# Pain management: evaluation of practices adopted by health professionals of a secondary public hospital

Manuseio da dor: avaliação das práticas utilizadas por profissionais assistenciais de hospital público secundário

Leonel Alves do Nascimento¹, Mariana Guimarães Cardoso², Samuel Andrade de Oliveira², Eliane Quina¹, Denise da Silva Scaneiro Sardinha¹

DOI 10.5935/1806-0013.20160019

## **ABSTRACT**

**BACKGROUND AND OBJECTIVES:** Pain is the primary reason for looking for healthcare services. So, this study aimed at knowing healthcare professionals practices with regard to managing pain in a secondary public hospital of the Northern region of Paraná.

**METHODS:** This is a descriptive and exploratory study with quantitative approach, carried out from March to May 2015 by means of a semi-structured questionnaire. Participated in the study 112 healthcare professionals (nurses, physicians, physiotherapists and nursing technicians). Data were analyzed by basic descriptive statistics.

**RESULTS**: Pain was a vital sign for 88.4% of professionals; however only 18.8% have reported having some pain evaluation scale as working material. Pain is always recorded on medical charts by 49.1% of professionals. Difficulties to evaluate pain were reported by 46.4%. With regard to drug administration, 27 (24.2%) professionals have reported having some difficulty to administer drugs to patients. For 48.2%, patients must have moderate pain to receive analgesics. Half professionals have never participated in specific pain training courses and 73.2% have answered that patients lie when reporting pain presence and intensity.

**CONCLUSION**: Deficiencies which may impair adequate pain management were observed. The lack of specific qualification regarding pain may lead professionals to ineffective approaches, often prolonging patients' distress.

**Keywords**: Analgesia and pain measurement, Health attitudes and practice, Knowledge, Pain management.

- 1. Hospital Dr. Anísio Figueiredo, Londrina, PR, Brasil.
- 2. Universidade Estadual de Londrina, Departamento de Enfermagem, Londrina, PR, Brasil.

Submitted in January 19, 2016. Accepted for publication in March 21, 2016. Conflict of interests: none – Sponsoring sources: none.

## Correspondence to:

Rua Odilon Braga, 199 - Conjunto Sebastião de Melo 86084-600 Londrina, PR, Brasil. E-mail: leonel\_lan@hotmail.com

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## **RESUMO**

**JUSTIFICATIVA E OBJETIVOS**: A dor é o principal motivo de procura por atendimento nos serviços de saúde. Dessa forma, este estudo teve como objetivo conhecer as práticas utilizadas por profissionais de saúde em relação ao manuseio da dor em um hospital público de nível secundário do norte do Paraná.

**MÉTODOS**: Pesquisa descritiva e exploratória com enfoque quantitativo, realizada no período de março a maio de 2015, por meio de um questionário semiestruturado. Participaram do estudo 112 profissionais da área da saúde (enfermeiros, médicos, fisioterapeutas e técnicos de enfermagem). Os dados foram analisados utilizando estatísticas descritivas básicas.

RESULTADOS: A dor foi considerada um sinal vital para 88,4% dos profissionais, entretanto apenas 18,8% relataram possuir alguma escala de avaliação da dor como material de trabalho. O registro referente à dor no prontuário sempre é anotado segundo 49,1% dos profissionais. A presença de dificuldades em avaliar a dor foi relatada por 46,4%. Quanto à administração de fármacos, 27 (24,2%) profissionais relataram possuir alguma dificuldade em administrar analgésicos ao paciente. Para 48,2% dos profissionais o paciente deve estar com dor de intensidade moderada para administrar analgésicos. Metade dos profissionais nunca participou de treinamentos específicos em relação à dor e 73,2% responderam que o paciente mente ao informar a presença e intensidade da dor.

**CONCLUSÃO:** Foram observadas deficiências que podem comprometer o manuseio adequado da dor. A falta de capacitação específica relacionada à dor pode fazer com que o profissional apresente condutas ineficazes, muitas vezes prolongando o sofrimento do paciente.

**Descritores**: Analgesia e mensuração da dor, Atitudes e prática em saúde, Conhecimentos, Manuseio da dor.

# INTRODUCTION

Considered a major reason for looking for healthcare services, pain is defined by the International Association for the Study of Pain (IASP) as "disagreeable sensory and emotional experience, associated to real or potential tissue injury, or described in terms of such injuries". Pain is a subjective, individual and complex symptom, made up of previous painful experiences and multidimensional phenomena, such as sociocultural and emotional aspects<sup>2-5</sup>.

Every patient has the right for adequate pain management, in addition to being considered a quality assistance criterion. When untreated, pain negatively influences patients' clinical evolution, leading to cardiovascular, immune, thrombolytic, psychological and social changes, sleep disorders or even to pain chronicity<sup>6</sup>

As from the year 2000, American associations recommend that pain should be evaluated in a standardized way, together with other vital signs; so, pain was defined as the fifth vital sign. Managers should encourage and follow-up health teams with regard to effective implementation of pain as the fifth vital sign, aiming at a humanized care when minimizing a distress which is often controllable.

Four basic tools are used to evaluate and measure pain manifestations and expressions, among them numeric, nominal, analogical and illustrated scales<sup>3,9</sup>. Self-report is the golden standard for pain evaluation. In this sense, it is critical that the health team appreciates pain complaints to trigger actions to control it<sup>2,10,11</sup>

However, difficulty to understand patients' pain extension is a critical point for pain control. Limited knowledge with regard to pain identification and measurement, associated to poor adhesion of health institution managers to pain evaluation as the fifth vital sign, perpetuate unnecessary distress and decreased quality of life (QL) of acute and chronic pain patients<sup>4</sup>.

This contributes for pain underreporting and inadequate management in spite of existing classification systems and measurement tools. Some reasons impairing pain management are related to inadequacy of evaluation models in health institutions, to deficiencies related to health professionals academic qualification with regard to pain management and to negligence with painful patients, leading to analgesic choices not validated by the literature and insufficient to control pain 12,13.

This research is part of the activities of the Pain Management Committee instituted in the studied hospital. This committee is made up of a multiprofessional team and aims at discussing subjects related to pain evaluation, measurement and management. The first initiative of the committee was to identify pain management actions adopted by health professionals.

This study aimed at understanding pain management practices of health professionals of a secondary public hospital of Northern Paraná.

# **METHODS**

This is a descriptive and exploratory research with quantitative approach. The study was carried out in a secondary public hospital of a city in the Northern Paraná. Studied institution has 117 beds for clinical and surgical hospitalization, with monthly mean of 560 hospitalization and 5800 admissions to the first-aid unit.

Data were collected from March to May 2015, by means of a semi-structured tool. Addressed issues were related to evaluation, measurement, recording and handling of painful pa-

tients, in addition to aspects related to the truth of information referred by patients during pain evaluation.

Participated in the study 112 health professionals, among them nurses, physicians, physiotherapists and nursing technicians working in different sectors of the institution. Inclusion criteria by simple sampling were being active during data collection period, participate in assistance activities and agree in participating in the study. Exclusion criteria were employees members of the Pain Management Committee of the institution, since this committee had already been qualified with regard to pain management.

Basic descriptive statistics were used for data analysis, being data transcribed and tabulated by means of double data entry and presented in tables and figure. Statistical Package for the Social Sciences (SPSS) version 21.0 was the software used. This study was approved by the Research Ethics Com-

This study was approved by the Research Ethics Committee, Universidade Estadual de Londrina (CAAE: 39596814.3.0000.5231), opinion 921.128 of 2014, as recommended by Resolution 466/2012 of the National Health Council. Data were collected after participants having signed the Free and Informed Consent Term (FICT).

#### **RESULTS**

Participated in the study 112 professionals, of whom 75 (67%) were nursing technicians, 25 (22.3%) nurses, 4 (3.6%) physicians, 3 (2.7%) physiotherapists and 5 (4.5%) have not informed their professional category. Mean age of participants was 39.7±9.4 years, varying between 26 and 68 years. Working sector of participants included First Aid (50.9%), Clinical and Pediatric Ward (36.6%), Operating Center (3.6%) and other sectors, or participants have not supplied this information (8.9%). There has been predominance of females (68.8%), nursing technicians (67%) and daily working shift (55.4%). Mean time as health professional was 12.9±6.8 years, varying from 4 to 36 years. Mean time working for the institution was 5.4±5.0 years.

Pain is a vital sign for 99 (88.4%) professionals, however just 20 (18.8%) reported having some pain evaluation scale as working material. In a Likert scale from 1 (no importance) to 5 (very important), professionals have scored the importance of pain evaluation as 4.9. In this same scale (1/no action and 5/many actions), professionals have scored 1.73, indicating that the institution carries out few actions with regard to pain management. Table 1 shows considerations reported by professionals with regard to practices with painful patients.

Some difficulty to evaluate pain was reported by 46.4% of professionals. When asked about recording pain on medical charts, 55 (49.1%) professionals have reported always recording it, 40 (35.7%) most of the times, 16 (14.3%) sometimes and 01 (9%) seldom records it.

With regard to pain management qualification, half the professionals have never received specific training on pain and 47 (42%) were trained in other institutions where they worked. About drug administration, 27 (24.2%) professionals had some difficulty in administering analysics. Reported difficul-

**Table 1.** Considerations reported by professionals with regard to painful patients' evaluation, measuring, recording and managing, Northern Paraná 2015

Paraná, 2015			
Questions	Categories of answers	# of quotes	%
How do you identify pain?	Behavioral aspects: face expression, tone of voice, weeping, way of acting	83	40.1
	By means of patients' passive report about pain	51	24.6
	Clinical and physiologic aspects: sweating, tachycardia, hypertension, injury/harm diagnosis and classification	39	18.8
	By means of action asking about presence of pain	17	08.2
	Using pain evaluation scales	17	08.2
Total		207	100
How do you evaluate pain intensity?	Using pain intensity scales	44	28.2
	By means of patients' verbal report using descriptors: mild, moderate or severe	41	26.3
	Observing and evaluating behavioral aspects: weeping, posture, expressions	38	24.4
	Observing clinical aspects: vital signs	22	14.1
	Observing frequency of complaints	06	03.8
	Observing patients' diagnoses	05	03.2
Total		156	100
What do you record about pain evaluation?	Intensity	85	21.5
	Site	102	25.8
	Туре	61	15.4
	Carried out interventions	82	20.8
	Improvement after analgesia	65	16.5
Total		395	100
Which are your difficul-	Knowing whether report is true or false	20	44.4
ties in evaluating pain?	Subjectivity of pain evaluation	12	26.7
	Patient-related aspects: non-communicating, confuse, psychiatric	10	22.2
	Lack of specific knowledge	03	06.7
Total		45	100
Which are your diffi-	Difficulties with medical prescription: no analgesia, delay in prescribing	11	40.7
culties in administering	Lack of the drug in the institution	05	18.5
analgesics?	Inadequate prescription with regard to pain: insufficient analgesia	04	14.8
	Doses and intervals between them	03	11.1
	Lack of controlled prescription form for psychotropic drugs	02	07.4
	Decide which analgesic to use	01	03.7
	Rarely used or new drugs	01	03.7
Total		27	100
Do you evaluate pain	Yes, always	50	44.6
after administering analgesics?	Yes, most of the times	51	45.5
	Yes, sometimes	05	04.5
	No answer	03	02.7
	No	03	02.7
Total		112	100

ties are shown in table 1. We have also asked which is the initial intensity patients have to express to receive analgesics, being that 54 (48.2%) professionals have reported moderate intensity (Figure 1).

When asked whether patients omit pain presence and intensity, 82 (73.2%) professionals have answered yes. Table 2 shows the frequency in which professionals observe that patients lie when evaluating pain.

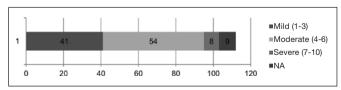


Figure 1. Initial pain intensity for analgesics administration, Northern Paraná, 2015

NA = no answer.

**Table 2.** Frequency in which patients omit pain presence and intensity, Northern Paraná, 2015

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Frequency	n	%
Never	03	02.7
Yes, rarely	15	13.4
Yes, sometimes	82	73.2
Yes, most of the times	08	07.1
Yes, always	02	01.8
No answer	02	01.8
Total	112	100

Suggestions of actions to be carried out by the institution to improve practices related to pain management are shown in table 3.

**Table 3.** Measures institution should adopt to improve pain management efficacy, Northern Paraná, 2015

Frequency	n	%
Improve patient-professional interaction	109	49.3
Training, ongoing information and education	70	31.7
Implement Pain Management Committee, Clinical Protocols, Standardized Scales	13	05.9
Standardize available analgesics	11	05.0
Standardize medical prescription of analgesia	07	03.2
Increase the frequency of medical revaluations	06	02.7
Increase the number of health professionals	04	01.8
Expedite analgesic administration to painful patients	01	00.5
Total	221	100

# **DISCUSSION**

Adequate pain management is made up of patients' evaluation, measurement, management and revaluation. This is critical when it is understood that pain is one vital sign. This way, a humanized and effective care of painful patients is assured<sup>14</sup>. This study has shown that most of the times, professionals use behavioral aspects, such as face expression, tone of voice, weeping and way of acting to evaluate pain, seldom mentioning pain measurement scales.

In this aspect, authors state that for adequate pain evaluation and quantification, it is necessary to choose an adequate method considering type of pain and patients' clinical condition. Several tools may be used to measure pain intensity and their advantages and limitations should be taken into consideration<sup>15</sup>.

Health professionals have used specific intensity scales or verbal descriptors scales to measure pain. This was compatible with a different study where 82.4% of interviewed professionals would describe pain intensity by means of verbal descriptors (mild, moderate or severe)<sup>8</sup>.

As to recording pain, our study has shown that pain site was the most common record, followed by intensity and interventions. Some studies show that nurses are limited to recording numeric intensity evolution, location and analgesia used, however records should encompass not only site and intensity but also variables such as worsening and improvement, pain-related losses, pain description and satisfaction with analgesia <sup>16</sup>.

Detailed recording of pain and its characteristics in medical charts is critical for its adequate management. These data allow the team to evaluate the efficacy of analgesic strategies and also pain evolution. Even lack of pain should be recorded. In the analysis of 60 medical charts, pain was recorded in 46.6% and 53.4% had no record whatsoever<sup>16</sup>.

Among difficulties to evaluate pain, knowing whether the report is true or false was the most quoted among professionals. This is often due to lack of training and information received since graduation. A study evaluating knowledge on pain received during graduation with 60 students from the last year has shown that just 56% reported having received information about the subject "pain" and that 95% of students have never participated in events about pain during graduation. This contributes to perpetuation of distress and decreased QL of painful patients<sup>17</sup>.

Pain, for being a subjective symptom, needs special attention from professionals when observing, listening to and interacting with patients. So, it is up to the nursing team to evaluate real patients' needs, thus appreciating their pain complaint<sup>18</sup>. Another difficulty found by professionals and specifically related to analgesic administration involves medical prescription deficiency, in addition to administrative difficulties. These results are in line with the literature which describes difficulties related to physicians (lack of analgesic prescription, insufficient analgesic prescription and lack of pain evaluation) and administrative difficulties (lack of the drug in the institution, lack of controlled prescription form for opioids and non-delivery of drugs to sectors when they are prescribed "if needed")<sup>8,17</sup>.

The choice of analgesics, dose and interval between doses, in addition to rarely used new drugs are also pointed as difficulties. Combined administration of analgesics, according to the Analgesic Ladder of the World Health Organization, is a recommended practice; however, studies show that nursing professionals still do not recognize this practice, and have even difficulties in validating morphine as the analgesic of choice when other pharmacological therapies are ineffective <sup>18,19</sup>.

With regard to drug administration, some professionals were in doubt, being that most of them administer analgesics when patients refer moderate pain. This might be due to little knowledge of recently graduated professionals about acute pain, to lack of ongoing education, to lack of experience with pain management protocols and routines and to lack of guidance about the choice of analgesic methods. So, further care with professional education and formation of multidisciplinary teams may contribute to improve the quality of care, to decrease pain-related complications and to decrease patients' distress<sup>20</sup>.

With regard to patients' evaluation after analgesic administration, professionals have stated that most of the times, or

always, they evaluate patients, confirming literature data where 85% of professionals have reported evaluating pain after analgesia. On the other hand, no record was found about pain improvement after analgesic administration in a medical charts audit study<sup>8,16</sup>.

# **CONCLUSION**

Our study has observed that health professionals evaluate and measure pain in a non-standardized way and very often with inadequate tools.

With regard to analgesia, patients had to refer moderate pain to receive analgesics. This practice contradicts pain management-related evidences, because it shows lack of knowledge and perpetuation of patients' distress.

It was evident the need for ongoing education, together with sensitization of hospital managers to discuss ways to adequately manage pain.

## **REFERENCES**

- Merskey H, BogdukN. Classification of Chronic Pain: Descriptions of Chronic Pain Syndromes and Definitions of Pain Terms. 2<sup>nd</sup> ed. Press Seattle: IASP; 1994.
- Souza RC, Garcia DM, Sanches MB, Gallo AM, Martins CP, Siqueira IL. Conhecimento da equipe de enfermagem sobre avaliação comportamental de dor em paciente crítico. Rev Gaúcha Enferm. 2013;34(3):55-63.
- Romanek FA, Avelar MC. O ensino de intervenções de Enfermagem como estratégia não farmacológica para alívio da dor. Rev Dor. 2014;15(4):264-6.
- Kipel AG, Franco SC, Muller LA. Práticas de enfermagem no manuseio da dor em hospitais de um município de Santa Catarina. Rev Dor. 2015;16(3):198-203.
- 5. Martin AR, Soares JR, Vieira VC, Marcon SS, Barreto MS. A dor aguda na perspectiva

- de pacientes vítimas de trauma leve atendidos em unidade emergencial. Rev Gaúcha Enferm. 2015;36(2):14-20.
- Silva EJ, Dixe MA. Prevalência e características de dor em pacientes internados em hospital português. Rev Dor. 2013;14(4):245-50.
- Bottega, FH, Fontana RT. A dor como quinto sinal vital: utilização da escala de avaliação por enfermeiros de um hospital geral. Texto Contexto Enferm. 2010;19(2):283-90.
- Nascimento LA, Santos MR, Ároni P, Martins MB, Kreling MC. Manuseio da dor e dificuldades relatadas pela equipe de enfermagem na administração de opióides. Rev Eletr Enf. 2011;13(4):714-20.
- Ribeiro NC, Barreto SC, Hora EC, de Sousa RM. [The nurse providing care to trauma victims in pain: the fifth vital sign]. Rev Esc Enferm USP. 2011;45(1):146-52. Portuguese.
- Sales IM, Ticianele JG. Análise da confiabilidade e o entendimento das escalas de mensuração em indivíduos com quadro álgico agudo na cidade de Boa Vista – Roraima. Cad Ciênc Biol Saúde. Boa Vista. 2014;(3).
- Araujo LC, Romero B. Dor: avaliação do 5º sinal vital. Uma reflexão teórica. Rev Dor. 2015;16(4):291-6.
- 12. Silva PO, Portella VC. Intervenções de enfermagem na dor. Rev Dor. 2014;15(2):145-51.
- Oliveira RM, Silva LM, Freitas CH, Oliveira SK, Pereira MM, Leitão IM. Medição da dor na prática clínica de enfermagem: revisão integrativa. Rev Enferm UFPE. 2014;8(8):2872-82.
- Magalháes PA, Mota FA, Saleh CM, Secco LM, Fusco SR, Gouvêa AL. 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;12(3):221-5.
- Nascimento LA, Kreling MC. Avaliação da dor como quinto sinal vital: opinião de profissionais de enfermagem. Acta Paul Enferm. 2011;24(1):50-4.
- Oliveira RM, Leitão IM, Silva LM, Almeida PC, Oliveira SK, Pinheiro MB. Dor e analgesia pós-operatória: análise dos registros em prontuários. Rev Dor. 2013;14(4):251-5.
- Barros SR, Pereira SS, Almeida AN. A formação de acadêmicos de enfermagem quanto à percepção da dor em duas instituições de ensino superior. Rev Dor. 2011;12(2):131-7.
- Morais FF, Matozinhos JP, Borges TT, Borges CM, Campos AC. Avaliação da dor como quinto sinal vital na classificação de risco: um estudo com enfermeiros. Rev Ciência & Saúde. 2009;2(2):73-7.
- Organización Mundial de la Salud. Alivio del dolor em el cáncer. Ginebra: OMS; 1996. 64p.
- Moreira L, Truppel YM, Kozovits FG, Santos VA, Atet V. Analgesia no pós-cirúrgico: panorama do controle da dor. Rev Dor. 2013;14(2):106-10.