

Analysis of intensity, sensory and affective aspects of pain of patients in immediate postoperative care



Análise da intensidade, aspectos sensoriais e afetivos da dor de pacientes em pós-operatório imediato

Análisis de intensidad, aspectos sensoriales y afectivos del dolor de pacientes en posoperatorio inmediato

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ABSTRACT

Objective: To evaluate the pain of patients in the immediate postoperative period during admission, an hour after admission, and at discharge of the post-anesthesia care unit in terms of intensity, and sensory and affective aspects.

Methods: Analytical, cross-sectional study with 336 patients. Data were collected using a sociodemographic and clinical form, the Numeric Pain Rating Scale, and the short-form McGill Pain Questionnaire. Data collection occurred from September to October 2015 at the post-anesthesia care unit of a general hospital in the north-west of Rio Grande do Sul, Brazil. The significance level of the descriptive and statistical analyses was set at $p < 0.05$.

Results: According to the data, 57.3% of the patients did not report pain and 47% felt pain from admission to discharge. Patients submitted to cancer and trauma surgeries reported more pain ($p < 0.01$). At admission and maintenance, there was a prevalence of moderate and intense pain, and at discharge, a predominance of mild and moderate pain.

Conclusions: The results showed a high percentage of patients with pain in the immediate postoperative period from admission to discharge. These findings can encourage researchers and health workers to conduct further investigations with the larger number of patients to allow for inferences.

Keywords: Pain. Pain, postoperative. Pain measurement. Perioperative care. Nursing care.

RESUMO

Objetivo: Avaliar a dor de pacientes em pós-operatório imediato, na admissão, uma hora após e na alta de uma Unidade de Recuperação Pós-Anestésica quanto a intensidade, aspectos sensoriais e afetivos.

Métodos: Analítico, transversal, com 336 pacientes, formulário sociodemográfico e clínico, escala numérica da dor e McGill reduzida. Dados coletados em setembro-outubro de 2015 em Unidade de Recuperação Pós-Anestésica (URPA), hospital geral do Noroeste do Rio Grande do Sul. Estatística descritiva, analítica, com significância para $p < 0,05$.

Resultados: 57,3% não referiram dor, 47% dor da admissão à alta, estatisticamente significativas. Pacientes submetidos a cirurgias oncológicas e traumatológicas relataram mais dor ($p < 0,01$). Na admissão e manutenção prevaleceu dor moderada e intensa; na alta, dor leve e moderada.

Conclusões: Percentual elevado de pacientes com dor no pós-operatório imediato, desde a admissão na unidade até a alta. Resultados podem instigar pesquisadores e profissionais de saúde às investigações, inclusive com maior número de participantes que permitam inferências.

Palavras-Chave: Dor. Dor pós-operatória. Medição da dor. Assistência perioperatória. Cuidados de enfermagem.

RESUMEN

Objetivo: Evaluar el dolor de pacientes en posoperatorio inmediato, en admisión, una hora después y en el alta de una unidad de cuidados posanestesia en intensidad y aspectos sensoriales y afectivos.

Métodos: Analítico, transversal, con 336 pacientes, formulario sociodemográfico y clínico, escala numérica del dolor y McGill reducida. Datos recogidos en septiembre-octubre de 2015, en unidad de cuidados posanestesia, hospital general del Noroeste de Rio Grande do Sul. Estadística descriptiva y analítica, con significación para $p < 0,05$.

Resultados: el 57,3% no informó dolor, 47% dolor de admisión hasta el alta, estadísticamente significativos. Pacientes sometidos a cirugía oncológica y traumatológica reportaron más dolor ($p < 0,01$). En la admisión y mantenimiento prevaleció el dolor moderado y grave, en el alta, leve y moderada.

Conclusiones: Elevado porcentaje de pacientes con dolor en posoperatorio inmediato, del ingreso hasta el alta. Resultados pueden instigar investigadores, profesionales de salud para investigaciones con mayor número de participantes que permitan inferencias.

Palabras clave: Dolor. Dolor posoperatorio. Dimensión del dolor. Atención perioperativa. Atención de enfermería.

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■ INTRODUCTION

The International Association for the Study of Pain (IASP) defines pain as an unpleasant sensory and emotional experience associated with actual current or potential and subjective injury⁽¹⁾. It is characterised as a multidimensional experience, both in quality and in intensity, with sensory, affective, autonomic, and behavioural aspects⁽²⁾.

Pain is a common phenomenon felt by all human beings and expressed in different ways, so assessing and measuring pain can be important parameters for the control and care of patients⁽³⁾. Important advancements have been made in relation to pain assessment in recent years. One of these advancements is the standardisation of pain as a fifth vital sign by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), which considers pain a priority in the assessment, intervention, and reassessment of hospitalised patients in comprehensive care. According to JCAHO, pain assessments include location and intensity based on behavioural scales and physiological parameters⁽⁴⁾.

When cells in the human body suffer any form of aggression, they release prostaglandins that attract others, specialised in phagocytosis, causing sensitivity. The undifferentiated nerve endings pick up the painful stimuli. Intense and prolonged exposure to such stimuli causes cardiovascular alterations, tachypnea, water retention, high blood glucose levels, changes in coagulation, and reduced immune response⁽⁵⁾.

Pain can be classified as acute, chronic, nociceptive, somatic, visceral, and neuropathic. When pain is considered in the immediate postoperative period in a post-anesthesia recovery unit (PARU), it is classified as acute, produced by skin lesion, deep somatic structures or visceral structures⁽⁶⁾. It is the result of surgical incision and the manipulation of tissues and organs that are frequent in this period, especially in medium and large surgeries⁽⁶⁾.

The immediate postoperative (IPO) period is the stage after anaesthetic procedures/surgery. It starts in the operating room when anaesthesia reversal occurs and continues for two to three hours after surgery. However, it can last up to 24 hours after the end of surgery⁽⁶⁾.

The IPO is a clinical stage in which patients feel pain and requires proper management from the care providers⁽⁶⁾. Care with the painful sensation is essential for the evolution of post-surgical patients⁽³⁾ and poses a challenge that demands sensitivity, standardised instruments, and careful clinical judgment⁽¹⁾. The inadequate control of pain can favour the onset of complications, such as pneumonia, deep vein thrombosis, infection, chronic pain, and depression, and can lead to longer hospital stays and expenses⁽⁷⁾.

In general, the inadequate control of pain is related to the lack of criteria, assessment methods, and records⁽³⁾. Health care workers must be trained to assess pain and use validated scales to ensure excellence and safety in patient care⁽³⁾. It should be noted that measures to control postoperative pain should acknowledge changes involving patients, health teams, and hospitals, which in some cases already have a specific legislation and only require the implementation of these measures⁽⁷⁾.

In many cases, post-operative pain is the result of faults in treatment, and it delays recovery and rehabilitation. The use of protocols improves, qualifies care, and increases patient satisfaction⁽⁷⁾. The inadequate relief of postoperative pain is still a problem in the clinical practice. The treatment of pain seems to have evolved little in recent years, despite the introduction of new agents and techniques for managing acute pain; experiments to control pain in specific units; and the educational activities on pain created by the International Association for the Study of Pain⁽⁸⁾.

The sensation of pain cannot be objectively determined using physical instruments of a single and invariable standard; however, in the clinical setting, pain must be assessed to adopt the correct therapeutic method, verify the need for treatment, and observe the effectiveness or possible interruption of treatment. A correct pain assessment can determine whether risks of a given treatment outweigh the damage caused by the clinical problem, and support selection of the best and safest therapeutic method. Evaluating the intensity and emotional responses associated with pain sheds valuable light on the phenomenon and the effectiveness of interventions⁽²⁾.

This study is justified because it can instigate nurses and other health workers to reflect on the care of patients in pain during the immediate postoperative period. This care can include protocols to assess and manage pain appropriately. Until then, the research question is how do patients in the immediate post-operative period assess and characterise their pain when admitted to the PARU, 1 hour after admission, and at discharge from the unit? The hypothesis is that patients do not feel pain when admitted or discharged from the PARU. The aim of this study was to assess the pain of patients in the immediate post-operative period during admission, one hour after admission and during discharge of a post-anesthesia recovery unit in terms of intensity, sensory, and affective aspects.

■ METHOD

This is an analytical, cross-sectional study from a final graduate course work titled, "*Avaliação da dor de pacientes*

na Unidade de Recuperação Pós-Anestésica, uma intervenção de enfermagem⁽⁹⁾, conducted with patients in a post-anesthesia recovery unit (PARU) of a philanthropic hospital, size IV, in the north of the state of Rio Grande do Sul, Brazil. This institution offers 10 beds and nursing staff is made up of a registered nurse and eight nursing technicians, with the support of 10 anesthesiologists.

The routine of the PARU is mostly patient admissions and shift changes. During the shift change, the workers report aspects related to patient history, age, medical diagnosis, procedure, type of anaesthesia, complications, vital signs, airway permeability, venipuncture, probes and drains, medication use, allergies, position to maintain, and others. Once patients are admitted, the nursing staff accommodate them in the beds and adjust probes and drains. To ensure they are comfortable and protected, the nursing staff lift the side rails of the bed. During the stay, the staff monitors the patients and assess their level of consciousness and the need for aspiration and oxygen therapy. The vital signs are checked every 15 minutes in the first hour and every 30 minutes in the second hours, followed by hourly checks. The professionals who work in the unit are attentive to complications, particularly circulatory (bleeding), respiratory (airway obstruction), gastrointestinal (nausea, vomiting), and hypothermia. Pain is assessed and controlled by asking the patients if they are feeling pain and its intensity. Any indication of reduced consciousness, changes in vital signs, gesticulation, or agitation are perceived as signs of pain that require management. The unit does not have a protocol or validated scale to assess pain. Patients are discharged from the PARU after recovery from anaesthesia and haemodynamic stabilisation.

The average monthly number of surgeries is 463, with a confidence level of 95% and a sampling error of 5%. The sample consisted of 302 patients, with a 10% sample safety margin. In all, 336 patients in the immediate postoperative period at the PARU participated in the research.

The inclusion criteria were patients at the PARU, in the immediate postoperative (IPO) period with allopsychic and autopsychic orientation. Patients under 18 were excluded from research. Data were collected in September and October 2015 during the patient's stay at the PARU, by the researcher and two scholarship holders, after a pilot study. The scholarship holders were trained by the researcher regarding the use of the instruments, handling medical records, and approaching the patients in the three pain assessment moments. The pilot study was conducted using the short-form McGill Pain Questionnaire on 30 patients in the immediate postoperative period to

test its practical applicability to assess pain in the periods of the main study and to identify and address and queries before application.

A form was used to collect the sociodemographic and clinical variables directly from the charts, namely gender, age, date of birth, education, marital status, profession, type of surgery, duration of surgery, type of anaesthesia, and duration of anaesthesia. Pain was assessed using the Numeric Pain Rating Scale and the short-form McGill Pain Questionnaire validated in Portuguese⁽¹⁰⁾. This questionnaire assesses pain perceived at the time of its application divided into Pain Rating Index Sensory (PRI-S), Pain Rating Index Affective (PRI-A), Present Pain Intensity (PPI), and Total Pain Experience (TPE)⁽¹⁰⁾.

The PRI-S contains 11 descriptors of sensory pain, namely throbbing, shooting, stabbing, sharp, cramping, gnawing, hot-burning, aching, heavy, tender, and splitting. The PRI- A consists of descriptors of affective pain, namely tiring-exhausting, sickening, fearful, punishing-cruel. Each descriptor has indicators related to pain intensity from 0 to 3: (0) none; (1) mild; (2) moderate; and (3) severe. Each descriptor is used to mark the intensity of each type of pain.

The Present Pain Intensity (PPI) is graded by the patient from 0 to 10, where 0 means no pain, 1 to 3 mild pain, 4 to 6 moderate pain, 7 to 9 intense pain, and 10 the worst possible pain. The Total Pain Experience comprises six words that describe a pain experience: "no pain", "mild", "discomforting", "distressing", "horrible", and "excruciating". The patient marks the response that best described the intensity of pain at the time of the evaluation.

The McGill questionnaire is widely accepted as an accurate, valid, sensitive, and precise instrument. It assesses pain in the sensory, emotional, and evaluative dimensions and is based on words that patients choose to describe their own pain⁽⁹⁾.

Pain was assessed with patients in the IPO period on three occasions. The first occasion was during admission to the PARU (moment 1), using the Present Pain Intensity (PPI) and Total Pain Experience (TPE), after verifying if the patient was awake and oriented, with the application of three questions, such as name, age and city of residence, from the charts. The second occasion (moment 2), was around one hour after patient admission to the PARU, using the PPI and TPE; the third occasion (moment 3), was during discharge of the patient from the PARU, using the short-form McGill questionnaire.

Data were analysed with descriptive and analytical statistics, using SPSS version 21.0, ANOVA test, and the Student's t-test for the dependent sample. The level of significance was $p < 0.05$.

With regard to the ethical aspects, all the respondents accepted to participate in the study and signed an informed consent statement and a commitment statement for use of data. They were asked to participate in the post surgery period. The research project was approved by the Research Ethics Committee, substantiated opinion 1.197.070.

■ RESULTS

Most of the participants were women, 68.8% (231), over 60 years old, 75.9% (255), married, 65.2% (219), with children, 86% (289), who finished primary school, 53.6% (180). There was a high percentage of retirees, 28.3% (95), followed by self-employed, 21.5% (74), and farmers, 20.5% (69).

Table 1 shows the surgical data of the research participants. Most of the patient underwent open surgery, 77.6% (258), with general anaesthesia, spinal anaesthesia or spinal with nerve block. The average duration of surgery was 1.4 hours, standard deviation 0.89 (CV = 0.79), and the average time of anaesthesia was 1.7 ± 1.10 (1.22) hours.

In terms of characterisation of the surgeries according to the speciality, the highest percentages were for patients who underwent cancer surgery, 26.5% (89), followed by trauma surgery, general surgery, obstetric surgery, urologic surgery, gynecologic surgery, and vascular surgery. Patients who underwent cancer, trauma, haemodynamic, and vascular surgery reported a greater intensity of pain when admitted to the PARU, with statistical significance ($p < 0.01$) than the other patients.

Table 1 – Surgical data of patients in the immediate postoperative period, in relation to pain reported at the post-anaesthesia recovery unit from September to October. Ijuí/RS, 2015

Characteristic	N	%	
Type of surgery			
Open	258	77.6	
Closed	78	22.4	
Type of anaesthesia			
General	153	45.2	
Spinal + Spinal with Nerve Block	134	40.4	
Sedation	19	5.6	
Local	10	2.9	
Others	20	5.9	
Average \pm SD^a (CV^b) – hours			
Average time of surgery	1.4 \pm 0.89 (0.79)		
Average time of anaesthesia	1.07 \pm 1.10 (1.22)		
Specialty	N	%	p ^c
Cancer	89	26.5	< 0.01*
Trauma	59	17.6	< 0.01*
General	53	15.8	0.11
Obstetrics	38	11.3	0.5
Urology	33	9.8	0.39
Gynecology	33	9.8	0.9
Vascular	16	9.8	< 0.01*
Hemodynamics	5	1.5	< 0.01*
Others	10	3	1.11
Total	336	100	

Source: Research data, 2015.

Notes: a = standard deviation; b = coefficient of variation; c = p – difference of pain among patients considering the type of surgery and PPI on arrival to the PARU, ANOVA test, followed by Student's t-test for the dependent sample, considering $p < 0.05$ as significant.

Table 2 – Assessment of Present Pain Intensity and Total Pain Experience of patients in the immediate postoperative period in three assessment moments. Ijuí/RS, 2015

	Average ± SD ^a (CV ^b)	p ^c
PPI 1 PAIN^d	0.97 ± 1.31 (1.73)	< 0.01*
PPI 2 PAIN	0.88 ± 1.09 (1.19)	< 0.01*
PPI 3 PAIN	0.64 ± 0.80 (0.64)	< 0.01*
TPE 1 PAIN^e	0.96 ± 1.28 (1.64)	< 0.01*
TPE 2 PAIN	0.92 ± 1.06 (1.13)	< 0.01*
TPE 3 PAIN	0.76 ± 0.87 (0.76)	< 0.01*

Source: Research data, 2015.
 Notes: a = standard deviation; b = coefficient of variation; c = p – difference of pain among patients considering the type of surgery and PPI on arrival to the PARU, ANOVA test, followed by Student's t-test for dependent sample, considering p < 0.05 as significant; d = Present Pain Intensity (PPI); e = Total Pain Experience (TPE)

With regard to intensity of the pain, at the patient admission, the “worst possible pain” was reported by 4.8% (16) of the patients, “intense” by 7.1% (24), “moderate” by 24.1% (81), and “mild” by 4.8% (16). A total of 58.6% (197) participants did not report pain. In the maintenance stage, the “worst possible pain” was mentioned 1.2% (4) patients, “intense” by 7.1% (24), “moderate” pain by 25.9% (87), “mild” by 11.0% (37), while 54.8% (184) of patients did not report pain. At discharge, “worst possible pain” was reported by 0.3% (1) of the subjects, “intense” by 1.2% (4), “moderate” by 15.2% (51), and “mild” by 29.8% patient (100), whereas 53.6% (180) of the respondents did not report pain.

In relation to the Total Pain Experience, on patient admission to the PARU, 0.6% (2) of the patients described their pain as “excruciating”, 4.8% (16) as “horrible”, 7.1% (24) as “distressing”, 24.1% (81) as “discomforting”, 4.8% (16) as “mild”, and 58.6% (197) reported no pain. In the maintenance stage, there were no reports of “excruciating pain”, 1.5% (5) reported “horrible” pain, 2.4% (8) “distressing” pain, 37.2% (125) “discomforting” pain, 5.1% (17) “mild” pain, and 54.8% (184) reported no pain. At discharge, none of the participants reported “excruciating” or “horrible” pain; however, 0.3% (1) mentioned “distressing” pain, 28.3% (95) “discomforting” pain, 18.8% (63) “mild” pain, and 52.7% (177) no pain.

In all, 57.3% of the participants did not report pain in the three assessment moments. In contrast, 47% reported pain from admission to discharge from the PARU. Table 2 shows the statistically significant differences (p < 0.01) for PPI and TPE in patients, in the three pain assessment moments. Patients reported diminished pain in terms of PPI during the assessment, with an average PPI1 of 0.97 and an average PPI3 of 0.64. Average TPE also dropped from

Table 3 – Assessment of the Pain Rating Indices Sensory and Affective of the patients in the immediate postoperative period. Ijuí/RS, 2015

	Average ± SD ^a (CV ^b)
PRI-S^c	1.80 ± 2.50 (6.26)
PRI-A^d	0.60 ± 0.99 (0.99)
PRI-A + PRI- S ^e	2.41 ± 3.17 (10.09)
TPE ^f	0.94 ± 1.25 (1.58)

Source: Research data, 2015.
 Notes: a = standard deviation; b = coefficient of variation; c = Pain Rating Index Sensory (PRI-S), d = Pain Rating Index Affective (PRI – A), e = average Pain Rating Index Affective plus Pain Rating Index Sensory, and f = Total Pain Experience (TPE).

admission to discharge, and showed a statistically significant difference (p < 0.01).

Table 3 shows the averages of the assessments for Pain Rating Index Sensory (PRI-S) and Pain Rating Index Affective (PRI-A) of research participants. In addition to PPI and AGD, PRI-S and PRI-A were assessed. For PRI-S and PRI-A, 44.9% of the patients did not report pain, and the averages were 1.80 ± 2.50 (6.26) and 0.60 ± 0.99 (0.99), respectively.

With regard to PRI-S, 7.7% (26) of participants reported throbbing pain, 9.5% (32) shooting pain, 7.4% (25) stabbing pain, 10.1% (34) sharp pain, 7.1% (24) cramping pain, 3.6% (12) gnawing pain, 1.8% (6) hot-burning pain, 0.9% (3) aching pain, 2.7% (9) heavy pain, 1.2% (4) tender pain, and 0.9% (3) splitting pain. In the PRI-A assessment, 0.9% (3) of the patients reported tiring-exhausting pain, 0.3% (1) sickening pain, 0.3% (1) fearful pain, and 0.3% (1) cruel-punishing pain.

Table 3 also shows that the average Pain Rating Index Affective plus the Pain Rating Index Sensory was 2.41 ± 3.17 (10.09) and the average TPE was 0.94 ± 1.25 (1.58).

DISCUSSION

Pain after surgery is expected and if not treated properly, it has harmful effects on the bodies of patients and increases the morbidity and mortality⁽³⁾. The fact that most of the study participants were women, elderly, retired, married, with children, and finished primary school agrees with a study conducted in the Hospital da Cruz Vermelha do Paraná, from July to September 2012, with 165 patients in the immediate postoperative period, in which the biggest complaint of pain was for open surgery⁽¹¹⁾.

An investigation in Zurich, Switzerland, assessed the pain of 12,179 patients in the postoperative pain period from admission to discharge of the PARU, and found that, when admitted, 73% of patients did not report pain, 23 reported mild pain, and 4 reported intense pain. At dis-

charge, 87 did not report pain, 13 reported mild pain, and 0.1 reported severe pain. These results are similar in terms of pain, but differ in percentage, that is, the percentage of pain was lower during admission and discharge⁽¹²⁾.

The short-form McGill Pain Questionnaire was also used in a study to assess the intensity of pain in patients after orthopaedic surgery. The authors found an association between physiological changes and postoperative pain, and described the analgesia used⁽¹³⁾. Pain was reported by 65.7% of the patients in the postoperative period, with a predominance of mild pain without a statistically significant association between physiological changes. In the study analysed here, there was a significant association between the TPE averages from admission to discharge, and a statistically significant difference ($p < 0.01$).

The patients who underwent cancer trauma, vascular, and haemodynamic surgery reported pain more frequently than the other patients. The pain of patients who undergo cancer surgery must be assessed during the entire clinical evolution. Research that sought to reflect on pain management of the perioperative nursing staff immediately after surgery in cancer patients found that pain management was represented by measuring scales and the signs and symptoms during the stay in the PARU represented by the nursing interventions⁽¹⁴⁾, as found in this study.

Concerning the pain of patients who underwent trauma surgery, a study from April to December 2011 assessed pain intensity in patients after orthopaedic surgery and found an association between physiological changes and postoperative pain. The authors reported that these surgeries are the main causes of severe pain, and therefore require the attention and care of health workers⁽¹³⁾.

Another investigation evaluated the pain of patients who underwent haemodynamic procedures and found that, although the surgical wound was small, these surgeries caused acute pain, discomfort, and changes in blood pressure associated with the harmful factors and the introduction of catheters. These results agree with the analysed study⁽¹⁵⁾.

Given the significant number of patients who reported pain in the immediate postoperative period, it must be the focus of nursing staff and multi-professional teams. A study in China investigated the management of postoperative pain in 168 medical institutions in Shandong province and revealed a lack of standardised management of postoperative pain with little involvement of the nurses in the assessment of pain and its control, and the education of staff members for the use of advanced pain care techniques⁽¹⁶⁾.

Analgesia can hasten recovery, increase patient collaboration with treatment, and improve post-surgery out-

comes⁽¹²⁾. Insufficient or inappropriate pain management is mostly caused by insufficient knowledge and education, inappropriate attitudes, and bad communication⁽¹⁷⁾. Authors report the lack of awareness of staff regarding the availability and importance of guidelines to assess and record pain intensity, use of painkillers, and educational actions for patients as indicative of the sub-treatment of pain. This consideration agrees with this study, especially in terms of the high percentage of patients who were discharged from the PARU with pain. This problem can be remedied with continuing education programmes, training and actions to assess patient pain in the immediate postoperative period.

Although more than half of the patients in this study did not report pain during the immediate postoperative period at the PARU using the McGill scale, a considerable number of patients reported pain during admission, maintenance and discharge, ranging from mild and moderate to intense, thus revealing the importance of continuous monitoring and control of the health team.

In a study to assess pain control in 342 patients after abdominal surgery based on scientific evidence and the association of pain intensity with age, sex, ethnic group, and prescribers, 38.9% of patients reported moderate to intense pain⁽¹⁸⁾. In the referred study, pain was significantly associated with women, use of other anaesthesia, and therapeutic schemes. Most of the patients received no guidelines on postoperative pain, 61% felt pain, and 80% had pain assessment records, but without the use of scales. In addition to the association between postoperative pain intensity and pain relievers, the occurrence of moderate and severe pain was statistically significant among women⁽¹⁹⁾. Similarly, in this study older women who underwent open procedures had a lower pain threshold.

A study assessed patient satisfaction after surgery in terms of pain control after implementing pain assessment as the fifth vital sign. The participants were divided into intervention and control group. Most of the patients were women who underwent open surgery with moderate and intense pain. This result, and the results of this study, shows that women have a lower pain threshold and different responses to stimuli algic than men. The study suggests that many factors contribute to patient satisfaction, despite only assessing the physiological aspect of pain⁽¹⁹⁾.

Research to analyse the complications of 42 adult patients in anaesthesia recovery who underwent elective surgery with general anaesthesia records pain, hypothermia, hypoxemia as the most frequent complications⁽²⁰⁾. The pain was the second most frequent complication reported by 45.2% of patients in the first hour of their stay at the

PARU⁽²⁰⁾, which is similar to the results of this study. In view of these data, the performance of nurses, especially in relation to assessing pain and preparing the team, is critical for the establishment of measures to appropriately manage pain in the postoperative period.

A study to assess the pain intensity of 134 patients in postoperative orthopaedic surgeries contains reports of intense pain in the second postoperative period. Also in this study, 75% of patients in the postoperative period reported mild pain without a statistically significant association between physiological changes in this period⁽¹³⁾. The result of the study is similar to those of this study, in which the average pain rating of patients was higher during admission to the PARU than in the other evaluated moments.

Pain produces effects in the entire body of patients, increases morbidity and mortality, and is present in the immediate postoperative period of patients in the PARU. Consequently, nurses must assess and manage care to increase patient satisfaction and the feeling of safety, improve recovery, and shorten their stay at the PARU.

This study can support clinical nursing for patient care in the immediate postoperative period, help improve the quality of care, and serve as a basis for reflection, discussions and actions to monitor, assess, and manage the pain of these patients. The possible limitations of this study are the lack of a pain assessment protocol at the studied unit, the short data collection period, and the lack of patient evaluations in the preoperative period. These gaps can be filled with the publication of these research results, institutional awareness for the establishment of pain assessments, and other investigations that address these study objects.

■ CONCLUSIONS

This study contains the pain assessment of 336 patients in the immediate postoperative period in terms of intensity, sensory and affective aspects, according to the established goal. The hypothesis was refuted at the start of research because practically half of the patients reported pain from admission to discharge of the PARU in different intensities.

The nurses and other health workers at the PARU are responsible for assessing pain in the immediate postoperative period with the use of a validated scale, to support monitoring, treatment choices, and pain control.

These results should encourage researchers, students, and health workers to conduct further investigations, with or without other methodological approaches, with a greater number of participants to allow room for inferences. In the clinical practice of nursing, these results can empow-

er the team to jointly implement assessment actions, improve pain management, and consequently, provide more qualified patient care.

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