

Artigo

Sociodemographic profile and mental health of patients under oncological treatment during the COVID-19 pandemic in a cancer combat unit in Anápolis – GO*Perfil sociodemográfico e saúde mental de pacientes em tratamento oncológico durante a pandemia da COVID-19 em uma unidade de combate ao câncer de Anápolis – GO*

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ABSTRACT: Coronavirus disease 2019 (Covid-19) has repercussions on several dimensions, affecting aspects such as socioeconomic, educational and health, corroborating the increase in mental disorders in the general population. Therefore, patients undergoing cancer treatment are affected psychologically by this scenario, which can directly reflect on therapeutic adherence, prognosis and quality of life. Thus, the present study aimed to describe the sociodemographic profile and evaluate the influence of the pandemic scenario on the mental health of patients undergoing cancer treatment in the city of Anápolis - Goiás. This is a descriptive, cross-sectional, quantitative study, involving patients between 18 and 90 years of age undergoing antineoplastic treatment from March 2020 to March 2021, and the General Health Questionnaire (GHQ-12) was used for data collection. The study included 133 patients, 66.2% female; age ranged from 20 to 87 years, with prevalence between 50 and 70 years (54.13%); predominant marital status was "married" (52.6%); belonging to the Catholic religion (61.7%); most with low education (51.9%); and with an income of up to one minimum wage (58.6%). Regarding mental health, it was noticed that the feeling of agony (42.1%), inability to concentrate on what they do (45.1%) and loss of sleep due to worries (45.1%) were the most reported negative aspects. It was also noted that there was no significant decrease in outpatient visits due to the pandemic, being the aspects most considered by those who reduced their trips, social isolation and fear of contracting Covid-19 disease. Accordingly, there should be greater encouragement to research on this subject in order to provide better care to this profile of patients.

KEYWORDS: Covid-19; Mental health; Psycho-Oncology; Antineoplastic protocols; Sociodemographic factors.

RESUMO: A doença por coronavírus 2019 (Covid-19) repercutiu em diversas dimensões, afetando aspectos como o socioeconômico, o educacional e o da saúde, corroborando para o aumento de distúrbios mentais na população em geral. Por conseguinte, os pacientes em tratamento oncológico são afetados psicologicamente por esse cenário, o que pode refletir diretamente em adesão terapêutica, prognóstico e qualidade de vida. Sendo assim, o presente estudo teve como objetivo descrever o perfil sociodemográfico e avaliar a influência do cenário pandêmico na saúde mental de pacientes em tratamento oncológico na cidade de Anápolis – Goiás. Trata-se de um estudo descritivo, transversal, de abordagem quantitativa, envolvendo pacientes entre 18 e 90 anos de idade em tratamento antineoplásico de março de 2020 à março de 2021, sendo usado para coleta de dados o Questionário de Saúde Geral (QSG-12). Participaram da pesquisa 133 pacientes, sendo 66,2% do sexo feminino; a idade variou de 20 a 87 anos, com prevalência entre 50 e 70 anos (54,13%); a situação conjugal predominante foi "casado" (52,6%); pertencentes à religião católica (61,7%); a maioria com baixa escolaridade (51,9%); e com uma renda de até um salário mínimo (58,6%). Em relação à saúde mental, percebeu-se que a sensação de agonia (42,1%), a incapacidade em concentrar-se no que faz (45,1%) e a perda do sono pelas preocupações (45,1%) foram os aspectos negativos mais relatados. Também notou-se que não houve diminuição significativa das visitas ambulatoriais em razão da pandemia, sendo os aspectos mais considerados por aqueles que reduziram suas idas, o isolamento social e o receio de contrair a doença da Covid-19. Desse modo, deve-se haver um maior fomento a pesquisas sobre esse assunto, a fim de oferecer um melhor atendimento a esse perfil de pacientes.

PALAVRAS-CHAVE: Covid-19; Saúde mental; Psico-oncologia; Protocolos antineoplásicos; Fatores sociodemográficos.

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INTRODUCTION

The coronavirus disease 2019 (Covid-19) has had repercussions on several dimensions of daily life, changing the lives of the world population, and affecting various aspects, such as economic, educational, social, and health¹.

The disease course of individuals infected with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is phenotypically diverse. However, subgroups of patients with Covid-19 that appear to be at increased risk of morbidity and mortality have been identified, including cancer patients, since both malignancy and antineoplastic therapy result in an immunosuppressive state to infectious agents, increasing the risk of developing serious biological complications from the virus^{2,3}.

In addition, the saturation of the health system, as resources are dedicated to the care of the Covid-19 pandemic, makes the care of cancer patients a dilemma, since the distracting effect of all attention diverted to Covid-19 and the neglect of daily clinical practice, can have substantially negative implications for cancer progression and patient survival. This scenario should contribute to a sense of urgency in the care of these patients, in order to provide the right treatment, to the right patient, and at the right time.⁴

Furthermore, as a consequence of the classification given to people who are clinically susceptible to Covid-19, cancer patients (of any age, sex, tumor subtype, and stage) were labeled as high risk, requiring health professionals to focus on cancer treatment, redesigning the therapeutic strategy based on radical alterations in the management of the disease during the last few months, including shortening of radiotherapy, switching from intravenous to oral chemotherapy regimens, and modifying the use of immunotherapy. Data on the impact of the tendency to avoid treatment in cancer patients are not yet available in the modern literature, however, it is known that avoiding care for diseases that require timely treatment can have significant consequences for public health^{2,5}.

In addition to this uncertainty regarding the therapeutic follow-up during the pandemic, adherence to social isolation by cancer patients is related to the fear of becoming infected or suffering injuries to health, which, when not conducted in a harmonious way, becomes a risk predictor for negative psychological issues, causing biopsychosocial-spiritual impairment. Thus, even though social restriction is indispensable in times of a pandemic as part of non-pharmacological prevention measures, it is also necessary to organize strategies to encourage the continuity of cancer treatment, as part of a plan to strengthen the engagement of patients^{6,7,8}.

Therefore, based on the characteristics of cancer treatment and the alterations caused by the Covid-19 pandemic, it is necessary to build strategies to minimize the impact of this period on the well-being, diagnosis, prognosis, and treatment of cancer patients¹.

In a pandemic context, in general, the number of people whose mental health is affected tends to be greater than the number of people contaminated by the infection itself. In addition to a concrete fear of death, the Covid-19 pandemic has implications for other spheres: family organization, closure of schools, businesses, and public places, changes in work routines, and isolation, leading to feelings of helplessness and abandonment. In addition, a pandemic can increase insecurity due to the economic and social repercussions of this large-scale tragedy⁹.

Therefore, patients undergoing cancer treatment are psychologically affected by this scenario, which can directly reflect on therapeutic adherence, prognosis, and quality of life. This is because the care of cancer patients has changed due to the current shift in priorities, leading to the postponement of effective treatments, and increasing the risk of cancer morbidity and mortality, perhaps more than Covid-19 itself. Hospitalizations for emergencies and life-threatening conditions have also been shown to have significantly decreased, possibly because people may have ignored symptoms, obeyed stay-at-home orders, or fear contracting the virus in hospitals⁵.

Considering the above, the development of the present work is justified, based on its importance in the approach to mental health, therapeutic follow-up, and the quality of life of cancer patients, since, when mental well-being is compromised, there is lower treatment adherence, making it costly, exhausting, and ineffective for the patient. In addition, no studies were found in the modern literature, based on the search in the databases, that addressed and correlated the influence of the pandemic on the mental health of patients undergoing cancer treatment. This discussion is imperative to fill the scientific gap in the theme. Thus, with the current study, we seek to expand and value the comprehensive and multidimensional care of cancer patients, focusing on their psychological state.

The present study aims to describe the sociodemographic profile and evaluate the influence of the pandemic scenario on the mental health of patients undergoing cancer treatment at the Cancer Unit in Anápolis - Unicca.

METHODS

Type of study

This is a descriptive, cross-sectional study with

a quantitative approach, which aims to analyze the impact of the Covid-19 pandemic on the mental health of cancer patients.

Population and sample

The study was carried out in the city of Anápolis, in the state of Goiás, specifically at the Cancer Unit in Anápolis - Unicca.

The sample size calculation was performed using G*Power 3.1.9.7 software, considering an average effect size of 0.5, significance level of 5%, sample power of 95%, and the type of analysis performed (frequency comparison between groups - chi-square). The final sample consisted of 133 patients.

Data collection

For the study, the sample included patients undergoing cancer follow-up, who spent the time of the Covid-19 pandemic undergoing anticancer treatment from March 2020 to March 2021, between 18 and 90 years of age, regardless of sex. Patients who did not agree to participate in the study were excluded from the study, as well as those who failed to participate in any of the data collection phases or who did not sign the Free and Informed Consent Term (FICT).

The field research collection process was based on the use of an objective assessment questionnaire to assess the level of mental health - the General Health Questionnaire (GHQ-12), which was adapted in line with the research objectives. This questionnaire was applied to a sample of cancer patients, assisted by the Cancer Unit - Unicca, in March and April 2022.

The General Health Questionnaire is considered a self-administered instrument, initially suggested by Goldberg & Williams in 1972. This tool, validated in Brazil in 1976 by Giglio, is based on studies with factorial analysis and has become a favorable measure for contexts which require quick analyses of psychological discomforts, thus becoming an agile evaluative indicator for psychological morbidity.¹⁰

The GHQ-12 is composed of 12 items that assess how much the person has experienced the symptoms described, with responses given on a four-point scale. For negative items (e.g., "Have you been feeling unhappy and depressed?"), response alternatives range from 1 = not at all, to 4 = much more than usual; and for positive items (e.g., "Have you felt able to make decisions?"), responses range from 1 = more than usual to 4 = much less than usual. In this sense, the negative items were inverted, with the lowest score indicating a better level of psychological well-being. In Brazil, the GHQ-12 has shown satisfactory evidence of validity

and accuracy, although, as pointed out earlier, there is no consensual factor structure. For application in the present study, the GHQ-12 was adapted to include the sociodemographic profile of patients undergoing cancer treatment, such as sex, age, religion, education, marital status, and income.¹⁰

The invitation to participate in the study was made by the researchers during the moment when the patient was present at the unit, waiting for their consultation or medication, and not taking up more time than predetermined for this process. When approaching the patients, the researchers explained the purpose of the study, as well as the associated risks and benefits, and collected the informed consent.

Data analysis

Statistical analyses were performed using the Shapiro Wilk normality test and p values less than or equal to 0.05 ($p \leq 0.05$) were considered statistically significant. The chi-square test was used to cross-reference the data and the likelihood ratio for a positive test (likelihood ratio) was considered. In addition, tables were constructed to present the results as clearly as possible. The data obtained were analyzed by the software *Statistical Package for Social Science for Windows* (SPSS).

Ethical aspects

This research was submitted to and received approval from the Research Ethics Committee. The research protocol is in accordance with Resolution 466/12 of the CNS, of December 12, 2012, not presenting any ethical obstacle to its execution, under approval number CAAE: 53068621.2.0000.5076.

The Cancer Combat Unit – Unicca was fully aware of the research and gave permission for data collection to be carried out at the institution.

RESULTS

As shown in Table 1, in relation to the sociodemographic profile of the cancer patients studied, there was a prevalence of females (66.2%), aged between 50 and 70 years (54.1%), belonging to the Catholic religion (61.7%), with low education (55.7%), with incomplete elementary education (51.9%), married (52.6%), and with an income of up to one minimum wage (58.6%).

Table 1: Sociodemographic profile of patients (n = 133).

VARIABLES	n	%
Religion		
Catholic	82	61.7
Evangelical	45	33.8
Spiritist	03	2.3
Other	03	2.3
Schooling		
Complete elementary	21	15.8
Incomplete elementary	69	51.9
Complete high school	22	16.5
Incomplete high school	05	3.8
Graduated	14	10.5
Incomplete higher education	02	1.5
Income		
Up to 1 minimum wage	78	58.6
From 1 to 3 minimum wages	50	37.6
From 4 to 10 minimum wages	05	3.8
Marital status		
Single	23	17.3
Married	70	52.6
Divorced	18	13.5
Widower	22	16.5
Sex		
Female	88	66.2
Male	45	33.8

Reference: Own author; 2022

Considering the influence of the pandemic scenario on mental health, it was noticed that the feeling of distress (42.1%), difficulty concentrating on what one is doing

(45.1%), and the loss of sleep due to worries (45, 1%) were the most commonly reported negative aspects, in this context, by cancer patients undergoing treatment. While

variables such as the feeling of usefulness (53.4%) and happiness (54.9%) did not suffer a significant negative impact in the majority of the patients studied.

As for outpatient visits, it was found that between March 2020 and March 2021 there was no significant decrease in these consultations. However, the most significant aspects considered by those who reduced their trips were social isolation and the fear of contracting the Covid-19 disease. In addition, it was observed that for most patients (94.7%) there were no alterations in treatment due to the pandemic. Thus, there has been no relevant change in the perception of patients in relation to outpatient treatment due to the pandemic.

By relating mental health during the pandemic and the sex of these patients, it was possible to conclude that females stand out in terms of their ability to face problems (90%) and make decisions (82.4%), but that they are more distressed than males (80.4%).

DISCUSSION

A priori, the main findings in the present research were: (1) prevalence of females, between 50-70 years old, Catholics, incomplete elementary school, married, and with an income of up to one minimum wage; (2) feeling of distress and inability to concentrate on what one is doing were the most frequent negative points; (3) there was no significant reduction in oncology consultations during Covid-19. All these aspects will be discussed in detail below.

It is known that the sociodemographic profile is a vulnerability factor for the development of neoplasms in general, which can compromise prevention actions, making early diagnosis and/or access to adequate therapy difficult. In the current study, the majority of the patients studied were female, aged between 60-80 years. Considering schooling, the average was four to seven years of study, and family income was from one to three minimum wages¹¹. These data are similar to those reported in the study of Lampert et al.¹², in which the results showed that patients have up to four years of study. The marital status of the individuals was not mentioned in either of those studies.

According to the authors Chen et al.¹³, the median age of patients surveyed was 60 years, and 71% had an annual income of <\$40,000 USD. Discovery of cancer was associated with an increase in financial hardship. In addition, the lowest annual income (<\$40,000) was associated with increased cancer worry and anxiety compared with the highest annual income (>\$40,000). In the study by the authors Schmidt et al.¹⁴, the median age of the interviewed patients was 65 years, and 54% were male, this being the only study found in which the majority of the patients were men.

As previously shown, adherence to treatment can

be impacted by different reasons, including economic factors. Unmet socioeconomic needs, for example, can lead to missed chemotherapy or radiotherapy visits. Previous studies have consistently found that patients who face practical and economic barriers have more difficulty adhering to the treatment regimen¹⁵.

As such, faced with many conflicting priorities, it is possible to observe that patients who face practical problems can de-emphasize their medical care, possibly affecting their mental health and quality of life, as well as their long-term survival. These findings corroborate with the results found in our study, since patients in economic vulnerability represented more than half of the participants with negative impacts on mental health during the Covid-19 pandemic.

With respect to marital status, not enough studies were found to discuss the relationship between this aspect and cancer treatment. However, of the patients interviewed in the present study, 52.6% were married. Finally, 58.6% of respondents had an income of up to one minimum wage. Therefore, the sociodemographic profile of the patients covered in our research is in line with the majority of studies found in the scientific literature.

Furthermore, it should be considered that as this is still a very current issue, there are few works in the literature that address the mental health of cancer patients during the Covid-19 pandemic. The authors Chen et al.¹³ studied vulnerable populations in New York City who were undergoing cancer treatment during the pandemic and found that low socioeconomic status was the most common risk factor for increased financial distress, concern about cancer, and anxiety. By way of comparison, in the patients surveyed in our study, it was noticed that the feeling of distress and the inability to concentrate on what one is doing were the most commonly reported negative aspects, significantly affecting the mental health of these individuals and their ability to cope with the disease.

Still regarding the psychosocial state, unfortunately, the Covid-19 pandemic has led to a deterioration of mental health among many populations, including those with cancer. According to the US Census Bureau, the prevalence of anxiety and depression among American adults was three times higher during the pandemic compared to the previous calendar year. Similar to what we observed before the pandemic, symptoms of anxiety and depression were more likely to be reported by cancer survivors compared to cancer-free patients during the Covid-19 pandemic. In addition, the high prevalence of mental health problems is accompanied by gaps reported in mental health services for cancer patients during pandemics¹⁶.

In consonance, Rodriguez et al.¹⁶ conducted a clinical trial in which they studied the prevalence of mental health symptoms and the behavioral impact of the COVID-19 pandemic on cancer survivors. The results showed that cancer survivors with anxiety or depression

were more likely to report that the pandemic impacted “a lot” on their daily lives compared to those without these mental health outcomes. When asked to describe their experiences during the COVID-19 pandemic, cancer patients with probable anxiety or depression were also more likely to report concern for friends, family and/or local partners, experiencing financial loss, feeling frustration or boredom, not having enough basic supplies such as water or medicines and sleeping less than cancer patients without mental health problems.

With regard to delays in the diagnosis and treatment of cancer, it is known that these can occur due to several factors, related to the individual attended, the professionals, and the access and organization of health services. However, in 2020, the effect of the pandemic caused by the new coronavirus was added to these factors. For example, in Brazil, in the year 2020, almost all procedures related to screening, diagnostic investigation, and treatment of cancer suffered a drop in production, compared to those recorded in 2019; except chemotherapy, which maintained the volume, with a slight increase in 2020¹⁷.

It was observed that in Brazil, cancer screening and diagnosis were more affected than treatment, an expected result considering the current recommendations and the balance between the risks and benefits of maintaining screening actions in an unfavorable epidemiological scenario such as Covid-19¹⁷. This corroborates the data found by the present study, which showed that 94.7% of patients did not report changes in treatment due to the pandemic and 82.7% stated that there was no decrease in outpatient consultations for the same reason.

However, the effect of the pandemic on the care of individuals with cancer has been addressed in several international studies, which have found significant alterations in cancer treatment due to the Covid-19 pandemic. According to Jazieh et al.¹⁸, in a study carried out in specialized oncology centers located in 54 countries, 88.0% reported difficulties in care during the pandemic. In addition, the loss of a chemotherapy cycle by more than 10.0% of the individuals treated, was reported in 46.3% of the centers.

In agreement with Jazieh et al., in a systematic review, Riera et al., identified 62 studies carried out in 15 countries, mostly in Europe and North America, related to delays and interruptions in the treatment of people with cancer as a result of the pandemic. Delays in treatment were reported by 77.5% of the individuals who responded to the surveys provided by the research; a treatment discontinuation rate of 26.3% was identified in the longitudinal studies, as well as a 30.0% reduction in cancer-related hospitalizations^{18,19}.

The limitations of the results presented in our study are the fact that the research was carried out in a single cancer treatment center, in addition to having been developed in a relatively small city, compared to the places

where the aforementioned studies were carried out. These factors may justify the divergence regarding the impact of the pandemic on cancer patient care.

Although it is clear that there are several important efforts underway to collect data on the effect of the pandemic on cancer patients, few studies have quantified the immediate impact that Covid-19 has had on the deviation from normal cancer treatment activities²⁰.

Considering the way in which the treatment of diseases is faced by men and women, it is known that both sexes can be culturally influenced through socially expected behaviors. As a result, most male patients demonstrate their own recognition of the disease and their emotions, as well as the maintenance of definitions of masculinity, which seek to preserve the concepts of masculinity in a ‘manly’ way. In addition to the male perspective of coping with cancer treatment, there is also the female perspective, which covers various areas of life. This scenario can negatively affect women in several aspects: from thoughts of death, the possibility of mutilation, and especially the family roles played by them as mothers. As a result, women are more sentimentally influenced during their processes of coping with the disease^{21,22}.

The results of the present study corroborate these findings, since 80.4% of the interviewed patients reported negative feelings about coping with cancer during the pandemic, while only 19.6% of male patients presented the same report.

Considering all the aspects discussed, it is important to point out that there were some limitations in our study. First, of the 143 total forms collected, 10 were excluded from the study, as the patients did not complete the items that contained some information, such as type of cancer (1), change in cancer treatment (1), ability to enjoy activities (2), thinking that they are useless (1), schooling (3), and income (1). In addition, 22 of the 133 patients did not report on the ability to feel useful in life, demonstrating the emotional fragility of this profile of individuals.

CONCLUSIONS

Based on the analysis of modern literature, it was possible to observe a scientific gap regarding works that address the relationship between the Covid-19 pandemic and its impact on the mental health of patients undergoing cancer treatment. Therefore, this study ends by emphasizing the importance of this subject, since the Covid-19 pandemic has corroborated in the increase in mental disorders, not only in the public studied, but in the general population.

It is necessary to directly encourage this public, with measures of preventive actions, promotion, early diagnosis, and treatment, and helping patients to cope with the disease. Finally, considering the current relevance

of this theme, as well as the scarcity of related scientific studies, there should be a greater research on this subject, in order to better correlate the discussed aspects with the

studied sample and, from there, offer a more holistic service to this profile of patients.

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