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RESEARCH

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SOCIODEMOGRAPHICAL AND CLINICAL CHARACTERISTICS OF PATIENTS IN ONCOLOGICAL TREATMENT

*Características sociodemográficas e clínicas de pacientes em tratamento oncológico**Características sociodemográficas y clínicas de pacientes en tratamiento oncológico*Lia Raquel Viana¹ Gerlania Rodrigues Salviano¹ Maria Cristina Lins Costa Oliveira¹ Erica Maria Belmiro dos Santos¹ Max Santos Pinheiro¹ Katia Neyla Freitas Macedo Costa¹ 

ABSTRACT

Objective: To identify the sociodemographic and clinical characteristics of patients undergoing cancer treatment. **Methods:** cross-sectional, exploratory and descriptive quantitative study, carried out in an oncological hospital located in João Pessoa-PB, with 381 patients. A semi-structured questionnaire was used to obtain data regarding the sociodemographic and clinical profile of the patients, which were analyzed using the Statistical Package for Social Sciences software, version 22.0. The study was approved by the Research Ethics Committee under opinion number 2,782,097. **Results:** there was a predominance of females, married, 60 years or older, retired and coming from the interior of Paraíba, with breast cancer, diagnosed from seven to twelve months, under chemotherapy. **Conclusion:** the results provide subsidies for health care, since by identifying the main sociodemographic and clinical characteristics, it is possible to elaborate a care plan directed to the real needs of this clientele, ensuring comprehensive and resolute care.

DESCRIPTORS: Cancer; Chronic disease; Comorbidity; Public health; Health Care.

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RESUMO

Objetivo: identificar as características sociodemográficas e clínicas de pacientes em tratamento oncológico. **Métodos:** estudo transversal, exploratório e descritivo, quantitativo, realizado em um hospital oncológico localizado no município de João Pessoa-PB, com 381 pacientes. Foi utilizado um questionário semiestruturado para obtenção de dados referentes ao perfil sociodemográfico e clínico dos pacientes, os quais foram analisados com auxílio do software Statistical Package for the Social Sciences, versão 22.0. A pesquisa foi aprovada pelo Comitê de Ética em Pesquisa sob parecer de número 2.782.097. **Resultados:** identificou-se predomínio do sexo feminino, casados, 60 anos ou mais, aposentados e procedentes do interior da Paraíba, com câncer de mama, diagnóstico de sete a doze meses, em quimioterapia. **Conclusão:** os resultados fornecem subsídios para a assistência em saúde, visto que ao identificar as principais características sociodemográficas e clínicas torna-se possível elaborar um plano de cuidados direcionado às reais necessidades desta clientela, garantindo um cuidado integral e resolutivo.

DESCRITORES: Câncer; Doença Crônica; Comorbidade; Saúde Pública; Atenção à Saúde.

RESUMEN

Objetivo: identificar las características sociodemográficas y clínicas de los pacientes sometidos a tratamiento contra el cáncer. **Métodos:** estudio cuantitativo transversal, exploratorio y descriptivo, realizado en un hospital oncológico ubicado en João Pessoa-PB, con 381 pacientes. Se utilizó un cuestionario semiestructurado para obtener datos sobre el perfil sociodemográfico y clínico de los pacientes, que se analizaron utilizando el paquete estadístico para el software de Ciencias Sociales, versión 22.0. El estudio fue aprobado por el Comité de Ética en Investigación con el número de opinión 2,782,097. **Resultados:** predominó el sexo femenino, casado, mayor de 60 años, jubilado y proveniente del interior de Paraíba, con cáncer de mama, diagnosticado de siete a doce meses, bajo quimioterapia. **Conclusión:** los resultados brindan subsidios para la atención de la salud, ya que al identificar las principales características sociodemográficas y clínicas, es posible elaborar un plan de atención dirigido a las necesidades reales de esta clientela, asegurando una atención integral y resuelta.

DESCRIPTORES: Câncer; Enfermedad crónica; Comorbilidad; Salud pública; Cuidados de salud.

INTRODUCTION

Cancer is defined as a group of more than 100 diseases characterized by the disordered growth of cells that invade organs and tissues and may spread to other parts of the body, causing metastasis.¹

The incidence of cancer is progressively increasing among the world population. In Brazil, according to data provided by the Instituto Nacional de Câncer José de Alencar Gomes da Silva (INCA), it is estimated for the biennium 2018-2019 about 600,000 new cases of the disease each year.² These numbers alert to the need for public policies, especially in the area of oncology, aimed at prevention and guidance regarding the disease at all levels of health care.³

It is a chronic disease with a high mortality rate, mainly due to delayed diagnosis. According to INCA, in the year 2018 there were more than 200,000 deaths from cancer throughout Brazil. However, it is emphasized that one third of the cases incident annually in the world could be prevented.²

Cancer causes significant impact on the lives of those affected, causing physical, psychological, social, and economic damage.⁴ Notwithstanding the patient dealing with the impact of the confirmation of the diagnosis, the same has to face the difficulties arising from the treatment, most often aggressive, which causes the most diverse side effects, affecting the quality of life of the individual.⁵

Therefore, the therapeutic routine changes both physiological patterns and the way of life, priorities, and life plans of people.¹ In

addition to these aspects, patients commonly report difficulties related to the therapeutic itinerary, such as difficulties in access to services and exams, fatigue due to the displacement to another city where the treatment is carried out, and insufficient financial resources, among others.⁵

In this context, it is noteworthy that chronic degenerative diseases, especially cancer, have a worse prognosis when associated with socioeconomic inequalities, since they affect the patient's social, economic, and personal spheres.⁶ Thus, it is essential to identify the socio-demographic and clinical characteristics of patients undergoing cancer treatment, in order to know their real needs and, in this way, support the development of improvements in the health care of professionals, especially nurses, who are more likely to develop a bond with patients and their families.

Given the above, this research aims to identify the sociodemographic and clinical characteristics of patients undergoing cancer treatment.

METHODOLOGY

This is a cross-sectional, exploratory and descriptive study, with a quantitative approach. The research was conducted in an oncology hospital located in the municipality of João Pessoa, Paraíba, Brazil. This service is a state reference for cancer treatment, working in the areas of pediatric oncology, hemato-oncology, chemotherapy, radiotherapy, Intensive Care Unit, oncology emergency, general practice and outpatient services

with various medical specialties, thus serving more than 90% of the population through the Sistema Único de Saúde (SUS).

The study population was composed of adults and the elderly who underwent oncological treatment in the hospital, specifically in the chemotherapy and radiotherapy sectors. The sample was a simple probabilistic, non-intentional type, and the sample calculation was carried out by identifying the number of patients seen in the respective sectors in a given period of time, applying the formula for finite populations, totaling 381 patients. Inclusion criteria for the participants were: age 18 years or older, and undergoing chemotherapy and/or radiotherapy for at least one month. The exclusion criteria were: having severe communication deficits or having complications at the time of data collection that prevented it.

A semi-structured questionnaire was used to obtain data regarding the patients' socio-demographic and clinical profile, containing information about gender, age group, origin, marital status, occupation/profession, education, race, family income, religion, type of treatment, treatment time, diagnosis time, life habits, family and personal history of cancer, comorbidities, therapeutic schemes, among other aspects. This instrument was built based on other instruments used in studies involving the profile of cancer patients, and a pilot test was carried out for corrections and adaptations. The participants were approached individually in

the waiting rooms of the chemotherapy and radiotherapy sectors for interviews that lasted approximately 15 minutes.

The data collected were typed and stored in Microsoft Office Excel and later imported into the software Statistical Package for the Social Sciences (SPSS) version 22.0, and analyzed by means of descriptive statistics.

The research was approved by the Research Ethics Committee of the Health Sciences Center of the Federal University of Paraíba, under opinion number 2.782.097, CAAE: 88994918.1.0000.5188, on July 24, 2018. For its execution, all recommendations recommended by Resolution No. 466/12, of the National Health Council, which deals with ethical aspects involving research with human beings, were followed. It is noteworthy that all participants were instructed about the aspects of the research and agreed to participate voluntarily by signing the Informed Consent Form.

RESULTS

A predominance of women (70.3%), 60 years of age or older (36.5%), married (45.4%), with one to four years of schooling (30.2%), retired (33.9%), with a family income of one to three minimum wages (88.2%), brown (45.7%), Catholic (66.9%), and from the interior of Paraíba (73.5%) were observed, Table 1.

Table 1 – Distribution of sociodemographic variables of patients in oncological treatment. João Pessoa-PB, Brazil, 2019.

Variables	N	%
Gender		
Female	268	(70,3)
Male	113	(29,7)
Age Group		
18 – 21 years old	Oito	(2,1)
22 – 45 years old	105	(27,6)
46 – 59 years old	129	(33,9)
60 years or more	139	(36,5)
Marital status		
Married	173	(45,4)
Single	108	(28,3)
Widower	57	(15,0)
Divorced	43	(11,3)
Education		
Illiterate	24	(6,3)
1 - 4 years of study	115	(30,2)
5 - 8 years of study	95	(24,9)
9 - 12 years of study	110	(28,9)
13 years or more of study	37	(9,7)
Professional status		
Retired	129	(33,9)
Pensioner	94	(24,7)
Employee	67	(17,6)
Unemployed	50	(13,1)
From Home	36	(9,4)
Benefit	Três	(0,8)
Autonomous	Dois	(0,5)

Table 1 – Cont.**Family income***

< 1 minimum wage	25	(6,5)
1 - 3 minimum wage	336	(88,2)
4 - 5 minimum wage	11	(2,9)
6 minimum wage or more	Nove	(2,4)

Race

Brown	174	(45,7)
White	153	(40,2)
Black	46	(12,1)
Yellow	Seis	(1,6)
Indigenous	Dois	(0,5)

Religion

Catholic	255	(66,9)
Evangelical	86	(22,6)
It does not	25	(6,6)
Spiritist	13	(3,4)
Jehovah's Witness	Dois	(0,5)

Source

Interior of the State of Paraíba	280	(73,5)
João Pessoa	101	(26,5)
Total	381	(100,0)

* Minimum wage in effect in 2019 = R\$998.00

Source: survey data, 2019.

Regarding the clinical data of the participants, it was found that most reported having no comorbidities (66.7%), however, among the self-reported comorbidities, systemic hypertension stood out (33.3%). There was a higher frequency of participants with no personal history (92.1%) of cancer, however a family history was mentioned by almost half of the patients (49.9%).

The most frequent external risk factors were smoking (29.4%) and physical inactivity (28.1%), Table 2.

Regarding the data on cancer, there was a predominance of breast cancer (37.5%), with time of diagnosis from seven to 12 months (43.0%), undergoing chemotherapy (67.5%), and with time of treatment between one and six months (77.2%), Table 3.

Table 2 – Distribution of clinical data of patients in oncological treatment. João Pessoa-PB, Brazil, 2019.

Variables	N	%
Comorbidities		
No	254	(66,7)
Yes	127	33,3
Self-reported comorbidity*		
SAH	127	(33,3)
Diabetes mellitus	59	(15,5)
Cardiopathy	14	(3,7)
Respiratory Disease	five	(1,3)
Neurological disease	five	(1,3)
Vascular disease	two	(0,5)
Autoimmune disease	two	(0,5)
Disease of the skeletal muscle system	one	(0,3)
Personal history for cancer		
No	351	(92,1)
Yes	30	(7,9)
Family history for cancer		
Yes	191	(50,1)
No	190	(49,9)
External Risk Factors for Cancer*		

Table 2 – Cont.

Smoking	112	(29,4)
Physical inactivity	107	(28,1)
Alcoholism	88	(23,1)
Exposure to the sun	82	(21,5)
Poor feeding	53	(13,9)
Occupational Exposure	32	(8,4)
Obesity	six	(1,6)
Unprotected sexual intercourse	four	(1,0)

* Variable with more than one response option.

Source: survey data, 2019.

Table 3 – Distribution of data regarding cancer of patients in oncological treatment. João Pessoa-PB, Brazil, 2019.

Variables	N	%
Cancer (primary tumor)		
Breast	143	(37,5)
Head and Neck	48	(12,6)
Prostate	29	(7,6)
Uterine colus	29	(7,6)
Lung	19	(5,0)
Colon and rectum	18	(4,7)
Stomach	17	(4,5)
Bones	13	(3,4)
Ovary	11	(2,9)
Pancreas	11	(2,9)
Esophagus	nine	(2,4)
Bladder	seven	(1,8)
Hematological	seven	(1,8)
Melanoma skin	six	(1,6)
Lymphoma	six	(1,6)
Soft parts	four	(1,0)
Non-melanoma skin	four	(1,0)
Diagnostic time		
1- 6 months	112	(29,4)
7 – 12 months	164	(43,0)
>1 – 2 years	66	(17,3)
> 2 years	39	(10,2)
Type of treatment*		
Chemotherapy	257	(67,5)
Radiotherapy	183	(48,0)
Surgery	15	(3,9)
Hormone therapy	10	(2,6)
Treatment time		
1 – 6 months	294	(77,2)
7 – 12 months	46	(12,1)
>12 months	41	(10,8)

* Variable with more than one response option.

Source: survey data, 2019.

DISCUSSION

The greater presence of women in the sample can be explained by data from the Brazilian Institute of Geography and Statistics,⁷ which highlights the prevalence of females in the Brazilian population, reaching about 51%. Moreover, this aspect reflects the economic situation in Brazil, since developing countries have the predominance of cancer in the female population due to the high detection rates of neoplasms specific to this gender, such as cervical cancer and breast cancer, considered priority axes of public health policies. Already in developed countries, the occurrence of cancer tends to incur similarly among men and women due to mass prevention programs.⁸ This data corroborates other studies on.⁹⁻¹⁰

Also according to IBGE (2018), the population is aging, and currently the female quantitative between 60 and 65 years corresponds to almost 3% of Brazilians, which directly impacts on the clientele of health services.⁷ It is emphasized that aging is a stage in which the fragilities of the human being can be evidenced, as well as favor the emergence of chronic diseases, such as cancer.¹¹

Cancer is one of the most complex current public health problems. A change in the epidemiological profile of the disease is perceived and the growing increase in new cases may be linked to increased exposure to carcinogens due to people's lifestyle habits and the industrialization process, as well as the extension of life expectancy and the consequent aging population. These last factors place the elderly population as the most prevalent group among those affected by cancer. According to INCA, 68% of all deaths from cancer in 2013 corresponded to the age group over 60 years.¹²

With regard to education, most referred to one to four years of study, i.e., they attended only the initial years of elementary school, as verified in other studies.¹³⁻¹⁴ The low level of education can interfere with the understanding of guidelines, information and health recommendations in general, especially when it comes to cancer, which has specific preventive measures, thus favoring the incidence of the disease.^{4,8} It is noteworthy that the relationship between socioeconomic aspects, such as age and education, and late diagnosis may be the result of difficult access to preventive health care programs.⁸

Regarding marital status, a higher prevalence of married people was observed, and it is important to highlight the support of the spouse or family member, since the family is the main support network for patients in situations of extreme stress, often experienced by cancer patients.¹⁵ Recent studies have highlighted that married patients accounted for the majority of the public in cancer services, which may be the result of greater support from the spouse in seeking help and treatment.¹⁶

Retirees were the majority among the participants of the present study, a result that may be related to the massive presence of elderly people in the sample, reflecting the current Brazilian demography, characterized by the increase of the geriatric population, influencing the increase of this clientele in health services.⁷

Most patients reported family income of one to three minimum wages, as in the study by Freire et al.⁴ This is important data, since the personal and/or family financial situation of the patient may interfere with access to health services, since low-income countries have higher cancer rates, since poverty exposes the individual to unhealthy conditions and constant risks.¹⁷ It is noteworthy that income can have an impact on the clinical condition of the patient in such a way that, if it is insufficient, it prevents the individual from seeking more efficient care in private services, leaving him/her waiting for care at the SUS.

Regarding the predominance of the brown race, it is consistent with the Brazilian reality, in which the number of self-declared browns grew 6.6% totaling 95.9 million of the country's population.⁷

It was observed that more than 90% of patients reported some type of religious belief, corroborating the study of Maia.¹³ Cancer and its repercussions have been a challenge for modern medicine, and in parallel, religion, religiosity, and faith have been the support that cancer patients resort to as a way of facing suffering and uncertainty in the face of the disease and the feeling of the finitude of life that it brings with it.¹³ Religiosity and spirituality were recently addressed in a study involving patients with cancer in order to describe how these people seek support from a Higher Being as a coping strategy to deal with the adversities of the disease.¹⁸

Most interviewees were from the interior of Paraíba, characterizing the lack of specialized health services where they live, which is one of the difficulties faced by patients as they need to travel from their cities to the service where the treatment is carried out, a situation that causes fatigue and directly influences their well-being, quality of life and therapeutic adherence.⁵ This reality may be related to the fact that the hospital where the research was conducted is a reference in oncologic care in the state of Paraíba, resulting in the displacement of these individuals to the capital, João Pessoa.

Regarding the clinical aspects of people undergoing cancer treatment, it was found that the absence of comorbidities among most participants could be explained by the self-perception of health, which may be deficient in the group assessed.

Moreover, among the self-reported comorbidities, the one with the highest prevalence was systemic arterial hypertension (SAH), similar to the study carried out in southern Minas Gerais, in which 75% of the interviewees reported suffering from increased blood pressure levels.¹⁹ This data may be related to the greater presence of elderly people in the sample studied, since SAH is quite frequent in this population. Moreover, there is in the literature a relationship between the occurrence of SAH and oncologic treatment, since antineoplastic drugs may imply in increased blood pressure levels because they act on the tumor causing inhibition of vascular endothelial growth factors, contributing to hypertension.²⁰ It is noteworthy that SAH is configured as one of the most prevalent chronic diseases in the population, followed by Diabetes Mellitus, both being frequent causes of high morbidity and mortality rates in Brazil.

Cancer may have a genetic bias, referring to the transmission of a cancerous characteristic to other generations. However, in this study, the family history was negative for the occurrence of predecessor family cases, a fact similar to that found in the study by Magalhães.²¹ On the other hand, in the study by Quijada,²² the prevalence of the genetic factor was observed, stating that if there is a direct predecessor such as a father or mother, the chance of having the same disease is 11 times greater, especially in the case of cancer.

However, it is known that of all cancer cases, 80% to 90% are associated with environmental factors. Chemical substances, irradiation, microorganisms, and behavioral factors are some examples of risk factors.¹² In this study, smoking and physical inactivity prevailed among the sample. Smoking, besides predisposing to lung cancer, when associated with alcohol can lead to cancer of the mouth, oropharynx, and larynx. Physical inactivity and all that surrounds sedentariness and associated comorbidities can cause several types including bowel, ovarian, and endometrial cancer, among others.¹² The regular practice of physical activity acts in the prevention as well as in the control of non-transmissible chronic diseases, improving mobility and functional capacity, as well as quality of life.²³

Regarding the aspects related to cancer, breast cancer was the most prevalent among the participants. There is an estimate of 18.1 million new cases of cancer worldwide, of which breast cancer accounts for 11.6%, being the second most prevalent among both sexes and the most frequent in women.²⁴ In Brazil, breast cancer is second in the ranking of prevalent cancers (except non-melanoma skin tumors) and it is estimated that 59,000 new cases will occur, besides being the leading cause of death among women, with age, use of hormone replacement therapies, parity, exposure to radiation, nulliparity, and other risk factors.⁷

The prevalent time of diagnosis was 7 to 12 months in this study. Breast cancer if diagnosed early has a good prognosis. In a review study, authors concluded that the screening program offered in Brazil based on mammography has been effective in diagnosing the disease, together with female empowerment about cancer and self-examination, which make women seek health services earlier.²⁵ However, although there has been a recent growth in mammography rates, this rate is still much lower than expected by the Ministry of Health, and this is mainly due to social inequality that compromises women's access to health services.²⁶ In this context, it is noteworthy that the North, Northeast, and Midwest regions have the worst access to breast cancer screening, making it necessary to emphasize the role of nurses in breast cancer screening in improving these indicators and solving problems, conducting health education, active search, requesting mammograms, and physical examination of the breasts.²⁶

Among the participants, most were under treatment with chemotherapy. This is a systemic treatment that uses drugs, which can be chemotherapy, hormone therapy, biotherapeutics, immunotherapy, and target therapy, which aim to destroy the neoplastic cells in the individual's body. The doses are thera-

peutically scheduled in daily, weekly, or biweekly cycles, at an interval of three, four, five, or six weeks.¹²

Because they affect both cancer cells and healthy cells, chemotherapy generally confers on the patient some degree of toxicity, which can cause cardiotoxicity and pneumopathies, as well as discomfort, pain, malaise, fatigue, nausea, vomiting, dyspnea, diarrhea, loss of appetite, insomnia, and constipation.²⁷ Faced with this series of undesirable effects, the patient's quality of life may be affected, making it impossible to perform daily activities, which may result in impaired functionality and reduced social interaction.²⁸

The prevalent treatment time was 1 to 6 months. Because it is a treatment that demands time and can be influenced by individual patient factors, a survey conducted in the South region of Brazil showed that the participants presented negative aspects between the time interval between one chemotherapy and another, exceeding the recommended time due to side effects such as neutropenia that demands treatment interruption, thus affecting its duration.²⁹

In the oncology hospital scenario, regarding the treatment, the nursing professional is involved mainly with the care of the antineoplastic medication, as well as in the consultations during the radiotherapy period.²⁹ Regardless of this environment, the nurse should act based on a systematization of care performed within the nursing process, paying attention not only to the psychobiological needs, but also to the psychosocial and psychospiritual needs of his patients, seeking to establish a link and achieve an integral care.

The limitations of this research are the fact that the study was carried out in a single cancer treatment service, which does not allow the findings to be generalized. Further studies are recommended with the purpose of expanding the research to other oncology services, besides the inclusion of subjective questions that involve the perception of the patient in relation to his sociodemographic condition and clinical status facing the cancer treatment.

CONCLUSION

It was observed a higher frequency of female patients, married, 60 years old or older, retired and from the interior of Paraíba. The main comorbidity self-reported was Systemic Arterial Hypertension and the type of cancer was breast cancer, diagnosed between seven and twelve months, during chemotherapy treatment for one to six months.

The results of this study are relevant as they provide subsidies for oncologic health care, especially for nursing professionals who have greater proximity to the patient and his family, since by identifying the main socio-demographic and clinical characteristics of people undergoing treatment, it is possible to develop a care plan directed to the real needs of this clientele, ensuring a comprehensive and resolute care.

Furthermore, it is worth noting that nursing care in oncology should cover the biopsychosocial aspects that must be worked

on in the nursing process in order to implement interventions that aim to contribute to facing the difficulties during therapy, contributing to its success.

It is hoped that other studies will be carried out with the objective of deepening the theme in question, as well as evaluating other important aspects in this population.

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