Patient safety in hospital care: a review of the patient's perspective

Segurança do paciente no cuidado hospitalar: uma revisão sobre a perspectiva do paciente

Seguridad del paciente en el cuidado hospitalario: una revisión sobre la perspectiva del paciente

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Abstract

The goal was to review the literature on incidents and adverse events and their contributing factors in hospital care, described according to the patient's perspective. A review was carried out of articles published in the MEDLINE, Scopus and LILACS databases between 2008 and 2019. From the 2,686 studies initially found, 167 were pre-selected for reading and then 24 were selected and classified based on a thematic analysis of their content. Four categories resulted from the information extracted from the 24 articles: terminology used to define incidents and adverse events, especially different terms such as error and medical error; incidents and adverse events identified by patients, family members and caregivers related to medication, surgery, health carerelated infections, falls and pressure injuries; patients' perception of factors that contribute to unsafe care, especially problems related to communication, hand washing and patient identification; suggestions from patients to prevent the occurrence of incidents and adverse events, including training staff, drawing up checklists, listening to patients and adapting the environment. Patients were able to identify incidents, adverse events and contributing factors in health care. Alongside information from staff, their reports can potentially contribute to the provision of safer health care.

Patient Safety; Patient-centered Care; Patient Preference; Patient Participation

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Introduction

Patient safety became a worldwide concern in the early 2000s following the release of the report *To Err Is Human: Building a Safety Health System* by the U.S. Institute of Medicine (IoM) ¹. Despite the advances, new challenges and priorities have emerged in the two decades since its publication, such as diagnosis errors and outpatient safety ². During this period, efforts have been made to listen to and learn from reports of adverse events provided by patients ²,3.

In this sense, since 2013 the Patients for Patient Safety program of the World Health Organization (WHO) has encouraged the incorporation of patient, family and community experience at all levels of health care, aiming at their involvement and empowerment. The ultimate goals of this program are to defend and support patients so they may take ownership of their own care; to give a voice to patients and people in charge of health care; and to promote partnerships among patients, family members, community, health care staff, policy makers and academia ⁴.

In line with international initiatives in the area of patient safety, Brazilian National Program for Patient Safety (PNSP, in Portuguese) advocated patient participation in one of the four core areas, emphasizing the importance of humanization, effective communication and viewing patients as a relevant factor in preventing the occurrence of incidents and adverse events ⁵. The literature on patient safety describes incidents as events or circumstances that might have resulted, or resulted, in unnecessary harm to the patient. In turn, adverse events are incidents that resulted in harm to the patient, extending hospital stay or disability ⁵. In short, they are undesirable results during health care provision deriving from a range of contributing factors, defined as circumstances, actions or omissions, which play a key role in the origin, development or increased risk of an incident ^{5,6}.

Considering that patients and family members identify incidents and adverse events that go undetected by staff, the incidents reported by staff are those with the most immediate and visible clinical impact. As the health care experiences perceived by patients happen in different clinical situations over the years, they may often be invisible to most staff, not only because the latter are reluctant to recognize them, but also due to lack of available information ⁷.

Patients are able and willing to report incidents and contributing factors without embarrassment or harm, providing new and valuable information about the type and frequency of these occurrences, which do not necessarily appear in health care staff records and notification systems ⁶. Even when patients' reports on care safety problems overlap with those of staff, they can provide additional information, helping to better understand the scope of such problems and the factors that contribute to their occurrence ⁸. Thus, patients' reports offer a different perspective on hospital care safety, and their experience, which usually goes undetected in information systems, can contribute to improve the quality of health care and shared decision-making.

The issues related to health care safety identified by patients cover a wide spectrum of problems, such as medication errors, care communication and coordination, infections, delayed diagnosis and treatment, failures in blood collection, procedures in the wrong patient or wrong part of the body and faulty equipment ^{9,10}. Therefore, the analysis of incidents identified by patients, besides those reported by staff, can contribute to a more complete overview of safety issues ⁷. In this sense, knowing the views of patients and relatives has become a priority, helping to build patient-centered care processes and to improve the performance of clinical teams and organizations ¹¹.

The concepts of patient empowerment, engagement, experience and participation have been used to support strategies and initiatives aimed at organizational learning and improved quality of health care services, especially patient safety ¹². Intensely debated in several countries ^{10,11,13}, this issue is still poorly addressed in developing countries like Brazil.

Given the importance of the view of patients and relatives to patient safety and the lack of studies on this subject in Brazil, the goal of this study is to review the literature on incidents and adverse events and their contributing factors in hospital care, described according to the patient's perspective.

Method

Type of study

This is a literature review with a systematic search. The guiding question of the study was: "What are the incidents and adverse events and their contributing factors identified by patients, their families and caregivers in hospital care?".

Search and selection

The following information sources were chosen for the article search: MEDLINE via PubMed, Scopus via *Portal de Periódicos* from Brazilian Graduate Studies Coordinating Board (CAPES) and LILACS via Virtual Library of Health (VHL). These databases were chosen for containing a wide range of national and international studies on health care with public access or available through a library.

The search terms were selected after an exploratory reading of the subject. The Medical Subject Headings Terms (MeSH) of the U.S. National Library of Medicine (NLM) provided the following terms: *patient safety; patient-centered care; patient participation; risk management and consumer participation*. In turn, the following terms were found as health science descriptors in Latin American and Caribbean Center on Health Sciences Information – Bireme (DeCS): *segurança do paciente (patient safety); perspectiva do paciente (patient preference); cuidado centrado no paciente (patient-centered care); and participação do paciente (patient participation).* After testing the bibliographic databases, the following terms were used: *segurança do paciente (patient safety); notificações de pacientes (patient reports); perspectiva do paciente (patient gatient safety); notificações de pacientes (patient reports); perspectiva do paciente (patient gatient safety); notificações de pacientes (patient reports); perspectiva do paciente (patient do paciente (patient participação do paciente (patient engagement); notificações de pacientes (patient experience); notificações da experiência do paciente (patient participation); experiência do paciente (patient experience); notificações da experiência do paciente (patient reporting experience); and notificações de incidentes (reporting incidents). The combination of these terms comprised the search strategies described in Table 1. The data were collected in June-August 2019 and updated in March 2020. Zotero Standards One software (https://www.zotero.org/) was used to manage references, eliminate duplicates and organize the articles.*

Eligibility criteria

The inclusion criteria for the articles were: focus on patient safety from the patient's perspective; occurrence of incidents and/or adverse events and contributing factors from the patient's perspective; empirical quantitative or qualitative study based on hospital care, during hospitalization or after hospital discharge, of adult patients (over 18 years old); information from actual patients or their relatives and caregivers.

The exclusion criteria for the studies were: perspective of staff and students; patient safety specifically related to medication use; patient safety in the treatment of specific diseases such as cancer, diabetes, lung and orthopedic diseases, circulatory, digestive and renal system diseases, among others; in obstetric or maternity care; in primary health care; in pediatrics and neonatology care; in mental health; in diagnostic and therapeutic use of radiation-generating devices; in laboratories; in dentistry; in home care; and studies specifically addressing patient satisfaction. Other studies not included in the above categories but which were unrelated to the research subject, such as those addressing violence, environmental health and health surveillance, were also excluded. Also excluded were reviews, opinion articles, editorials, letters, interviews, books and book chapters, theses, monographs, dissertations and term papers, plus gray literature. Therefore, the focus was on articles resulting from empirical studies with different methodological approaches, published in scientific journals and submitted to peer review. This stage also included the reading of titles and abstracts of all studies cited in the bibliographic references of the 24 selected works. In this stage, 16 articles were selected for complete reading, and five articles were included after the exclusion criteria had been applied.

Table 1

Search strategies used in the bibliographic databases, 2020.

Databases	Terms used	Publications (n)
LILACS via VHL	tw:((tw:("patient safety" OR "seguranca do paciente") AND (tw:("risk management" OR "Consumer participation" OR "patient participation" OR "segurança do paciente" OR "reporting incidents" OR	739
	"Patient reports" OR "patient perspective" OR "patient-centered care" OR "patient engagement" OR	
	"patient participation" OR "patient experience" OR "patient reporting experience")))) AND (fulltext:("1")	
	AND db:("LILACS") AND limit:("humans" OR "female" OR "male" OR "adult" OR "aged") AND la:("pt" OR	
	"en" OR "es") AND year_cluster: ("2016" OR "2015" OR "2018" OR "2017" OR "2014" OR "2019" OR "2013"	
	OR "2012" OR "2010" OR "2011" OR "2009" OR "2008"))	
MEDLINE via	(("patient safety"[Title/Abstract] OR "patient safety"[MeSH Terms]) AND (((("risk management"[MeSH	1,554
PubMed	Terms] OR "consumer participation"[Title/Abstract] OR "patient participation"[MeSH Terms]) OR "patient	
	participation"[Title/Abstract]) OR "reporting incidents"[Title/Abstract]) OR ((((("patient reports"[Title/	
	Abstract] OR "patient centered care"[Title/Abstract]) OR "patient perspective"[Title/Abstract]) OR	
	"patient participation"[MeSH Terms]) OR "patient experience"[Title/Abstract]) OR "patient reporting	
	improvement"[Title/Abstract]) OR "safety management"[Title/Abstract])) AND (("loattrfree full text"[sb]	
	AND "loattrfull text"[sb]) AND ("2008/01/01"[PDAT]: "2019/12/31"[PDAT]) AND "humans"[MeSH Terms])	
Scopus	(TITLE ("patient safety") AND TITLE-ABS-KEY (("risk management" OR "Consumer participation" OR	512
	"patient participation" OR "reporting incidents" OR "Patient reports" OR "patient perspective" OR	
	"patient-centered care" OR "patient engagement" OR "patient participation")) OR TITLE-ABS-KEY	
	(("patient experience" OR "patient reporting experience"))) AND (LIMIT-TO (DOCTYPE, "ar") OR LIMIT-TO	
	(DOCTYPE, "ch") OR LIMIT-TO (DOCTYPE, "sh") OR LIMIT-TO (DOCTYPE, "bk")) AND (LIMIT-TO (PUBYEAR,	
	2019) OR LIMIT-TO (PUBYEAR, 2018) OR LIMIT-TO (PUBYEAR, 2017) OR LIMIT-TO (PUBYEAR, 2016) OR	
	LIMIT-TO (PUBYEAR, 2015) OR LIMIT-TO (PUBYEAR, 2014) OR LIMIT-TO (PUBYEAR, 2013) OR LIMIT-TO	
	(PUBYEAR, 2012) OR LIMIT-TO (PUBYEAR, 2011) OR LIMIT-TO (PUBYEAR, 2010) OR LIMIT-TO (PUBYEAR,	
	2009) OR LIMIT-TO (PUBYEAR, 2008)) AND (LIMIT-TO (LANGUAGE, "English") OR LIMIT-TO (LANGUAGE,	
	"Spanish") OR LIMIT-TO (LANGUAGE, "Portuguese"))	

Source: prepared by the authors.

Identification of studies, selection and data extraction

The studies selected for the review were complete, available and accessed through a library, written in English, Spanish and Portuguese, regardless of the methodological approach (quantitative or qualitative) and study design (including experimental, observational, semi-experimental and correlational, among others), and published between January 2008 and December 2019. The time frame was chosen due to the importance of the Patients for Patient Safety program ⁴ created by WHO in 2013 to expand the global discussion on the subject; therefore, the period spanning from 2008 to 2019 was selected for this review, that is, 5 years before and 5 years after the aforementioned program was instituted, in order to identify both publications that provide input for the program and those that report on its results or developments.

The selected articles were organized in a synoptic table featuring the following variables: authors; year of publication; study location/country; study design; goals; main results. The terminology used to define incidents and adverse events was also considered.

A narrative synthesis of the information collected from each article was carried out, grouped into categories according to the content analysis, namely: (i) terminology used to define incidents and adverse events; (ii) incidents and adverse events identified by patients, relatives and caregivers; (iii) patients' perception of factors contributing to unsafe care; and (iv) patients' suggestions to prevent the occurrence of incidents and adverse events. The first category was based on the International Classification for Patient Safety – ICPS) ⁶, whose key concepts are: notifiable circumstance, near miss, incidents and adverse events. The second and third categories considered the six WHO international

patient safety goals, adopted in Brazil: (1) identify patients correctly; (2) improve effective communication; (3) improve the safety of highly-alert medications; (4) ensure safe surgery; (5) reduce the risk of health care-associated infections; (6) reduce the risk of patient harm from falls ¹⁴. The fourth category resulted from the need for organizational learning derived from the perspective of patients and relatives on safer care.

The selected articles were read in full and their content related to the above categories. The methods and results were described, with the latter highlighted, analyzed and interpreted in light of the theoretical and conceptual literature on health care quality and patient safety. The relevance of the previously defined categories was confirmed, and therefore they were reinforced in the reading and maintained. Some studies covered more than one category.

Results

Following the removal of duplicates from the initial 2,805 articles identified, 2,686 articles remained. After the reading of titles, abstracts and keywords, 2,519 studies were excluded; 42.8% were excluded for addressing patient safety from the perspective of staff, 18.5% were not related to the subject and 7.7% addressed patient safety in using medication (Table 2).

After this stage, application of the inclusion and exclusion criteria resulted in the selection of 172 articles. At the end of this process, 29 articles were selected considering the guiding question (Figure 1).

Of the 29 selected publications, 17.2% were published in 2018 and 2016, 13.7% in 2015 and 2008, 10.3% in 2013 and 6.8% in 2017 and 2012. Only one publication was identified in the other years and none in 2010. Canada was the country with the largest number of papers (20.6%), followed by England (17.2%) and the United States (13.7%). Most of the articles were published in English, totaling 79.3% of the studies (Box 1).

As for study design, it was observed that most of the articles (37.9%) used mixed methods ^{15,16,17, 18,19,20,21,22,23,24,25} and the same proportion (31%) adopted qualitative ^{26,27,28,29,30,31,32,33,34} and quantitative approaches ^{19,35,36,37,38,39,40,41}. There was variation in sample size and type according to quantitative and/or qualitative design. One quantitative study included 25,098 participants ¹⁹, while a qualitative study was carried out with 11 patients ²⁸.

Most studies were performed with patients after 16,19,21,23,24,25,26,29,33,38,41,42,43 and during hospitalization 15,18,20,22,27,31,32,36,37,39,40. Three studies used notification systems of incidents and adverse events for patients 17,28,35 In two studies 30,34 the time of data collection was not informed.

The study that identified the highest proportion of patients that were concerned about or reported incidents and adverse events in health care was conducted in the United States, with a 65% occurrence rate among sampled cases ²⁸. The work with the lowest proportion was also carried out in that country and found 4.3% of reports of some type of incident ¹⁹.

Terminology used to define incidents and adverse events

Considering the ICPS 6, different terminologies and concepts were identified to address patient safety problems, such as: notifiable circumstances, near miss, incidents and adverse events (Box 2).

Other terminologies were identified in the selected studies, among them: error ^{31,35,37}; medical error ^{17,23,25,28,29,34,38,40,41,42}, understood as error of any health care worker; diagnostic error ^{28,36}; clinical error ^{36,37,41}; error with harm and error with injury ¹⁷; and medication error ²⁶. Two studies used the terms unsafe situation ^{22,39} and safety concerns reported by patients ^{17,20}. Also employed were the terms security concerns ²⁰, catastrophic events ³³, adverse outcomes ²¹ and unsafe situations ³⁹.

Incidents and adverse events identified by patients

Prominent among incidents and adverse events reported by patients were problems related to medication 16,17,18,19,20,21,23,25,26,27,28,29,35,36,37,38,39,40,41,42,43. Switched medication was the main concern mentioned in six studies 18,19,27,38,39,40, while allergic reactions to drugs were addressed in another

Table 2

Reasons for excluding studies, 2020.

Reasons	n
Monograph	1
Term paper	1
Thesis	1
Interview	3
Patient satisfaction study	5
Unavailable for free or through a library	5
Letter	6
Dissertation	7
Patient safety and homecare	7
Books	8
Patient safety in dentistry	8
Studies in other languages	11
Patient safety in students' perspective	11
Patient safety in laboratories	11
Patient safety in use of medical equipment	12
Opinion articles	15
Patient safety instruction	15
Patient safety and mental health	15
Patient safety in maternity and obstetrics care	16
Patient safety in the use of radiation-generating devices	19
Abstract not available	22
Editorial	26
Clinical trials	49
Primary care studies	83
Studies relates to pediatrics and neonatology	127
Reviews	147
Patient safety in treatment of specific pathologies (cancer, diabetes, orthopedics,	149
circulatory system)	
Patient safety in medication processes	195
Unrelated to the subject	467
Patient safety in staff perspective	1,077
Total	2,519

Source: prepared by the authors.

five ^{18,19,28,36,37}. Also reported were errors and incidents in administration; prescription and dispensation ³⁵, such as prescribing a drug to which the patient was allergic and providing non-prescribed medication ²³; wrong dosage and hemorrhage after administration of anticoagulant ¹⁸; wrong medication or patient unaware of which drug should have been administered and possible adverse effects ^{16,23,39,40,43}; and patients' knowledge about the medications being used ^{18,26}.

In a study carried out in the United States, 56% of patients reported having suffered adverse events to medication ²⁸. In Brazil, incidents related to drug administration were reported by 78.5% of the sampled patients, such as switched medication, wrong dose and allergic reaction ¹⁸. Concern about medication safety was also mentioned in the Chinese study, in which only 14% of patients considered themselves to be aware of the possible adverse effects of drugs used, while 48% said they had some knowledge and 38% reported not knowing anything ⁴⁰.

Concerns about hospital-acquired infections appeared in 13 studies ^{16,17,19,21,23,27,28,36,37,38,39,40,43}. In an Argentinian study, health care-associated infections (HAI) was the most frequent adverse

Figure 1

Study selection flowchart of literature review, 2020.



Source: prepared by the authors.

event, reported by 8.5% of patients. In turn, a study conducted in the United States reported that 184 patients experienced diagnostic errors, 85 (46.2%) of whom also reported HAI ²⁸. Despite the concerns described in the study conducted in China, 28% of patients were not aware of the possibility being infected in the hospital environment ⁴⁰.

Box 1

Characteristics of selected studies, 2020.

Study (year)	Country	Study design	Goals	Main results
Heavey et al. ²⁶	England	Qualitative; n = 28	To explore the responsibility of	Personal experience and self-care were
(2019)		narrative interviews	patients for their own safety in	aspects of patient responsibility mentioned.
		with patients after	clinical settings.	Medication errors were mentioned in
		discharge.		patients' reports.
Armitage et al. ²⁷	England	Qualitative; interviews	To compare the results of a new	77 patients provided 155 patient safety
(2018)		with n = 329	tool to identify incident reports with	concerns. Reported incidents were related
		hospitalized patients.	three other methods of detecting	to general care (40%); care provision (25%);
			existing patient safety incidents and	communication (16%); medication (15%) and
			identify agreement between the	various issues (4%).
			studied methods.	
Giardina et al. ²⁸	United	Qualitative; n = 465	To analyze the database where	75.8% of the records indicated that the
(2018)	States	records of patients	patients and relatives reported	patient suffered at least one adverse
		and relatives.	errors and explore factors that	event. The most frequent error reported
			contribute to diagnostic errors.	by patients was diagnostic error (79.9%),
				followed by adverse events related to
				medication process (56%), surgery- or
				procedure-related error (54.3%) and
				hospital-acquired infection (46.2%). Patients
				could select more than one category.
Hagensen et al. ²⁹	Norway	Qualitative; n = 15	To present patients' perspectives	The analysis revealed three main topics
(2018)		interviews with	on the occurrence, disclosure and	regarding patients' experiences with adverse
		patients.	response of health organizations to	events: 1 – ignoring patient concerns or
			adverse events.	complication signs; 2 – lack of responsibility
				and error correction; and 3 – lack of support,
				loyalty and learning opportunities.
Jerng et al. ¹⁵ (2018)	Taiwan	Mixed methods;	To analyze and compare health	1,259 complaints were identified, 441
		n = 343 complaints	complaints in the ICUs and general	in the ICUs and 818 in wards, classified
		from patients	wards of a university teaching	as: respect and patients' rights (16% and
		admitted to intensive	medical center to understand the	18.1%), respectively; communication (6.3%
		care units (ICU) and	types of complaints, and investigate	and 3.2%); listening (12.2% and 18.5%);
		686 complaints from	the factors associated with the	institutional processes (4.1% and 11.4%);
		general care wards.	severity of the reported problems.	environment (40.8% and 33.3%); safety (4.3%
		0		and 2.7%); and quality (15.4% and 13%).
Sahlstrom et al. 35	Finland	Quantitative; n = 656	To analyze safety incidents reported	The identified incidents related to:
(2018)		electronic records.	by patients and their use in Finnish	information flow or management (32.6);
			nealth care organizations.	medication (18%); diagnosis (7.5%); operative
				procedure (6%); harm (5.5%); asepsis/
Walton at al. 16	Australia	Mixed methoday	To investigate the every inner of	11ygiene (2.0%) invasive procedures (1.6%).
(2017)	Australia	wixed methods; $p = 7.661$ suprate	no investigate the experience of	474 (7%) respondents reported having
(2017)		with patients after	avents in bespitals	surrered some type of adverse event.
		bospital discharge and		
		analysis of inpatients		
		analysis of inpatients		
		uatabase.		

(continues)

Study (year)	Country	Study design	Goals	Main results
Weingart et al. 17	United	Mixed methods;	To develop and test a pilot	Of the 37 reports, 20 were considered errors
(2017)	States	n = 37 reports by	prototype of a notification system	without harm and 15 errors with harm. Most
		patients, family	for patient safety, the Health Care	of the problems reported were related to
		members and	Safety Hotline.	diagnosis or advice from health care staff.
		caregivers via		Also reported were delays in operations,
		telephone and		superficial examination, inadequate staff
		Internet.		and medication errors. Contributing
				factors reported include problems with
				communication, care coordination, access
				and staff response.
Bezerra et al. ¹⁸	Brazil	Mixed methods	To identify the occurrence of	17 (17.5%) interviewees reported having
(2016)		(descriptive cross-	incidents perceived by patients	noticed an incident, most of them related to
		sectional study);	during hospitalization, analyze	medication process (78.5%).
		n = 80 interviews with	the opinion of users about the	
		inpatients in pre- and	occurrence of incidents and classify	
		post-operative care.	the incidents perceived regarding	
			type, causes and consequences.	
Kemp et al. ¹⁹ (2016)	Canada	Quantitative (phone	To analyze the association between	A total of 1,085 respondents (4.3%)
		survey); n = 25,098	patient safety indicators and patient	reported having had at least one
		patients.	experience scores to determine	documented incident. The most frequent
			the risk adjusted with experiences	were hemorrhage (2%); events related to
			reported by staff.	obstetrics (1.5%); surgery (1%); and infection
				(0.8%).
O'Hara et al. 20\	England	Mixed methods	lo explore the feasibility of	Patients' reports of safety concerns were
(2016)		[complex, multifaceted	systematically collecting patient	about: dignity and respect; access to
		Intervention (cluster	feedback on care safety; to explore	resources; communication and teamwork;
		randomized controlled	the reasibility and acceptance of	delays; equipment; information flow; care
		triai)]; n = 379	PRASE Intervention by starr and	organization and planning; staff roles and
		inpatients.	use patient feedback to improve	lavout
			sonvices	layout.
Okoniowska ot al. 21	Capada	Mixed methods:	To develop a concentual model	Of the 460 adverse outcomes reported
(2016)	Callaua	n = 1.247 tolophono	to assess the results of adverse	by patients, 260 were reviewed and 7.0%
(2010)		interviews after	outcomes reported by patients	classified as adverse events
		hospital discharge and	outcomes reported by patients.	
		analysis of natients'		
		medical records.		
van Melle et al. 22	Netherlands	Mixed methods: pilot	To investigate whether transient	28 transient incidents were identified of
(2016)		study n = 13 patients	incidents can be identified based	which 57% were classified as unsafe: 25%
()		interviewed and n = 12	on hospital records to assess	considered near miss; 25% errors that
		records evaluated.	agreement between medical	affected the patient without causing harm;
			records and patient interviews.	and 18% adverse events.
Bishop & Cregan	Canada	Qualitative	To determine what patient and	Three themes emerged: 1 – failure in care
(2015) 30		(videotaped	family narratives can say about a	follow-up; 2 – no dialogue; 3 – the person
		interviews); n = 11	patient safety culture within health	behind the patient.
		patients and family	care organizations and how patients	·
		members.	perceive a patient safety culture.	

(continues)

Box 1 (continued)

Study (year)	Country	Study design	Goals	Main results
Gallardo et al. ³⁶	Argentina	Quantitative (cross-	To describe patients' perception	The most common clinical error was
(2015)		sectional descriptive);	of safety regarding health care	infection (8.5%), followed by allergic
		n = 37 inpatients.	received during hospitalization.	reactions, diagnostic error (2.8%) and being
				mistaken for another patient (2.8%).
García-Diéguez ³¹	Argentina	Qualitative; n = 28	To describe patients' perception of	Dimensions and categories were defined
(2015)		inpatients divided into	their safety during hospitalization.	based on the opinions provided by
		4 focus groups.		participants: staff/patient relationship;
				patient rights; quality of care process;
				perceived vulnerability; adverse events and
				error.
Meléndez Méndez	Mexico	Quantitative	To determine patients' perception	29.9% of patients reported having suffered
et al. ³⁷ (2015)		(descriptive and cross-	of safety in relation to health care;	a clinical error during hospitalization. They
		sectional); n = 127	to identify the number of patients	reported having suffered an infection (7.1%),
		inpatients.	who reported having suffered	an allergic reaction (4.7%), undergone
			an error; and now the error was	a second operation (10.2%), diagnostic
			resolved during hospitalization in a	error (3.2%), being mistaken for another
			hospital surgery service.	administration of infoctions (1.6%)
Risbon at al. 38	Canada	Quantitativo: n =	To understand whether nationt	Overall respondents were more likely to get
(2014)	Canada		safety perceptions played a role	involved in actual patient safety practices
(2014)		discharged natients	in natient engagement in safety-	such as sharing a list of used drugs with staff
		discharged patients.	related initiatives	(88%) and always asking doctors about their
				health status (53.5%), than in challenging
				practices, such as asking staff whether they
				washed their hands (7.4%) or to confirm
				their identity before receiving medication or
				treatment (35%).
Davis et al. ²³ (2013)	England	Mixed methods;	To investigate reports of unwanted	258 undesirable events were reported,
		n = 80 survey with	events in health care of hospitalized	including 136 (52.7%) interpersonal
		patients after hospital	patients.	problems, 90 (34.8%) medical complications
		discharge and analysis		and 32 (12.4%) problems in the health care
		of medical records.		process.
Giles et al. ³² (2013)	England	Qualitative; n = 33	To explore to what extent	The following contributing factors were
		interviews with	patients are able to provide	identified by patients: communication;
		patients.	feedback on factors contributing	individual patient-related factors;
			to patient safety incidents. To	physical involvement; bed allocation and
			develop indicators for each of the	management; staff management; staff
			contributing factors in the form of a	workload; dignity and respect; training and
			questionnaire, and test and validate	education; staff responsibility; equipment
			this questionnaire with patients and	and supplies; supervision and leadership;
			professionals.	factors related to team and support by
	A	Qualitati un 15	To combine the contract of the st	superiors.
noward et al. 33	Australia	Qualitative; n = 16	no explore the actions taken by	communication: disconnectful treatments
(2013)		nterviews with	patients who were admitted to	inconsistant care standards: percentions of
		roprosontativos	acute care in a Queensianu nospital	nonsistent care standards; perceptions of
		representatives.	with the service provided	regrect, lack of information of now to file a
			with the service provided.	complaint.

(continues)

Box 1 (continued)

Study (year)	Country	Study design	Goals	Main results
Schwappach	Switzerland	Quantitative (quasi-	To investigate the effects of patient	Overall, patients reported infection (6%);
et al. ³⁹ (2012)		experimental	safety advice on risk perception,	medication error (5%); and believed that a
		intervention);	safety behaviors and patient	medical error had happened in their care
		n = 218 inpatients in	incident experience.	(5%).
		the intervention group		
		and 202 in the control		
		group.		
Zhang et al. 40	China	Quantitative;	To investigate the initial status of	One hundred and eighty-seven respondents
(2012)		n = 959 surgical	patients' awareness, knowledge and	(21%) have experienced a medical error; 18%
		patient	attitudes towards their safety and	have experienced nosocomial infections; and
		questionnaires.	determine the factors that influence	14% of patients are aware of the side effects
			patients' involvement in their own	of medications being used.
			safety.	
Weingart et al. ²⁴	United	Mixed methods;	To understand to what extent	163 patients reported at least one adverse
(2011)	States	n = 2,025 telephone	inpatients took part in their care	event during or as a result of hospitalization.
		survey and review of	and how their participation related	
		medical records of	to care safety quality.	
		patients, relatives and		
		caregivers.		
Mira et al. ⁴¹ (2009)	Spain	Quantitative; n = 384	To determine the perception of	31 patients reported a possible adverse
		survey with post-	clinical safety among discharged	event. 5.8% of cases were related to
		discharge patients	patients.	medication errors and 6.1% to surgery; in
				2.3% both types occurred.
Burns ³⁴ (2008)	Canada	Qualitative; n = 25	To explore their stories as a learning	Surgical complications or errors; errors in
		accounts by patients	tool and raise awareness about	drug therapy; problems with procedures;
		and family members.	patient safety issues.	birth complications; no diagnosis and
				misdiagnosis; neglect of patients; errors in
				emergency screening; and hospital-acquired
				infections.
Friedman et al. ²⁵	Canada	Mixed methods:	To determine whether patients and	10 (5%) adverse events and 8 (4%) near
(2008)		n = 201 interviews	family members are able to identify	misses were identified. Adverse events
		after hospital	adverse events in the emergency	were mostly related to delays or inadequate
		discharge and analysis	department, to characterize reports	analgesia.
		of institutional	of errors identified by patients, and	
		database.	to compare patient reports with	
			staff records.	
Mira et al. ⁴² (2008)	Spain	Quantitative; n = 336	To describe the frequency of clinical	38 (13%) interviewees reported having
		surveys after hospital	errors from the patients' point of	suffered complications due to medication or
		discharge.	view, their perception of safety	surgical intervention. Of these, only 10.5%
			and their relationship with the	considered that the complications were
			information received.	serious.
Weissman et al. 43	United	Mixed methods;	To compare adverse events	23% of respondents reported having
(2008)	States	n = 998 surveys with	reported in post-discharge	suffered at least 1 adverse event.
		patients after hospital	interviews with those detected in	
		discharge.	medical records.	

Source: prepared by the authors.

Box 2

Terminology used in the selected studies to define incidents and adverse events.

Terminology	Study (year)	Concept adopted
Notifiable	Bezerra et al. ¹⁸ (2016)	A circumstance with significant potential to harm the patient.
circumstance		
Near miss	Sahlström et al. ³⁵ (2018); van Melle et al. ²² (2016);	An incident that did not reach the patient.
	Burns ³⁴ (2008)	
Incident	Armitage et al. ²⁷ (2018); Jerng et al. ¹⁵ (2018);	An incident that reached the patient but caused no harm.
	Hagensen et al. ²⁹ (2018); Sahlström et al. ³⁵ (2018);	
	Walton et al. ¹⁶ (2017); Bezerra et al. ¹⁸ (2016); Kemp	
	et al. ¹⁹ (2016) ; van Melle et al. ²² (2016); Gallardo et	
	al. ³⁶ (2015); Meléndez Méndez et al. ³⁷ (2015); Bishop	
	et al. ³⁸ (2014); Giles et al. ³² (2013); Schwappach et al.	
	³⁹ (2012); Weissman et al. ⁴³ (2008)	
Adverse event	Hagensen et al. ²⁹ (2018); Walton et al. ¹⁶ (2017);	An incident that harmed the patient.
	Bezerra et al. ¹⁸ (2016); Okoniewska, et al. ²¹ (2016);	
	van Melle et al. ²² (2016); Bishop & Cregan ³⁰ (2015);	
	García-Diéguez ³¹ (2015); Davis et al. ²³ (2013);	
	Schwappach et al. ³⁹ (2012); Zhang et al. ⁴⁰ (2012);	
	Weingart et al. ³⁴ (2011); Mira et al. ⁴¹ (2009); Burns ³⁴	
	(2008) ; Friedman et al. ²⁵ (2008); Mira et al. ⁴² (2008);	
	Weissman et al. ⁴³ (2008)	

Source: prepared by the authors.

Incidents related to surgery or procedures were a matter of concern in 11 studies ^{17,18,19,21,28,34, 35,38,39,41,42}. The following stand out among surgery-related problems reported by patients: presence of a foreign body, broken instrument in patient, intervention in wrong patient, incorrect surgical site ^{16,25,34,35}, unexpected new surgery ^{23,37} and procedure-related harm ²¹, such as pain, tingling and numbness following venipuncture ^{18,23} and complications related to anesthesia and surgery ^{19,34,42}.

Reports of falls appeared in seven studies ^{16,18,19,21,23,34,43}. In one case the patient fell when trying to get up without the nurse's help, as his request was not answered. Moreover, the accident was reported merely as a fall resulting in severe headache, with no professional assessment of the patient's condition after the adverse event ¹⁸. The issue of pressure injury appeared in three studies with patients that had been discharged ^{19,23,43}.

Other issues mentioned related to safe health care were diagnostic errors ^{15,16,17,21,22,23,25,28,29, 34,35,36,37} and delayed diagnosis ^{15,28,29}. Patients reported several types of diagnostic errors, such as: delayed diagnosis and treatment (76.1%); misdiagnosis of health problem in symptomatic patients (65.2%); failure to order necessary tests (48.4%); and lost, mislaid or disregarded test results (17.9%) ²⁸. Also mentioned were failure to perform requested tests, unnecessary test repetition, cancelled tests and wrong test results ²³.

Patient reports also mentioned more serious problems such as bleeding, bruising, pain and fractures, and central nervous system, obstetric, respiratory, cardiac, gastrointestinal and endocrine complications. Also reported were life-threatening events or risk to important organs, non-procedural harm, adverse events related to fluid control and venous thromboembolic events ^{17,19,23}.

Patients' perception of factors contributing to unsafe care

Patients' perception of safety can influence the way they and their relatives engage in safe practices ³⁸. Contributing factors related to communication, identification and hand washing were mentioned in patients' reports, related to six safety goals. Other factors were also reported related to health care staff and team, and material and structural resources.

In the studies investigated, effective communication in exchanging and sharing information among staff, patients, groups, departments and services ³² was identified as key factor and a potential trigger of problems in health care provision ^{15,16,17,18,20,23,28,29,30,31,32,35,38,41}. Issues related to communication were perceived by patients in different ways, such as problems related to respect and dignity ^{20,23,31,32}, listening to patients ^{15,17}, staff/patient relationship ^{16,23,28,31}, patient rights ^{15,31} and information flow and management ^{16,3,29,35}.

Poor dialogue between staff and patients was emphasized. In a US study, patients most often complained of: not being heard, being ignored by the health team, reduced time of staff with patients and poor staff teamwork ¹⁷. In some cases patients reported feeling they were just a number, with no proper care being given to the actual person behind the disease ³⁰.

Being treated with dignity and respect was another concern related to patient safety, as were staff training, care organization and planning, and roles and responsibility of the health care team ^{20,23}.

Four types of behavior problems were identified: staff ignoring patients' knowledge; disrespect for patients by using pejorative language; failure to communicate information to patient and family; and staff manipulating information and using fear to influence the decisions of patients and relatives, or to misinform/withhold information from patients ²⁸.

Poor continuity and coordination in providing care were identified by patients as contributing factors to the occurrence of patient safety problems ^{17,30}. The presence of multiple staff often gave them a sense of fragmented care. According to patients, doctors were unable to provide a diagnosis based on the patient's medical history, rather than only on manifest conditions and symptoms ³⁰. In this sense, communication is directly related to decision-making shared between staff and patients regarding diagnosis or treatment ³⁶.

Problems with patient identification were mentioned in six studies ^{16,18,36,37,38,39}. A Mexican study highlighted that four (3.1%) patients were mistaken for others ³⁷, and in Switzerland patients reported having been mistaken for other patients, called by the wrong name and receiving care not intended for them ³⁹.

Hand washing as a means to prevent HAI featured in four studies ^{27,33,37,39} Patients were able to identify the lack of hand washing among staff and its importance ²⁷. However, in a Canadian study, few reported having asked staff to wash their hands ³⁸. In a Chinese study, 68% of patients were willing to remind staff to wash their hands ⁴⁰.

In the only Brazilian study ¹⁸, omission of care was reported by three patients: one reported that no one monitored his reactions to the medication after reporting discomfort; another patient, in bed rest for 30 days, got up on her own and fell over the waste bins after unsuccessfully requesting nursing care; and in a third case, the nursing staff requested a medical evaluation after identifying increased blood pressure levels, to no avail. The incidents reported by patients were attributed to problems related to communication, high staff turnover and work overload.

Problems related to staff training and responsibility, staff management and workload, supervision, leadership and health team-related factors were mentioned by patients as potential triggers of incidents and adverse events ³². Besides those aspects, issues related to material and structural resources in hospitals may interfere with patients' perception of care quality ^{16,20,32}. Complaints about comfort and entertainment during hospitalization, food, parking and long waiting times were also identified ¹⁶.

Patients' suggestions to prevent the occurrence of incidents and adverse events

One of the key strategies to improve patient safety is to engage patients in recognizing risks and preventing harm ³⁸. A study carried out in England ²⁰ developed an action plan based on patients' perspectives which contained some simple measures: changes in furniture arrangement in wards and rooms, and the provision of a container to store medication brought by patients from home, helping them manage administration. On the other hand, there were also more complex and costly initiatives, such as investigation of delays and staff training.

Four main topics were listed based on suggestions by patients to mitigate incidents and adverse events. The first and most common related to checking and reviewing treatment processes, managing risk and reviewing patient care, accounting for 43.2% of suggestions. These included attention to checklists, adequate supplies and facilities, and familiarity of staff with patients' illnesses, laboratory results, allergies and information available before appointments and during care.

The second topic, staff professionalism and competence, was mentioned in 27.2% of the suggestions. They highlighted the importance of ensuring the necessary professional skills, including during staff holidays and leaves. Also stressed were the reduction of nursing turnover rates to ensure the flow of information and the importance of exchanging information among co-workers.

The third topic was the need for cooperation among patients, families and staff, mentioned in 21.1% of suggestions. Patients stressed that incidents can be prevented by listening to patients and family members about issues related to care and with clearer guidelines on admission and discharge. Also included in this topic was the need for empathy in treating patients. The last topic was related to improvement in environment safety (9.5%), including locking doors in the case of patients with impaired memory, checking the safety of beds and keeping the corridors clear to prevent patients from tripping ³⁵.

Discussion

This review identified the main incidents, adverse events and contributing factors related to safety in the provision of hospital care from the perspective of patients, as well as variation in current terminology used in the examined studies.

Some terminologies adopted in the reviewed articles differ from those recommended by WHO in the IPCS, which made it difficult to compare results, especially in terms of frequency of occurrence. Variation in terminology and non-adoption of international taxonomy may interfere with organizational learning and the understanding and accurate reporting of incidents and adverse events 6. It should be noted that the term "error" was mentioned for medical error, diagnostic error, clinical error and error with harm. It is noteworthy that "error" is understood in this sense as an unintentional attitude, as a failure to execute a plan or the execution of an incorrect plan by all health care staff, not only the physician ⁴⁴. Sometimes error was understood by patients as resulting from specific technical procedures and human error; in other cases it was related to tiredness and lack of organization. In the former interpretation error is attributed to a specific, one-off situation, regardless of the context, while in the latter it results from multiple variables in the system ³¹.

Problems related to stages of medication use ^{15,16,17,18,19,20,21,23,25,26,27,28,35,36,37,38,39,40,41,42,43} stood out among incidents and adverse events reported by patients in hospital care, compared to other care processes. This may be related to previous experiences with medication use, which can positively influence self-care ^{18,26}, contributing to the prevention of incidents and adverse events. Another important finding was issues related to communication, which play a key role in all aspects of health care quality. Communication-related problems were reported by patients as contributing factors to and potential triggers of incidents and adverse events ^{15,16,17,18,20,23,28,29,30,31,32,35,38,41}.

The results of this review corroborate previous studies aimed at improving health care quality ^{9,10} that highlighted problems related to the process of using medication and especially to communication. The latter is a relevant and legitimate concern given the evidence that communication failures are associated with the occurrence of adverse events ⁴⁵. In turn, medication errors are among the most common incidents in health care, potentially happening in all stages of the health care process ⁴⁶ and sometimes also related to communication ⁴⁷.

Other categories of incidents, adverse events and contributing factors related to the international patient safety goals ¹⁴ such as infections ^{16,18,20,27,28,30,31,32,33,37}, surgery-associated problems ^{16,17,20,24,28,32,35,40}, falls ^{17,18,20,24}, pressure injury ¹⁸ and problems related to patient identification ^{17,30,31,32,37} were also mentioned by patients, indicating their ability to identify unsafe care situations often highlighted in the relevant literature.

As for factors contributing to the occurrence of incidents and adverse events, the most cited were related to (i) staff, such as professional competence and physical and mental health; (ii) work pro-

cesses, such as communication failures; (iii) working environment, such as staff numbers and skills, workload and shifts; and (iv) organization and management, such as financial resources and restrictions and organizational structure ^{16,18,31,41,48}.

It is essential to recognize, understand and mitigate the identified contributing factors, among which communication failures deserve special attention. Effective communication between staff and patients plays a key role in patient-centered care, favoring bonding between staff and patients, health literacy and education, and adherence to self-care and the proposed treatment. In this sense, patients and staff should make joint decisions, which encourages transparency and the appreciation of patients' values, beliefs and choices during care ¹⁹.

Acknowledging that patients hold important and unique knowledge about their health status is essential for effective and safe treatment ²⁹. Furthermore, knowledge and understanding of the experiences of patients and relatives when adverse events occur provide important information to strengthen the safety culture at the organizational level. Sharing those perspectives can encourage open communication and a change in patient safety culture, which should not be based on individual guilt or stigma, although deliberate neglect is unacceptable ³⁰.

Patient involvement in care safety, whether related to their own care or future improvement of ongoing processes, is increasingly viewed as a means to reduce risks associated with health care, albeit dependent on the type of cooperation patients are able to establish with staff ³⁸. Ideally, patients and family members involved in care become more active and engaged in discussions and decision making, including identifying unsafe situations before incidents occur, contributing to the safe use of medication based on their knowledge of the prescribed drugs and of possible side effects or adverse events, taking part in initiatives to control infections and promote hand washing, and encouraging open communication about complications and adverse events to favor a non-punitive culture and organizational learning ⁴⁹.

Such benefits are hindered by fear and by patients being unaware that their attitude towards treatment can help reduce the risk of an incident or adverse event ^{26,41}. Educational campaigns can minimize this knowledge gap and even create situations conducive to improved care ^{18,39}. Similarly, individual traits of patients can influence the reporting of incidents, such as knowledge and beliefs about safety and emotional experiences with health care provision, including those related to demographics and also diseases, like stage and severity, symptoms, treatment plan ⁵⁰ and previous experience with the occurrence of incidents and adverse events ^{26,31,50}.

Compared to staff, patients generally have a different view of what incidents and adverse events are ⁹. They have a broader understanding of health care problems as they consider their entire care background, including the different levels of care and the household and community to which they belong, and are able to identify incidents and adverse events overlooked by staff ⁷. Care safety concerns reported by patients can be ignored by current incident and adverse event notification systems, which are mostly focused on notifications by staff. However, their point of view is essential to detect adverse events ¹¹. The perspective of patients and relatives is valuable in many areas, including organizational environment design, care planning, notification of incidents and adverse events, and even analysis of root causes ⁵¹ and proposition of solutions.

This reveals the need for initiatives aimed at patient safety which also consider the opinion of patients, the main beneficiaries or victims of the health system. And important contribution in this sense would be to reformulate incident notification systems to include the views of patients, especially those who have experienced problems while using health care services. This should evidently be aligned with other educational strategies and notification systems for staff. A possible complementary measure is the creation of virtual communication spaces for patients to share their experiences, as it is likely that patient safety incidents reported by them in such spaces will not be picked up by other reporting means ^{27,36}. Besides providing greater reach, social media and ombudsperson services have the advantage of being independent or outside the institutional environment.

The development of tools to identify relevant circumstances, incidents or adverse events from the viewpoint of patients is a challenge that requires cooperation between family members and staff. Thus, the literature stresses the importance of incorporating the opinion of patients in current information collection systems aimed at monitoring and ensuring patient safety ^{11,51}. A further need is to acknowledge the emergence of new socio-psychological themes, focused on the cognitive and

emotional aspects of health care related to patients and relatives, as an issue of patient safety 7 and, above all, patient-centered care ¹⁹.

Limitations and contributions of the study

Despite increasing attention to the subject since 2013 ⁴ and the steady recognition over time of the active and critical role played by patients, the volume of selected studies fell short of expectations. Therefore, this review has limitations, some of which are inherent to its design of a literature review. Although broad terms were initially used, there were limitations related to inaccuracies in the search formula employed in the bibliographic databases and to the restricted inclusion of published scientific articles of free access or available through libraries, excluding gray literature, books or term papers, which may explain the limited number of articles selected for this review.

However, the expectation is to disclose here the state of the art regarding patient participation in ensuring and improving safe care in Brazil vis-à-vis international advances. Despite the existence of academic production and even government policy focused on patient safety, organizational culture, characteristics of the patient/staff relationship and the level of health literacy of the population are still barriers, even more so in Brazil. For patients to truly play a key role in the care process and be heard in decision-making there must be scope for them to voice their complaints without embarrassment or harm of any kind, especially in a society with such inequality in terms of socio-educational conditions and health care access, use, adequacy and effectiveness.

Conclusions

Patients are able to identify incidents and adverse events in health care, and their participation and contribution in initiatives aimed at improving health care quality and safety should be encouraged and their role increasingly appreciated.

Problems related to communication and use of medication were found to be the most reported by patients in this review. These results are in accordance with previous reviews ^{9,10}. Issues related to The international patient safety goals were also identified in the reviewed studies, such as safe surgery, HAI, patient identification, falls and pressure injuries. Also reported were organizational factors, such as delays, incorrect diagnosis and poor care continuity; staff-related issues, such as work overload and poor listening to patients; and problems related to environment and structure of services, showing that patients' perception of safety goes beyond that reported by staff.

This stresses once more the importance of considering the incidents, adverse events and contributing factors reported by patients and family members and combining them with those identified by staff to develop a plan to improve the quality of care. This is a step towards ensuring the key role of patients in this process at various levels.

This review stands out from previous ones for including studies in Portuguese and Spanish in the debate, expanding the range of countries and their respective cultural contexts. Moreover, it is worth noting the scarcity of research on the subject in Brazil, indicating the need for studies and initiatives to expand its insertion and engagement, plus regular data collection on patient safety and other aspects of care quality from the perspective of patients, family members and caregivers.

From an organizational point of view, despite the acknowledged relevance of the issue, current notification systems still do not seem capable of identifying all patients' concerns about the quality of the care they receive. New arrangements in which patients play an active and leading role in care should be encouraged and developed to remedy this situation. Paradoxically, in the current context of lack of supplies and precarious hospital services in Brazil, giving voice to patients is both urgent and necessary to the founding principles of the Brazilian Unified National Health System – universality, equity, integrality and popular participation.

Contributors

V. C. F. L. Villar, S. C. M. Duarte and M. Martins participated in the conception, design, data analysis and interpretation, writing of the article and relevant critical review of intellectual content and approval of the final version for publication.

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References

- 1. Institute of Medicine Committee on Quality of Health Care in America; Kohn LT, Corrigan JM, Donaldson MS. To err is human: building a safer health system. Washington DC: National Academies Press; 2000.
- 2. Bates DW, Singh H. Two decades since *To Err Is Human*: an assessment of progress and emerging priorities in patient safety. Health Aff (Millwood) 2018; 37:1736-43.
- 3. Vincent CA, Couter A. Patient safety: what about the patient? Qual Saf Health Care 2002; 11:76-80.
- World Health Organization. Patients for patient safety. http://www.who.int/patientsafe ty/patients_for_patient/en/ (accessed on 13/ Jul/2018).
- Ministério da Saúde. Documento de referência para o Programa Nacional de Segurança do Paciente. Brasília: Ministério da Saúde; 2014.
- 6. World Health Organization. Conceptual framework for the International Classification for Patient Safety. Final technical report. Geneva: World Health Organization; 2009.
- Vincent C, Carthey J, Macrae C, Amalberti R. Safety analysis over time: seven major changes to adverse event investigation. Implement Sci 2017; 12:151.
- Lawton R, O'Hara JK, Sheard L, Reynolds C, Cocks K, Armitage G, et al. Can staff and patient perspectives on hospital safety predict harm-free care? An analysis of staff and patient survey data and routinely collected outcomes. BMJ Qual Saf 2015; 24:369-76.
- Harrison R, Walton M, Manias E, Smith-Merry J, Kelly P, Iedema R, et al. The missing evidence: a systematic review of patients' experiences of adverse events in health care. Int J Qual Health Care 2015; 27:424-42.
- Ward JK, Armitage G. Can patients report patient safety incidents in a hospital setting? A systematic review. BMJ Qual Saf 2012; 21:685-99.
- 11. O'Hara JK, Reynolds C, Moore S, Armitage G, Sheard L, Marsh C, et al. What can patients tell us about the quality and safety of hospital care? Findings from a UK multicentre survey study. BMJ Qual Saf 2018; 27:673-82.
- 12. Berger Z, Flickinger TE, Pfoh E, Martinez KA, Dy SM. Promoting engagement by patients and families to reduce adverse events in acute care settings: a systematic review. BMJ Qual Saf 2014; 23:548-55.
- 13. Harrison JD, Auerbach AD, Anderson W, Fagan M, Carnie M, Hanson C, et al. Patient stakeholder engagement in research: a narrative review to describe foundational principles and best practice activities. Health Expect 2019; 22:307-16.
- 14. Agência Nacional de Vigilância Sanitária. Assistência segura: uma reflexão teórica aplicada à pratica. Brasília: Agência Nacional de Vigilância Sanitária; 2017. (Série Segurança do Paciente e Qualidade em Serviços de Saúde).

- 15. Jerng J-S, Huang S-F, Yu H-Y, Chan Y-C, Liang H-J, Liang H-W, et al. Comparison of complaints to the intensive care units and those to the general wards: an analysis using the Healthcare Complaint Analysis Tool in an academic medical center in Taiwan. Crit Care 2018; 22:335.
- Walton MM, Harrison R, Kelly P, Smith-Merry J, Manias E, Jorm C, et al. Patients' reports of adverse events: a data linkage study of Australian adults aged 45 years and over. BMJ Qual Saf 2017; 26:743-50.
- 17. Weingart SN, Weissman JS, Zimmer KP, Giannini RC, Quigley DD, Hunter LE, et al. Implementation and evaluation of a prototype consumer reporting system for patient safety events. Int J Qual Health Care 2017; 29:521-6.
- Bezerra ALQ, Silva TO, Paranaguá TTB, Souza ACS, Silva AEBC, et al. Conhecimentos de usuários de uma clínica cirúrgica sobre a ocorrência de incidentes. Cogitare Enferm 2016; 21:1-9.
- Kemp KA, Santana MJ, Southern DA, McCormack B, Quan H. Association of inpatient hospital experience with patient safety indicators: a cross-sectional, Canadian study. BMJ Open 2016; 6:e011242.
- 20. O'Hara JK, Lawton RJ, Armitage G, Sheard L, Marsh C, Cocks K, et al. The patient reporting and action for a safe environment (PRASE) intervention: a feasibility study. BMC Health Serv Res 2016; 16:676.
- 21. Okoniewska B, Santana MJ, Holroyd-Leduc J, Flemons W, O'Beirne M, White D, et al. A framework to assess patient-reported adverse outcomes arising during hospitalization. BMC Health Serv Res 2016; 16:357.
- 22. van Melle MA, Erkelens DCA, van Stel HF, de Wit NJ, Zwart DLM. Pilot study on identification of incidents in healthcare transitions and concordance between medical records and patient interview data. BMJ Open 2016; 6:e011368.
- 23. Davis RE, Servdalis N, Neale G Massey R, Vincent CA. Hospital patients' reports of medical errors and undesirable events in their health care. J Eval Clin Pract 2013; 19:875-81.
- 24. Weingart SN, Zhu J, Chiappetta L, Stuver SO, Schneider EC, Epstein AM, et al. Hospitalized patients' participation and its impact on quality of care and patient safety. Int J Qual Health Care 2011; 23:269-77.
- 25. Friedman SM, Provan D, Moore S, Hanneman K. Errors, near misses and adverse events in the emergency department: what can patients tell us? CJEM 2008; 10:421-7.
- Heavey E, Waring J, De Brún A, Dawson P, Scott J. Patients' conceptualizations of responsibility for healthcare: a typology for understanding differing attributions in the context of patient safety. J Health Soc Behav 2019; 60:188-203.

- 27. Armitage G, Moore S, Reynolds C, Laloë P-A, Coulson C, McEachan R, et al. Patient-reported safety incidents as a new source of patient safety data: an exploratory comparative study in an acute hospital in England. J Health Serv Res Policy 2018; 23:36-43.
- 28. Giardina TD, Haskell H, Menon S, Hallisy J, Southwick FS, Sarkar U, et al. Learning from patients' experiences related to diagnostic errors is essential for progress in patient safety. Health Aff (Millwood) 2018; 37:1821-7.
- 29. Hagensen G, Nilsen G, Mehus G, Henriksen N. The struggle against perceived negligence. A qualitative study of patients' experiences of adverse events in Norwegian hospitals. BMC Health Serv Res 2018; 18:302.
- 30. Bishop AC, Cregan BR. Patient safety culture: finding meaning in patient experiences. Int J Health Care Qual Assur 2015; 28:595-610.
- 31. García-Dieguez M, Ocampo A, Cragno A, Gallardo F, Lamponi Tappatá L, Gazzoni C, et al. Estudio cualitativo sobre la percepción de seguridad de los pacientes en dos hospitales de Bahía Blanca. Rev Argent Salud Pública 2015; 6:15-20.
- 32. Giles SJ, Lawton RJ, Din I, McEachan RRC. Developing a patient measure of safety (PMOS). BMJ Qual Saf 2013; 22:554-62.
- 33. Howard M, Fleming ML, Parker E. Patients do not always complain when they are dissatisfied: Implications for service quality and patient safety. J Patient Saf 2013; 9:224-31.
- 34. Burns KK. Canadian patient safety champions: collaborating on improving patient safety. Healthc Q 2008; 11:95-100.
- 35. Sahlström M, Partanen P, Turunen H. Patientreported experiences of patient safety incidents need to be utilized more systematically in promoting safe care. Int J Qual Health Care 2018; 30:778-85.
- 36. Gallardo MF, Trobbiani JI, Gazzoni C, Lamponi Tappatá L, Cabrera AC, Monaldi A, et al. Adaptación y aplicación de un cuestionario de percepción de seguridad en pacientes internados. Rev Asoc Med Bahía Blanca 2015; 25:33-9.
- 37. Meléndez Méndez C, Garza Hernández R, Castañeda-Hidalgo H, González Salinas JF, Turrubiates Pérez J. Percepción del paciente quirúrgico acerca de la seguridad en el ámbito hospitalario. Rev Cuid (Bucaramanga) 2015; 6:1054-61.
- Bishop AC, Baker GR, Boyle TA, MacKinnon NJ. Using the Health Belief Model to explain patient involvement in patient safety. Health Expect 2014; 18:3019-33.
- Schwappach DLB, Frank O, Buschmann U, Babst R. Effects of an educational patient safety campaign on patients' safety behaviours and adverse events. J Eval Clin Pract 2012; 19:285-91.

- 40. Zhang Q, Li Y, Li J, Mao X, Zhang L, Ying Q, et al. Patients for patient safety in China: a cross sectional study. J Evid Based Med 2012; 5:6-11.
- 41. Mira JJ, Lorenzo S, Vitaller J, Ziadi M, Ortiz L, Ignacio E, et al. El punto de vista de los pacientes sobre la seguridad clínica de los hospitales: validación del Cuestionario de Percepción de Seguridad. Rev Méd Chile 2009; 137:1441-8.
- Mira JJ, Aranaz JM, Vitaller J, Ziadi M, Lorenzo S, Rebasa P, et al. Percepción de seguridad clínica tras el alta hospitalaria. Med Clín 2008; 131:26-32.
- 43. Weissman JS, Schneider EC, Weingart SN, Epstein AM, David-Kasdan J, Feibelmann S, et al. Comparing patient-reported hospital adverse events with medical record review: do patients know something that hospitals do not? Ann Intern Med 2008; 149:100-8.
- 44. Mendes W. Taxonomia em segurança do paciente. In: Souza P, Mendes W, organizadores. Segurança do paciente: conhecendo os riscos nas organizações de saúde. Rio de Janeiro: Escola Nacional de Saúde Pública Sergio Arouca, Fundação Oswaldo Cruz; 2014. p. 57-71.
- 45. Guttman OT, Lazzara EH, Keebler JR, Webster KLW, Gisick LM, Baker AL. Dissecting communication barriers in healthcare: a path to enhancing communication resiliency, reliability, and patient safety. J Patient Saf 2018; (Online ahead of print).

- 46. Santos PRA, Rocha FLR, Sampaio CSJC. Ações para segurança na prescrição, uso e administração de medicamentos em unidades de pronto atendimento. Rev Gaúcha Enferm 2019; 40:e20180347.
- 47. Johnson A, Guirguis E, Grace Y. Preventing medication errors in transitions of care: a patient case approach. Pharm Today 2015; 21:79-90.
- Vincent C, Amalberti R. Cuidado de saúde mais seguro: estratégias para o cotidiano do cuidado. Rio de Janeiro: Centro Colaborador para a Qualidade do Cuidado e a Segurança do Paciente; 2016.
- 49. Canadian Patient Safety Institute. The engaging patients in patient safety: a Canadian guide. Edmonton: Canadian Patient Safety Institute; 2018.
- 50. Davis RE, Jacklin R, Sevdalis N, Vincent CA. Patient involvement in patient safety: what factors influence patient participation and engagement? Health Expect 2007; 10:259-67.
- 51. Gandhi TK, Kaplan GS, Leape L, Berwick DM, Edgman-Levitan S, Edmondson A, et al. Transforming concepts in patient safety: a progress report. BMJ Qual Saf 2018; 27:1019-26.

Resumo

O objetivo foi revisar a literatura sobre os incidentes, eventos adversos e seus fatores contribuintes no cuidado hospitalar, descritos segundo a perspectiva do paciente. Foi realizada revisão em artigos publicados nas bases MEDLINE, Scopus e LILACS entre os anos de 2008 e 2019. Dentre 2.686 estudos inicialmente levantados, 167 foram pré-selecionados para leitura, 24 selecionados e categorizados de acordo com a análise temática de conteúdo. Na síntese das informações extraídas dos 24 artigos emergiram quatro categorias: terminologia usada para definir incidentes e eventos adversos, destacando-se diferentes nomenclaturas como erro e erro médico; incidentes e eventos adversos identificados pelos pacientes, familiares e cuidadores relacionados ao processo de medicação, cirurgia, infecções relacionadas à assistência à saúde, quedas e lesão por pressão; percepção do paciente quanto os fatores contribuintes para o cuidado inseguro, destacando-se problemas relacionados à comunicação, higienização das mãos e identificação do paciente; sugestões dos pacientes para prevenir a ocorrência de incidentes e eventos adversos, incluindo treinamento de profissionais, elaboração de listas de verificação, escuta do paciente e adequação do ambiente. Pacientes foram capazes de identificar incidentes, eventos adversos e fatores contribuintes na prática do cuidado, que aliados às informações oriundas dos profissionais de saúde podem potencialmente contribuir para a prestação do cuidado em saúde mais seguro.

Segurança do Paciente; Assistência Centrada ao Paciente; Preferência do Paciente; Participação do Paciente

Resumen

El objetivo fue revisar la literatura sobre los incidentes, eventos adversos y factores que contribuyen al cuidado hospitalario, descritos según la perspectiva del paciente. Se realizó una revisión en artículos publicados en las bases MEDLINE, Scopus y LILACS entre los años de 2008 y 2019. Entre los 2.686 estudios inicialmente recabados, 167 fueron preseleccionados para la lectura, 24 seleccionados y categorizados de acuerdo con el análisis temático de contenido. En la síntesis de la información extraída de los 24 artículos emergieron cuatro categorías: terminología usada para definir incidentes y eventos adversos, destacándose diferentes nomenclaturas como error y error médico; incidentes y eventos adversos identificados por los pacientes, familiares y cuidadores, relacionados con el proceso de medicación, cirugía, infecciones relacionadas con la asistencia a la salud, caídas y lesión por presión; percepción del paciente respecto a los factores contribuyentes para el cuidado inseguro, destacándose problemas relacionados con la comunicación, higienización de las manos e identificación del paciente; sugerencias de los pacientes para prevenir la ocurrencia de incidentes y eventos adversos, incluyendo entrenamiento de profesionales, elaboración de listas de verificación, escucha del paciente y adecuación del ambiente. Los pacientes fueron capaces de identificar incidentes, eventos adversos y factores contribuyentes en la práctica del cuidado que aliados a la información procedente de los profesionales de salud pueden potencialmente contribuir a la prestación de un cuidado en salud más seguro.

Seguridad del Paciente; Atención Dirigida al Paciente; Prioridad del Paciente; Participación del Paciente

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