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Evaluation of pain dimensions in oncological patients

ABSTRACT | Objective: to measure the painful experience in cancer patients. Methodology: cross-sectional, descriptive quantitative survey, with 50 patients undergoing cancer treatment in a private service located in the Northwest region of the State of Rio Grande do Sul, after approval by the Research Ethics Committee. 0035 The instrument chosen was the McGill Pain Questionnaire. The data were stored in Microsoft Office Excel and analyzed using descriptive statistics. Outcomes: Prevalence of women (54%) and colon cancer (20%). The most used descriptors were: Fisgada (54%), Tiring (52%), Chata (38%) and Aperta (26%) i 80% of the patients reported absence of pain at the time of the interview. Wniosek: The Pain Questionnaire McGill zezwala na spójność i aspekty jakości przez dor, in addition to supporting nursing in patient care planning, offering improvement in the quality of systematization of nursing care.

Keywords: Cancer pain; Pain measurement; Rak.

RESUMEN | Objetivo: medir la experiencia dolorosa en pacientes con cáncer. Método: estudio descriptivo de corte transversal con enfoque cuantitativo, con 50 pacientes sometidos a tratamiento contra el cáncer en un servicio privado ubicado en la región noroeste del estado de Rio Grande do Sul, luego de la aprobación del Comité de Ética de Investigación bajo el protocolo CAAE nº 14025119.0.0000.5354. El instrumento elegido fue el McGill Pain Questionnaire. Los datos se almacenaron en Microsoft Office Excel y se analizaron mediante estadísticas descriptivas. Resultados: Prevalencia de mujeres (54%) y cáncer de colon (20%). Los descriptores más utilizados fueron: Fisgada (54%), Cansancio (52%), Chata (38%) y Aperta (26%) y el 80% de los pacientes no informaron dolor al momento de la entrevista. Conclusión: El Cuestionario de dolor McGill permite conocer los aspectos cualitativos del dolor, además de apoyar a la enfermería en la planificación de la atención al paciente, ofreciendo una mejora en la calidad de la sistematización de la atención de enfermería.

Palavras claves: Dolor por cáncer; Medición del dolor; Cáncer.

RESUMO | Objetivo: mensurar a experiência dolorosa em pacientes oncológicos. Método: pesquisa transversal, descritiva de abordagem quantitativa, com 50 pacientes que realizam tratamento oncológico em um serviço privado localizado na região Noroeste do Estado do Rio Grande do Sul, após aprovação do Comitê de Ética em Pesquisa sob protocolo CAAE nº 14025119.0.0000.5354. O instrumento escolhido foi o Questionário da Dor McGill. Os dados foram armazenados no Microsoft Office Excel e analisados através da estatística descritiva. Resultados: Prevalência do sexo feminino (54%) e câncer de Cólon (20%). Os descritores mais usados foram: Fisgada (54%), Cansativa (52%), Chata (38%) e Aperta (26%) e 80% dos pacientes relataram ausência de dor no momento da entrevista. Conclusão: O Questionário da Dor McGill permite conhecer os aspectos qualitativos da dor, além de dar suporte à enfermagem no planejamento da assistência ao paciente, oferecendo melhora na qualidade da sistematização da assistência de enfermagem.

Palavras-chaves: Dor oncológica; Medição da dor; Cáncer.

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INTRODUCTION

Cancer is a disease whose characteristic is the disordered growth of cells that invade the surrounding tissues and organs.⁽¹⁾ About 50% to 70% of cancer diagnosis with patients report the presence of pain and in advanced stage this percentage increases to 90% of hospitalized people.⁽²⁾

The pain in the patient with neoplasia may be due to the treatments used, clinical condition and location of the neoplasia.⁽³⁾ Reinforcing this, the National Cancer Institute (INCA) says about 25% of Cancer patients die with pain that is not relieved.⁽⁴⁾

Pain is classified as acute and chronic, with the understanding that chronic pain is one that persists for more than three to six months. Thus, chronicity is the first major attribute that is given to cancer pain.⁽⁵⁾ In cancer patients it is called "total pain", because it reaches the dimensions: physical, psychological, social and spiritual of the person's life.⁽⁶⁾

Pain is defined by the International Association for the Study of Pain (IASP) as "an unpleasant sensory and emotional experience that is associated with real or potential injuries".⁽⁷⁻⁸⁾

A study carried out in a large university hospital, located in the State of Paraná, pointed out the importance of pain assessment, since pain serves as a parameter for the patient's evolution.⁽⁸⁾ At the same time, another study on pain carried out in a public hospital in the municipality of Campina Grande,

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highlighted that it should be considered as the fifth vital sign.⁽⁹⁾

Interventions for pain relief are part of nursing care. It is necessary for nurses to understand pain and the importance of measuring it, since it is possible to identify the best drug to be used, as well as to evaluate and control the effectiveness of the treatment.⁽¹⁰⁻¹¹⁾

Measuring and evaluating through instruments such as scales or techniques is fundamental to all scientific research. Thus, pain scales are great tools and stand out, because in addition to measuring pain, they evaluate the effectiveness of medications and allow to know the temporal behavior of the pain. Above all, it is through them that the patient's pain is validated.⁽¹²⁾

An example of a worldwide reference pain scale is the McGill Questionnaire (MPQ), of multidimensional type.⁽¹³⁾ The MPQ was developed in 1975 by Melzack, at McGill University, Canada and assesses the sensory, affective, temporal and miscellaneous qualities of pain. In addition, it presents an assessment of spatial distribution and pain intensity.⁽¹⁴⁾

This study is justified considering that, by studying and measuring pain in cancer patients, elements are obtained to humanize care, build protocols and systematization of nursing care. Given this context, the study starts with the following question: What are the characteristics of pain in cancer patients? The objective of the study is: To measure the painful experience in cancer patients.

METHOD

This is a cross-sectional, descriptive study with a quantitative approach. Participants were patients undergoing cancer treatment at a private oncology and hematology service located in the Northwest region of the State of Rio Grande do Sul. All were invited to participate as long as they met the following inclusion criteria: being over 18 years

old, having performed at least the first cycle of cancer treatment in the period of the research, mention pain symptoms and have some type of neoplasm. Data collection took place between July and October 2019.

The McGill Pain Questionnaire was used as a data collection instrument. The questionnaire was applied before



The MPQ considers pain in the sensory, affective, evaluative and miscellaneous dimensions, in addition to its intensity and location. The first part of the questionnaire contains a human body sketch for the spatial location and depth of pain.



the start of the chemotherapy session or during the session and was in the form of an interview, where the options were read to the patient. Of the total 119 patients undergoing chemotherapy, 50 were interviewed, by convenience sample, during the data collection period.

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tensity and location. The first part of the questionnaire contains a human body sketch for the spatial location and depth of pain. The second part helps the patient to report the specific qualities of their pain.⁽¹⁵⁾

Subgroups 1 to 10 represent sensitive responses to the painful experience, the descriptors of subgroups 11 to 15 are responses of an affective nature, subgroup 16 is evaluative and those 17 to 20 are miscellaneous. Each subgroup has 2 to 6 qualitatively similar descriptors, but with a different magnitude. Thus, for each descriptor there is a number that indicates its intensity.⁽¹⁶⁾

The third part seeks to collect information about the temporal properties of pain. The fourth part seeks to assess the Intensity of Present Pain. It is a scale ranging from 1 to 5, associated with the following words: (1) light; (2) uncomfortable; (3) agonizing; (4) horrible e (5) lacerating.⁽¹⁵⁾

To complement the MPQ, the responsible physician of the institution was asked to authorize the viewing of the subjects' medical records, through the authorization of the patient obtained in the Informed Consent Form who participated in the research, in order to identify the clinical diagnosis. The ethical aspects established by resolution 466/12 were respected.

The study was initiated after approval by the Research Ethics Committee involving Human Beings, of the Integrated Regional University of Alto Uruguay and of the Missions - Campus Santo Ângelo, with the opinion n° 3.346.725, protocol CAAE n° 14025119.0.0000.5354. The Declaration of Coparticipation for the Institution and the Free and Informed Consent Term were used.

For the treatment of the data, descriptive statistical analysis was used and simple measures were used, such as frequencies distribution, percentages, average and others appropriate to the variables studied. The discussion of the findings was based on the literature produced on the subject.

RESULTS

The study population consisted of 50 participants out of a total of 119 undergoing chemotherapy, of which 54% (n = 27) were female. The predominant

age group was 62 to 82 years (56%) (n = 28), with an average of 65.44 years.

Regarding the neoplasms diagnosed in the participants, the results are shown in the board 1. As for the location of pain, 36% (n = 18) of the pa-

tients marked the region of the joints in the human body diagram, 34% (n = 17) the region lumbar and 18% (n = 9) in the legs, the remaining 12% were for different body regions.

Among the drugs most used for pain relief, 36% (n = 18) of the patients stated that they used paracetamol, 28% (n = 14) reported that they did not use any pain medication. The characterization of pain according to the most cited descriptors in the dimensions of the MPQ are shown in Board 2.

Of the 78 descriptors available in the McGill questionnaire, 55 were cited. In Board 3, the percentage of descriptors pointed out in each dimension is shown.

When summing the values of the descriptors in each category, an average of 8.58 was obtained for the sensory dimension, 1.52 in the affective, 1.32 in the evaluative and an average of 2 in the miscellaneous dimension. This shows that even though the evaluative category has all the descriptors mentioned, the sum of the descriptors' values points to the sensory category as the most scored. Thus, it can be said that there are nociceptive or neuropathic mechanisms related to pain in these patients.

Regarding the temporal property of pain, 34% (n = 17) of the patients stated that it was brief and another 26% (n = 13) reported that the episodes of pain were momentary. When analyzing board 4, that presents the crossing of data from the Pain Index, referring to the sum of the value corresponding to each chosen descriptor, together with the Intensity of Present Pain measured in six words, it was found that 80% (n = 40) patients reported not feeling pain when applying the questionnaire, of which 36% (n = 18) of the patients scored from 4 to 10 points and 38% (n = 19) of the patients scored from 11 to 20 points.

DISCUSSION

Our findings show the female popu-

Board 1- Diagnosed neoplasms. Santo Ângelo, RS, Brazil, 2019.

Neoplasias diagnosticadas	N	%
Câncer de Cólon	10	20
Câncer de Mama	9	18
Linfoma não Hodgkin	7	14
Câncer de Próstata	5	10
Outros Tipos de Neoplasias	19	38

Source: Survey data.

Board 2- Pain characteristics. Santo Ângelo, RS, Brazil, 2019.

Dimensão	Descritor	%
Sensorial	Fisgada	54%
Afetiva	Cansativa	52%
Avaliativa	Chata	38%
Miscelânea	Aperta	26%

Source: Survey data.

Board 3. Pain Dimension Descriptors

Dimensão	%	N
Sensorial	72	31 de 43
Afetiva	57	8 de 14
Avaliativa	100	5 de 5
Miscelânea	68	11 de 16

Source: Survey data.

Board 4 - Present Pain Rate and Intensity. Santo Ângelo, RS, Brazil, 2019.

Intensidade da dor Presente	Índice de Dor			Total
	4- 10	11-20	21-35	
Leve	2	4	2	8
Desconfortável	0	2	0	2
Agonizante	0	0	0	0
Horrível	0	0	0	0
Lacerante	0	0	0	0
Não tem	18	19	3	40
Total	20	25	5	50

Source: Survey data.

lation in a greater proportion when carrying out chemotherapy. A similar result was found in a study carried out in a referral hospital for cancer treatment, in the State of Piauí. In a total of 52 patients, 27 were female and 25 male.⁽¹⁴⁾

As for age, the prevalence of cancer in older people is due to the aging process of the population and changes in the morbidity and mortality profile, decreasing the occurrence of infectious diseases and increasing chronic-degenerative diseases.⁽¹⁷⁾ In addition, the elderly have many comorbidities that affect the treatment and prognosis of neoplastic diseases.⁽¹⁸⁾ About 75% of neoplasms occur in individuals over 60 years of age, constituting the second leading cause of death in this population.⁽¹⁸⁾

With regards to colon cancer, the neoplasia with the highest incidence in this study is also the most common of the gastrointestinal tract, the third most common type in men and the second among women. Colon cancer is generally a disease that affects older people and has a higher prevalence in men.⁽¹⁸⁾

As for the anatomical regions with the highest incidence of pain, there is a strong relationship with scientific evidence about the clinical manifestations of patients undergoing chemotherapy that indicate changes in sensitivity, presence of pain, muscle contractions, decreased or absent tendon reflexes and functional disability.⁽¹⁹⁾

Peripheral neuropathy induced by chemotherapy is the most common neurological syndrome secondary to antineoplastic therapy and mainly affects patients who need treatment with taxanes and platinum derivatives.⁽²⁰⁾ It is characterized by sensory abnormalities, such as increased intensity of response to painful stimuli and pain in response to stimuli that normally do not cause pain.⁽²¹⁾

Pain, the fifth vital sign, significantly affects the patient's quality of life and requires adequate prevention

and treatment. It has been shown that the adoption of effective therapeutic



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practices can reduce 80% to 90% of cases of cancer pain.⁽²²⁾ In this sense, to standardize the pharmacological analgesia of cancer pain, the World Health Organization (WHO) introduced the Analgesic Ladder recommending the use of drugs according to the intensity of the pain.⁽²²⁾

The prevalence of non-opioid analgesics in this study is contradictory to literature data, which show the use of opioid drugs in approximately 69.8% of patients (22), contrasting with our research that presents 28% of the sample without use of pain medication. However, it is necessary to pay attention to the use of simple analgesics, such as paracetamol due to the risk of hepatotoxicity, the dose of which should not be exceeded more than 4g / 24h when administered chronically.⁽²³⁾

When dealing with qualitative pain descriptors, a study⁽²⁴⁾ identified that only 8% of the participants described the word "sting" in the sensory dimension of pain and 13%, the word "annoying" in the evaluative dimension. Our results show 54% and 38%, respectively. Among the affective descriptors was the word "tiresome" with 52%, corroborating with Mendes who presented a report of 61.5%. (14) In the miscellaneous dimension, the word "tightness" was mentioned by 26%. Barbosa and collaborators found a similar finding in their study, presenting 13%.⁽²⁵⁾

As for the temporality of pain, most patients stated that the pain they felt was brief or momentary, contrasting the 42% result for constant pain pointed out by Mendes.⁽¹⁴⁾ During the application of the questionnaire, participants reported that the pain they felt was due to tissue injuries related to peripheral venipuncture or port-a-cath puncture for chemotherapy, so they considered the periodicity brief or momentary.

When analyzing the Intensity of Present Pain measured in six words, it was found that 80% of patients did

not feel pain at the time of applying the questionnaire. It was noticed that all those who felt mild pain were treated with analgesia necessary for pain control, following the Analgesia Scale established by the WHO. However, Barbosa et al observed the prevalence of non-compliance with WHO standards in comparison between the analgesia offered to patients with verbal complaints of pain and that recommended by WHO. ⁽²⁵⁾

In view of the qualitative characteristics pointed out by the cancer patient

to describe his pain, it is necessary that the care offered to the cancer patient is systematic, as a way to guarantee the success of the therapy. Therefore, it is well known that a patient's pain should always be analyzed with great caution and safety, considering all types of pain that he may be suffering.

CONCLUSION

Pain assessment, for clinical and research purposes, depends on the verbal description of personal experience, not

only on the intensity, but also on the qualities of the pain.

In contrast to the literature on the subject, the prevalence and intensity of pain among patients undergoing chemotherapy are low. This demonstrates that the therapeutic scheme is being carried out correctly, allowing for well-being and minimizing the moment of suffering of these patients. Future studies are necessary to continue to assess resources without pain, enabling greater comfort for cancer patients. 🌿

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