# Use of opioids by patients in oncology palliative care: analysis of consumption rates at a public hospital in Brasília (DF), Brazil

Uso de opioides por pacientes em cuidados paliativos oncológicos: análise de consumo em um hospital público de Brasília (DF), Brasil

Mariana do Nascimento Morais¹ , Priscilla Avelino Tavares¹ , Emília Vitória da Silva² , Jacksandra Farias de França Campos³ , Débora Ferreira Reis³ .

## **ABSTRACT**

**Introduction:** Pain is the most common symptom in oncology, affecting more than 80% of patients, with opioids being the drugs of choice for the treatment of moderate to severe pain, especially in cancer.

**Objective**: To analyze the patterns of opioid consumption among a group of cancer patients presenting to a tertiary palliative care unit.

**Methods**: Cross-sectional study of analysis of medical records and prescriptions of patients at the Oncological PCU of a public hospital in Brasília (DF), Brazil, between September 2021 and March 2022. Fisher's exact test was used, followed by Bonferroni's post hoc test for categorical variables, and Kendall's tau correlation coefficient for continuous variables.

**Results**: Study participants were on average 62 years old (SD  $\pm$  14.8), 52% were female and had a diagnosis of malignant neoplasms of the digestive system (40.9%), the genital system (27.6%), and others malignant neoplasms (31.5%). Participants were hospitalized for an average of 12.5 days (SD  $\pm$  18.7), most of them were using an opioid, with morphine being the most prevalent (81.9%), and drugs were delivered mostly through intravenous route (45.7%). There was a change in the routes of drug administration in 39.4% of the cases. Genital system neoplasms affected women the most.

**Conclusion**: In regard to the use of opioids and pain control data collected at the studied OPCU were consistent with the recommended practices of PC, such as dose rotation and titration. The patients' profile partially matches what is expected from the epidemiology of cancer in Brazil.

**Keywords:** Opioid, Analgesics; Palliative Care; Medical Oncology; Hospitals, Public; Brazil.

### **RESUMO**

**Introdução**: A dor é o sintoma mais comum na oncologia, abrangendo mais de 80% dos pacientes, sendo os opioides os medicamentos de escolha para o tratamento de dores moderadas a intensas, principalmente no câncer.

**Objetivo**: Analisar o padrão de consumo do uso de opioides em pacientes com doenças oncológicas de uma unidade terciária de cuidados paliativos.

**Métodos**: Estudo transversal de análise de prontuários e prescrições de indivíduos internados na ala de Cuidados Paliativos Oncológicos de um hospital público de Brasília (DF) entre 09/2021 e 03/2022. Utilizou-se o teste exato de Fisher, seguido do post hoc de Bonferroni para variáveis categóricas e o coeficiente de correlação tau de Kendall para variáveis contínuas.

**Resultados**: Os participantes do estudo tinham em média 62 anos (DP  $\pm$  14,8), 52% eram do sexo feminino, e apresentavam diagnóstico de neoplasias malignas do sistema digestivo (40,9%), do sistema genital (27,6%) e outras neoplasias malignas (31,5%). Os participantes estavam internados em média há 12,5 dias (DP  $\pm$  18,7), a maioria usava um opioide, sendo morfina o mais prevalente (81,9%), e a maior parte tratada por via endovenosa (45,7%). Houve mudança de via de administração em 39,4% dos casos. Neoplasias do sistema genital acometeram mais mulheres.

**Conclusão**: A unidade estudada apresentou dados coerentes com práticas de cuidados paliativos, como a rotação e a titulação da dose, quando se fala do uso de opioides e do controle da dor. O perfil dos pacientes analisados neste estudo se encaixa parcialmente com o esperado pela epidemiologia do câncer no Brasil.

**Palavras-chave:** Analgésicos Opioides; Cuidados Paliativos; Oncologia; Hospitais Públicos; Brasil.

Escola de Ciências da Saúde, Programa de Residência Multiprofissional em Cuidados Paliativos, Brasília, Distrito Federal, Brasil.

<sup>2</sup>Universidade de Brasília, Faculdade da Ceilândia, Brasília, Distrito Federal, Brasil.

secretaria de Saúde do Distrito Federal, Programa de Residência Multiprofissional em Cuidados Paliativos, Brasília, Distrito Federal, Brasil.

Corresponding author: Mariana do Nascimento Morais; Email: marianadnmorais@gmail.com.

Authors' contributions: MNM, PAT, DFR, JFFC, EVS: planning. MNM, PAT: data collection. MNM, PAT: data statistical analysis and design of tables and figures. MNM: writing of the manuscript. DFR, JFFC, EVS: review of the manuscript and guidance. All authors have approved the final version of the manuscript.

Received on December 30, 2022; Final version Received on June 30, 2023; Accepted on July 13, 2023; Published on October 18, 2023.

Editor-in-chief: João Batista Santos Garcia; Scientific editor: Rudval Souza da Silva.



## **INTRODUCTION**

The World Health Organization (WHO) has defined palliative care (PC) as an approach which improves the quality of life (QoL) of patients, adults or infants, and that of their families in face of a life-threatening disease. Therefore, PC is indicated when a serious illness is diagnosed, being considered simultaneous and complementary to the curative treatment. As the disease progresses and disease-modifying treatments are no longer recommended, PC indication may increase, thus becoming a priority or an exclusive alternative when death approaches. Following the patient's death, PC continues in support of the mourning family<sup>1,2</sup>.

Pain is "an unpleasant sensory and emotional experience, associated with, or similar to actual or potential tissue damage", being an individual experience, which can be influenced at various levels by biological, psychological and social factors. In the 1960s, the nurse, social worker and physician Cicely Saunders defined the concept of "total pain", taking into account the multiple dimensions of the human being. Saunders 'definition followed her questioning of a patient about pain who answered in reply: "It's all wrong with me". Saunders 'concept of total pain thus encompasses not only physical pain, but also emotional, spiritual and social pain, taking into account the patient's biographical context and the principle that pain is a personal experience. Therefore, comprehensive care is necessary for pain control, taking into account the patient as a holistic being<sup>3,4</sup>.

Pain can be classified as nociceptive, neuropathic, and mixed, according to their pathophysiological mechanisms. In nociceptive pain, nociceptive pathways are preserved, being activated by cutaneous or deep nociceptors. In neuropathic pain, nociceptive pathways present alterations in their structure and/or function, as a result of some injury. Mixed pain is when both types are present, which is very common in cancer patients, due to the tumor's ability to grow and generate compression of neural structures. Pain is present in 55% of cases of patients undergoing cancer treatment, and in 66% of patients with advanced, metastatic or terminal disease. Pain management aims to improve a patient's QoL and should be performed at all stages of the disease, with more satisfactory results when PC is introduced in the early stage of the disease<sup>2,5</sup>.

Opioids have been the main option for the treatment of moderate to severe pain<sup>2</sup>. Considering PC as an approach that aims to control symptoms, including pain, the use of opioid analgesics becomes central for this practice and essential for the treatment of oncological patients. Thus, the present study aims to analyze the opioid consumption patterns in cancer patients at a tertiary oncology palliative care unit (OPCU).

## **METHODS**

A descriptive and documentary, cross-sectional study was conducted based on electronic medical records and prescriptions available in the TrakCare® health information system, of inpatients treated in an oncological palliative care unit (OPCU) at a public hospital located in the Federal District of Brasília, in Brazil, between 1 September 2021 and 28 February 2022. Data were collected following prior approval of the research project by the Research Ethics Committee (CAAE n° 67371817.0.0000.5553).

The criteria for inclusion in the study were the same as those required for hospitalization in the OPCU, as follows:

- Diagnosis of malignant neoplasm;
- Age greater than or equal to 18 years;
- Oncologist´s statement that there were no more disease-modifying treatment (DMT) proposals (recorded in the Trakcare® system or in a medical report);
- Presence of clinical complications that justify hospitalization:
- Family 's and patient 's consent with regard to OPC and hospitalization.

The criteria for exclusion were the following:

- Use of opioids non-standardized by the Health Department of the Federal District;
- Patients without the ICD-10 classification in their medical record:
- Patients with ICD-10 that do not correspond to neoplasms;
- Patients not using opioids;
- Patients using non-fixed dosing (only if necessary);
- Preemptive doses were not considered.

Data collected from each patient were respectively: medical record number; age; gender; ICD-10; date of opioid prescription; opioid dose/day; and route of administration.

For comparison purposes, the conversion of the opioid dose to the oral equivalent dose of morphine (mEq) was performed using the Pocket Guide of the National Academy of Palliative Care and the Brazilian Consensus on Management of Pain Related to Cancer <sup>6,7</sup>.

All data were collected and recorded daily using a Google Sheets spreadsheet application. The descriptive analysis of all study variables was performed using the IBM SPSS program, version 19.0. They were presented in absolute numbers and proportion or mean and standard deviation. Bivariate analysis evaluated the association between clinical diagnosis, age, as well as sociodemographic, clinical and drug treatment characteristics using Pearson's chi-square

or Fisher's exact test, followed by Bonferroni's *post hoc* test for categorical variables and Pearson's correlation coefficient or Kendall's tau for continuous variables. Results were considered significant when p < 0.05.

## **RESULTS**

A total of 1,606 medical records were analyzed based on the prescriptions of 127 patients under treatment in the OPCU at a public hospital in Brasília (DF). Table 1 shows the demographic and clinical data of the sample.

Study participants were on average 61.9 years old (SD  $\pm$  14.8), and most were female (52%). Regarding the clinical characteristics, the participants had a diagnosis of malignant neoplasms of the digestive system (40.9%), of the genital system (27.6%) and other malignant neoplasms (31.5%), such as respiratory and intrathoracic organs, eye, brain and other parts of the central nervous system, skin, unknown places, among others. Among women, the most common ICD was malignant neoplasm of the cervix (7 participants) and among men malignant neoplasm of the prostate (6 participants).

Table 1. Demographic and clinical characteristics of patients admitted to the OPCU of a public hospital in Brasília (DF), Brazil.

Variables	N	Mean (SD) %
Sociodemographic Characteristics		
Age	127	61.9 (14.8)
< 60 years	57	44.9
≥ 60 years	70	55.1
Gender		
Female	66	52.0
Male	61	48.0
Clinical Characteristics		
Diagnosis		
Malignant neoplasms - other	40	31.5
Malignant neoplasms - digestive system	52	40.9
Malignant neoplasms - genital system	35	27.6
Length of Stay	127	12.5 (18.7)
1 to 7 days	74	58.3
8 to 14 days	27	21.3
≥ 15 dias	26	20.5
Drug Treatment Characteristics		
Drug		
Morphine	104	81.9
Methadone	24	18.9
Fentanyl	22	17.3
Amount of opioids prescribed	127	1.2 (0.4)
1 opioid	107	84.3
2 opioids	17	13.4
3 opioids	3	2.4
Minimum and Maximum Doses		
Min	127	66.3 (86.4)
Max	127	119.3 (152.9)
Initial and Final Dose		
Initial	127	78.6 (98.4)
Final	127	104.2 (143.4)

Table 1. Cont.

Variables	N	Mean (SD) %
Dose Change		
Yes	76	59.8
No	51	40.2
Route of Administration		
Oral	57	44.9
Sublingual	1	0.8
Probe (nasoenteral and gastrostomy)	17	13.4
Intravenous	58	45.7
Subcutaneous	51	40.2
Transdermal	5	3.9
Change of Route of Administration		
Yes	50	39.4
No	77	60.6
Amount of Route of Administration		
1	77	60.6
2	39	30.7
3	10	7.9
4	1	0.8
Initial Route of Administration		
Oral	49	38.6
Transdermal	4	3.1
Intravenous	34	26.8
Subcutaneous	23	18.1
Probe (nasoenteral and gastrostomy)	17	13.4
Final Route of Administration		
Oral	26	20.5
Transdermal	3	2.4
Intravenous	50	39.4
Subcutaneous	40	31.5
Probe (nasoenteral and gastrostomy)	8	6.3

The opioids evaluated in the study were: methadone, morphine, codeine, fentanyl and oxycodone. However, codeine and oxycodone were not part of the drug prescriptions during the period evaluated.

Patients were hospitalized for an average of 12.5 days (SD  $\pm$  18.7), and most used an opioid, with morphine being the most prevalent (81.9%). The oral equivalent dose of morphine varied on average from 78.6mg (SD  $\pm$  98.4) to 104.2mg (SD  $\pm$  143.4), with a dose change in 59.8% of the cases. Regarding the route of administration, most participants used the intravenous route (45.7%). The most prevalent route at the beginning of treatment in the oncology ward was oral. There was a change in the route of administration for 39.4%

of the cases, with 39.4% of the participants using the intravenous route, and 31.5% the subcutaneous route at the end (Table 1). Figure 1 shows the variation in opioid doses used by participants according to their clinical diagnosis. There was an increase in the initial and minimum oral morphine equivalent doses in relation to the final and maximum doses used by the participants.

By evaluating the association of clinical diagnosis according to sociodemographic, clinical and drug treatment characteristics, the bivariate analysis showed that patients with malignant neoplasms of the genital system were mostly female (Table 2). The percentage of patients using feeding tubes was significantly lower among the groups at the

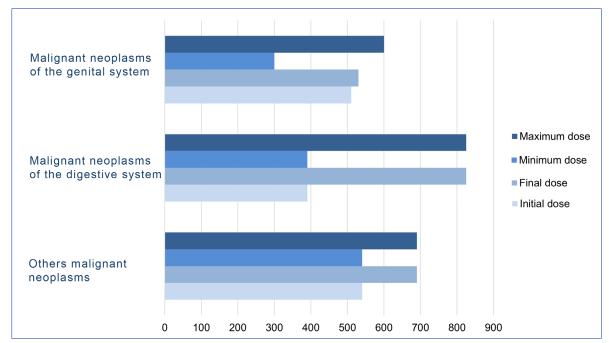


Figure 1. Number of oral morphine equivalent doses (mEq) of opioids used according to clinical diagnosis

**Table 2.** Prevalence of clinical diagnosis according to sociodemographic, clinical and drug treatment characteristics (N = 127). Brasília (DF), Brazil, 2022.

	Diagnosis							
Variables		Malignant neoplasms – others		Malignant neoplasms – digestive system		Malignant neoplasms – genital system		
	N	%	N	%	N	%		
Sociodemographic	Characteristics							
Age								
< 60 years	15	37.5	24	46.2	18	51.4	0.46	
≥ 60 years	25	62.5	28	53.8	17	48.6		
Gender								
Female	14	35.0	26	50.0	26*	74.3	0.003	
Male	26	65.0	26	50.0	9*	25.7		
Clinical Characteris	stics							
Length of Stay								
1 to 7 days	23	57.5	32	61.5	19	54.3	0.67	
8 to 14 days	9	22.5	12	23.1	6	17.1		
≥ 15 days	8	20.0	8	15.4	10	28.6		
Drug Treatment Ch	naracteristics							
Drug								
Morphine	31	77.5	43	82.7	30	85.7	0.64	
Methadone	6	15.0	9	17.3	9	25.7	0.46	
Fentanyl	8	20.0	8	15.4	6	17.1	0.84	
Amount of opioids p	orescribed							
1 opioid	36	90.0	44	84.6	27	77.1	0.22	
2 opioids	3	7.5	8	15.4	6	17.1		
3 opioids	1	2.5	О	0.0	2	5.7		

Table 2. Cont.

_	Diagnosis						
Variables	Malignant neoplasms – others		Malignant neoplasms – digestive system		Malignant neoplasms – genital system		P
	N	%	N	%	N	%	
Minimum and Maximu	ım Dose						
Mín	-0.03	0.77					
Max	-0.04	0.60					
Initial and Final Dose							
Initial	-0.07	0.41					
Final	-0.04	0.66					
Dose Change							
Yes	21	52.5	35	67.3	20	57.1	0.33
No	19	47.5	17	32.7	15	42.9	
Administration Route							
Oral	16	40.0	23	44.2	18	51.4	0.60
Sublingual	0	0.0	0	0.0	1	2.9	0.27
Probe (nasoenteral and gastrostomy)	8	20.0	4	7.7	5	14.3	0.22
Intravenous	15	37.5	28	53.8	15	42.9	0.27
Subcutaneous	17	42.5	21	40.4	13	37.1	0.89
Transdermal	2	5.0	1	1.9	2	5.7	0.59
Change of Administrat	ion Route						
Yes	14	35.0	20	38.5	16	45.7	0.63
No	26	65.5	32	61.5	19	54.3	
Amount of Administrat	tion Routes						
1	26	65.5	32	61.5	19	54.3	0.73
2	10	25.0	16	30.8	13	37.1	
3	4	10.0	3	5.8	3	8.6	
4	0	0.0	1	1.9	0	0.0	
Initial Administration R	Route						
Oral	15	37.5	20	38.5	14	40.0	0.82
Transdermal	2	5.0	1	1.9	1	2.9	
Probe (nasoenteral and gastrostomy)	8	20.0	4	7.7	5	14.3	
Intravenous	9	22.5	16	30.8	9	25.7	
Subcutaneous	6	15.0	11	21.2	6	17.1	
Final Administration Re	oute						
Oral	8	20.0	10	19.2	8	22.9	0.03
Transdermal	2	5.0	0	0.0	3	8.6	
Probe (nasoenteral and gastrostomy)	5	12.5	0*	0.0	3*	8.6	
Endovenous	11	27.5	27	51.9	12	34.3	
Subcutaneous	14	35.0	15	28.8	11	31.4	

<sup>\*</sup>Significant considering p < 0.05

end. As shown in Table 2, the other characteristics of the patients were not significantly different according to their clinical diagnosis.

With respect to the age of the patients, the bivariate analysis indicates that the patient's age differed in relation

to sex, with a higher percentage of women younger than 60 years old with cancer (Table 3). The use of fentanyl was slightly lower among those over 60 years of age (p= 0.05), with no differences being observed among the other sample variables (Table 3).

Table 3. Sociodemographic, clinical and drug treatment characteristics of patients according to age (N = 127). Brasília (D.F.), Brazil, 2022.

_	Age				
Variables	< 60 years		≥ 60 years		P
	N	%	N	%	
Sociodemographic Characteristics					
Gender					
Female	36	63.2	30*	42.9	0.03
Male	21	36.8	40*	57.1	
Clinical Characteristics					
Diagnosis					
Malignant neoplasms - other	15	26.3	25	35.7	0.46
Malignant neoplasms - digestive system	24	42.1	28	40.0	
Malignant neoplasms - genital system	18	31.6	17	24.3	
Length of Stay					
1 to 7 days	32	56.1	42	60.0	0.71
8 to 14 days	14	24.6	13	18.6	
≥ 15 days	11	19.3	15	21.4	
Drug Treatment Characteristics					
Drug					
Morphine	45	78.9	59	84.3	0.44
Methadone	12	21.1	12	17.1	0.58
Fentanyl	14	24.6	8	11.4	0.05
Amount of opioids prescribed					
1 opioid	46	80.7	61	87.1	0.08
2 opioids	8	14.0	9	12.9	
3 opioids	3	5.3	0	0.0	
Minimum and Maximum Doses					
Mín	-0.039	0.67			
Max	-0.056	0.53			
Initial and Final Doses					
Initial	-0,04	0,65			
Final	0,01	0,90			
Dose Change					
Yes	38	66.7	38	54.3	0.16
No	19	33.3	32	45.7	
Administration Route					
Oral	27	47.4	30	42.9	0.61
Transdermal	0	0.0	1	1.4	0.27
Probe (nasoenteral ou gastrostomy)	8	14.0	9	12.9	0.85

Table 3. Cont.

	Age				
Variables	< 60 years		≥ 60 years		P
	N	%	N	%	
Intravenous	26	45.6	32	45.7	0.99
Subcutaneous	19	33.3	32	45.7	0.16
Oral	2	3.5	3	4.3	0.82
Change of Administration Route					
Yes	19	33.3	31	44.3	0.20
No	38	66.7	39	55.7	
Amount of Routes of Administration					
1	38	66.7	39	55.7	0.18
2	13	22.8	26	37.1	
3	6	10.5	4	5.7	
4	0	0.0	1	1.4	
Initial Route of Administration					
Oral	22	38.6	27	38.6	0.84
Transdermal	2	3.5	2	2.9	
Probe (nasoenteral ou gastrostomy)	8	14.0	9	12.9	
Intravenous	17	29.8	17	24.3	
Subcutaneous	8	14.0	15	21.4	
Final Route of Administration					
Oral	14	24.6	12	17.1	0.57
Transdermal	1	1.8	2	2.9	
Probe (nasoenteral ou gastrostomy)	5	8.8	3	4.3	
Intravenous	22	38.6	28	40.0	
Subcutaneous	15	26.3	25	35.7	

<sup>\*</sup>Significant considering p < 0.05.

# **DISCUSSION**

When comparing female and male individuals, the diagnostic profile presents different characteristics. Most female patients hospitalized have malignant neoplasm of cervix, and male patients have malignant neoplasm of prostate.

Estimates of the ten most incident types of cancer for 2023 by gender, except non-melanoma skin, from the National Cancer Institute (INCA) show that the most common neoplasms among men and women would be respectively prostate (30%) and breast (30.1%). Cervix is the third most common cancer among women, with an incidence of 7%, and those of the digestive system vary, with colon and rectum (9.2%) being the second most common cancer among men, and stomach (5.6%) the fourth. Among women, colon and rectum (9.7%) is second, and stomach (3.3%) sixth<sup>8</sup>. That said, the female sample studied does not fully resemble the INCA

estimates, however, both are cancers that affect essentially the female structures.

Regarding opioids, 81.9% of patients used at least one opioid, 13.4% used two types, and 2.4% even used up to three types of opioid not concomitantly during the hospitalization period. These figures can be correlated with the practice of opioid rotation, which is the exchange of one opioid for another when its expected effect is not obtained or the adverse effects are intolerable for the patient. That is a common situation in an OPCU, which acts especially in patients' uncontrolled pain.

Morphine was the most used drug in the study (81.9% of patients), because it is the first-line opioid for the treatment of severe pain. It was followed by methadone (18.9%), probably due to its action potential in neuropathic pain. Although methadone causes less dependence and sedation than other opioids, its use should be cautious, due to its long

and unpredictable elimination half-life, justifying its lower use at the hospital unit studied<sup>2</sup>.

Fentanyl was the least used drug during the study period (17.3%). It has two pharmaceutical forms: injectable solution and transdermal patch. Its use was probably not high due to its intrinsic characteristics: it should not be used for rapid titration, as it has a long half-life; it should be considered when an opioid is no longer a patient 's first option. Fentanyl is indicated for patients who no longer have the oral route, have intolerable adverse effects, presence of situations that can lead to bronchoaspiration and also consider its ease of use<sup>2</sup>. Considering the oral route as the route of choice in palliative care, drugs that have pharmaceutical forms compatible with this administration are preferable.

Despite being available, codeine and oxycodone were not prescribed to any patient in the sample during the study period. Codeine is the opioid of choice for mild pain, but it has marked adverse effects such as constipation. In addition, there is a maximum dose of 360 mg/day and above this dose, it is recommended to consider switching to morphine. Codeine is metabolized by the liver and approximately 10% of the population does not have the necessary enzyme for its metabolization and cannot convert it into its active metabolite<sup>2,13</sup>. Therefore, considering the studied population, the results presented accords with what was expected for this drug.

Oxycodone is more potent than morphine and is more effective for some types of cancer (skin, muscles and esophagus). However, in Brazil, its only presentation available is in the form of a prolonged-release tablet, thus preventing its maceration and, consequently, administration via probes. In addition, in the hospital environment, there must be caution regarding the use of modified-release drugs, since there is a risk of drug accumulation with slow elimination speed, reduction in dose adjustment flexibility, impossibility of suspending the rapid therapeutic effect in case of intoxication or intolerance, and the risk of failure in its delayed release mechanism, allowing immediate dispensing of the drug<sup>7,[1,13,14</sup>. Considering the aforementioned data, the nonuse of oxycodone is consistent with the needs of the patients studied and their limitations, such as the presence of tubes.

So far, opioids are the only drugs known to treat moderate and severe pain, with morphine included in the WHO Essential Medicines list. However, due to fear of abuse, its use is restricted, and bureaucratic barriers are instituted, along with additional difficulties arising from the lack of appropriate training with regard to its use. According to Duthey, the per capita consumption of opioids (using morphine equivalent – mEq) in 2010 was 13.13mg, and the adequate consumption would be 192.91mg, that is, 14× less than indicated 10.

The present study showed that hospitalized patients received an average of 78.6mg (SD  $\pm$  98.4) to 104.2mg (SD  $\pm$  143.4) of opioid equivalent to morphine, with morphine itself being the most consumed (81.9%). When compared to Duthey's figures, the patients in our study received between 5.90x and 7.90x more opioids than the Brazilian population in general in 2010, and from 40.85% to 54% of the adequate dose. Because this is a population portion for whom pain is one of the symptoms present and consists of one of the characteristics of cancer, especially at the end of life, it is expected that the dose of opioid analgesics used is higher than that of the Brazilian population in general, even not reaching the amount that the literature indicates as the ideal<sup>5,10</sup>.

However, in our studied OPCU, the opioid analgesic dose is titrated through rescue doses. Therefore, 59.8% of the patients had a dose change. The rescue dose corresponds to the administration of an extra dose, in addition to the scheduled doses, according to the patient's analgesic needs. They must be 5% to 15% of the total daily dose of the opioid, and make up the calculation of the drug dose adjustment<sup>7,9</sup>. Therefore, although the equivalent dose of morphine is not considered adequate by the literature, it is probably adequate to the needs of patients at the OPCU studied, or it is adjusted according to demand so as to reach the ideal dose for the analgesic needs of each patient.

Initially, the most used route of administration was the oral route (38.6%). According to Zoccoli, preference should be given to the simplest and least invasive treatment, so that the oral is the most preferred route. This could explain the use of such a pathway in large numbers in an exclusive palliative care service. In 39.4% of the cases, there was a change of route. Among the routes of administration at the end of hospitalization, 39.4% were intravenous, and 31.5% subcutaneous. The subcutaneous route is the preferred route after the oral route, as it promotes the bioavailability of drugs in a similar way. The intravenous route has peaks of action, with a faster drop in serum concentration when compared to the subcutaneous route. However, in the studied OPCU, the intravenous route stood out, because its use is usually associated with continuous infusion pumps, which stabilize the concentration of the drug in the bloodstream<sup>12</sup>.

The bivariate analysis (Table 2) indicates relevance among females with a clinical diagnosis (p=0.003), indicating that most neoplasms of the genital system affect women, probably due to the high number of women in the sample who had malignant neoplasms of the cervix uteri. The percentage of patients using tubes, at the end, was significantly lower among the groups (p=0.03). Finally, considering the age of the patients, the majority of patients aged less than 60 years were female and those aged 60 or over were male (Table 3).

Between 2023 and 2025, INCA estimates 704,000 new cases of cancer in Brazil each year. In this triennium, there will be about 2.1 million cases<sup>15</sup>. Therefore, there is an urgent need to improve the quality of PC in our country and disseminate its importance among the community and health professionals, in order to reduce the stigma and increase the access to palliative approaches since there will be a massive demand.

Finkelstein compared countries to assess the "quality of death", based on expert opinions about his country's performance on 13 indicators related to the end of life. Brazil is ranked 79 out of 81, below other Latin American countries such as Uruguay, Mexico and El Salvador. Among the facilitating factors mentioned in the article for the quality of care at the end of life, access to opioids and other essential drugs is mentioned, and the lack of access to them is considered a limiting factor. Brazilian services are among the worst in the ranking, so there is a perception that an improvement in the quality of what is offered is necessary<sup>12</sup>. With an increasing demand and an unsatisfactory evaluation, research on the consumption of opioids in PC units can collect data about the characteristics of the service provided, contributing to advances in PC and, consequently, in the quality of death in Brazil.

# **CONCLUSION**

Taking into account the concept of palliative care and its main objectives (such as symptom control, pain relief, maintenance of QoL and comfort for those with life-threatening illnesses and their families), the consumption of opioids in the studied OPCU corresponds to what was expected. The opioid dispensing rates for each patient during hospitalization and the progression of doses also suggest the adoption of strategies related to a palliative approach, such as opioid rotation and dose titration, both used for better analgesic control.

The pattern of opioid consumption in an OPCU during a six month period was identified and considered in line with what was previously expected. Similarly, the profile of patients accords with the hospitalization criteria mentioned in the methodology and is partially aligned with the epidemiology of cancer. Despite some weaknesses of our study, such as lack of sample calculation and small sample, the results are satisfactory when considering the objective initially established.

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