NURSES AND PATIENT SAFETY IN HOSPITAL PRACTICE

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ABSTRACT: Study of qualitative nature, with the aim of analyzing nurses’ knowledge on patient safety in the hospital environment. Field research was conducted in October 2015 at a general hospital in the south of the state of Minas Gerais, by means of semi-structured interviews with 43 nurses. The data were analyzed with the use of Bardin’s content analysis method, identifying two categories: nurses’ knowledge on patient safety in hospital practice and patient safety in nursing practice: strengths/strategies and weaknesses/difficulties. The results pointed that nurses have knowledge on patient safety based on the World Health Organization and the Patient Safety National Program, and they demonstrated concern for aligning work processes and improving safety culture in health services.

DESCRIPTORS: Nurses; Knowledge Bases; Nursing Care; Patient Safety; Hospitals.

OS ENFERMEIROS E A SEGURANÇA DO PACIENTE NA PRÁXIS HOSPITALAR

RESUMO: Estudo de natureza qualitativa, com o objetivo de analisar o conhecimento dos enfermeiros sobre segurança do paciente no ambiente hospitalar. A pesquisa de campo foi realizada em um hospital geral do sul de Minas Gerais, em outubro de 2015, por meio de entrevistas semiestruturadas com 43 enfermeiros. Os dados foram analisados utilizando a técnica de análise de conteúdo, conforme Bardin, identificando duas categorias: conhecimento dos enfermeiros sobre segurança do paciente na práxis hospitalar e segurança do paciente na práxis do enfermeiro: fortalezas/estratégias e fragilidades/dificuldades. Os resultados apontam que os enfermeiros possuem o conhecimento sobre segurança do paciente embasado na Organização Mundial de Saúde e Programa Nacional de Segurança do Paciente e demonstram preocupação em alinhar os processos de trabalho e melhorar a cultura de segurança no serviço de saúde.

DESCRITORES: Enfermeiras e enfermeiros; Bases de conhecimento; Cuidados de enfermagem; Segurança do paciente; Hospitais.

LOS ENFERMEROS Y LA SEGURIDAD DEL PACIENTE EN LA PRAXIS HOSPITALARIA

RESUMEN: Estudio de naturaleza cuantitativa, con el objetivo de analizar el conocimiento de los enfermeros sobre seguridad del paciente en el ámbito hospitalario. La investigación de campo fue realizada en un hospital general de Minas Gerais, en octubre de 2015, a través de entrevistas semiestructuradas con 43 enfermeros. Datos analizados utilizando técnica de análisis de contenido según Bardin, identificándose dos categorías: conocimiento de los enfermeros sobre seguridad del paciente en la praxis hospitalaria y seguridad del paciente en la praxis del enfermero: fortalezas/estrategias y debilidades/dificultades. Los resultados expresan que los enfermeros poseen el conocimiento sobre seguridad del paciente basado en la Organización Mundial de la Salud y el Programa Nacional de Seguridad del Paciente, y demuestran preocupación por ordenar los procesos de trabajo y mejorar la cultura de seguridad del servicio de salud.

DESCRIPTORES: Enfermeros; Bases del Conocimiento; Atención de Enfermería; Seguridad del Paciente; Hospitales.

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INTRODUCTION

Concern about patient safety, understood as “reduction of risk of unnecessary harm associated with healthcare to an acceptable minimum”\(^{(1)}\), assumed a privileged place in the worldwide discussion as an obstacle to be overcome in search for quality of care provided in different care levels\(^{(2)}\). Major efforts were implemented over time with the aim of offering patients safer care\(^{(3)}\).

The World Health Organization (WHO) established the World Alliance for Patient Safety\(^{(4)}\) in 2004. One of the first initiatives of the Alliance was the development of a classification for patient safety\(^{(5)}\), namely the International Classification for Patient Safety - ICPS\(^{(1)}\). This standardization was considered a solution to spread learning into healthcare systems and to define, harmonize and improve patient safety through time and borders\(^{(6)}\).

At the same time, the WHO established Global Patient Safety Challenges\(^{(7)}\), with the aim of helping healthcare institutions to deal with more difficult areas of patient safety. The most discussed and worked goals in health services are: to identify patients correctly; to improve communication effectiveness; to improve safety of high-risk medications; to ensure the appropriate place, correct procedure and surgery in the correct patient; to reduce risk of infections associated with medical care; and to reduce risk of injuries caused by patients’ fall.

In 2013, the Brazilian Ministry of Health established the Patient Safety National Program (PNSP, as per its acronym in Portuguese)\(^{(8)}\), with the general objective of contributing to the qualification of health care, in both public or private healthcare institutions of the national territory, according to priority given to patient safety in healthcare institutions in the political agenda of the WHO Members States\(^{(9)}\).

Brazilian healthcare institutions have incorporated this program with the aim of offering excellence in care, reducing costs and ensuring client satisfaction\(^{(10)}\). In this context, nurses count on several possibilities to perform their activities. Nurses are responsible for providing care to the person, family and collectivity, free of harm resulting from malpractice, negligence or imprudence. The nursing staff must ensure safe care and provide appropriate information to the person and family about rights, risks, complications and benefits concerning nursing care\(^{(11)}\).

The role of nursing professionals, who spend most of their time with patients, is to collaborate with the development of more positive expectations, by means of humanitarian interventions, for the improvement of quality of care\(^{(12)}\).

The objective of the present study was to analyze nurses’ knowledge on patient safety in the hospital environment, in face of the relevance of these professionals’ participation regarding the PNSP implementation in health services.

METHOD

A qualitative study was conducted at a general hospital in the south of the state of Minas Gerais, which had 289 nurses in its staff. Forty-three nurses participated in this study. For the participants’ selection, the following criteria were adopted: to be working in the healthcare institution as a nurse; and to be working in the institution for at least one year and not being on paid vacation and/or on work leave. Of the 43 nurses, two were excluded from the study because they worked in the institution for less than one year, thus not meeting the inclusion criteria. In total, 41 nurses participated in the study.

The study was conducted in three stages. First, a meeting with the institution's nursing technician supervisor was held for awareness of the study's development; then, individual approach with nurses was provided to formalize the invitation, present the objective of the study and schedule time and place for the interviews, and finally to conduct them in a place intended for this purpose.

The volunteer nurses were explained about the objectives of the study, their rights regarding confidentiality, refusal to participate in the study and consent’s withdrawal at any time during the study, without causing them any damage. In addition, they were asked to sign an informed consent form in two copies.
Data were collected by means of semi-structured interviews from 21 to 27 of October 2015 by the researcher. A form containing characteristics of the participants and the following guiding question was used for the interview: Tell us what you know about patient safety. The interviews were recorded in an MP4 device and then transcribed. The participants were identified with acronyms from E1 to E41. Data collection ended when information became repetitive, not resulting in new findings.

The interviews had an average duration of seven minutes. Information obtained from the speeches was submitted to content analysis,(13) which was composed of three stages: pre-analysis, material exploration and treatment of results, inference and interpretation. During pre-analysis, a thorough reading was conducted and the transcribed material was organized, resuming the object and objective of the study to undertake categorization. Later, material exploration was undertaken, identifying meaning cores for categorization. Two categories were identified: nurses’ knowledge on patient safety in hospital practice and patient safety in nursing practice: strengths/strategies and weaknesses/difficulties. The interpretation of the empirical material with theoretical axes was undertaken for treatment of results.

The research project was approved by a research ethics committee under protocol no.1189495.

RESULTS

Participants’ characteristics

Of the 41 nurses who participated in the study, 37 (90%) were women with a mean age of 33 years; time of profession and length of work in the institution of nine and eight years, respectively. Seventeen (41%) participants already worked in the institution as nursing technicians and similar professions before finishing their undergraduate course in nursing; 30 (73%) nurses had a latu sensu specialization, and the most mentioned were: ICU (general, cardiology and neonatology), Urgency and Emergency; Health Administration/Management; Health Education; Occupational Health Nursing; and Obstetrics. As observed, the higher the position (general supervision, ward coordinator, ward supervisor/leader and nurse/level 1), the more specializations the participants had. Most participant nurses worked in the morning shift and did not have another employment relationship.

Nurses’ knowledge on patient safety in hospital practice

Nurses pointed several definitions on patient safety:

Patient safety is everything we can do to prevent harm to patients […].(E4)

It is the main objective of nursing: safe care; it is my main role […] it involves the individual as a whole. (E15)

Some interviews showed confusion and/or lack of knowledge on patient safety:

I do not have much knowledge on this subject; it is something we see in the everyday, but still […].(E3)
First, coming to work, arriving here in the workplace, it is very complex, it involves everything […].(E30)

Another interview showed another type of safety found in health services: biosafety and occupational health:

Occupational safety is everything you do to prevent against any type of accident […] from using personal protective equipment correctly to care with cleaning, asepsis and physical space […].(E34)

Patient safety in nursing practice: strengths/strategies and weaknesses/difficulties

Regarding strengths in nursing practice, the nurses’ reports pointed to the use of instruments and strategies that favor patient safety in the hospital environment.
We use a risk panel in care, in this panel we identify: risks of fall, phlebitis, emotional vulnerability, bleeding and processes that involve patients during hospitalization. (E8)

We analyze events that happen in the institution; we have adverse events and sentinel events [...]. (E14)

For nurses, the participation of family members/companions is essential for quality care and patient safety.

An aspect that I find extremely important is the participation of companions [...] we must involve them in the process; we must call them to act together with the staff, showing their importance [...]. (E6)

Nurses pointed communication and continuing education as strategies to expand safety culture in the institution.

Of course that humanly, there are weaknesses, nothing is 100%, but we try to make the team aware based on permanent learning, continuing education [...]. (E18)

Communication is very important in our area, it is the basis of everything [...] if everyone could communicate clearly with each other, from 10 events, it would reduce to one. (E32)

Regarding difficulties in nursing practice, the nurses’ reports pointed that overcrowding, work overload and inadequate physical structure interfere negatively with patient safety in the hospital environment. Work overload and overcrowding abovementioned reflect a major problem presented in Brazilian institutions.

The sector holds 10 beds, but sometimes there are 22 or 20 patients; overcrowding is a risk, the staff might administer wrong medication [...]. (E3)

Furthermore, the higher complexity of patients in clinical areas and the lack of skills of the staff affect nursing care, exposing patients to risks.

We have many new employees and training time is short [...] they will soon have to assume responsibility for patient care; the risk of harm for patients is very high [...]. (E17)

**DISCUSSION**

The hospital environment presents several risks to patient safety, which can aggravate their health status. Therefore, the professionals’ role is to identify health risks which are present in each unit, ensure patient safety and their recovery, as well as to prevent or minimize complications during their stay in the institution. Care must be provided without causing harm, to permeate care to patients through comprehensiveness (14-15).

The meaning attributed by nurses to patient safety corroborates the definition of the WHO (1). Nurses reiterate that their role in patient safety is to provide safe care free of harm. This harm includes diseases, injury, suffering, inability, dysfunction and/or death of patients.

The ICPS (1) defines other classifications mentioned: event is something that occurs or involves patients. Risk, in turn, is the possibility of an incident’s occurrence. Incident is an event or circumstance that could have resulted, or resulted in unnecessary harm to patients. Incidents are divided in incident without harm and incident with harm (adverse event). The adverse event becomes a sentinel event when harm results in death or serious loss of patients. The term accident is more used in occupational safety.

When the definition proposed by the WHO is analyzed, some participants demonstrated doubts and/or uncertainties when defining patient safety. At the same time, other concepts of safety included in healthcare institutions were found, such as biosafety and occupational health.

Biosafety in the hospital environment aims to achieve control and reduction and/or elimination of risks inherent to activities that compromise human, animal and environmental health (16), by means of preventive actions. Within these services, the Brazilian Regulatory Standard NR-32 establishes protective measures for workers’ health, as well as those who perform activities of health promotion.
and care in general\textsuperscript{(17)}. 

For both patient and workers' safety to be effective in healthcare services, professionals count on strategies established by the Brazilian Ministry of Health for the development of actions such as: patients' identification; incentive to hand hygiene; prevention, control and notification of adverse events; safe surgery; safe administration of medications, blood and blood components; incentive to patients' participation in care provided; and actions for prevention of falls and ulcers caused by blood pressure\textsuperscript{(18)}. 

Nurses perform an important role in the development of these actions. Within their abilities and skills, they are able to diagnose and solve health problems; communicate, make decisions, intervene in the work process; work as a team and face ever-changing situations. Nurses must use instruments that ensure quality of nursing care and health care with principles of ethics and bioethics\textsuperscript{(19)}. 

Nursing services have an important role in the search for quality in healthcare institutions, considering the number of professionals working in the institutions and their responsibility in care provided to patients during 24 hours. These are the professionals who coordinate and manage the whole care process to be developed regarding patients, and everything that involves it in the hospital context\textsuperscript{(20)}. 

Some nurses explained the use of strategies as processes, protocols, panels for providing quality care with a focus on minimizing risks to patients. These instruments organize care in a feasible and beneficial way to patients, since they work with multidisciplinary and interdisciplinary focus\textsuperscript{(21)}. 

Another aspect raised by nurses is the participation of family members/companions in the health-disease process of patients. The right of the companion to stay in the hospital environment is already recognized for some users of the Brazilian healthcare system. 

Communication, accountability of actions and continuing education were raised by the participants as essential for the strengthening of safety culture in the institution. Patient safety culture reflects on the behavior of the members of an organization, service, department or team, especially in values and beliefs shared by them, and on how much they prioritize patient safety. Promoting safety culture implies in establishing a set of interventions based on principles of leadership, teamwork, in change of behavior\textsuperscript{(25)}. 

In this process, awareness and involvement of all professionals are essential, but making this happen, incentive and encouragement from leaders are necessary, and it should be understood that they cannot be something arbitrary. Therefore, it is important to influence professionals in a natural way, encouraging them to a greater awareness of the importance of the whole process, because otherwise, it will result in discouraged professionals and the non-achievement of required standards\textsuperscript{(26)}. 

Work overload and overcrowding were pointed by nurses as detrimental to quality care and to the establishment of a safety culture. These data corroborate the literature\textsuperscript{(27-28)}. 

A study conducted in 2013\textsuperscript{(29)} showed that the increased number of patients assigned to the nursing staff per day is significantly associated with an increase in incidence of errors, falls from bed, infections, and staff absenteeism and turnover. The study also proved that the highest number of patients assigned to nursing aides/technicians per day, is associated with the lowest rate of patient satisfaction with the nursing team. 

The media often reports poor working conditions, limited resources, overcrowding and long delays in Brazilian public hospitals, exposing patients to medical errors and failures in care. Reports like these increase the population's perception suggesting inefficiency of health professionals\textsuperscript{(29)}. 

http://revistas.ufpr.br/cogitare/
Patient safety is not only linked to the multidisciplinary care provided in health services, but also to the involvement of everyone for the compliance of safe policies. The PNSP cannot be seen as the only measure able to change this picture. It considers in its potential the promotion of the importance of the role of professionals and teams in care qualification processes (9).

Studies related to patient safety and the participation of nurses in the implementation of strategies for quality and safe care improvement are necessary and innovative at the same time, and they may help professionals of the area to know the causes and effects to patients’ health, besides enabling adequate training for the prevention of new errors in health services (10).

**FINAL CONSIDERATIONS**

The participants of the present study developed their performance in hospital practice, with responsibility based on principles of professional ethics; by their reports, they demonstrated knowing risks inherent to patients during hospital care and prioritizing patient safety based on legislations. So that patient safety is effective in health services, nurses used instruments (processes, panels, evaluation of events) proposed by the hospital management, aiming at quality of care.

The difficulties raised by nurses, such as overcrowding, inadequate physical space, lack of skills of the team, work overload and failure in communication, corroborate the Brazilian literature, demonstrating the difficulty in spreading a safety culture in hospitals. Nurses’ concern in aligning processes and working patient safety everyday through training, team awareness and continuing education was pointed as a strategy for improving safety culture in the hospital environment.

Studies on patient safety are increasing in the country. The present study had as limitation the knowledge base of nurses of the studied hospital institution only. New studies on patient safety with other healthcare professionals are suggested, and studies with primary and secondary health care, which are incipient in the country, are recommended.

**REFERENCES**


28. Paiva MCMS, Paiva SAR, Berti HW. Eventos adversos: análise de um instrumento de notificação utilizado no