Original Article

PERFIL DOS ATENDIMENTOS A PACIENTES ONCOLÓGICOS EM UMA UNIDADE DE PRONTO ATENDIMENTO

PROFILE OF CARE MEASURES PROVIDED TO CANCER PATIENTS IN AN EMERGENCY CARE UNIT

PERFIL DE LOS ATENDIMENTOS A PACIENTES ONCOLÓGICOS EN UNA UNIDAD DE PRONTO ATENCIÓN

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RESUMO

Objetivo: descrever o perfil dos atendimentos realizados a pacientes oncológicos admitidos na unidade de pronto atendimento de um hospital de grande porte. **Métodos**: estudo descritivo, quantitativo que avaliou 315 prontuários de pacientes oncológicos, com idade maior ou igual a 18 anos, submetidos a classificação de risco em um pronto atendimento. Os dados foram coletados em prontuários eletrônicos e submetidos à análise estatística descritiva. **Resultados:** predominou o sexo feminino (55,9%), mediana da idade de 62 anos e o câncer de mama feminino foi o tipo de câncer mais frequente (20,9%). A queixa principal foi dor (36,2%), a maioria dos pacientes foi classificada como pouco urgente/verde (54%), seguido de urgente/amarelo (41,6%). A conduta mais frequente foi a administração de medicamentos (64,1%) e 70,9% recebeu alta para o domicílio. **Conclusão:** observou-se a necessidade de investimentos em tratamentos alternativos para o manejo da dor em pacientes oncológicos e melhorias nos registros dos prontuários visando uma avaliação mais precisa e eficaz dos atendimentos.
Descritores: Oncologia; Serviços médicos de emergência; Emergências; Triagem; Enfermagem.

ABSTRACT

Objective: to describe the profile of the care provided to cancer patients received in the emergency care unit of a large hospital. **Methods:** a descriptive, quantitative study evaluated 315 medical records of cancer patients, aged 18 years or older, who were submitted to risk classification in an emergency care unit. Data were collected from electronic charts and submitted to descriptive statistical analysis. **Results:** Females predominated (55.9%), with a median age of 62 years, and female breast cancer was the most frequent type of cancer (20.9%). The main complaint was pain (36.2%), and the majority was classified as not urgent/green (54.0%), followed by urgent/yellow (41.6%). The most frequent treatment was drug administration (64.1%) and 70.9% were discharged to go home. **Conclusion:** it was observed the need for investments in alternative treatments for the management of pain in cancer patients and improvements in the filling of medical records aiming at a more accurate and effective evaluation of the care provided.
Keywords: Oncology; Emergency medical services; Emergencies; Triage; Nursing.

RESUMEN

Objetivo: describir el perfil de las visitas a los pacientes con cáncer ingresados en la unidad de cuidados de emergencia de un hospital grande. **Métodos:** Estudio descriptivo que evaluó 315 historias clínicas de pacientes con cáncer, mayores de 18 años, sujeto a la clasificación de riesgo en la atención inmediata. Los datos fueron recolectados en registros electrónico y sometidos al análisis estadístico descriptivo. **Resultados:** las mujeres (55,9%), con una edad media de 62 años y el cáncer de mama femenino fueron los más frecuentes (20,9%). La queja principal fue el dolor (36,2%), la mayoría de los pacientes fue clasificada como no urgente/verde (54,0%), seguido por urgente/amarillo (41,6%). El método más frecuente fue la administración de medicamentos (64,1%) y el 70,9% recibió el alta para el domicilio. **Conclusión:** se observó la necesidad de inversiones en tratamientos alternativos para el manejo del dolor en pacientes oncológicos y mejoras en el registro de los prontuarios visando una evaluación más precisa y eficaz de las atenciones.
Descriptores: Oncología; Servicios médicos de urgencia; Urgencias médicas; Triaje; Enfermería.

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INTRODUCTION

The world estimates for 2030, according to the World Health Organization (WHO), are 21.4 million new cases of cancer and 13.2 million deaths as a result of population growth and aging. On the other hand, a reduction in infant mortality and deaths from infectious diseases is expected[1].

Currently, cancer is the second cause of death in Brazil, behind only diseases of the circulatory system. It is estimated that cancer will gradually become the leading cause of death in the world if preventive measures are not effectively implemented in the population[1,2].

The estimate for Brazil, based on the biennium 2016-2017, indicates the occurrence of about 600 thousand new cases. Excluding cases of non-melanoma skin cancer, the most frequent types in men will be prostate (28.6%), lung (8.1%), intestine (7.8%), stomach (6%) and oral cavity (5.2%). In women, they will be those affects the breasts (28.1%), intestine (8.6%), cervix (7.9%), lung (5.3%) and stomach (3.7%)[2].

This reality implies that care to cancer patients has become more frequent in practically all health services, mainly in hospital units, with respect to signs and symptoms directly or indirectly related to cancer or its treatment. Specifically, in the in-hospital environment, highly complex units have the essential purpose of contributing to the restoration of the quality of life of this group of patients[2-4].

Oncologic emergency episodes may start suddenly or take months to develop and manifest abruptly, resulting in complications and worsening of the disease with the possible outcome of death, thus necessitating rapid and invasive interventions. Emergency situations can occur at any time and very often imply the need to seek assistance in urgency and emergency units[3,4].

Other factors that likely contribute for cancer patients to seek emergency care units for the resolution of their complaints, even in situations that do not characterize urgencies and/or emergencies, include the fear of not receiving effective ambulatory care and the possibility of immediate access to low-complexity tests and oral or intravenous drugs[5].

The lack of studies describing cancer patients in the scenario of units destined to urgent and emergent care indicates an important knowledge gap in the national literature and the need for investing in more in depth studies on this theme, in order to know this reality and contribute to the quality of care for these patients.

Researches analyzing the care of cancer patients in urgency and emergency units will most likely favor the identification of their specific needs and contribute to the elaboration and implementation of training and protocols aimed at increasing the knowledge of the multiprofessional team, qualifying the care provided to these patients and, consequently, improving their quality of life.

Thus, considering the estimated increase in the number of people affected by cancer and the need to know the circumstances that lead cancer patients to seek immediate care in urgent and emergency units, this study was proposed with the goal to describe the profile of cases of assistance provided to cancer patients admitted to the ECU of a large hospital.

METHOD

This is a quantitative, descriptive, retrospective study conducted in a Emergency Care Unit (ECU) of a large hospital, maintained by a philanthropic entity, located in the city of Belo Horizonte, Minas Gerais. In this institution, comprehensive medical, outpatient and inpatient care serves supplementary health care providers, private clients and users of the Unified Health System[6]. The ECU receives an average of 250 patients/day and uses the Risk Classification method for prioritization of care, which is made by nurses and based on the Manchester Triage System (MTS)[6].

The methodology used by the MTS was planned in order to establish care priorities, determining a maximum time for patient evaluation[7]. It is organized through 55 flowcharts (guided by the main complaint that motivates the search for the service) and it is based on discriminators (signs and symptoms) that indicate the level of clinical priority. The protocol priorities are classified according to a number, name, color and maximum response time in minutes, namely: 1: Emergency/Red/0 min; 2: Very Urgent/Orange/10 min; 3: Urgent/Yellow/60 min; 4: Little Urgent/Green/120 min and 5: Not Urgent/Blue/240 min[7].

We included 315 medical records of cancer patients attended from January to February 2015, aged 18 years or older, submitted to Risk

Classification and who received the first care measures at the institution. Patients with a history of cancer with completed treatment or patients investigating the diagnosis of this disease were excluded. The flowchart for inclusion and delimitation of the analyzed sample is presented in Figure 1.

Figure 1 - Flowchart for inclusion and delimitation of the sample studied. Belo Horizonte, 2016.
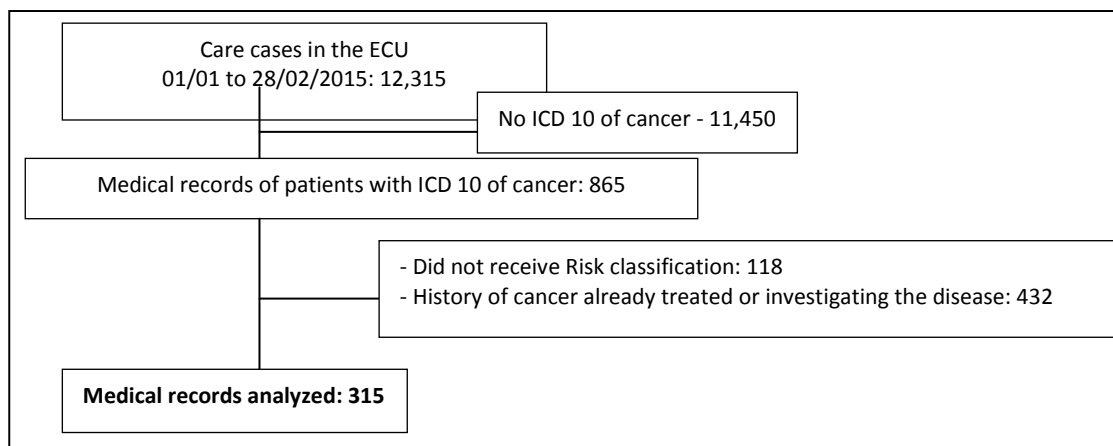
Source: The author.

To characterize the sample, sociodemographic and clinical variables of the studied population were analyzed, namely: sex, age, marital status, comorbidities, type of cancer and therapeutics for the treatment of cancer. The service-related variables collected were: day of the week, main complaint, flowchart, level of priority, therapeutic approach, tests performed, and outcome.

An instrument for data collection was prepared to cover the variables studied. Data collection was carried out by the authors in the months from January to April 2016. Data were retrieved from electronic medical records, filtered by the ICD 10, and the then entered in the computerized statistical program EpiInfo (version 3.5.1).

Statistical analyses were performed *using the Statistical Software for Professional* (Stata), version 12.0 (Stata Corp., Texas, USA). In the descriptive analysis of the data, medians and interquartile range (IQ) were calculated for the quantitative variables, since they had a non-normal distribution (Shapiro-Wilk test). Frequencies and percentages were used for the analysis of the categorical variables.

The research project met the requirements of Resolution 466/12 of the National Health Council and was approved by the Research Ethics Committee of the Federal University of Minas Gerais and of the co-participating institution under Opinion nº 1,174,638/2015.

RESULTS AND DISCUSSION

The data collected allowed the analysis of sociodemographic, clinical and care characteristics of cancer patients.

Of the 315 records that made up the sample, 55.9% were from female patients. Age ranged from 22 to 96 years, with a median of 62 years (IQ: 51-74).

The results found in this research follow the epidemiological profile of cancer in Brazil and show that more than half of the patients are female. A study carried out in a municipality in the southern region of Brazil showed similar results[8]. The estimated number of new cases of cancer for 2016 provided by the National Cancer Institute (INCA) was 300,870 in women and 295,200 in men.

This demonstrates the higher incidence of cancer in women than in men[2]. It is known that women usually seek health services more frequently than men, and this per se increases the chances of early diagnosis and timely treatment of diseases[9]. Men resort to health care services when the disease is more advanced and they often do not adhere to treatment[10].

The median age was similar to that found in a study developed in a municipality in the countryside of the state of São Paulo[11]. The increased prevalence of cancer in more advanced ages is noteworthy. The ageing process of the population implies that chronic diseases start to

represent a significant and growing demand for health care[9].

With regard to marital status, the largest portion of the sample studied was married (61%), followed by single (17.6%), widowed (10.5%) and divorced/separated (9.9%). Living with a partner is considered beneficial and may influence the health status of cancer patients because the presence of a partner represents a source of social support, reduces the effects of stress, and helps in the adherence to treatment, and in patient survival[12].

Data on the variables comorbidities, type of cancer and therapeutics for the treatment of cancer are shown in Table 1.

Table 1 - Comorbidities, type of cancer and therapeutics for the treatment of cancer patients attended at the Emergency Care Unit. Belo Horizonte, 2016.

Variable	N	%
Comorbidities	**299***	**100**
Systemic arterial hypertension	127	42.5
Diabetes *mellitus*	46	15.4
Heart disease	27	9
Hypothyroidism	24	8
Chronic Respiratory Disease	21	7
Others	54	18.1
Type of cancer	**315**	**100**
Breast	66	20.9
Prostate	44	14
Colon and rectus	32	10.2
Head and neck	23	7.3
Lymphatic network	21	6.7
Others	129	40.9
Therapeutics for the treatment of cancer	**489****	**100**
Chemotherapy	179	36.6
Surgery	176	36
Radiotherapy	102	20.9
Hormone therapy	32	6.5

* Not all medical records had the studied variables filled and a single medical record could present more than one comorbidity.
** The patient may have been subjected to more than one therapeutic option.
Source: The author.

There was no record of comorbidities in 178 medical records (56.5%) and as shown in Table 1, a single patient presented more than one comorbidity; thus, the absolute number of comorbidities was 299. The category "other" comorbidities grouped items with a frequency equal of below 16 in the sample, including: psychiatric disease (n = 16), dyslipidemia (n = 14), renal disease (n = 7), obesity (n=6), smoking (n=5), artritis (n = 1), amyotrophic lateral sclerosis (n = 1), fibromyalgia (n = 1), hyperthyroidism (n = 1), systemic lupus erythematosus (n = 1) and acquired immunodeficiency syndrome (n = 1).

The category "other" types of cancer was composed of types with less than 20 cases, including: leukemia (n = 16), ovary (n = 10), lung (n = 10), pancreas (n=8), esophagus (n=7), stomach (n=7), bones (n=7), skin (n = 7), bladder (n = 6), brain (n = 6), cervix (n = 5), intestine (n=5), multiple myeloma (n=5), liver (n=4), kidney (n=4), undetermined/disseminated (n=3), glioblastoma (n=3), tongue (n=3), thyroid (n=3), gallbladder (n=3), penis (n=2), spine (n=1), endometrium (n=1), pharynx (n=1), myelofibrosis (n=1) and vulva (n=1). Regarding surgical intervention, the most performed surgery was total mastectomy (18.7%), followed by radical prostatectomy (10.8%).

The most frequent types of cancer in the sample studied were breast cancers, followed by

prostate, colon/rectum and head/neck. A study carried out in a municipality in the southern region of Brazil showed similar results[8]. Apart from non-melanoma skin tumors, breast cancer is the world's most common cancer in women. In Brazil, 57,960 new cases of breast cancer were expected in 2016, with an estimated risk of 56.20 cases per 100,000 women[2]. This type of cancer was also the most prevalent in the sample studied. Breast cancer is possibly the neoplasm most feared by women because its occurrence causes a great psychological, functional and social impact, acting negatively on issues related to self-image and perception of sexuality[13].

In the male population, prostate cancer stood out among the other types. The expectation for 2016 was that of the 295,200 new diagnoses of cancer cases in men, 61,200 were prostate cancers[2]. The third most prevalent cancer in the sample studied was cancer of the colon and rectum. In Brazil, 16,660 new cases of this type of cancer were estimated in men and 17,620 in women in 2016, corresponding to the third most frequent neoplasm in the male population and the second in the female, excluding skin tumors[2]. It is probable that the investment in strategies that encourage the screening of colon and rectal cancer, as well as cancers of the prostate, cervix and especially breast, favor the identification of lesions in initial stages, less symptomatic and with greater chance of cure. Such screening thus contributes to the reduction of incidence, mortality, and public expenditures related to this type of cancer[14].

Head and neck cancers were the fourth most common type in patients seeking the Emergency Care Unit. In 2014, the estimate for the occurrence of cancers of the oral cavity in Brazil was 11,280 new cases in men and 4,010 in women[1]. The treatment of this type of cancer implies surgeries that involve big resections with possibility of functional and aesthetic mutilation, which have an impact on the daily life of the patients. Besides the surgical approach, the need for radiotherapy may contribute to the appearance of clinical complications such as mucositis and dermatitis[15]. These may be contributing factors to the demand for urgent and emergent care.

The most frequent therapies found in the patients of this study were chemotherapy and surgical intervention. Surgical interventions, as well as antineoplastic chemotherapy, have become one of the most important and promising ways to fight cancer and can be used for curative purposes[16]. The goals of the treatment are to cure the cancer, increase the survival when there is no possibility of cure, and provide palliative care. When treatment can not result in cure, it should lead to an improvement in the patients' well-being and quality of life[16].

The day of the week with higher frequency of cases assisted in the ECU was Monday (22.9%), followed by Friday (20.6%), in the morning shift. The association between the adequacy of the demand and the time of arrival at the ECU, with a higher proportion of less urgent cases and prevalence of cases assisted in the daytime are in line with data found in other two studies developed in Brazil[8,9].

The most frequent complaints were pain (36.2%) and weakness (6.7%), followed by other categories with less than 20 reports: skin lesion and abscesses (n = 19), fever (n = 17), dyspnea (n = 14), tiredness and malaise (n=12), vomit (n = 12), dysuria (n = 9), edema (n = 8), anuria (n = 7), diarrhea (n = 7), dizziness (n = 7), specialist evaluation (n = 5), constipation (n = 5), abdominal distention (n = 4), removal of stitches (n = 4), hematuria, anal bleeding or melena (n = 3), blood transfusion (n = 3), ear obstruction (n = 3), pruritus (n = 3), local secretion (n = 3), trauma (n = 3), faint (n = 2), deviation of labial commissure (n = 2), epistaxis (n = 2), abnormal laboratory test results (n = 2), wound (n = 2), chemotherapy (n = 2), drain removal (n = 2), nasogastric tube removal (n=2), indwelling bladder catheter loss or removal (n = 2), cough (n = 2), catheter leakage (n = 2), dehydration (n = 1), dysphagia (n = 1), ecchymosis (n = 1), involuntary movements (n = 1), nausea (n = 1), loss of consciousness (n = 1), loss of vision (n = 1), prostration (n = 1), and deep venous thrombosis (n = 1).

The high prevalence of pain was also evidenced in studies that analyzed the profile of general care measures in Emergency Care Units[6,11,17]. Data from the World Health Organization (WHO) show that of the five million people who die from cancer each year, 80% do not have a proper control of pain. In Brazil, it is estimated that 62 to 90% of cancer patients present some kind of pain. Brazil is the second country in Latin America where cancer patients feel more pain[18].

We highlight the importance of investments in training nurses with respect to proper pain assessment, including site, intensity, persistence and treatments available, as well as

the need to apply standardized scales appropriate to this specific public aiming at reducing subjective aspects that can change the pain level assigned to the patient[17].

Of the 52 presentation flowcharts that made up the MTS at the moment of the study, 22 (42.3%) were mentioned in the Risk Classification. The flowcharts cited with frequency equal to or greater than 10 are shown in Figure 2.

Figure 2 - Distribution of the most frequent presentation flowcharts in the Risk Classification of cancer patients. Belo Horizonte, 2016.
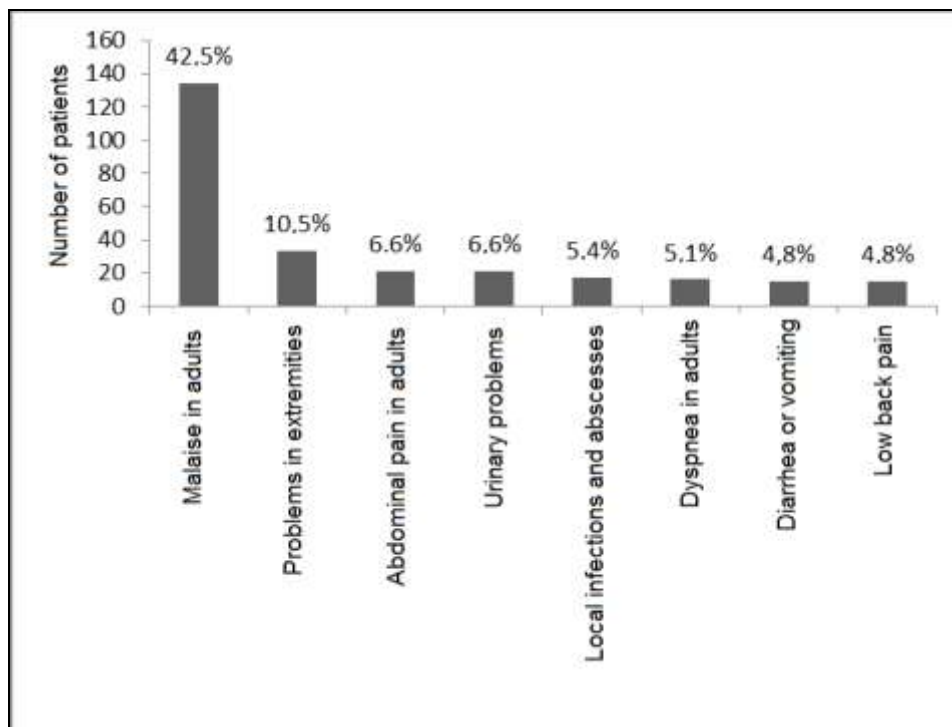
Source: The author.

Flowcharts with frequency less than 10 cases represented 63.6% of the sample and did not appear in the figure above (Figure 2), namely: wounds (n = 9), ear problems (n = 7), sore throat (n = 5), allergy (n = 3), face problems (n = 3), headache (n = 2), digestive hemorrhage (n = 2), head trauma (n = 2), behavioral changes (n = 1), faint in adult age (n = 1), history of diabetes (n = 1), eye problems (n = 1), and thoracic and abdominal trauma (n = 1).

A study carried out in a large emergency service in southern Brazil which uses the MTS for risk classification showed a similar result, with the flowchart "malaise in adult age" being the most cited in patients classified as non-urgent (blue), little urgent (green) and urgent (yellow)[19]. It should be emphasized that, although pain was the most frequent main complaint cited by the patients and that the MTS has flow charts addressing several types of pain, such as abdominal pain, headache, low back pain and so forth, these do not appear as the most cited,

which points to the possibility of underreporting of pain as the main focus of care.

On the prioritization of care determined by the Risk Classification, most were classified as priority 4: little urgent/green (54%), followed by 3: urgent/yellow (41.6%) and 2: very urgent/orange (4.4%). Thus, it was observed that more than half of the patients did not need immediate care. This reality is decisive for the overcrowding of the service, a worldwide phenomenon characterized by the occupation of emergency beds, hospitalization in corridors, increased waiting times for care, wear of the care team, and great pressure for more consultations[20]. Many of these situations are likely the result of untreated chronic diseases and that may have been exacerbated by the lack or limited care offered in the Basic Health Care Network[11,20].

Data on therapeutic approaches, tests performed, and outcome of the cases assisted in the ECU are presented in Table 2.

Table 2 - Therapeutic conduct, exams performed and outcome of the care provided to cancer patients in the emergency care unit. Belo Horizonte, 2016.

Variable	N	%
Therapeutic conduct	**348***	**100**
Oral medication	138	39.7
Parenteral medication	77	22.2
Therapy with saline solution	46	13.2
Topical medication	21	6
Blood transfusion	21	6
Others	45	12.9
Exams performed in 2008:	**298****	**100**
Imaging tests	108	36.3
Hemogram	61	20.5
Laboratory review	60	20.1
Urine Examination routine	23	7.7
Others	46	15.4
Outcome	**313****	**100**
Discharge to go home	222	70.9
Hospitalization	91	29.1

* Patients underwent more than one therapeutic approach.
** Not all records were filled with the variable.
Source: The author.

Regarding the therapeutic measures, the category "others" grouped the approaches that had a frequency lower than 12, such as: intermittent or indwelling bladder catheterization (n = 10), dressing of wounds and immobilization with a strip of cloth (n = 10), subcutaneous medication (n = 6), inhalation of medication (n = 4), removal of stitches (n = 4), sutures or removal of foreign bodies (n = 4), gastric catheterization (n = 3), removal of bladder catheter (n = 2), enteral catheterization (n = 2) and removal of thoracic drain (n = 1). It should be noted that a single patient could be treated with one or more approaches simultaneously.

The tests that comprised the category "others" had a frequency of 16 or less, namely: Gram (n = 16), culture of urine (n = 15), electrocardiogram (n = 10), ionogram (n = 4) and hepatic function (n = 1).

Prescription of drugs as main approach adopted is clearly aligned with the care model based on the complaint-treatment of acute cases, seeking to solve the health needs presented by users[5]. They are short-term solutions, a fact that explains the subsequent returns of the same users to the emergency service; when the symptoms return, the users seek the service over and over again. Thus, ECUs are still considered a form of service that has a great accumulation of possibilities to be offered to users, be it in the form of medications, exams and/or consultations[5].

The administration of oral or intravenous medication was the approach for relief of symptoms in more than half of the patients evaluated in this study. This may be related to the fact that pain was the main complaint reported. Studies indicate that the prescription of oral or intravenous drugs as therapeutic approach has become evident among the established medical behaviors and, for the most part, this actions are directly related to the resolution of the complaints reported by the users[5,11].

As to the outcome, the high frequency of discharge to go home was similar to the findings of another study carried out in Brazil[8]. This result makes us question whether cancer patients seeking emergency services could solve less urgent demands on routine consultations or outpatient follow-up. It is believed that many patients sought urgency and emergency services to have immediate access to medications which

are not prescribed in routine consultations, or because they are not receiving adequate care in primary care settings[8].

With regard to the limitations of the study, it should be mentioned that these are secondary data and are subject to the possibility of incomplete filling of medical records. It should also be noted that the institution studied does not use the formal electronic system of the MTS, and this posed a limitation to the search of essential data such as waiting time for classification, duration of risk classification, and time between classification and first care measures.

CONCLUSION

This study outlined the socio-demographic and clinical profile of cases cancer patients who received care after seeking an emergency unit of a large hospital. The majority of the patients were women, with a median age of 62 years, married, diagnosed with breast cancer, and chemotherapy was the main treatment resorted to. The cases occurred more frequently on Mondays, during the daytime period. The main complaint was pain, the most cited flowchart was "malaise in adults" and most patients were classified as not urgent/green. The most frequent therapeutic approach was the administration of oral and intravenous drugs and the majority was discharged from the emergency unit after improvement of symptoms.

This work made it possible to observe that alternative treatments for pain management need to be established for cancer patients, as this symptom appears as the main complaint. Moreover, the Basic Health Care Network needs to be strengthened in order to assist and follow up the treatment and evolution of cancer patients. It is also necessary to improve the complete registration of data in medical records in order to have a more accurate and efficient evaluation of the care provided to these patients.

REFERENCES

1. Instituto Nacional de Câncer José Alencar Gomes da Silva. Estimativa 2014: Incidência de câncer no Brasil. Rio de Janeiro: INCA; 2014.
2. Instituto Nacional de Câncer José Alencar Gomes da Silva Estimativa 2016: Incidência de câncer no Brasil. Rio de Janeiro: INCA; 2016.
3. Gabriel J. Acute oncological emergencies. Nurs Stand. 2012 Oct;27(4):35-41. DOI: 10.7748/ns2012.09.27.4.35.c9308

4. Sadik M, Ozlem K, Huseyin M, AliAyberk B, Ahmet S, Ozgur O. Attributes of cancer patients admitted to the emergency department in one year. World J Emerg Med. 2014;5(2):85-90. DOI: 10.5847/wjem.j.issn.1920-8642.2014.02.001
5. Gomide MFS, Pinto IC, Gomide DMP, Zacharias FCM. Perfil de usuários em um serviço de pronto atendimento. Rev Medicina 2012;45(1): 31-8. DOI: 10.11606/issn.2176-7262.v45i1p31-38
7. Grupo Brasileiro de Classificação de Risco (GBCR). Sistema Manchester de Classificação de Risco: Classificação de risco na urgência e emergência. Oxford: GBCR; 2016.
8. Borges G, Rovere RK, Maman KAS, Zabel MCJ, Dagnoni C, Corrêa EG et al. Perfil dos pacientes oncológicos que procuraram o departamento de emergência de um hospital de Blumenau no período de 01 abril de 2011 a 31 de outubro de 2011. Rev Bras Oncol Clín. 2013; 9(34): 130-4. Available in: http://sboc.org.br/revistasboc/pdfs/34/artigo1.pdf
9. Oliveira MM, Malta DC, Guauche H, Moura L, Silva GA. Estimativa de pessoas com diagnóstico de câncer no Brasil: Dados da Pesquisa Nacional de Saúde. Rev Bras Epidemiol. 2015 dez; 18 (suppl 2):146-57. DOI: 10.1590/1980-5497201500060013
10. Tomberg JO, Cantarelli KJ, Guanilo MEE, Dal Pai D. Acolhimento com avaliação e classificação de risco no Pronto Socorro: Caracterização dos atendimentos. Rev Cienc Cuid Saude 2013;12(1): 80-7. DOI: 10.4025/cienccuidsaude.v12i1.18694
11. Boaventura AP, Vedovato CA, Santos FF. Perfil dos pacientes oncológicos atendidos em uma unidade de emergência. Rev Cienc Enferm. 2015 ago;21(2):51-62. DOI: 10.4067/S0717-95532015000200006
12. Müller JS, Sperandio FF. Perfil demográfico e fatores associados de pacientes com câncer de mama em tratamento radioterápico na grande Florianópolis. Rev Cienc Med Biol 2012 jan/abr; 11(1):41-7. DOI: 10.9771/cmbio.v11i1.5792
13. Pinheiro AB, Lauter DS, Medeiros GC, Cardozo IR, Menezes LM; Souza RMB, et al. Câncer de mama em mulheres jovens: Análise de 12.689 casos. Rev Bras Cancerol. 2013;59(3):351-9. Available in: http://www1.inca.gov.br/rbc/n_59/v03/pdf/05-artigo-cancer-mama-mulheres-jovens-analise-casos.pdf
14. Valadão M, Leal RA, Barbosa LC, Carneiro M, Muharre RJ. Perfil dos pacientes portadores de câncer colorretal operados em um Hospital Geral: Necessitamos de um programa de rastreamento

acessível e efetivo. Rev Bras Coloproct. 2010 abri/jun;30(2):160-6. DOI: 10.1590/S0101-98802010000200006

15. Paula JM, Sawada NO. Qualidade de vida relacionada à saúde de pacientes com câncer em tratamento radioterápico. Rev Rene 2015 jan/fev;16(1):106-13. Available in: http://www.revistarene.ufc.br/revista/index.php/revista/article/view/1868/pdf

16. Andrade V, Sawada NO, Barichello E. Quality of life in hematologic oncology patients undergoing chemotherapy. Rev Esc Enferm USP 2013 Apr; 47(2):355-61. DOI: 10.1590/S0080-62342013000200012

17. Diniz AS, Silva AP, Souza CC, Chianca TCM. Clinical demand in an emergency care unit according to the Manchester triage system. Rev Eletrônica Enf. 2014 abr/jun;16(2): 312-20. DOI: 10.5216/ree.v16i2.21587

18. Cunha FF, Rêgo LP. Enfermagem diante da dor oncológica. Rev Dor 2015 abr/jun;16(2): 142-5. DOI: 10.5935/1806-0013.20150027

19. Tanccini T. Sistema de Manchester: Tempo despendido na classificação de risco, prioridades estabelecidas e desfecho clínico dos pacientes atendidos na maior emergência do sul do Brasil [dissertação] Porto Alegre (RS): Escola de Enfermagem da Universidade Federal do Rio Grande do Sul; 2014.

20. Bittencourt RJ, Hortale VA. Interventions to solve overcrowding in hospital emergency services: A systematic review. Cad Saúde Pública 2009 jul;25(7):1439-54. DOI: 10.1590/S0102-311X2009000700002

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