

PATIENT SAFETY IN PRIMARY HEALTH CARE: AN INTEGRATIVE REVIEW

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ABSTRACT: This is an integrative review with the aim of analyzing scientific articles addressing patient safety in primary health care. It was conducted from January until March 2016 with national and international journals and with health sciences databases from the Virtual Library on Health. The author chose 10 articles that answered the guiding question: How does the literature depict the theme of patient safety in primary health care? With 2008 as the earliest publishing date, publication themes ranged from investigations on safety culture and the relation between patient safety and prevention of adverse events and incident assessment to translations of instruments for assessment of patient safety. It was possible to draw conclusions from content gathered during analysis about the importance of discussing safety to support the improvement of health care. The authors also found a need for more studies, considering the relevance of the theme and the limited scientific work on the theme.

DESCRIPTORS: Patient safety; Primary health care; Nursing care.

SEGURANÇA DO PACIENTE NA ATENÇÃO PRIMÁRIA À SAÚDE: REVISÃO INTEGRATIVA

RESUMO: Revisão integrativa que objetivou analisar produções científicas sobre a Segurança do paciente na Atenção Primária à Saúde. Realizada de janeiro a março de 2016, em periódicos nacionais, internacionais e nas bases de dados em ciências da saúde da Biblioteca Virtual em Saúde. Selecionaram-se dez artigos que respondiam à questão norteadora: de que forma é evidenciada na literatura a temática Segurança do Paciente na Atenção Primária à Saúde? Observou-se que as publicações datavam de 2008 em diante, com temática variando entre investigação da cultura de segurança, relação da segurança do paciente com a prevenção de eventos adversos e avaliação de incidentes, e tradução de instrumento para avaliação da segurança do paciente. O conteúdo evidenciado pela análise permitiu concluir sobre a importância de discutir sobre segurança de modo a contribuir na melhoria da qualidade da assistência à saúde, assim como a necessidade de novos estudos, haja vista relevância do tema e pouca produção científica na área.

DESCRIPTORIOS: Segurança do paciente; Atenção primária à saúde; Cuidados de enfermagem.

SEGURIDAD DEL PACIENTE EN LA ATENCIÓN PRIMARIA DE SALUD: REVISIÓN INTEGRATIVA

RESUMEN: Revisión integrativa objetivando analizar producciones científicas sobre Seguridad del Paciente en la Atención Primaria de Salud. Realizada de enero a marzo de 2016, en periódicos nacionales, internacionales y bases de datos de ciencias de salud de Biblioteca Virtual en Salud. Seleccionados diez artículos respondiendo la pregunta orientadora: "¿De qué forma está evidenciada en la literatura la temática Seguridad del Paciente en Atención Primaria de Salud?" Las publicaciones databan de 2008 en adelante, con temática variando entre investigación de cultura de seguridad, relación de seguridad del paciente con prevención de eventos adversos y evaluación de incidentes; y traducción de instrumento para evaluación de seguridad del paciente. El contenido analizado permitió determinar la importancia de discutir sobre seguridad apuntando a contribuir en mejorar la calidad de atención de salud, así como la necesidad de nuevos estudios, considerándose la relevancia del tema y la escasa producción científica en el área.

DESCRIPTORIOS: Seguridad del Paciente; Atención Primaria de Salud; Atención de Enfermería.

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● INTRODUCTION

Patient safety is crucial for health care quality. As health care organizations continuously make efforts to improve, there is increasing recognition of the importance of a patient safety culture⁽¹⁾.

From this perspective, since the beginning of the last decade of the 20th century the health community has focused on care quality and discussed patient safety. This was mostly due to the publishing of the report *To err is human: building a safer health care system*, published by the Institute of Medicine (IOM). It is considered a landmark for patient safety and is dated to the same period⁽²⁾.

In reaction to the global mobilization after the report's publishing, the World Health Organization (WHO) published the World Alliance for Patient Safety in 2004. This called the attention of member countries, including Brazil, to the commitment of developing practical and public policies for patient safety⁽³⁾.

Safety consists of reducing the risks and unnecessary harms associated with health care to an acceptable minimum level, which refers to what is feasible with then-current knowledge, available resources, and the context in which care was administered⁽⁴⁾.

The authors emphasize that most health care is administered outside of hospital environments and that many incidents identified in hospitals actually began at other locations, such as primary health care (PHC)⁽⁵⁾.

Research related to patient safety is mainly focused on hospital care, despite most patients being treated in primary care. This happens especially in countries with strong and active primary health care systems⁽⁶⁻⁸⁾.

Although there is increasing interest in patient safety, there is a general lack of awareness of the problem. In this context, the development of research related to the theme becomes relevant as a way of improving and disseminating literature on the theme, decreasing existing knowledge gaps, and raising awareness among professionals about the importance of practicing patient safety at all levels of health care, which leads to the reduction of risks and damages related to care.

Also of notice is Decree No. 529 of April 1, 2013 by the Ministry of Health, which created the National Program for Patient Safety. Its specific objectives mention the need to produce, systematize, and disseminate knowledge about patient safety and to increase society's access to information related to this theme, which also justifies this research⁽⁹⁾.

Thus, this study had the objective of analyzing scientific articles on patient safety in primary health care.

● METHOD

The authors conducted an integrative review of the literature. This method makes it possible to synthesize state-of-the-art knowledge on a specific subject in a systematic way, pointing to knowledge gaps that must be filled by new studies as support to decision-making and to the improvement of clinical practice. It also makes it possible to synthesize various published studies, enabling general conclusions on a particular area of study⁽¹⁰⁾.

The following stages were completed during the creation of this integrative review: definition of the review's guiding question; definition of inclusion and exclusion criteria for articles; definition of information to be extracted from the selected articles; and analysis, discussion, and presentation of results.

The following guiding question was created: How does the literature depict the theme of patient safety in primary health care?

After creating the questions, the authors established three search strategies: the first one in national journals; the second one in international journals; and the last one in national databases of the Biblioteca Virtual em Saúde (Virtual Library on Health–BVS), through cross-comparison of descriptors.

During selection of studies, the following inclusion criteria were used in the first and third search strategies: articles available in full; articles in Portuguese; articles that addressed the theme at hand. For the second strategy, the same criteria were employed, except for language, which would be English. At the end of the three searches, all duplicates, editorials, and epidemiological reports were excluded.

The first search, carried out in January, 2016, sought studies related to the theme “Patient safety in primary health care” in 15 national journals: *Acta Paulista de Enfermagem*; *Revista de Saúde Pública*; *Cadernos de Saúde Coletiva*; *Cadernos de Saúde Pública*; *Ciência&Saúde Coletiva*; *Epidemiologia e Serviços de Saúde*; *Revista da Escola Anna Nery*; *Revista Interface*; *Revista Brasileira de Enfermagem*; *Revista da Escola de Enfermagem da USP*; *Revista Gaúcha de Enfermagem*; *Saúde e Sociedade*; *Saúde em debate*; *Texto Contexto Enfermagem*; and *Physis*. In this research, four articles related to the theme were found. Two were published in *Cadernos de Saúde Pública*, one in *Revista Gaúcha de Enfermagem*, and one in *Revista Texto Contexto Enfermagem*.

The second search, carried out in the month of February, 2016, included nine international journals by finding studies related to “Patient Safety in Primary Health Care.” They were: the Canadian Medical Association Journal; The New England Journal of Medicine; the International Journal for Quality in Health Care, the BMJ Quality and Safety Health Care; The New Zealand Medical Journal; Administrative Science Quarterly; Management Science; the Journal of Nursing Scholarship; and the Medical Journal of Australia. Five articles related to the theme were identified.

Lastly, in March, 2016, a bibliographical research was carried out in BVS, with studies indexed in the following databases: SciELO; LILACS; Medline; and BDENF. For this, the descriptors “patient safety” and “primary health care” were cross-compared. These descriptors were taken from *Descritores em Ciências da Saúde* (Health Science Descriptors–DECS). Cross-comparison was done with the Boolean operator and. Search on BVS found 139 articles. After careful selection through inclusion and exclusion criteria, four articles were obtained for analysis.

Bibliographical searches resulted in 10 studies. They were read, descriptively analyzed, and laid out in charts according to relevant aspects.

● RESULTS

Considering the proportion of articles published and articles used in the review, it can be noticed that scientific work related to the theme of patient safety has increased in recent years, accompanying discussions and directions from the WHO. It initially appeared in international journals in the years 2008 and 2009. It appeared in the national literature starting in 2011, as shown in Chart 1.

Among the 10 articles analyzed, there was a predominance of articles published in the International Journal for Quality in Health Care, with a total of four, followed by *Cadernos de Saúde Pública*, with two articles. The remaining were: *Revista da Escola de Enfermagem da USP*; *Texto Contexto Enfermagem*; *Revista Gaúcha de Enfermagem*; and The New Zealand Medical Journal, with one publication each.

As for the study types, transversal studies predominated (four), either epidemiological or prospective, followed by descriptive studies (two), review studies (two), theoretical studies (one) and sectional studies (one), according to Chart 2.

Regarding the articles’ themes, three mentioned investigations on safety culture. The remaining six addressed the relationship between patient safety and the prevention of adverse events and incident assessment, except for one study, which addressed the translation and adaptation of a questionnaire.

Chart 1 – Presentation of scientific articles selected by year of publication. Sobral, Ceará, Brazil, 2016.

Title	Year
Using nurses and office staff to report prescribing errors in primary care	2008
A survey on patient safety culture in primary health care services in Turkey	2009
Quality of hand hygiene of active professionals in basic health units	2011
Patient safety culture in primary health care	2013
Safety climate and its association with office type and team involvement in primary care	2013
The role of primary care in the prevention and control of health care associated infections	2014
Patient safety in primary health care: a systematic review	2014
Exploring patient safety culture in primary care	2014
Using triggers in primary care patient records to flag increased adverse event risk and measure patient safety at clinic level	2014
Translation and adaptation of a questionnaire to assess patient safety in primary health care	2015

● DISCUSSION

Analysis of the scientific work revealed that many organizations have dedicated efforts to assess episodes of incidents related to health care with the aim of improving the quality of care offered. Two years ago, WHO created a group to study the risks and incidents in primary health care⁽²⁰⁾.

The time period of the journals in this review addresses initiatives that were pioneered by foreign countries, with the U.S. at the forefront and other countries that have various different health care systems, such as the UK, Ireland, Australia, Canada, Spain, France, New Zealand, and Sweden, which championed initiatives such as the creation of institutes, associations, and organizations focused on the field of patient safety⁽²¹⁾.

In a study that analyzed patient safety in the realm of PHC with a focus on the prevention of Healthcare-Associated Infections (HAI), it was learned that PHC has an indirect role in HAI prevention, since it must act on the prevention of diseases and, consequently, in the reduction of unnecessary hospital admissions. Moreover, it also discusses the phenomenon of hospital-centrism, which disproportionately emphasizes the resolution of health problems through hospital care. Considering that hospital stays have higher costs for the institution, the actual need for these stays is questioned. Could they be avoided at other care levels⁽¹⁶⁾?

The same authors emphasize that, beyond prevention of primary health care sensitive conditions (PHCSC) and ease of access, PHC must also act on the reference and counter-reference system and can contribute to post-discharge HAI monitoring. In short, although the principle of not causing harm is a crucial part of PHC, because of this care level's potential for improving health it is necessary to expand the notion that health safety does not begin only when an individual is hospitalized⁽¹⁶⁾.

Risks associated with the most common procedures performed at PHC are little known, except for those related to immunization. Procedures with a certain degree of invasiveness are commonly performed at PHC, such as colposcycological exams, intrauterine device (IUD) insertion, cervical cauterization, capillary glucose monitoring, inhalation therapy, wound bandaging, and injections, for which it is possible to anticipate some associated adverse event. However, currently there are no estimates. As for dental procedures, the risk associated with viral infection (hepatitis B, HIV) is well known. However, reports of HAI caused by bacteria are rare⁽¹⁶⁾.

Another research study investigated hand sanitation in primary health care units. It was considered necessary because most studies of that type in Brazil are conducted only in hospitals. In that study, it was possible to notice that the majority of workers did not sanitize their hands correctly and, when they did it, they largely employed incorrect technique. That shows negligence toward a procedure that

Chart 2 – Distribution of identification data of scientific articles. Sobral, Ceará, Brazil, 2016

Article	Journal	Authors	Objective	Type of Study
Using nurses and office staff to report prescribing errors in primary care	International Journal for Quality in Health Care	Kennedy, Littenberg, Senders ⁽¹¹⁾	To implement a prescribing-error reporting system in primary care offices and analyze the reports	Descriptive
A survey on patient safety culture in primary health care services in Turkey	International Journal for Quality in Health Care	Bodur, Filiz ⁽¹²⁾	To evaluate the patient safety culture in primary health care units	Sectional
Quality of hand hygiene of active professionals in basic health units	Revista Gaúcha de Enfermagem	Locks, Lacerda, Gomes, Serratine ⁽¹³⁾	To evaluate the quality of hand hygiene of professionals	Cross-sectional epidemiological
Patient safety culture in primary health care	Texto Contexto Enfermagem	Paese, Dal Sasso ⁽¹⁴⁾	To analyze attitudes that demonstrate safety culture by professionals of the Family Health Strategy and agents of the Community Health Program	Cross-sectional prospective
Safety climate and its association with office type and team involvement in primary care	International Journal for Quality in Health Care	Gehring, Schwappach, Battaglia, Buff, Huber, Sauter, et al. ⁽¹⁵⁾	To assess differences in perception of the environment of safety between health worker groups and types of primary care organizations	Cross-sectional
The role of primary care in the prevention and control of health care-associated infections	Revista da Escola de Enfermagem da USP	Padoveze, Figueiredo ⁽¹⁶⁾	To develop a theoretical study from the principle of primum non nocere, by analyzing patient safety at the level of PHC with a focus on HCAI prevention	Theoretical
Patient safety in primary health care: a systematic review	Cadernos de Saúde Pública	Marchon, Mendes Jr. ⁽¹⁷⁾	To identify methodologies to evaluate incidents in primary health care	Systematic
Exploring patient safety culture in primary care	International Journal for Quality in Health Care	Verbakel, Melle, Langelaan, Verheij, Wagner, Zwart ⁽¹⁸⁾	To explore perceptions of safety culture in nine different types of primary care professions and to study possible differences	Cross-sectional
Using triggers in primary care patient records to flag increased adverse event risk and measure patient safety at clinic level	The New Zealand Medical Journal	Eggleton, Dovey ⁽¹⁹⁾	To establish which triggering tool for adverse events worked, which one was more useful, and which one could be routinely employed	Literature review
Translation and adaptation of a questionnaire to assess patient safety in primary health care	Cadernos de Saúde Pública	Marchon, Mendes Jr. ⁽²⁰⁾	To describe the translation and adaptation of the questionnaire used in the Primary Care International Study of Medical Errors (PCISME)	Descriptive

is widely considered essential for controlling cross infections. The WHO chose HAIs as the first global challenge for patient safety, with the promotion of hand sanitation as its primary focus⁽¹³⁾.

A systematic review study claims that, although most care is offered at the PHC level, investigations on patient safety have been focused on hospitals. Seeing as hospital care is more complex, it is natural that this environment is central to these studies⁽¹⁷⁾.

The following factors were found to contribute to incidents: errors in communication among workers and patients; errors in management, such as lack of medical-surgical resources and medicines; professionals under pressure for more productivity in less time; errors in medical records; errors in patient admissions; inadequate health facilities; inadequate disposal of health care waste; excessive tasks; and errors in care⁽¹⁷⁾.

That same study presents a number of solutions for those factors, such as: dissemination of safe practices; adjustment of physical structures; training health care workers; improving communication among professionals; improving the management of health care units; enabling patients and workers to recognize and handle adverse events; training health workers to share changes in the team and to identify and act on situations of risk; motivating health workers to act in favor of patient safety; participation (from health workers) in managerial decisions; and creating systems for the assessment of physicians' performance⁽¹⁷⁾.

The authors emphasize the need to expand safety culture in primary health care in order to enable patients and workers to recognize and handle adverse events, making them aware of their shared capacity for change, reducing errors and tensions between workers and the population⁽¹⁷⁾.

Regarding patient safety culture in PHC, errors were seen as less relevant attitudes in this context. In a way, errors are still very strongly associated with culpability, a punitive work environment, and a culture that views caregiver error as a result of careless actions. Thus, addressing error and culpability with teams can be an alternative to change and transform error into an opportunity for the discussion and development of critical thinking regarding care actions and attitudes toward personal errors and coworker errors. In other words, errors can be perceived as opportunities for learning in order to avoid new events related to the same cause⁽¹⁴⁾.

A study conducted in Turkey reinforces what was previously stated when evidencing that improving patient safety culture should be a priority among health care center administrators and that health workers should be encouraged to report errors without fear of punishment. Authors confirm this by mentioning dimensions considered essential for the assessment of patient safety culture, such as leadership, policies and procedures, human resources, communication, and presentation⁽¹²⁾.

Another aspect that deserves attention is that the patient's feeling of safety in primary health care is influenced by the quality of the relations among the team in meetings involving all members. This is an efficient way to strengthen an environment of safety in terms of team-based strategies and error-prevention activities⁽¹⁵⁾.

In a study that investigated medication prescription errors in primary health care services in a city in the U.S. in the view of nurses and office staff, the importance of these professionals' reports was emphasized, as they were considered valuable resources in research of this kind⁽¹¹⁾. A study conducted in the Netherlands emphasizes the importance of the presence of a variety of professionals that act at primary health care facilities to contribute to the implementation of safety strategies⁽¹⁸⁾.

Another study brings to light another important discussion, which is the translation of instruments such as the Primary Care International Study of Medical Errors (PCISME) questionnaire that can support research on patient safety at national levels, because of their contribution to measuring accidents at PHC. Moreover, these instruments call attention to the problem of harms inflicted on patients at PHC⁽²⁰⁾.

● FINAL CONSIDERATIONS

This study presented scientific evidence about the phenomenon of patient safety at PHC, including information that ranges from the translation of instruments for safety assessment to prevention steps and cultural aspects involved in patient safety.

The study also made it possible to observe the scarcity of scientific work related to patient safety at PHC, an attention level in which there is the possibility for health care-related errors that cause some harm to patients. In this context, a number of knowledge gaps affected the study of the theme, such as

little information on safety culture among PHC workers, the difficult assessment of types of incidents at that level of attention, the scarcity of strategies for handling and raising awareness on the theme and of instruments for this type of investigation.

There is hope that this research will encourage the performance of new studies on the theme, so that new strategies can be developed to raise awareness of and disseminate the practice among workers at all levels of health care.

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