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PATIENT SAFETY IN UNDERSTANDING NURSING STUDENTS OF A COMMUNITY UNIVERSITY

SEGURANÇA DO PACIENTE NA COMPREENSÃO DE ESTUDANTES DE ENFERMAGEM DE UMA UNIVERSIDADE COMUNITÁRIA

SEGURIDAD DEL PACIENTE EN COMPRENSIÓN DE ESTUDIANTES DE ENFERMERÍA DE UNA UNIVERSIDAD COMUNITARIA

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ABSTRACT

Objective: To identify the understanding of undergraduate nursing students at a community university in southern Brazil, about patient safety. **Method:** Cross-sectional study with 139 nursing students at a Community University in Southern Brazil. A self-administered questionnaire with sociodemographic and academic variables and the instrument related to conceptual and attitudinal aspects of human error and patient safety was used. **Results:** The prevalence of students with formal learning on the topic was evidenced; however they demonstrated uncertainty with certain concepts, as well as with some attitudes related to patient safety. **Conclusion:** Students demonstrated favorable perceptions of patient safety, such as the importance of strengthening discussions on this topic in the academic environment.

Descriptors: Nursing; Students, Nursing; Education, Higher; Patient Safety.

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RESUMO

Objetivo: Identificar a compreensão dos estudantes de Graduação em Enfermagem, de uma Universidade comunitária no Sul do Brasil, sobre a segurança do paciente. **Método:** Estudo transversal, com 139 estudantes do curso de enfermagem de uma Universidade Comunitária do Sul do Brasil. Foi utilizado um questionário auto preenchível com varáveis sociodemográficas, acadêmicas e o instrumento relacionadas a aspectos conceituais e atitudinais sobre erro humano e segurança do paciente. **Resultados:** Evidenciou-se a prevalência de estudantes com aprendizado formal sobre o tema, porém demonstraram incerteza com determinados conceitos, bem como com algumas atitudes relacionadas a segurança do paciente. **Conclusão:** Os estudantes demonstraram percepções favoráveis à segurança do paciente, como a importância de fortalecer discussões sobre esta temática no ambiente acadêmico.

Descritores: Enfermagem; Estudantes de Enfermagem; Educação Superior; Segurança do Paciente.

RESUMEN

Objetivo: identificar la comprensión de los estudiantes de pregrado de enfermería en una universidad comunitaria en el sur de Brasil, sobre la seguridad del paciente. **Método:** estudio transversal con 139 estudiantes de enfermería en una universidad comunitaria del sur de Brasil. Se utilizó un cuestionario autoadministrado con variables sociodemográficas y académicas y el instrumento relacionado con los aspectos conceptuales y actitudinales del error humano y la seguridad del paciente. **Resultados:** se evidenció la prevalencia de estudiantes con aprendizaje formal sobre el tema, sin embargo, demostraron incertidumbre con ciertos conceptos, así como con algunas actitudes relacionadas con la seguridad del paciente. **Conclusión:** los estudiantes demostraron percepciones favorables de la seguridad del paciente, como la importancia de fortalecer las discusiones sobre este tema en el entorno académico.

Descriptores: Enfermería; Estudiantes de Enfermería; Educación Superior; Seguridad del Paciente.

INTRODUCTION

Patient safety is characterized by the reduction of the risk of unnecessary damage associated with health care.[1] It is understood that quality health care, in order to promote patient safety, is an individual's right. For this, health services must offer effective and safe care to the patient throughout the process.[2]

Addressing this issue is essential for the qualification of services and the construction of a positive culture in favor of patient safety. In this perspective, in Brazil, the Ministry of Health instituted the National Patient Safety Program (PNSP) in 2013, which can be considered a milestone of commitment to quality and safe care.[3]

In this context, the PNSP, articulated with the Ministry of Education and the National Council of Education, brings the inclusion of the patient safety theme in technical, higher and postgraduate education in the area of health, in order to produce, systematize and spread knowledge about the theme, in addition to

the continuing education of professionals. It is essential that health professionals are able to recognize and employ evidence-based practices in patient safety, in order to prevent or minimize the impact of adverse events on the patient's health.[4]

It is essential that Undergraduate Nursing courses address patient safety during academic training. And so, they offer subsidies to nursing actions in order to promote knowledge and skills about strategies that reduce errors and improve patient safety, which are not only focused on technical knowledge issues, but on the need to work on safety while organizational culture and management tool for nurses.[5]

This study meets two specific objectives of the PNSP: to produce, systematize and disseminate knowledge about patient safety; and promote the inclusion of the theme in technical education, undergraduate and graduate in the health area.[3] Thus, the research problem is: What is the understanding of undergraduate nursing students about patient safety? The hypothesis of this study is that nursing students have a favorable understanding of patient safety. In this sense, the objective was to identify the understanding of Undergraduate Nursing students, from a community university in southern Brazil, about patient safety.

METHOD

Descriptive cross-sectional study carried out with undergraduate nursing students at a Community University in southern Brazil. At the time of the study, 165 students were enrolled. Considering a sample calculation with an error of 5% and an estimated percentage of 50%, a minimum sample of 117 participants was estimated. All students enrolled in the course were included, excluding those under 18 years old, on leave (leaves and home exercises), or still on leave or transfer, and the academic who collected the data.

Data collection took place between September and October 2016, using a self-administered questionnaire consisting of two parts. The first included sociodemographic and academic variables (age, sex, origin, race and formal guidance on patient safety). The second, consisting of 20 questions related to conceptual (7) and attitudinal (13) aspects about human error and patient safety[4], distributed on a 5-point Likert-type scale ranging from “strongly agree” to “strongly disagree”. Conceptual aspects consist of academics' knowledge of theory, and attitudinal aspects refer to the intention or predisposition for action, which must be performed.[4]

For data insertion, the program, Epi-info®, version 6.4, with independent double typing was used. After checking for errors and inconsistencies, data analysis was performed using the PASW Statistics® program (Predictive Analytics Software, SPSS Inc., Chicago - USA) 18.0 for Windows, using descriptive statistics. The results are presented by absolute (N) and relative (%) frequencies.

This study fulfilled the requirements contained in Resolution 466/2012. It also received authorization from the Research Ethics Committee (COEP) under number: 1687552, CAAE No. 58499316.8.00005353.

RESULTS

There were 139 students participating in the study. The losses include two leaves, 15 locks and/or transfers, eight that were not found during the data collection period, one death and the academic who collected the research.

Female students (N=121; 87.1%), white race (N=121; 87.1%) prevailed, with a mean age of 23.9 years (±5.45; minimum = 18 and maximum = 44), from the city where the university is located (N=70; 50.4%). Students claim to have formal learning about patient safety (N=96; 69.1%).

Table 1 shows the distribution of students' responses on conceptual aspects of human error and patient safety.

Table 1– Distribution of student responses on conceptual aspects related to human error and patient safety. Santiago, RS, Brazil, 2016. (N=139)

Conceptual Aspects	SA	A	N
	N (%)	N (%)	N (
Making mistakes in healthcare is inevitable.	19(13.8)	59 (42.4)	7(5
There is a big difference between what professionals know what is right and what is seen in the daily routine of health care.	44(31.7)	77(55.4)	12(8
Competent professionals do not make mistakes that cause harm to patients.	10(7.2)	28(20.1)	5(3
Committed students do not make mistakes that harm patients.	7(5.0)	29(20.9)	6(4
In the event of an error, everyone involved (professionals, students, managers, patient and family) must discuss its occurrence.	63 (45.3)	57 (41.0)	7(5
For the analysis of human error, it is important to know the individual characteristics of the professional who made the error.	32 (23.0)	89(64.0)	10(7

Once an error occurs, an effective prevention strategy is to work with greater care.	64 (46.0)	64 (46.0)	3(2,3)	7(5.0)	1(0.7)	-

Source: Survey data, 2016.
Caption: SA – Strongly Agree; A – Agree; NO – I have no opinion; D – Disagree; SD – Strongly Disagree – I agree; NA- No Answer.

Table 2 shows the distribution of responses on attitudinal aspects regarding human error and patient safety.

Table 2– Distribution of student responses on attitudinal aspects related to human error and patient safety. Santiago, RS, Brazil, 2016. (N=139)

Attitudinal Aspects	CF	Ç	AT THE	D	DF	NR
	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)
Professionals should not tolerate working in places that do not offer adequate conditions for patient care	54(38.8)	60(43.2)	10(7.2)	14(10.1)	1(0.7)	-
In order to implement measures to prevent human errors, a systemic analysis of the facts must always be instituted	42(30.2)	88(63.3)	9(6.5)	-	-	-
It is necessary to implement systemic analysis of errors in healthcare, but preventive measures need to be taken whenever someone is injured	43 (30.9)	70(50,4)	10(7.2)	12(8.6)	4(2.9)	-
I always communicate to my teacher about the presence of conditions in the internship field that favor the occurrence of the error	63 (45.3)	66(47.5)	9(6.5)	1(0.7)	-	-
I always communicate to the teacher/manager/person responsible for the internship about the occurrence of an error	69 (49.6)	61 (43.9)	7(5.1)	2(1,4)	-	-
I always tell my colleague about the occurrence of the error (n=138)	29(20.9)	66(47.5)	19(13.7)	23(16.5)	1(0.7)	1(0.7)
I always communicate to the patient and their family about the occurrence of the error	13(9.4)	54(38.8)	42(30.2)	27(19.4)	3(2,2)	-
If there is no harm to the patient, it must be analyzed whether there is a need to report the occurrence of the error to the patient and family.	10(7.2)	53(38.1)	20(14.4)	50(36.0)	6(4.3)	-
Teachers always take corrective measures with the student so that he does not make new mistakes	51(36.7)	63 (45.3)	14(10.1)	8(5,8)	3(2,2)	-
Error reporting systems make little difference in reducing future errors	4(2.9)	22(15.8)	14(10.1)	79 (56.8)	20(14.4)	-
Only physicians can determine the cause of the occurrence of the error.	-	2(1,4)	11(7.9)	70(50,4)	56(40.3)	-
I always carry out internship activities in places that promote good practices for the promotion of patient safety	27(19.4)	50(36.0)	29(20.9)	27(19.4)	6(4.3)	-
Whenever I identify situations that need improvement, I receive support from the institution to implement measures that promote safe practices.	11(7.9)	50(36.0)	39(28.1)	33(23.7)	6 (4.3)	-

Source: Survey data, 2016.
Legend: DF – Strongly Disagree D – Disagree; NO – I have no opinion; C – I agree; CF – I agree; NR- No answer

DISCUSSION

Studies carried out in the Federal University of Santa Maria (UFSM)6 and the Federal University of Triângulo Mineiro (UFTM)[7] show similarity with regard to the sociodemographic characterization of the students: female (86.1%)[6] and (89%)[7], as well as young people, aged between 18 and 22 years (56.1%)6 (34%).[7] Also regarding the origin of the students to be from the host city of the university.[7] However, it differs from the study carried out at UFSM.[6]

It was identified that students have formal learning about patient safety during their graduation in Nursing. Even though the researched University does not offer a specific discipline, this theme is covered in different semesters and practice scenarios. As well as, in a study conducted at UFSM[6] and at the Federal University of São Paulo (UNIFESP)[4], in which students also showed favorable perceptions about patient safety, which confirms that the topic has been addressed in courses in a cross-sectional manner.[8, 9]

Regarding conceptual aspects, 42.4% of students agree that making mistakes in the health area is irrevocable, demonstrating the perception that making mistakes is human. However, they may not have the understanding that it can be avoided through preventive measures. It is known that it is impossible to eliminate the error completely, but there are mechanisms to avoid the error and the EA.[8]

It is known that understanding the relationship between risks and characteristics of care can provide important elements for improving care. This knowledge is relevant to establish links between health services, trigger educational actions, contribute to the reduction of mortality associated with severe AE and improve the quality of life of patients and professionals.[9] In this context, to obtain safe and secure care. quality, the professional must have prudence and commitment to their actions of patient care.[10]

Students agree that it is important to know the individual characteristics of the professional who made the error, which is similar to other national studies.[4,6] By believing that personal characteristics are important for evaluating the error, it contradicts the model proposed by Reason, which clarifies the systemic analysis of the error, which replaces the individual approach that refers to blame. In the systemic model, the various stages of

the work process that may fail and lead to an error or incident are discussed and evaluated.[11]

With regard to the existence of an error, students agree that everyone involved must discuss its occurrence, as well as that an effective prevention strategy is to work with greater care. Given this, in accordance with the results of the UNIFESP4 and UFSM studies.[6] It can be considered an effective preventive action, working carefully, however it refers to a view focused on the subject, however, to prevent human errors it is necessary to understand how they happen.[11] It is noteworthy that in complex organizations, a single error at the tip is rarely enough to cause damage.[12] A study highlights that the use of simulation in the teaching-learning process is an innovative strategy to be encouraged, also, in a complementary way to studies of case, concept map, problem-based learning can stimulate students' critical-reflective thinking.[13]

The error must not be seen individually but systematically, the approach must advocate the systemic factors and which contributors caused it. When corrective measures are seen individually, highlighting who made a mistake, it promotes false security regarding the resolution of the problem. In this sense, the relevance of non-punitive actions is highlighted, but with a view to opportunities to learn from mistakes, as well as discuss them with the staff involved and patients.[10]

It is noteworthy that when providing care, there is a complex and dynamic scenario with adverse situations that can predispose to error.[14] Thus, working with attention is necessary, but it is recognized that the accelerated pace of work, overload, and a A constant state of alertness is an inherent characteristic of nursing work, which often interferes with care. A study carried out with nurses indicates that work overload, lack of professional attention, unpreparedness or poor professional training, automation of care, illegible prescription, lack of professionals, lack of planning and inadequate physical environment in health services are contributing factors to the error.[15]

Regarding attitudinal aspects, students agree that professionals should not tolerate working in places that do not offer adequate conditions for patient care. This result converges with results found in the UNIFESP study.[4] Thus, it is clear that students understood that inadequate conditions in the workplace can contribute to the occurrence of AE.

In addition to the work environment being favorable for safe care, the ethical commitment of professionals and students to patients must also be considered. For, to have a positive safety culture, care must be based on health promotion and free from AE related to malpractice, negligence or recklessness.[16]

As for implementing error prevention measures, students agree that a systemic error analysis should always be instituted in the health area. This is similar to the results of the study carried out at UNIFESP[4] and at UFSM.[6] The systems approach, in this context, aims to identify situations or factors susceptible to the origin of human errors, and implement change systems that will reduce their occurrence or minimize their impact on the care provided to the patient.[11] Observing this understanding in the student is relevant, as it demonstrates that they can be reflective on the AE, and the error, which may favor a change from the individual assessment model to an expanded and systemic model.

Still, the students agreed that the teacher must be communicated about the presence of inadequate conditions in the internship field, which may favor the occurrence of the error. It is important to emphasize that patient safety is the responsibility of everyone involved in health care; in this sense, students need to be partners in this process. Thus, favoring the opportunity for learning based on clear communication, based on the prevention of AE, teamwork, patient-centered care and learning from mistakes is recommended throughout the health education process.[19]

As for the assertions, referring to the communication of the error to the patient, his family and the colleague, the students agreed. Likewise, they agree that if there is no harm to the patient, it should be analyzed whether there is a need to report the occurrence of the error to the patient and family. These results corroborate those of a study carried out at UFSM.[6]

It is understood that inserting the patient and the family/caregiver as partners of care is a challenge. for health professionals, as they are not prepared for a planning assistance together with the patient and family/caregiver. However, in order to achieve a effective and quality care, family members must be involved in their care process care and safety, having the right to be informed, thus strengthening the team-patient relationship and the effectiveness of treatment.[17]

It was evident that students disagreed that error reporting systems make little difference in reducing future errors. These data are in line with the results obtained in other studies.[4,6] It is understood that notification systems are tools that must be used and disseminated in health services, in order to monitor and evaluate complications in the provision of care. These enable institutions to develop training regarding notification, as well as assist in decision making to implement improvements in work processes. There is a worldwide consensus that knowledge, assessment and discussion of reported errors strengthen the establishment of improvements for the service, which is the focus of the Patient Safety Centers.[11]

With regard to receiving support from the institution to implement measures that promote safe practices, the students agreed. However, a study carried out at UFSM showed a higher percentage of students who had no opinion on the subject. Then, it is observed that the weighting of the students over the support to the institution, in order to improve the assistance to patient' care, might be related with the disciplines offered by the nursing course at the aforementioned university. Disciplines such as the Professional Intervention Project, supervised internship and course conclusion work, which are directly related to the planning and execution of care actions, which can contribute to patient safety.

A significant number of responses "I have no opinion" was identified, which does not make it possible to identify whether or not they have an understanding of the topic. Based on the above, in order to provide safe care, it is essential for students to build knowledge about concepts and attitudes for a positive patient safety culture. In addition, for the care to be safe, professionals and services need to share practices and behaviors that contribute to the promotion of care and harm reduction.[18] For this, principles related to patient safety are unquestionable in the training of the academic of nursing, allied to ethical, resolute and quality-assurance care.[19]

CONCLUSION

Students who agree that making mistakes in health care is inevitable prevailed, as well as knowing the individual characteristics of this professional is important, but they disagreed that committed students and professionals do not make mistakes.

Regarding attitudinal aspects, students agreed that professionals should not tolerate working in places that do not offer adequate conditions for patient care. Regarding error reporting, they agreed that they would, and that the systems for reporting error situations make a difference in preventing future situations.

The study allowed students and professors to realize the importance of strengthening discussions about patient safety in the academic environment. In this sense, they expose the instrument as a limitation of the study, which still does not allow the analysis of levels of understanding, about the knowledge and attitudes of students, which did not allow analysis with correlations or associations. For this, it is relevant that new studies with the instrument can establish scores and cutoff points for the dimensions evaluated. Furthermore, it is suggested that a multivariate analysis of the items be performed in order to verify the dimensional validity, as well as the assessment of the instrument's internal consistency.. Thus, it is necessary to consider the results in their uniqueness, since it portrays the particular reality of these students.

However, it is necessary to develop further studies on the subject among students in the health area, given the importance of multidisciplinary work in the context of promoting patient safety. Still, it is recommended that the theme be included, in a transversal way, in the already existing disciplines of the courses in the health area, contributing to the formation of future professionals, subsidizing them for a critical, creative and safe practice.

REFERENCES

1. WHO. World Health Organization. Marco conceptual de la clasificación internacional para la seguridad del paciente. Versión 1.1. Informe técnico definitivo. Geneva: WHO; 2009.
2. Anvisa. Agência Nacional De Vigilância Sanitária. Assistência Segura: Uma Reflexão Teórica Aplicada à Prática. Brasília; 2013.
3. Ministério da Saúde (Brasil). Portaria n° 529 de 1° de abril de 2013. Institui o Programa Nacional de Segurança do Paciente (PNSP). D. O. U., Brasília, 2013.
4. Yoshikawa JM, Sousa BEC, Peterlini MAS, Kusahara DM, Pedreira MLG, Avelar AFM. Compreensão de alunos de cursos de graduação em enfermagem e medicina sobre segurança do paciente. Acta Paul. Enferm. 2013; 26: 21-9.
5. Bogarin DF, Zanetti ACB, Brito MFP, Machado JP, Gabriel CS, Bernardes A. Segurança do paciente: conhecimento de alunos de graduação em enfermagem. Cogitare Enfermagem. Jul/Set 2014; 19:491-7.
6. Cauduro GMR, Magnago TSBS, Andolhe R, Lanes TC, Dal Ongaro J. Segurança do paciente na compreensão

de estudantes da área da saúde. Rev Gaúcha Enferm. 2017;38(2):e64818.
7. Nardelli GG, Gaudenci EM, Garcia BB, Carleto CT, Gontijo LM, Pedrosa LAK. Perfil dos alunos ingressantes dos cursos da área da saúde de uma universidade federal. Revista de enfermagem e atenção em saúde. 2013; 2(1):3-12.
8. Fernandes LGG, Tourinho FSV, Souza NL, Menezes RMP. Contribuição de James Reason para a segurança do paciente: reflexão para a prática de enfermagem. Rev enferm UFPE. Jul 2014; 8(supl. 1):2507-12.
9. Oliveira RM, Leitão IMTA, Silva LMS, Figueiredo SV, Sampaio RL, Gondim MM. Estratégias para promover segurança do paciente. Escola Anna Nery. Jan./Mar 2014; 18(1): 122-29.
10. Eberle CC, Silva APSS. Compreensão de estudantes de enfermagem sobre a segurança do paciente. Revista Baiana de Enfermagem. Out/dez 2016; 30(4):1-9.
11. Brasil, Ministério da Saúde. Agência Nacional de Vigilância Sanitária. Documento de referência para o Programa Nacional de Segurança do Paciente. Brasília, 2014.
12. Wachter RM. Compreendendo a segurança do paciente. Artmed, 2ª edição. Porto Alegre (RS): 2013. Disponível em: https://books.google.com.br/books?hl=pt-BR&lr=&id=LWQ3AgAAQBAJ&oi=fnd&pg=PR3&ots=sACrbheWzf&sig=JeUdRXnbLPZmCukawGAtmA9f72M&redir_esc=y#v=onepage&q&f=false.
13. Lopes MNA, Beccaria LM, Silva LB, Cesarino CB, Faria JIL. Segurança do paciente: desenvolvimento do tema em cursos de graduação em enfermagem. Enfermagem Brasil. 2018;17(3):208-217.
14. Rosa RT, Gehlen MH, Ilha S, Pereira FW, Cassola T, Backes DS. Segurança do paciente na práxis do cuidado de enfermagem: percepção de enfermeiros. Ciencia y enfermeria. 2015; XXI(3):37-47.
15. Dias JD, Mekaro KS, Tibes CMS, Zem-Mascarenhas SH. Compreensão de enfermeiros sobre segurança do paciente e erros de medicação. Revista Mineira de Enfermagem. Out/dez 2014;18(4):866-873.
16. Ilha P, Radünz V, Tourinho FSV, Marinho MM. Segurança do paciente na percepção de acadêmicos de enfermagem. Cogitare Enferm. 2016; 21(especial):1-10.
17. Fonseca AS, Peterlini FL, Costa DA. Segurança do Paciente. São Paulo (SP): Martinari; 2014.
18. Rede Brasileira de Enfermagem e Segurança do Paciente (Brasil). Rede Brasileira de Enfermagem e Segurança do Paciente: Estratégias para a segurança do paciente: manual para profissionais da saúde. Porto Alegre. EDIPUCRS; 2013.
19. Calazans MSC et al. Segurança do paciente entre estudantes de enfermagem: uma revisão integrativa. Revista Enfermagem Atual In Derme. 2020; 94(32):1-7.

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