Nursing students' training on pain...



ORIGINAL ARTICLE

NURSING STUDENTS' TRAINING ON PAIN ASSESSMENT FORMAÇÃO DOS DISCENTES DE ENFERMAGEM ACERCA DA AVALIAÇÃO DA DOR LA FORMACIÓN DE LOS ESTUDIANTES DE ENFERMERÍA SOBRE LA EVALUACIÓN DEL DOLOR

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ABSTRACT

Objective: to evaluate the training of students from the last semester of the Nursing undergraduate course regarding pain assessment. *Method*: this is a quantitative, descriptive, cross-sectional study, developed in a private educational institution. The sample consisted of 169 students from the last semester, who answered a form with objective questions. The univariate descriptive analysis was performed from tables. *Results*: professors teah pain as the fifth vital sign for 52.1% of the participants; 76% stated not observing pain record on medical charts in the curricular mandatory internship; 68% were not encouraged to use the scales for pain assessment and 62.1% have never used the scales for pain assessment. *Many Nursing undergraduate students*, in the last semester, do not feel able to carry out pain assessment. *Conclusion*: Nursing graduates' knowledge present gaps in relation to pain assessment, whose training is worrying, considering pain assessment and control as basic principles for quality assistance. *Descriptors*: Pain; Assessment; Nursing; Teaching; Pain Measurement; Continuing Education.

RESUMO

Objetivo: avaliar a formação dos discentes do último período do curso de Enfermagem quanto à avaliação da dor. *Método*: trata-se de um estudo quantitativo, descritivo, transversal, desenvolvido em uma instituição de ensino privada. Compôs-se a amostra por 169 graduandos do décimo período. Utilizou-se um formulário com questões objetivas. Realizou-se a análise descritiva univariada a partir de tabelas. *Resultados*: constata-se que a dor foi ensinada pelos docentes como o quinto sinal vital para 52,1% dos participantes; 76% afirmaram que, no estágio curricular obrigatório, não observaram o registro da dor nos prontuários; 68% não foram estimulados a utilizar as escalas para a avaliação da dor e 62,1% nunca utilizaram as escalas para a avaliação da dor. Entende-se que muitos acadêmicos de Enfermagem, no último semestre da graduação, não se sentem aptos a realizar a avaliação da dor. *Conclusão*: encontram-se falhas no conhecimento dos graduandos de Enfermagem no tocante à avaliação da dor, e é preocupante a formação desses enfermeiros, considerando que a avaliação da dor e o seu controle são princípios básicos para uma assistência de qualidade. *Descritores*: Dor; Avaliação; Enfermagem; Ensino; Medição da dor; Educação Continuada.

RESUMEN

Objetivo: evaluar la formación de los estudiantes del último período del curso de enfermería en la evaluación del dolor. *Método*: se trata de un estudio cuantitativo, descriptivo, transversal, desarrollado en una institución de enseñanza privada. La muestra estuvo compuesta por 169 estudiantes del 10° período. Se utilizó un formulario con preguntas objetivas. El análisis descriptivo univariado de tablas. *Resultados*: se observó que el dolor era enseñada por los profesores como el quinto signo vital para 52,1% de los participantes; 76% afirmaron que, en la práctica laboral curricular obligatoria, no observaron el registro del dolor en los cuadros; 68% no fueron estimulados a usar las escalas de evaluación del dolor y 62,1% nunca han utilizado las escalas para la evaluación del dolor. Se entiende que muchos universitarios de enfermería, en el último semestre de graduación, no se sienten capaces de llevar a cabo la evaluación del dolor. *Conclusión*: existen lagunas en el conocimiento de los graduados de enfermería en relación con la evaluación del dolor, y es preocupante la formación de estos enfermeros, mientras que la evaluación del dolor y su control son los principios básicos para la calidad de la asistencia. *Descriptores*: Dolor; Evaluación; Enfermería; Enseñanza; Dimensión del Dolor; Educación Continua.

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INTRODUCTION

Pain is a common, subjective and unpleasant phenomenon at any age. Its manifestation occurs differently, which can impair the assessment.¹ It is essential to understand its physiology, methods of assessment and therapy to promote its relief and ensure the patient's well-being.²

Pain is considered the fifth vital sign, for being as important as others are. The effectiveness of its treatment relates to a proper evaluation, since pain measurement is essential for its proper management. The nurse must use the scales to measure this phenomenon, as they help to obtain specific information about the patient's representing a safe, fast and evaluation method that can be used in the pain management.3

Since the nurses is part of the multiprofessional healthcare team, he/she must assess and record the aspects and the intensity of the pain; however, the pain has been underestimated and undertreated due to the deficit of knowledge and precarious continuing education on its control, promoting discomfort and its intensification.⁴

During the assistance, the Nursing does not address pain as a priority, resulting in bad practices and unnecessary suffering for the patient. This phenomenon may have originated during the professionals' graduation, because the content on pain, its methods of evaluation and treatment are still neglected in the curriculum of Nursing undergraduate courses.⁵

This study is justified by the high prevalence and difficulty of the Nursing team in pain evaluation, requiring, therefore, studies that investigate the related factors.

OBJECTIVE

• To assess the training of students from the last semester of the Nursing undergraduate course regarding pain assessment.

MÉTODO

This is a quantitative, descriptive and cross-sectional study, conducted in a private educational institution of Aracaju (SE), in October 2017. This institution was chosen due to the easy access to the students from the last semester. Nursing undergraduate students from the last semester participated in the survey. During data collection, the students were duly informed about the objectives of

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the study and signed the Informed Consent Form (ICF).

The inclusion criteria were: student from the last semester of the Nursing undergraduate course; duly enrolled; being up-to-date with the university obligations; being Brazilian; having already attended supervised internship and completed the basic disciplines of the course.

The interviewers applied a form with objective questions, divided into three parts: students' profile; pain teaching way and suitability for pain assessment. The univariate descriptive analysis was performed, followed by the categorization of data extracted, obtaining the respective frequencies and percentages presented in the form of tables.

The study complied with the recommendations of Resolution 466/2012 of the National Health Council and was approved by the Research Ethics Committee of the teaching institution Estacio of Sergipe (CAEE: 70838717.0.0000.8079).

RESULTS

The sample consisted of 169 nursing students form the last semester of the course, being 16 men and 153 women aged between 20 and 50 years. Table 1 shows the results obtained fater asking participants about the vital signs, scales for pain assessment and disciplines.

88.9%

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Table 1. Data on academic preparation of Nursing students on pain assessment. Aracaju (SE), Brazil, 2017.

Questionnaire	Frequency	Percentage%
Vital signs learnt during graduation		
PAIN, HR, RR, ABP and T	88	52.1%
HR, RR, ABP and T	66	39.1%
Not answered	15	8.8%
Information on pain assessment scale for children?		
No	14	8.3%
Yes	149	88.2%
Not answered	6	3.5%
Information on pain assessment scale for adults?		
No .	9	5.3%
Yes	150	88.8%
Not answered	10	5.9%
Disciplines presenting instruments for pain		
assessment		
Child's health clinical training	100	59.2%
Adults' and elders' health clinical training	56	33.1%
Clinical training in surgical room	22	13.0%
High-complexity clinical training	 17	10.1%
Care systematization	59	34.9%
Child's health supervised	60	35.5%
Adults' and eders' health supervised	40	23.7%
High-complexity supervised	23	13.6%
Not answered	14	7.3%
Number of disciplines presenting instruments for	• •	7.370
pain assessment		
One discipline	55	32.5%
Two - Three disciplines	73	43.2%
More than three disciplines	27	16.0%
Not answered	14	7.3%
During curricular internship, was there any pain	• •	7.370
assessment scale on the chart?		
No	131	77.5%
Yes	28	16.6%
Not answered	10	5.9%
What were the pain assessment scales observed		3.770
on the chart?		
Unspecified	24	85.7%
Faces pain rating scale	2	7.1%
Numerical scale	2	7.1%
Did professor encourage using pain assessment	-	7 • 1 / 0
scales in children or adults?		
No	115	68.0%
Yes	36	21.3%
Not answered	18	10.7%
Which discipline encourage using pain asessment	10	10.7/0
sclaes in children or adults?		
Child's health clinical essay	3	11.1%
Cilità s neattii Clinicat essay	J	11.1/0

HR (Heart Rate), RR (Respiratory Rate), ABP (Arterial Blood Pressure) and T (Temperature).

Next, Table 2 hows the results concerning the use of instruments for measuring pain and the ability to carry out pain assessment safely in children and adults.

Unspecified

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Table 2. Identification of Nursing undergraduate students' practice and skill to assess pain. Aracaju (SE), Brazil, 2017.

Questionnaire	Frequency	Percentage%
Have you ever used any		
pain assessment scale?		
Yes	51	30.2%
No	105	62.1%
Do you feel able to		
perform pain assessment		
safely in children?		
Yes	43	25.4%
No	116	68.6%
Not answered	10	5.9 %
Do you feel able to		
perform pain assessment		
safely in adults?		
Yes	100	59.1%
No	61	36.1%
Not answered	8	4.7%

DISCUSSION

The idea that pain constitutes the fifth vital sign is reinforced, making its meaning and evaluation important during patients' health care, and, once present, pain should be treated. In this study, more than half of the students understand that pain is one of the five vital signs, but a large portion has not learned to assess pain as the fifth vital sign. Many Nursing professionals recognize pain as the fifth vital sign, and 25.5% of them reported acquiring the knowledge about pain during the graduation.⁷

The lack of knowledge on pain as vital sign hinders its evaluation once the importance of this sign is disregarded in patients' clinical picture. Students should be sensitive in the sense of seeking knowledge about the pain beyond the learning process at the college. Higher education institutions should should offer and encourage professors to address the pain issue widely, in theory, extending to practice. The use of instruments already validated in pain assessment is essential to ensure a correct measurement. The use of scales assessing pain aspects benefits Nursing care, because it directs the care to each patient's needs.8 These instruments constitute an essential strategy that favors care planning and decision making of professionals in the development of a holistic assistance.9

Although most students reported acquiring knowledge on pain assessment scales in children and adults during graduation, the existence of students that have never had contact with these instruments is worrying. A study with 50 Medical students from the fifth and sixth semesters showed that many know some pain assessment scale, but a large part of these students reported not receiving sufficient information on its management.¹⁰

Part of the Nursing students know that there are scales that assess pain in children and adults, a fact considered positive, because the knowledge of the existence of these scales can awaken students' interest in seeking these instruments, acquiring knowledge and evaluating pain in the course of their professional practice. Pain assessment should be part of Nursing activities in order to provide a humanized and appropriate care. Nevertheless, researches still show that many doctors and nurses do not know the scales to assess pain. 11 Therefore, that knowledge should not be acquired only during undergraduate studies, and continuing education must be part of professional practice.

Few disciplines of the Nursing undergraduate course provide information on pain and, when they do, it is superficial. Thus, these future professionals need to seek new strategies, such as courses, specialization and postgraduate courses in the area, to minimize the gaps in their learning about the pain phenomenon.¹²

When guestioned about the disciplines that provide the knowledge on instruments for pain assessment, 59.2% of the students reported the discipline child's health clinical training, followed by the discipline adulst' and elders' heath clinical training (33.1%), among others. conducted survey with multiprofessional healthcare team, the majority reported having attended contents on pain in the undergraduate disciplines, such Pharmacology, Anesthesiology Physiology, among others. 13 In a study 14 with Nursing undergraduate students, participants stated that only four disciplines address pain. Educational institutions address pear in different ways, and, despite being part of the syllabus of undergraduate courses, it does not constitute a specific discipline.

Undergraduate courses treat the pain subject as a complement subject in various disciplines, ¹⁵ providing a discontinuous learning.

During mandatory internship, 77.5% of the students mentioned not observing the use of pain assessment scales on the medical chart. A survey with nurses working in emergency departments showed that most professionals did not record pain assessments nor did they use the scale to evaluate it. 16 Health professionals often disregard pain, a fact that can be attributed to the lack of knowledge of appropriate methods for its evaluation, leading to an inadequate care to the patient. The lack of records of pain assessment on the chart may hinder students' learning, since it does not allow observing the use of scales in care practice and discourages them to seek learning.

Professors have the potential to influence the pain management issue through the facilitation of the acquisition of knowledge and its practical use during Nursing classes.¹⁷ During supervised internships, more than half of the students were not encouraged by professors to use pain assessment scales.

In supervision, the professor provides the student more freedom, believing he/she is prepared. Nonetheless, the student's difficulties relate to the theory. The absence of theoretical-practical teaching about pain, the little time of contact of the student with the patient and the excessive number of students per professor are factors that contribute to the low knowledge of students regarding pain management. The professor should understand the student's limitations and offer knowledge in all circumstances.

Pain is able to affect the overall health status. Therefore, its management becomes fundamental, contemplating its assessment, monitoring and treatment, using appropriate scales and indicators for its monitoring that allow measuring its intensity and evaluating the effectiveness of interventions.¹⁹

A large part of the students had never used scales to assess the patient's pain; similarly, more than half of medical students stated not always using the pain assessment scales. ¹⁰ Thus, it demonstrates that both nurses as other healthcare professionals are unprepared to perform the correct pain management after graduation.

The student should understand the pain phenomenon and its impact on people's lives and seek to raise awareness regarding the care that should be offered. Since it constitutes a field of knowledge and practices Nursing students' training on pain...

in construction, the theme pain should have a greater impact on the academic training and Nursing practices.²⁰

In this study, approximately 68% and 36% of the students do not feel able to carry out a safe pain assessment in children and adults, respectively. This feeling may relate to the deficit of knowledge on the subject. Similarly, evaluating Nursing undergraduate students' knowledge about pain, most of them could not answer correctly not even 50% of the questions, mainly on pain assessment.¹⁸ assessment scales subsidize accomplishment of adequate interventions; however, to ensure the proper use of these instruments, one must have knowledge to apply and interpret the findings, since, in addition to quantifying the pain, they govern actions with the objective to improve the patient's outcomes.

Students' training presents limitations that may contribute to the unnecessary suffering and deterioration in the quality of life of clients affected by pain.²⁰ Nursing undergraduate students attend few credits on the pain theme, leaving aside specific skills in the evaluation and management of this phenomenon.²¹

Nursing should seek to introduce the pain theme in its undergraduate curricula, isolated from and complementary with other provide disciplines. in order to more knowledge better preparedness and students on the evaluation and the methods to offer pain relief, trying to reduce the gap between theoretical and practical assistance.21

CONCLUSION

Many Nursing undergraduate students, although presented, during undergraduation, to aspects relating to pain management, with the application of scales in curricular disciplines, they still report not being able to assess pain in children and in adults.

These nurses' training is worrying, since pain assessment and its control are basic principles for quality assistance, according to the recommendations of the International Association for the Study of Pain and the guidelines of the National Health System.

Higher education institutions need to commit to train competent, critical and reflective professionals that may act, in a comprehensive way, in their area of training.

REFERENCES

1. Cruz CT, Stumm EMF. Instrumentation and implementation of pain evaluation scale in a

Neonatal Intensive Care Unit. Case report. Rev 2015 July/Sept: 16(3):232-4. http://dx.doi.org/10.5935/1806-0013.20150046

- 2. Silva PO, Portella VC. **Nursing** interventions in pain. Rev Dor. 2014 Apr/June; 15(2):145-8. Doi: http://dx.doi.org/10.5935/1806-0013.20140027
- 3. Leite ACS, Farias LGO, Nogueira AO, Chaves EMC. Acute chest pain intensity in a cardiopulmonary emergency unit. Rev Dor. July/Sept;17(3):159-63. 2016 Doi: http://dx.doi.org/10.5935/1806-0013.20160063
- 4. Costa KF, Alves VH, Dames LJP, Rodrigues DP, Barbosa MTSR, Souza RRB. Clinical management of pain in the newborn: perception of nurses from the neonatal intensive care unit. J res fund care on line. Jan/Mar:8(1):3758-69. http://dx.doi.org/10.9789/2175-5361.2016.v8i1.3758-3769
- Franklin CM. Pain: a content review of undergraduate pre-registration nurse education in the United Kingdom. Nurse educ 2017 Jan;48:84-9. Doi: https://doi.org/10.1016/j.nedt.2016.08.035
- 6. Bussotti EA, Guinsburg R, Pedreira MLG. Adaptação cultural para o português do Brasil da escala de avaliação de dor Face, Legs, Activity, Cry, Consolability revised (FLACCr). Rev. Rev Latino-Am Enfermagem. 2015 July/Aug;23(4):651-9. Doi:

http://dx.doi.org/10.1590/0104-1169.0001.2600

7. Magalhães PAP, Mota FA, Saleh CMR, Secco DLM, Fusco SRG, Gouvêa ÁS. Percepção dos profissionais de enfermagem frente à identificação, quantificação e tratamento da dor em pacientes de uma unidade de terapia intensiva de trauma. Rev Dor. 2011 July/Sept; 12(3):221-5.

http://dx.doi.org/10.1590/S1806-00132011000300005

- Ruela LO, Sigueira YMA, Gradim CVC. Pain evaluation in patients under chemotherapy: application of McGill pain Questionnaire. Rev Dor. 2017 Apr/June; 18(2): 156-60. http://dx.doi.org/10.5935/1806-0013.20170031
- 9. Margues VR, Benetti PE, Benetti ERR, Rosanelli CLSP, Colet CF, Stumm EMF. Pain intensity assessment in chronic renal patients on hemodialysis. Rer Dor. 2016 Apr/June; 17(2):96-100. Doi:

http://dx.doi.org/10.5935/1806-0013.20160023

Nursing students' training on pain...

- 10. Pinheiro TRSP. Avaliação do grau de conhecimento sobre cuidados paliativos e dor dos estudantes de medicina do quinto e sexto anos. Mundo Saúde [Internet]. 2010 [cited 2017 Nov 19];34(3):320-6. Available from: http://www.saocamilo-
- sp.br/pdf/mundo_saude/77/320a326.pdf
- 11. Ribeiro MCO, Pereira CU, Sallum AMC, Alves JAB, Albuquerque MF, Fujishima PA. Knowledge of doctors and nurses on pain in patients undergoing craniotomy. Rev Latino-Am Enfermagem. 2012 Nov/Dec;20(6). Doi: https://doi.org/10.1590/S0104-11692012000600007

- 12. Leão ER, Oliveira MA. Relacionamento enfermeiro- paciente: do cuidar do corpo ao cuidar do ser. In: Leão ER, Chaves LD. Dor 5° sinal Vital: reflexões e intervenções de enfermagem. 2nd ed. São Paulo: Martinari,
- 13. Ribeiro MCO, Costa IN, Ribeiro CJN, Nunes MS, Santos B, DeSantana JM. Knowledge of health professionals about pain and analgesia. Rev Dor. 2015 July/Sept;16(3):204-9. Doi: http://dx.doi.org/10.5935/1806-0013.20150041
- 14. Romanek FARM, Avelar MCQ. Percepção dos docentes acerca do ensino da dor para graduandos em enfermagem. Rev eletrônica enferm. 2013 Apr/June;15(2):463-70. http://dx.doi.org/10.5216/ree.v15i2.16732.
- 15. Alves RC. Tavares JP, Funes RAC, KCC, Ueda Gasparetto GAR, Silva Evaluation of pain knowledge of Physiotherapy students from a university center. Rev Dor. 2013 Oct/Dec;14(4):272-9. Doi: http://dx.doi.org/10.1590/\$1806-00132013000400008
- 16. Ucuzal M, Doğan R. Emergency nurses' knowledge, attitude and clinical decision making skills about pain. Int Emerg Nurs. 2015 Apr;23(2):75-80. Doi:

https://doi.org/10.1016/j.ienj.2014.11.006

- 17. Duke G, Haas BK, Yarbrough S, Northam S. Pain management knowledge and attitudes of baccalaureate nursing students and faculty. Pain manag nurs. 2013 Mar;14(1):11-9. Doi: https://doi.org/10.1016/j.pmn.2010.03.006
- 18. Gadallah MAEA, Hassan AM, Shargawy Undergraduate nursing students' knowledge and attitude regarding pain management of children in Upper Egypt. J Nurs Educ Pract. 2017;7(6):101-8. https://doi.org/10.5430/jnep.v7n6p100
- 19. Teixeira JMF, Durão MC. Pain assessment critically ill patients: an integrative literature review Seguimiento del dolor en pacientes en estado crítico: una revisión integradorade la literatura. Referência. 2016

ISSN: 1981-8963

Santos AF, Machado RR, Ribeiro CJN et al.

Nursing students' training on pain...

July/Aug/Sept;4(10):135-42. Doi: http://dx.doi.org/10.12707/RIV16026

20. Barros SRAF, Pereira SSL, Almeida Neto A. Nursing students qualification as to pain perception in two universities. Rev Dor. 2011 Apr/June;12(2):131-7. Doi:

http://dx.doi.org/10.1590/S1806-00132011000200010

- 21. Wijayanti E. Teaching pain management to student nurses: a literature review. Nurse Med J Nurs. 2014 June;4(1):715-32. Doi: https://doi.org/10.14710/nmjn.v4i1.6708
- 22. Rahimi MM, Tavakol M, Dennick R. A quantitative study of Iranian nursing students' knowledge and attitudes towards pain: implication for education. Int J Nurs Pract. 2016 May;16(5):478-83. Doi: https://doi.org/10.1111/j.1440-172X.2010.01872.x
- 23. DeSantana JM, Souza JB, Reis FJJ, Gosling AP, Paranhos E, Barboza HFG, et al. Pain curriculum for graduation in Physiotherapy in Brazil. Rev Dor. 2017 Jan/Mar;18(1):72-8. Doi: http://dx.doi.org/10.5935/1806-0013.20170015

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