

Recording acute pain in hospitalized patients

O registro da dor aguda em pacientes hospitalizados

Amanda Brassaroto Gimenes¹, Camila Takáo Lopes², Alfredo José Alves Rodrigues-Neto³, Marina de Góes Salvetti⁴

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ABSTRACT

BACKGROUND AND OBJECTIVES: Nurses are in a good position to carry out pain assessment and management, as well as to perform pharmacological and non-pharmacological interventions. The aim of this study was to compare hospital pain records in hospitalized patients with pain reports from a previous study and to analyze the presence of the “Acute Pain” Nursing Diagnosis and the Nursing Interventions prescribed for pain management.

METHODS: Cross-sectional study with retrospective data collection. As a criteria for sample selection, the pain report referred to in a previous study interview was used. The medical records were analyzed in order to verify the registries of acute pain intensity, presence of the “Acute Pain” Nursing Diagnosis and nursing interventions prescribed for adult hospitalized patients.

RESULTS: The sample of the present study consisted of 63 adult patients, with a mean hospital stay of 12 days. There was a disparity between medical records and pain data collected previously, indicating pain underreporting. The “Acute Pain” Nursing Diagnosis was identified in 60.3% of cases and Nursing Interventions were based on pharmacological pain relief (36.5%).

CONCLUSION: The information in the hospital’s medical records did not reflect the pain reports observed in a previous study. There was underreporting of pain and the Nursing Interventions listed by nurses privileged the assessment and pharmacological treatment of pain. These findings suggest the need for continuous training of the Nursing Team with an emphasis on non-pharmacological pain assessment and management.

Keywords: Acute pain, Health services, Nursing, Nursing diagnosis, Pain management.

RESUMO

JUSTIFICATIVA E OBJETIVOS: Os enfermeiros têm posição privilegiada para realizar a avaliação e o manejo da dor e utilizam intervenções farmacológicas e não farmacológicas. O objetivo deste estudo foi comparar os registros hospitalares de dor em pacientes internados com relato algico em estudo prévio e analisar a presença do Diagnóstico de Enfermagem “Dor Aguda” e as Intervenções e Atividades de Enfermagem prescritas para o manejo da dor.

MÉTODOS: Estudo transversal com coleta de dados retrospectiva. Utilizou-se como critério de seleção da amostra o relato de dor referida em entrevista de estudo anterior. Foram analisados os prontuários com a finalidade de verificar os registros de intensidade de dor aguda, presença do Diagnóstico de Enfermagem “Dor Aguda” e cuidados de enfermagem prescritos para pacientes adultos internados.

RESULTADOS: A amostra do presente estudo consistiu em 63 pacientes adultos, com tempo médio de internação de 12 dias. Observou-se disparidade entre registros de prontuário e dados sobre a dor coletados previamente, indicando subnotificação da dor. O Diagnóstico de Enfermagem “Dor Aguda” foi identificado em 60,3% dos casos e as Intervenções e Atividades de Enfermagem foram pautadas no alívio farmacológico da dor (36,5%).

CONCLUSÃO: Os registros de dor no prontuário do hospital não refletiram os relatos de dor observados em estudo prévio. Foi verificada a subnotificação da dor e as Intervenções e Atividades de Enfermagem elencadas pelos enfermeiros privilegiaram a avaliação e o tratamento farmacológico da dor. Esses achados sugerem a necessidade de treinamento contínuo da Equipe da Enfermagem com ênfase na avaliação e manejo não farmacológico da dor.

Descritores: Diagnóstico de enfermagem, Dor aguda, Enfermagem, Manejo da dor, Serviços de saúde.

INTRODUCTION

During hospitalization, pain affects various physiological and metabolic functions^{1,2}, increases the risk of complications and stunts the patient’s recovery. When undertreated, acute pain may become chronic, resulting in a financial and social burden for patient and society³. Nurses are in a good position to carry out pain assessment and management, as well as to perform pharmacological and non-pharmacological interventions. According to the NANDA-I Nursing

Amanda Brassaroto Gimenes – <https://orcid.org/0000-0002-1515-5844>;

Camila Takáo Lopes – <https://orcid.org/0000-0002-6243-6497>;

Alfredo José Alves Rodrigues-Neto – <https://orcid.org/0000-0002-5376-7075>;

Marina de Góes Salvetti – <https://orcid.org/0000-0002-4274-8709>.

1. Universidade de São Paulo, Hospital Universitário, Residente de Enfermagem do Programa de Saúde do Adulto e do Idoso, São Paulo, SP, Brasil.

2. Universidade Federal de São Paulo, Escola Paulista de Enfermagem, Departamento de Enfermagem Clínica e Cirúrgica, São Paulo, SP, Brasil.

3. Universidade de São Paulo, Faculdade de Ciências Farmacêuticas, São Paulo, SP, Brasil.

4. Universidade de São Paulo, Escola de Enfermagem, Departamento de Enfermagem Médico-Cirúrgica, São Paulo, SP, Brasil.

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Correspondence to:

Av. Dr. Enéas Carvalho de Aguiar, 419 - Cerqueira César
05403-000 São Paulo, SP, Brasil.

E-mail: amandabrassaroto@hotmail.com

Diagnostics Classification, “Acute Pain” is defined as: “Unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage (International Association for the Study of Pain); sudden or slow onset of any intensity from mild to severe with an anticipated or predictable end and a duration of less than 3 months”². Relief of pain is the patient’s right and is an ethical responsibility of the professional committed with humanization and quality of assistance⁴.

Identifying the complaint of pain and the consequences of acute pain for the patient’s recovery should be a nurse’s concern. Knowledge gaps on pain assessment and management and the lack of systematization of this care contributes to underreporting and inadequate treatment, despite the various assessment and management tools available⁵⁻¹⁰.

A literature review that analyzed studies on the recording of post surgery pain in the hospital context showed that the quality of nurse records about pain are insufficient, affect the clinic decision making and undermine the continuity of care¹¹.

This study aimed at exploring the registries of pain in the medical record, the clinical practice of the Nurse Team in regard to the management of pain.

Thus, this study’s objectives were to compare the pain records of hospitalized patients that presented pain in a previous study and analyze the relation between the “Acute Pain” Nurse Diagnosis (ND) and the Nurse Interventions (NI) prescribed for the management of pain.

METHODS

The study was done in a large scale University Hospital located in the west of the city of São Paulo. The place of research is a public institution, providing secondary level health assistance and offering emergency, surgical, clinical and outpatient services.

This study is a ramification of the “Prevalência de dor e adequação analgésica: estudo diagnóstico” (“Prevalence of pain and analgesic fitness: diagnostic study”) research, whose objective was to identify the prevalence of pain and the adequacy of analgesia in hospitalized patients. The criteria for the sample selection (n=134) of the referred study was: individuals with 18 years old or more, hospitalized in the University Hospital in November 2017, conscious, lucid, well oriented in time and space, and that accepted in participating in the research after signing the Free and Informed Consent Term (FICT). From the main research database, the extracted sample (n=63) consisted of patients who reported pain at the time of the interview or in the 24 hours preceding the main study interview, admitted to the Adult Emergency Room, Adult Intensive Care Unit, Medical Clinic, Surgical Clinic, Obstetrics Clinic or Day Hospital. Study participants were evaluated by means of a questionnaire developed for the main study, including sociodemographic, clinical and pain treatment data.

The presence, intensity and impact of pain on activities were assessed. The presence of pain was assessed at the moment of the interview and in relation to 24h before the interview. The intensity of pain was assessed by the visual numeric scale (VNS)¹² and the impact of pain on daily activities was assessed by the dichotomous

mode (yes/ no) regarding several activities. Data of the current work was collected retrospectively and transversally, using the instrument developed for this purpose. The authorization for access to the physical records of the 63 patients was obtained, collecting sociodemographic (age and sex) and clinical information. The information on pain was extracted from the values documented on the vital signs print and ND forms selected by the nurses after analysis of the NI on the days related to the collection of data from the main study. The mean pain intensity was calculated for the morning, afternoon and night, being classified as: mild (1-4), moderate (5-7) or severe (8-10)¹².

The presence of the “Acute Pain” ND and the proposed Acute Pain-NI for pain control were evaluated. Coherent conducts were considered to be the records containing: the ND-NI related to pain management. Incoherent nursing behaviors were considered the records containing: NI related to pain control without the presence of “Acute Pain” ND and absence of ND and NI related to pain management in patients that reported pain.

This study was approved by the Ethics Committees of the Nursing School of the *Universidade de São Paulo* (opinion number 2,542,888) and the USP University Hospital (opinion number 2,611,208).

Statistical analysis

The data was tabulated in a spreadsheet and analyzed in a statistics software (SPSS 25.0). A descriptive analysis was performed, containing the characteristics of the sample, the registry of the “Acute Pain” ND in the medical record and the Nursing Interventions prescribed for this Diagnosis. The results of pain intensity in the main study were compared with the means collected in the current study.

RESULTS

The results are presented in three stages: sample description, analysis of the pain registries in the hospital record in comparison to the main study’s form and, lastly, the ND and NI for the referred patients.

The sample consisted of 63 patients who reported pain in the main study. The patients had a mean length of hospitalization of 11.9 days (median = 10 days, minimum = 1 day and maximum = 57 days), were predominantly women (57.1%) and were between 18 and 59 years old (65.1%). The places of hospitalization with more cases of pain were the Surgical Clinic (36.5%), Medical Clinic (28.5%) and Adult Emergency Room (15.8%).

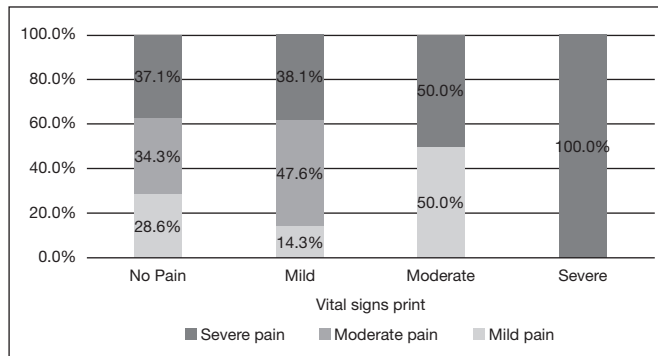
The most frequent medical diagnosis, by specialty, were clinic (30.2%), gastro-surgical (19.0%) and orthopedic (17.5%). Among the evaluated patients, 61.9% had comorbidities prior to their current hospitalization and, of these, 25.4% had three or more comorbidities. In the main study’s form, in which the intensity of pain was classified as: light (1-4), moderated (5-7) or severe (8-10)¹², 76.3% of interviewed patients reported moderate or severe pain. In the records of the vital sign prints there was no information about pain in 61.9% (n=39) of the cases and only 4.8% (n=3) presented moderate or severe pain (Table 1), demonstrating the difference between the self-reported pain and the registry of pain in the medical records.

Table 1. Comparison between pain intensity in medical records and the pain reports from the previous study. São Paulo, 2018

Intensity of pain	Vital signs print		Main study	
	n	%	n	%
No pain	39	61.9	-	-
Light pain (1-4)	21	33.3	14	23.7
Moderate pain (5-7)	2	3.1	22	37.3
Severe pain (8-10)	1	1.7	23	39.0
Total	63	100	59*	100

* There were 4 unexamined records in the main study due to lack of data.

The comparison between the records of pain from the main study's vital signs print and the data collection form are represented in figure 1. It can be seen in the first column that, among patients with a record of absence of pain in the vital signs form, 37.1% had reported severe pain in the main study. Likewise, in the "moderate pain" column there is an absence of conformity to the records, since 50% of patients classified with moderate pain in the hospital record referred severe pain in the main study.

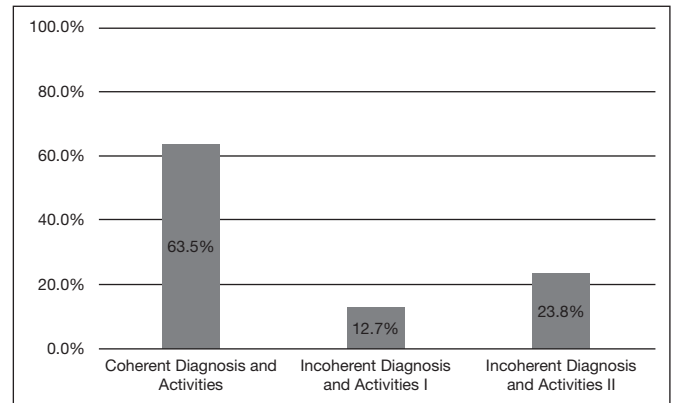
**Figure 1.** Columns show comparison between intensity registered in the medical records and in the previous study's form. São Paulo, 2018

The "Acute Pain" ND was registered in 60.3% (n=38) of the analyzed records, however, the whole sample presented pain in the main study¹. For 33.3% (n=21) of the patients that presented "Acute Pain" ND there was no registry of pain in the records. Thus, the nurse may have register the "Acute Pain" ND not considering just the presence of pain intensity in the vital signs print, but also the other characteristics and related features found in the ND² definition.

The most prescribed NIs were relief of pain through analgesics (36.5%); comprehensive pain assessment (19.0%) and monitoring of the degree of discomfort or pain (17.5%), with clear emphasis on pharmacological strategies rather than non-pharmacological pain management measures.

It was observed that in 63.5% (n=40) of the cases the "Acute Pain" ND was associated with relevant NI for this Diagnosis (Coherent Diagnosis and Activities). In 12.7% (n=8) of the cases, the nurses prescribed a NI without registering the "Acute Pain" ND (Incoherent Diagnosis and Activities I). Despite the presence of pain referred by all the sample's patients, in 23.8% (n=15) of cases the nurse did not registered "Acute Pain" ND,

neither NI for acute pain (Incoherent Diagnosis and Activities II), as shown in figure 2.

**Figure 2.** Relationship between diagnoses and prescribed nurse interventions. São Paulo, 2018

DISCUSSION

This study compared the records of hospitalized patients who had reported the presence of pain in the main study and analyzed the consistency between the pain registries, the "Acute Pain" ND and the NI prescription for pain management.

Discrepancies were found between the patients' reports regarding the occurrence and intensity of pain and the registries made by the Nursing Team in the medical records. Moreover, it was verified that in 23.8% of the cases there was no documentation of pain or prescription of pain management by nurses.

The incoherence between the pain registry in the records and the presence and intensity of pain identified in the main study shows incomplete registries and fragmented assistance processes, undermining the quality and security of the service provided¹. The Federal Nursing Council Resolution no. 429/2012 states the professionals' responsibility and duty to register the information inherent to the care process, enabling the continuity and quality of assistance¹³.

The evaluation of pain as a fifth vital sign was instituted in order to continuously identify its presence and establish appropriate strategies for its control^{8,10,14}. In addition, the adoption of international standards, such as that established by the Joint Commission International (JCI) in various health care organizations, recognizes pain control as a practice to be followed for the hospital accreditation process⁵.

As for the presence of the registry of pain in the records, one study evaluating hospitalized patients in a secondary hospital observed lack of pain registry in 53,4% of assessed medical records⁷, a slightly inferior number to the one observed in the present study, which found flaws in the pain record of 61,9% of patients. The flaw in the records of pain supports the findings in the literature that point to a lack of professional knowledge in regard to the evaluation and control of pain^{8,9,15}.

Despite the present study having evaluated only cases of patients that did report pain, the "Acute Pain" ND appeared in only 60,3% of cases. This mismatch may have occurred due to failure in assessing pain or because the nurses did not value the report of pain enough.

The documentation of the Nursing Process in the hospital where the study was developed is computerized, performed through a system of clinical reasoning support called “PROCEnf”. This system makes it possible to follow the path from evaluation to the planning of care¹⁶, making it possible to propose interventions related to pain, without necessarily having listed the “Acute Pain” ND. Thus, even if the “Acute Pain” ND was identified in 60.3% of the cases, pain care was prescribed in 76.2% of the cases.

Pain relief with prescribed analgesics was the most frequent NI in nursing care for acute pain management, referring to the analgesic actions of the biomedical model⁹. Although this intervention is necessary for pain management, there are much less explored NI, such as massage, heat and cold application, relaxation techniques and guided imagination, which may contribute to pain management and promotion of patient comfort⁸.

This study has limitations, which should be pointed out: secondary data and convenience sample analyses were used, factors that make it difficult to generalize results.

CONCLUSION

The pain registries from the hospital record did not reflect the pain reports observed in the previous study. Underreporting of pain was verified, even though the “Acute Pain” ND was identified in most cases. The NI listed by the nurses favored the evaluation and pharmacological treatment of pain. These findings suggest the need for continuous training of the Nursing Team with emphasis on non-pharmacological pain assessment and management.

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