a culture of safety in the institution.

The risks raised are concerning, as they evidence the quality of the care; however, after these have been surveyed, they must be analyzed to elucidate the possible causes, guiding reflection and continuous education for the service's nursing team. Furthermore, they must receive special attention from the managers, who need to incentivize and train the professionals for prevention, notification and effective management of these risks during the undertaking and the evaluation of the care given.

The incorporation of evidence-based practice associated with the surveying of the barriers and opportunities was also a strategy identified which corresponded to an encouraging result, as it demonstrates that initiatives are already being taken by the professionals so as to promote patient safety.

During this study it was agreed that tacit knowledge, the experience, the values and the skills in carrying out actions which prioritize patient safety constitute a different type of evidence, which has a strong influence on decision-making for planning management of the nursing care.

The impact of patient safety on the quality of the nursing care should be emphasized. The reduction of the risks and harm and the incorporation of good practices favor the effectiveness of the nursing care and its management in a safe way. This improvement depends on the necessary change of the professionals' culture in the interests of safety, on the use of quality indicators, on the existence of a records system, all aligned with a nationally-instituted patient safety policy.

Therefore, continuous efforts must be prioritized in the practice, from senior management to the professionals involved in direct care, with the aim of promoting physical, human and organizational structure in quality and quantity which can ensure the promotion of the culture of patient safety in the hospital and the satisfaction of the staff and the patients and their family members. Such investment should take into account aspects directed at management of people, feasible working days, adequate pay and the establishment of good interpersonal relationships through encouragement for effective communication and team work.

REFERENCES

1. Belela ASC, Peterlini MAS, Pedreira MLG. Revelação da ocorrência de erro de medicação em unidade de cuidados intensivos pediátricos. *Rev. bras. ter. intensiva*. 2010;22(3):257-63.
2. Claro CM, Krocokz DVC, Toffolletto MC, Padilha KG. Eventos adversos em Unidade de Terapia Intensiva: percepção dos enfermeiros sobre a cultura não punitiva. *Rev. Esc. Enferm. USP*. 2011; 45(1): 167-72.
3. Roque KE, Melo ECP. Avaliação dos eventos adversos a medicamentos no contexto hospitalar. *Esc. Anna Nery*. 2012 jan/mar; 16(1):121-7.
4. Beccaria LM, Pereira RAM, Contrin LM, Lobo SMA, Trajano DHL. Eventos adversos na assistência de enfermagem em uma unidade de terapia intensiva. *Rev. bras. ter. intensiva*. 2009; 21(3): 276-82.
5. Roque KE, Melo ECP. Adaptação dos critérios de avaliação de eventos adversos a medicamentos para uso em um hospital público no Estado do Rio de Janeiro. *Rev. bras. epidemiol.* 2010 dez; 13(4): 607-19.
6. Bardin L. Análise de conteúdo. Lisboa (POR): Edições 70; 2010.
7. Moura GMSS, Juchem BC, Falk MLR, Magalhães AMM, Suzuki LM. Construção e implantação de dois indicadores de qualidade assistencial de enfermagem. *Rev. gauch. enferm.* 2009; 30(1): 136-40.
8. Paiva MCMS, Paiva SAR, Berti HW. Eventos adversos: análise de um instrumento de notificação utilizado no gerenciamento de enfermagem. *Rev. Esc. Enferm. USP*. 2010; 44(2): 287-94.
9. Silva AEBC, Cassiani SHB, Miasso AI, Opitz SP. Problemas na comunicação: uma possível causa de erros de medicação. *Acta paul. enferm.* 2007; 20(3): 272-6.
10. Bohomol E, Ramos LH. Erro de medicação: importância da notificação no gerenciamento da segurança do paciente. *Rev. bras. enferm.* 2007; 60(1): 32-6.
11. Anvisa. Agência Nacional de Vigilância Sanitária. Parcerias para diminuir o mau uso de medicamentos. *Rev. saude publica.* [online]. 2006 [citado 2013 jan 10]; 40(1): 191-2. Disponível em: <http://www.scielo.br/pdf/rsp/v40n1/27135.pdf>
12. Freitas GF, Oguiso T, Merighi MAB. Motivações do agir de enfermeiros nas ocorrências éticas de enfermagem. *Acta paul. enferm.* 2006; 19(1): 76-81.
13. Vargas MAO, Luz AMH. Práticas seguras do/no cuidado de enfermagem no contexto hospitalar: é preciso pensar sobre isso e aquilo. *Enferm. Foco*. 2010; 1(1): 23-7.
14. Pedreira MLG. Práticas de enfermagem baseadas em evidências para promover a segurança do paciente [palestra]. *Acta paul. enferm.* 2009; 22 (especial 70 anos): 880-1.
15. Pedrolo E, Danski MTR, Mingorance P, Lazzari LSM, Méier MJ, Crozeta K. A prática baseada em evidências como ferramenta para prática profissional do enfermeiro. *Cogitare enferm.* 2009 out/dez; 14(4): 760-3.
16. Casey A, Wallis A. Effective communication: principle of nursing practice *E. Nurs Stand.* 2011; 25(32): 35-7.
17. Versa GLGS, Inoue KG, Nicola AL, Matsuda LM. Influência do dimensionamento da equipe de enfermagem na qualidade do cuidado ao paciente crítico. *Texto & contexto enferm.* 2011 oct/dez; 20(4): 796-802.
18. Ques AAM, Montoro HC, González MG. Fortalezas e ameaças em torno da segurança do paciente segundo a opinião dos profissionais de enfermagem. *Rev. latino-am. enfermagem* [online]. 2010 [citado 2013 jan 10]; 18(3): 339-45. Disponível em: http://www.scielo.br/scielo.php?pid=S0104-11692010000300007&script=sci_abstract&tlng=pt.