

THEMATIC PATIENT SAFETY IN THE CURRICULAR MATRICES OF UNDERGRADUATE SCHOOLS IN NURSING AND OBSTETRICS

TEMÁTICA SEGURANÇA DO PACIENTE NAS MATRIZES CURRICULARES DE ESCOLAS DE GRADUAÇÃO EM ENFERMAGEM E OBSTETRÍCIA

TEMÁTICA SEGURIDAD DEL PACIENTE EN LAS MATRICES CURRICULARES DE LAS ESCUELAS DE GRADUACIÓN EN ENFERMERÍA Y OBSTETRICIA

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Objective: to categorize the patient safety theme in the curricular matrices of undergraduate courses in nursing and obstetrics. Method: documentary study, developed in nine universities from June 2013 to March 2014. Sixteen direct and 12 indirect keywords were categorized according to the *Patient safety curriculum guide: multi-professional edition*. Results: direct and indirect descriptors were found in 168 disciplines, and Patient Safety (20.4%) and Professional Exercise Law (13.7%) were the most frequent direct ones, while the indirect ones were Systematization of Assistance in Nursing (42.1%) and Biosafety (10.0%). Conclusion: the thematic patient safety was found in the programmatic contents analyzed, but in a disjointed manner, making it imperative to seek teaching strategies that have repercussions on student's education.

Descriptors: Patient Safety. Curriculum. Nursing. Obstetricians.

Objetivo: categorizar a temática segurança do paciente nas matrizes curriculares de cursos de graduação em enfermagem e obstetrícia. Método: estudo documental, desenvolvido em nove universidades no período de junho

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de 2013 a março de 2014. Foram elencadas 16 palavras-chave diretas e 12 indiretas e categorizadas conforme o *Patient safety curriculum guide: multi-professional edition*. Resultados: as palavras-chave diretas e indiretas foram encontradas em 168 disciplinas, sendo Segurança do Paciente (20,4%) e Lei do Exercício Profissional (13,7%) as diretas mais frequentes, enquanto que as indiretas foram Sistematização da Assistência em Enfermagem (42,1%) e Biossegurança (10,0%). Conclusão: a temática segurança do paciente foi encontrada nos conteúdos programáticos analisados, porém de maneira desarticulada, tornando-se imperativo buscar estratégias de ensino que repercutam na formação do estudante.

Descritores: Segurança do Paciente. Currículo. Enfermagem. Obstetizes.

Objetivos: categorizar la temática seguridad del paciente en las matrices curriculares de cursos de graduación en enfermería y obstetricia. Método: estudio documental, desarrollado en nueve universidades en el período de junio de 2013 a marzo de 2014. Se relacionaron 16 palabras-clave directas y 12 indirectas y se categorizaron conforme el *Patient safety curriculum guide: multi-professional edition*. Resultados: las palabras-clave directas e indirectas se encontraron en 168 disciplinas, siendo Seguridad del Paciente (20,4%) y Ley del Ejercicio Profesional (13,7%) las directas más frecuentes, mientras que entre las indirectas fueron Sistematización del Cuidado en la Enfermería (42,1%) y Bioseguridad (10,0%). Conclusión: la temática seguridad del paciente fue encontrada en los contenidos programáticos analizados, pero de manera desarticulada, lo que hace que sea imperativo, buscar estrategias de enseñanza que repercutan en la formación del estudiante.

Descriptorios: Seguridad del Paciente. Currículo. Enfermería. Obstétricas.

Introduction

The topic of patient safety has been the object of reflection on the part of managers, professionals and users of health institutions in the face of the growing demand for care in these organizations and the magnitude of the occurrence of adverse events.

The World Health Organization (WHO) defines patient safety as the absence of unnecessary or potential harm to the individual⁽¹⁾. This definition corroborates the concept provided by the *Institute of Medicine* as the process of ridding the patient of accidental injuries, stabilizing systems and processes, in order to minimize the occurrence of errors and maximize the probability of their interception⁽²⁾.

Initiatives focused on patient safety have been observed worldwide in recent decades. These include the creation of the World Alliance for Patient Safety (WAPS) in 2004 by WHO and the International Network on Nursing and Patient Safety in 2005 by the Pan American Health Organization (PAHO). In 2008, the *Rede Brasileira de Enfermagem e Segurança do Paciente* (Rebraensp - Brazilian Network of Nursing and Patient Safety) was established with the purpose of disseminating and sedimenting

the patient's safety culture in health and teaching organizations⁽³⁾.

Regarding education, it was observed that, at the global level, the topic of patient safety is incipient in the process of training health professionals⁽⁴⁾. This premise does not differ in the national scenario, due to the scarcity of studies in this area.

In order to solve this problem, WHO highlighted in the document *Patient safety curriculum guide: multi-professional edition*⁽⁵⁾ 11 topics as guiding principles for curricular construction, based on the seven dimensions of the *Australian Patient Safety Education Framework* (APSEF). Thus, it proposed the implementation of programmatic content and teaching methodologies focused on education in patient safety, involving the training of teachers in the appropriation of concepts, as well as the development of program content.

In Brazil, it should be noted that one of the specific objectives of the *Programa Nacional de Segurança do Paciente* (PNSP - National Patient Safety Program), created in 2013, is to promote the inclusion of patient safety in

technical, undergraduate and postgraduate health education⁽⁶⁾.

Consonant to these considerations, Rebraensp's Nucleus of Undergraduate Nursing Schools realized the need to develop this study in order to make the subject a key element in the training of health professional.

In this direction, the objective of this research is to categorize the patient safety theme in the curricular matrices of nursing undergraduate courses.

Methods

It is a documentary study, developed in nine public and private higher education institutions (HEI) of the metropolitan region of São Paulo, members of the Nucleus of the Undergraduate Nursing Schools of Polo São Paulo of Rebraensp.

Because it is a documentary study and because it does not involve human beings, there was no need to process the project in Research Ethics Committees.

The documents analyzed were the teaching plans of the curricular matrices in force in eight nursing undergraduate courses and an exclusive obstetrical graduation course. In order to ensure anonymity, the HEIs involved in this study were identified by letters A through I.

Data collection took place from June 2013 to March 2014, through a form that was composed of the following items: characterization of HEI and registration of the programmatic content in terms of the subject patient safety in teaching plans. In order to do so, the descriptors that would be researched in the curricular matrices were agreed after successive meetings and they were divided into two groups: direct and indirect.

The direct descriptors were: patient safety; safety in health services; process safety; safety of health professionals; quality of nursing care; evaluation of health services; quality measurement tools; quality indicators; management/risk management; adverse event; sentinel event; iatrogenics/iatrogenic occurrences; rights of health service users; consumer code; code of ethics and law of professional practice.

The indirect ones were: health indicators; biosafety; epidemiological surveillance; *Sistematização da Assistência de Enfermagem* (SAE - Systematization of Nursing Assistance); dosing or calculation of medication; nursing theories; interpersonal relationships; basic nursing tools; basic life support in the evaluation aspect of the scene, situation and safety of the place of complaint; regulations, hospital standards; collegiate board resolution and regulatory standard-32; and safety and infection control measures in the operating room.

With this material, these terms were raised in the teaching plans by the teachers representing each HEI. After this survey, successive workshops took place in order to group the content found and to categorize it according to the theoretical references of the APSEF and WHO⁽⁵⁾. The data were stored in a spreadsheet and the results presented in tables. The treatment of the data was based on descriptive statistics.

Results

The duration of the courses participating in semesters ranged from eight in courses B, C, D, F, G and H, nine in course A and ten in courses E and I.

It was observed that the patient safety theme was found in 3 (33.3%) semesters in course A and 8 (100.0%) in course B. In courses C, D, F, G, H and I, it was verified in 8 (87.5%) semesters and in the E course in 9 (90.0%).

The subjects that contained the direct and indirect keywords in the syllabus were concentrated in the fourth semester of all courses. They were also present in 80% of the courses in the first, fifth and seventh semesters, in 70% of the courses in the sixth and eighth and 60% in the second and third. As not all courses had the ninth and tenth semesters, the frequency in those semesters was lower, featuring 20% and 10% respectively.

Direct and indirect descriptors were found in 168 subjects; In the fourth and fifth semesters there were 31 (18.4%) subjects in each, in the third and sixth there were 21 (12.5%) in each.

Following, in the seventh, first and eighth semesters, respectively, presented 19 (11.3%), 15 (8.9%) and 14 (8.4%). The second (7.1%), the ninth (1.2%) and the tenth (0.6%) semesters presented the lowest frequencies. The average was 16.7 (dp±1.53) subjects per semester.

The disciplines that most presented the descriptors were Supervised Curricular Internship, in the various areas of health care, featuring 32 (19.0%), followed by Clinical Nursing with 18

(10.7%), Semiology and Semi-technical with 16 (9.5%), Ethics and Legislation with 15 (8.9%), Nursing Theories with 11 (6.5%), Management with 10 (5.9%) and Pharmacology with 8 (4.7%). The others dealt with different topics, such as Biosafety, Health Policies, Nursing History, Epidemiology, among others, totaling 58 (34.5%).

Tables 1 and 2 present the direct and indirect descriptors present in the syllabus contents of the analyzed disciplines.

Table 1 – Direct descriptors present in the syllabus contents of the courses. São Paulo, SP, Brazil, 2014. (N=88)

Direct Descriptors	N	%
Patient safety	18	20,4
Safety in health services	-	-
Security in processes	-	-
Safety of health professionals	8	9,1
Quality of nursing care	5	5,7
Evaluation of health services	3	3,4
Quality Measurement Tools	4	4,5
Quality Indicators	4	4,5
Management/Risk Management	2	2,3
Adverse Event	2	2,3
Sentinel Event	2	2,3
Iatrogenic events / Iatrogenesis	3	3,4
Rights of health service users	8	9,1
Consumer Code	6	6,8
Code of ethics	11	12,5
Law of Professional Practice	12	13,7
Total	88	100,0

Source: Created by the authors.

Note: Conventional signal used:

- Numeric data equal to zero not resulting from rounding.

Table 2 – Indirect descriptors present in the syllabus contents of the subjects. São Paulo, SP, Brazil, 2014. (N=159) (to be continued)

Indirect Descriptors	N	%
Health indicators	6	3,7
Biosafety	16	10,0
Epidemiological surveillance	9	5,7
Systematization of nursing care	67	42,1
Dosing or calculation of medication	14	8,8
Nursing Theories	11	7,0
Interpersonal relationships	11	7,0
Basic Nursing Instruments	8	5,0

Table 2 – Indirect descriptors present in the syllabus contents of the subjects. São Paulo, SP, Brazil, 2014. (N=159)

Indirect Descriptors	N	(conclusion)
		%
Basic life support in the evaluation aspect of the scene, situation and safety of the place of complaint	1	0,6
Regulations, hospital norms	3	1,9
Collegiate Board Resolution and Regulatory Norm-32	9	5,7
Safety measures and infection control at the Surgical Center	4	2,5
Total	159	100,0

Source: Created by the authors.

When the data were analyzed against the dimensions of the APSEF and the WHO topics, the classification for each direct or indirect

keyword was identified in more than one dimension or topic.

Table 3 shows the distribution of descriptors in the APSEF dimensions.

Table 3 – APSEF dimensions according to the descriptors present in the syllabus contents of the courses. São Paulo, SP, Brazil, 2014. (N=786)

Dimensions	N	%
D1- Effective Communication	102	13,0
D2- Identifying, preventing and managing adverse events	149	19,0
D3 - Using Evidence and Information	116	14,7
D4 - Working with Safely	169	21,5
D5 - Being ethical	91	11,5
D6 - Continuous learning	113	14,4
D7 - Specific topics	46	5,9
Total	786	100,0

Source: Created by the authors.

Table 4 describes the distribution of the keywords listed in this study according to the 11 topics recommended by WHO.

Table 4 – WHO topics according to the descriptors present in the syllabus contents of the subjects. São Paulo, SP, Brazil, 2014. (N=780) (to be continued)

WHO Topics	N	%
1. What is patient safety?	49	6,3
2. Why is the human factor important for patient safety?	110	14,1
3. Understanding the systems and complexity of relationships and interactions in patient care.	119	15,3
4. Acting effectively in a team	107	13,7
5. Learning from mistakes to prevent damage.	41	5,3
6. Understanding and managing clinical risks.	85	10,9
7. Employing methods to improve the quality of care.	112	14,3
8. Involving patient and caregivers in health care.	73	9,4
9. Preventing and controlling infection.	29	3,7

Table 4 – WHO topics according to the descriptors present in the syllabus contents of the subjects. São Paulo, SP, Brazil, 2014. (N=780)

WHO Topics	N	%
10. Attempting for patient safety in invasive procedures.	24	3,0
11. Improving safety in drug therapy.	31	4,0
Total	780	100,0

Source: Created by the authors.

Discussion

In this study, with regard to the characterization of the participating courses, it was verified that, predominantly, the nature was of private HEI and the duration of eight semesters.

The semester distribution of subjects that dealt with the subject of patient safety was present in most courses for at least seven semesters, and it can be inferred that the subject matter covered almost all the semesters of the courses. Studies conducted in Brazil in health courses, which adopted the same WHO framework, also showed that patient safety issues were present in different disciplines; however, teaching remained fragmented throughout the course⁽⁷⁻⁸⁾.

This fact is also perceived in Australian universities, where studies have shown that the training of physicians continues to be deficient in terms of knowledge regarding the skills and behaviors considered necessary to provide safe care⁽⁹⁾.

In the fourth and fifth semesters, there was predominance of disciplines containing the direct and indirect descriptors, since, in general, it is in these semesters that the insertion of the student occurs in the practice scenarios. It was also observed that the disciplines Supervised Curriculum Training and Clinical Nursing were also the most frequent in the presentation of the descriptors listed in this study.

As seen in Table 1, patient safety, code of ethics and law of professional practice were the most present direct descriptors. The reflection process during training should broaden students' understanding in terms of complex problems, enabling them to respond to them, bypassing

the technical dimension, considering ethical and moral aspects, and beliefs and values towards decision-making⁽¹⁰⁾.

In order for organizations' safety culture to change, health professionals must have the knowledge and skills to identify and know what to do when they commit or witness an error. In this sense, undergraduate courses in health can play an important role in promoting concepts and skills in terms of patient safety, developing specific knowledge and practices, regardless of the technical training that is intended to be achieved^(8,11).

The SAE excelled in the indirect descriptors, which refers to the reflection that the nursing process allows the improvement of cognitive and psychomotor skills, associating theory and practice, relating multidisciplinary knowledge, insofar as it favors clinical reasoning and the interface between the behaviors adopted by nurses and other members of the health team.

Table 3 presents the most frequent dimensions to 4 (Working with safely) and 2 (Identifying, preventing and managing adverse events). A study carried out in Australia presented different results for Brazilians, in which the most frequently taught dimension was 1 – Effective communication, and the less frequently was 2 – Identifying, preventing and managing adverse events⁽¹²⁾.

The research entitled “Planning and implementing a systems-based patient safety curriculum in medical education”⁽¹³⁾ demonstrated that students were able to identify problems in teamwork and communication. It also reported the insertion of strategies with the theme of patient safety in the curriculum as effective.

It is important to point out that the 11 topics highlighted by the WHO (Table 4) have, among their purposes, to explain how topics related to patient safety can be developed in curriculum matrices. From this perspective, teachers can verify that many concepts are similar, according to the WHO description, but they are presented with several nomenclatures, such as the first topic – What is patient safety? –, for which they can relate as direct descriptors in the programmatic contents: patient safety, adverse event, sentinel event and iatrogenics/iatrogenic occurrences.

The results in Table 4 show that the 11 topics listed by WHO were identified through descriptors in the syllabus of the subjects, in opposition to the findings of the study conducted in a Brazilian public university⁽⁷⁾, in which the topic 5 – Learn from the error to avoid damage – has not been identified. It is important to discuss the notification of mistakes in the learning process, so that students incorporate this concept and commit to the improvement process.

Another point to be highlighted with respect to the lower frequency of the Topic 9 – preventing and controlling infection – and Topic 10 – Paying attention to the safety of patients during invasive procedures – in comparison with the cited study⁽⁷⁾, which featured greater frequency of these subjects in the syllabus contents of the medical course subjects when compared to the nursing and midwifery courses.

Because it is a documentary study, it is characterized as limitations the impossibility of unveiling other aspects of the curriculum, such as the relationship between formally registered content and what was taught by the teacher, as well as the use of a single validation technique for descriptor.

Conclusion

The theme of patient safety was present in the programmatic contents analyzed, but in a disjointed and heterogeneous manner, making it imperative to seek more meaningful practices, which have repercussions throughout the student's training, as recommended by the PNSP,

and that in the future they provide support to their professional performance.

Likewise, it is believed that it is fundamental to review the political pedagogical projects of undergraduate health courses, as well as the implementation of strategies that allow the alignment of this theme with other disciplines in the health area.

Collaborations

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3. final approval of the version to be published: Marta Maria Melleiro, Daisy Maria R. Tronchin and Ana Claudia Alcântara Garzin.

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