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Original Article

Strengths and Threats Regarding the Patient's Safety: Nursing Professionals' Opinion[1]

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The aim of this research is to know the barriers and opportunities that nursing professionals detect in their clinical practice in order to develop the culture of patient safety and to identify future research lines. This qualitative study is based on the DELPHI method, with a group of 19 nursing professionals from education and care practice, involving both primary and specialized care. Weaknesses and threats revolve around five categories: profession, organization and infrastructure; indicators; communication and safety culture; and safety training. Opportunities to improve safety cover six categories: organizational change; promotion of the safety culture, professional training and development; relationship with the patients; research; and strategic planning. Work is needed to improve safety and nursing should be ready to assume this leadership.

Descriptors: Nursing; Safety Management; Delphi Technique; Qualitative Research.

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Fortalezas e ameaças em torno da segurança do paciente segundo a opinião dos profissionais de enfermagem

O objetivo deste estudo é conhecer as barreiras e oportunidades que os profissionais de enfermagem detectam em sua prática clínica para o pleno desenvolvimento da cultura da segurança do paciente e identificar possíveis linhas de pesquisa futuras. Trata-se de um estudo qualitativo baseado na técnica Delphi modificada sobre um grupo composto por 19 profissionais de enfermagem do âmbito docente e assistencial, tanto do atendimento primário como especializado. Encontrou-se que as debilidades e ameaças giram em torno de cinco categorias: profissão; organização e infra-estrutura; indicadores; comunicação e cultura de segurança; e, formação em segurança. As oportunidades para melhorar a segurança compreendem seis categorias: mudança organizacional; fomento da cultura de segurança, formação e desenvolvimento profissional; relação com os pacientes; pesquisa; e, planejamento estratégico. Conclui-se que existe a necessidade de trabalhar para melhorar a segurança e que a enfermagem deve assumir essa liderança.

Descritores: Enfermagem; Gerenciamento de Segurança; Técnica Delfos; Pesquisa Qualitativa.

Fortalezas y amenazas en torno a la seguridad del paciente según la opinión de los profesionales de enfermería

El objetivo de este estudio es conocer las barreras y oportunidades que los profesionales de enfermería detectan en su práctica clínica para el pleno desarrollo de la cultura de la seguridad del paciente e identificar posibles líneas de investigación futuras. Se trata de un estudio cualitativo basado en la técnica Delphi modificada sobre un grupo compuesto por 19 profesionales de enfermería del ámbito docente y asistencial, tanto de atención primaria como especializada. Se encontró que las debilidades y amenazas giran alrededor de cinco categorías: profesión; organización e infraestructura; indicadores; comunicación y cultura de seguridad; y, formación en seguridad. Las oportunidades para mejorar la seguridad comprenden seis categorías: cambio organizacional; fomento de la cultura de seguridad, formación y desarrollo profesional; relación con los pacientes, investigación; y, planificación estratégica. Se concluye que existe la necesidad de trabajar para mejorar la seguridad y que la enfermería debe asumir ese liderazgo.

Descriptores: Enfermería; Administración de la Seguridad; Técnica Delfos; Investigación Cualitativa.

Introduction

Patient safety is a complex theme and, as such, the main threat is to make it indisputable. In recent years, we are witnessing the full development of a global policy and strategy in countries with different development levels, under the auspices of the World Health Organization. Thus, the strategic option for safety has been included on the agendas of health institutions, organizations and systems. Beyond initiatives that could make it seem a matter of fashion though, patient safety has ethical and legal foundations[1]. The clinical patient safety problem is

part of the health world and not just hospital world[2]. This innovative perspective is influencing the development of actions and the encouragement of good practices. Nevertheless[3], there is a risk of turning the safety theme into the Holy Grail of clinicians, epidemiologists and managers, at risk of losing its meaning and turning into mere rhetoric.

Therefore, the System should know and recognize its errors, resides proposing measures to avoid them, knowing that part of them damage the patients[4]. If, as one says[5], making mistakes is human, taking measures to avoid errors is an urgent need. These patient safety measures include Quaternary Prevention[6], defined as "the set of activities aimed at avoiding unnecessary damage caused by medical activity". Now, we believe that this concern has invaded clinical practice without systematic and specific research about it. Some studies indicate the pertinence of addressing safety as a research priority in health services that are part of the Spanish National Health System[7]. And, although some studies have put a finger on the sore spot by identifying errors, there is little production about effective measures to work in this line, despite the belief that patient safety has been and is a constant in professional development, particularly for nursing professionals[8]. What seems evident is that this change strategy has not been sufficiently interiorized yet. Therefore, knowledge is needed about how safety changes are interpreted, as well as about perceptions related to this phenomenon.

This research aims to get to know and evaluate the barriers nursing professionals detect in their clinical practice with a view to the full development of the safety culture in daily practice, as well as the positive elements that emerge from the system and serve as allies to put in practice the safety strategy and identify possible research lines in the field of clinical safety.

Methods

Approaching the safety culture demands multiple foci that permit a more comprehensive and dynamical in-depth look into the different interacting processes in this area. In that sense, qualitative evaluation research offers a critical, analytic and comprehensive evaluation model, as it not only evaluates results but the process used to achieve them, identifying both strengths and weaknesses, and guides future decision making[9]. That is why the researchers decided to approach the study objective with a qualitative evaluative design based on the modified Delphi technique (Mini-Delphi).

Voluntary participants were selected. The group comprised 19 nursing professionals active in teaching and care, at the primary and specialized care levels. Participants came from different Spanish communities, except two who came from Mexico. The meeting took place on November 21st 2008, during the V International Meeting on Evidence-Based Nursing, organized by the Index Foundation in Granada (Spain), which focused on the existing relation between evidence, care and patient safety[10]. In the research, legal and ethical principles established in the Spanish Law of Biomedical Research were respected. Participants agreed to take part voluntarily alter they had been informed, guaranteeing anonymity and data confidentiality. The modified (real-time) Mini-Delphi technique was chosen, because of its flexibility and adaptability, as it serves to precisely determine positions, clarify the perspective of different viewpoints inside a group, identifies solutions to a problem and makes it possible to conduct the process during a meeting or conference[11]. Moreover, it can be used to achieve greater understanding of a reality based on different perspectives.

To facilitate answers, the variables were adjusted to a structure similar to the SWOT matrix, which includes four sections: strengths, weaknesses, opportunities and threats. This matrix is useful to analyze a problem in combination with possible solutions, which contributes to professionals' complete view of the health context. For the sake of this research, weaknesses and threats were conceived as the environmental barriers or limitations that affect the development of the strategy; on the other hand, strengths and opportunities were considered as factors that, if used, can counterweigh the weaknesses and threats, generating optimal and favorable conditions for the development of the safety strategy. Thus, two discourse areas were outlined: one that favors the safety culture and another working in the opposite sense, as an obstacle, felt as a catch for the development of safety. These two conceptual areas will be transported to the results in a similar way. After presenting the meeting objectives, the moderator explained the method and each participant filled out a form structured according to the proposed variables. The data collection form was self-administered, guaranteeing participants' anonymity. Only information about origins and work context were collected.

The analysis involved different phases: inclusion of the ideas participants contributed into a worksheet created for this purpose; reduction of unreadable or repeated data; discovery of categories in each element of the matrix to group ideas in a logical and coherent

way; description of each element supported by the participants' discourse, following the previously defined conceptual structure.

Results

Environmental barriers or limits affecting the development of the safety strategy

The main threats detected revolve around five categories:

- The profession as a corporate barrier
- Health care organization and infrastructure, which included five subcategories:
  - Clinical variability, lack of protocols and absence of leadership
  - Scarce material resources
  - Inadequate proportion of health professionals and lack of teamwork
  - Care pressure and time
  - Lack of incentives and motivation
- Absence of reliable safety indicators
- Communication and safety culture
- Safety education.

Self-interested behavior is seen as a barrier. In this sense, some conflict is perceived between organizations and other groups, especially the medical category, which has a feeling of losing power with respect to other professionals. The following determining factors are observed: the group's commodity or passive attitude, a small percentage of professionals dedicated to safety, and lack of identification of professional responsibilities.

Health care organization and infrastructure act as obstacles for safety due to the existence of great clinical variability, lack of protocols and absence of clear leadership in the safety area, manifested by the insufficient diffusion of quality plans, protocols etc., in addition to the professionals' limited participation in their elaboration. Other limiting factors are routines, lack of interprofessional protocols, lack of support by management to put in practice and develop safe intervention, discontinuity of care or inexistence of a process-based risk catalogue. Participants express the need for the patient safety culture to reach all organizational layers in health center with a view to its effective establishment, which demands great effort by the administration.

One concern is related to limited material resources, reflected in an adjusted economic budget. It is difficult to deploy safety with inadequate or scarce material resources (lack of handrails, bathrooms, etc.) or deficient or inadequate technological support for the patients who receive care. In addition, there is the economicist policy that hides errors and the dispersion of resources and competences between autonomous and state entities.

Users are somewhat mistrusting of health professionals and vice-versa, which translates into a lack of credibility and lack of patients' participation in clinical decisions. Care work is organized hierarchically instead of interdisciplinarily, without work groups that watch over the improvement of clinical safety and user satisfaction; interdisciplinary teams are missing too. This entails the productions of interventions with little professional control and increased complications for patients and, logically, decreased care quality. Professionals manifest the feeling that safety is a quality fashion and will be forgotten in a while, indicating a lack of internal commitment (responsibility) and a certain degree of resistance to change.

One of the factors that make it difficult to develop actions to improve safety is the great care pressure professionals suffer. The great care demand and heavy workload make it difficult to seek scientific evidence. Moreover, new care technologies and demands, unknown to the professionals, would act as it they decreased human resources.

The time factor is important. Besides the lack of time during work hours to address patient safety themes and teach other professionals and the lack of actual time to perform activities and reach a consensus about procedures, there is the use of professionals' work time to perform tasks and not to detect complications. Another limiting factor is the lack of globally acceptable and accepted indicators to analyze and evaluate patient safety, despite proof that work is being done.

As for the safety and error communication culture, a lack of communication and of an adverse event (AE) notification culture is manifested, as well as difficulties to accept human error out of fear for punishment if the AE is notified, the population's misunderstanding due to the lack of an error culture, and the fact that error notification can mean a problem for other professionals. This demands adaptation to legal standards. Health organizations' in-depth work on clinical safety demands knowledge on current errors, which requires a change in thinking and the use of adequate records.

Finally, insufficient education on clinical safety themes is noticed, as well as lack of specific training on process-related risks, inadequate knowledge management in this area and lack of training on bibliographic searches and the search for evidence.

In addition to this barrier, there is clinical professionals' lack of access to existing evidence, which

increases patients' insecurity and some professionals' difficulties to distinguish between evidences and customs/routines. One final issue is the danger of information saturation in the field of safety, at risk of making professionals insensitive.

Strengths and opportunities to develop the safety strategy

With respect to strengths and opportunities, participants' answers revolve around six aspects: (a) organizational change; (b) promotion of safety culture; (c) education and professional development; (d) relation with patients, (e) research; and, (f) strategic planning.

The opportunity of organizational change is feasible when professionals welcome themes related to patient safety and due to the novelty and great media repercussion of the theme, which is why the most has to be made of the current "boom". The existence of management teams that motivate the promotion of institutional changes needs clear leadership by a group of trained professionals, in which the nurse figure serves as a guarantee of patient safety; this will demand the creation of an internal committee at each of the centers, with interdisciplinary sections in multidisciplinary teams.

Working in clinically safe environments makes health professionals feel good and, in the long term, working with safety decreases workloads and reduces costs. Professionals should develop greater professional zeal, which will be possible if the following exist: professional motivation and involvement with the work; stimulation for self-criticism, change and improvement; safe actions carried out elsewhere and which can be followed as an example; committed tutors who teach well; communication between professionals and institution; and adequate resource use. For this purpose, the potential of a number of resources is available: digital history; emerging domotics (electronics and informatics applied to space); self-controls and prevalence cuts at centers; care safety indicators; incorporation of emerging technologies; evaluation of care practices; prevention of medication errors; etc.

The stimulation and encouragement of the safety culture will imply increased potential for: the organizational culture; collaborative and participatory work; and the promotion of the belief that change and improvement are possible. The nursing class' great ability to adapt to new work methods and health professionals' greater awareness will permit the reporting of safety-related adverse events without punitive effects for the professional.

The new challenges in education and professional development will be safety's allies. To give an example, new undergraduate and graduate programs will expand management science and leadership; the development of health professionals' specialties and continuing education in their field of care interest with specific training in the safety area will also contribute, as well as the dissemination of documents about scientific evidence and improvements in knowledge management. The incorporation of patient safety as an area in which nursing can grow and develop professionally nowadays supposes better competencies and increased nursing participation.

Working in the safety presupposes a radical change with regard to patients, in a new model that takes into account patients' preferences, and better knowledge and acknowledgement of who is responsible for patient safety. The patient's participation in the clinical relation with the professional is being enhanced, and the relation with different patient associations is improving. Patients identify nursing professionals as their main defenders in view of the risks of the health system and nursing's key role in patient safety is acknowledged, due to these professionals' presence with the patient 24 hours per day.

The existing connection between patient safety and evidence-based practice promotes and facilitates the incorporation of safe practices at health centers. Global scientific evidence is increasingly incorporated to improve patient safety, including greater knowledge transfers to clinical practice. The diffusion of systematic and clinical reviews needs to be insisted on. On the other hand, some entities' economic investments in research on the theme are growing, turning safety into a priority research line. As a result of the increased number of publications on this theme, other professionals get to know what we do and this can help to improve safety.

Finally, with regard to strategic planning, the following opportunities for improvement are perceived:

- The Ministry funds many of the resources needed to improve patient safety;
- The health system is working to produce indicators and standards, in which patient safety is a priority;
- Introduction of safety policies at health centers;
- Strategies and policies influence local, regional and national programs;
- Establishment of strategic lines by the central and autonomous government;
- Creation of synergies with different institutions in the Spanish National Health System;
- Strategies are designed at global level and applied at local level.

Discussion

This analysis allowed for knowledge about health professionals' concerns with patient safety. This research obviously did not look at their level of knowledge, but aimed to unveil the main obstacles these professionals identify in daily practice and the conditioning factors that can favor organizational change towards a true patient safety culture. The exploratory and qualitative nature of this research and the absence of similar research limit the result comparison. The "Hospital Survey on Patient Safety Culture" initiative is highlighted, promoted by the Agency for Healthcare Research and Quality (AHRQ), whose results are in a preliminary phase[12]. A multicenter research based on AHRQ guidelines, carried out in Spain[13], agrees with the present research that, at all hospitals, the perceived problems are related with human resources and the work rhythm and, mainly in large and medium-sized hospitals, with the need for a more proactive management attitude, besides the need to improve coordination between units and services. This goes in line with the proposed need for greater mobilization of the agents (professionals, managers and politicians) that intervene in health in other contexts[14]. It also goes in line with the increasing number of studies that relate the safety climate with clinical indicators[15]. Data from the present study reveal more nuances perceived as weaknesses and threats, demanding further research[16] with a global approach to patient safety, as well as nursing's professional contribution in more specific areas, such as the detection of medication errors[17].

On the whole, this study discloses the need to do more and better for safety. The critical issues appointed indicate where to start with concrete actions in order to assume this leadership. These actions are compatible at different micro, middle and macro management levels, in line with the recommendations of international entities, among which the need for further research and safety education stand out, among others. Strong agreement and coherence exist between the contrasted data; hence, education is seen as a threat when missing and a strength when present. In parallel, certain ambivalence is noticeable in some of the obtained answers; for example, users' lack of confidence in nursing is perceived as a threat and, vice-versa, health professionals' lack of credibility. Paradoxically, it is perceived that patients identify nurses as their best defenders in view of the risks of the Health System, which is perceived as an opportunity for improvement. The same happens with knowledge and educational management, where the lack of specific training about process-associated risks and safety training is a threat, while nursing professionals are still seen as one of the most interested parties in patient safety.

Saying that nursing stands out in the health system can be a void statement if no competencies are attributed. One of these can be its proactive participation in safety. This is indicated by its privileged situation close to the patient, which implies that nursing professionals should assume leadership in this area[18] and that innovative care strategies should be developed and evaluated with a view to guaranteeing patient safety; one example are the experiences in the implementation of the Computerized Surgical Circuit at Hospital Puerta del Mar in Cádiz[19] or the information program directed at nurses with a view to safe oral medication administration at Hospital Gregorio Marañón in Madrid[20].

For the sake of operational management of safety changes, a more comprehensive analysis of the local environment is needed. It is in the clinical context that the identification of barriers and strengths will point out the course to follow, contributing to a broader professional culture in the safety area.

Conclusions

In conclusion, it should be affirmed that the main barriers identified revolve around: professionals' corporate position; great variations in organization and infrastructure; great care pressure; lack of protocols and absence of authentic leadership in the safety area; lack of reliable and accepted indicators; lack of communication and a safety culture; and, finally, the lack of specific education in the safety area. On the other hand, with respect to the potentials that could favor exchange, initiatives like stimulating the safety culture, education and professional development are appointed as positive, as well as empowering professional-patient relations and care research.

Nursing is aware of the complexity of this challenge and its discourse reveals its willingness to assume leadership in the safety area, fundamentally based on education, research, evidence-based practice and the idea that patient safety is everyone's safety.

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