Saúde e Pesquisa
DOI: 10.17765/2176-9206.2023v16n1.e11278

Aspects of coping in adult and elderly patients with cancer

Aspectos do coping em pacientes adultos e idosos com câncer

Flávia Trindade Picolo Fritzen*[1]*, Luiz Gabriel Manini Minto*[2]*, Everton Fritzen Picolo*[3]*,
***Álvaro Micael Duarte Fonseca*[4*]*, José Antonio da Silva Júnior*[5]*, Ellany Gurgel Cosme do Nascimento*[6]**

[1] Graduanda de Medicina, Universidade Estadual do Rio Grande do Norte (UERN), Mossoró (RN), Brasil. [2] Graduando de Medicina, Universidade Estadual do Rio Grande do Norte (UERN), Mossoró (RN), Brasil. [3] Médico, Universidade Estadual do Rio Grande do Norte (UERN), Mossoró (RN), Brasil. [4] Psicólogo, Mestrando pelo Programa de Pós-graduação em Saúde e Sociedade, Universidade Estadual do Rio Grande do Norte (UERN), Mossoró (RN), Brasil. [5] Enfermeiro, Bolsista e Mestrando pelo Programa de Pós-graduação em Saúde e Sociedade, Universidade Estadual do Rio Grande do Norte (UERN), Mossoró (RN), Brasil. [6] Enfermeira. Doutora em Ciências da Saúde pela Universidade Federal do Rio Grande do Norte (UFRN), Professora Adjunta IV do Curso de Graduação em Medicina e Professora Permanente do Programa de Pós-Graduação em Saúde e Sociedade, Universidade Estadual do Rio Grande do Norte (UERN), Mossoró (RN), Brasil.

***Corresponding author**: Alvaro Micael Duarte Fonseca – *E-mail*: alv.micael@gmail.com

RESUMO

O objetivo do estudo foi comparar o enfrentamento emocional, racional, espiritual ou de busca por suporte social dos portadores de câncer nas diferentes fases de estadiamento entre adultos e idosos. Tratou-se de um estudo transversal, exploratório de abordagem quantitativa. Os dados foram coletados utilizando a Escala Modo de Enfrentamento de Problemas, com 182 participantes. O escore dos pacientes mais jovens foi superior, tanto para o foco no problema (p=0,031), quanto para a busca por suporte social (p=0,011). No que se refere à busca por suporte social, a média dos escores na doença localizada foi inferior à média dos escores na ausência de estadiamento (pacientes que há vários anos estavam sem nova progressão da doença ou os que já haviam terminado o tratamento) (p=0,039). Os achados evidenciaram a importância do conhecimento das estratégias de enfrentamento dos portadores de câncer e que a resposta aos estressores depende do contexto individual, coletivo e institucional onde os pacientes estão inseridos.

Palavras-chave: Neoplasias. Adultos. Idosos. Estratégias de enfrentamento.

ABSTRACT

The aim of the study was to compare the emotional, rational, spiritual coping or the search for social support of cancer patients in the different stages between adults and the elderly. This is a cross-sectional, exploratory study with a quantitative approach. Data were collected using the Problem Coping Mode Scale, with 182 participants. The score of younger patients was higher, both for the focus on the problem (p=0.031) and for the search for social support (p=0.011). Regarding the search for social support, the mean scores for localized disease were lower than the mean scores in the absence of staging (patients who had not progressed further in the disease for several years or those who had already completed treatment) (p. =0.039). The findings evidenced the importance of knowing the coping strategies of cancer patients and that the response to stressors depends on the individual, collective and institutional context in which patients are inserted.

Keywords: Neoplasms. Adults. Elderly. Coping.

Received in October28, 2022
Accepted on December 22, 2022

INTRODUCTION

The name “cancer” is given to a set of more than one hundred diseases with similar characteristics, such as the disorderly growth of cells, and the capacity of invading tissues and organs in an aggressive and uncontrollable manner, proliferating to other regions of the body through metastasis and increasing mortality rates[1,2,3]. Furthermore, certain characteristics distinguish the different types of cancer, such as the speed of cell multiplication and their ability to metastasize. The cancer stage is mainly determined by the TNM System of Malignant Tumor Classification, which is recommended by the Union for International Cancer Control (UICC).”T” stands for the characteristics of the main tumor, “N” for those of the lymph nodes, and “M” for the presence or absence of distant metastasis. In general, the states vary from I to IV[4,5].

Cancer is the second greatest cause of death in the world, responsible for nearly 9.6 million deaths in 2018. Around the globe, one in every six deaths are related to the disease[6].In the adult population, according with data from the System of Information on Mortality (SIM), from the Ministry of Health (MS), neoplasms are the third most common death cause among men from 20 to 59 years old, only after external causes of morbidity and mortality and circulatory system diseases[7]. Among women, neoplasms are a relevant cause of death, with breast cancer being the most common cause of death by cancer in most regions in the country - except the North, where cervix cancer is still the first in terms of mortality[8].

The word “cancer” is associated with the stigma of an incurable disease, with suffering and death. Since this is a highly impactful pathology, neoplasm patients feel an imminent risk of death, coupled with many important changes not only in their lives, but on those of their relatives and closed ones, who live with this situation[9,10,11].

The moment of diagnosis ruins the routine of life, leading to psychological stress, anxiety, fear, and uncertainty. These changes are even more dramatic due to the treatment, which causes several changes in one’s body and self-esteem, compromising their autonomy and capacity of carrying out basic day-to-day lives[12]. This leads to feelings and thoughts that, coupled with the personal experience of each patient, their beliefs and rules, results and unique behaviors, adjusted to deal with the situation[9].

Even though the field of oncology has improved substantially, and advanced technology has been developed to treat and increase the possibilities of a cure, the therapy is associated with restrictions in daily life activities, body changes, highly damaging surgeries, among others, which affect the quality of life of the patients[8,12,13,14]. It is well known that, during the process of development of cancer and the therapy to deal with the disease, patients undergo several body changes that, usually, lead to reduced physical strength; losing or gaining weight; bloating; alopecia; nausea and vomit; lack of appetite; and, in the case of men, to difficulties having/ maintaining erections; premature ejaculation, and many other signs and symptoms that, often, distort the body image of individuals and reduce their self-esteem[15].

The possibilities of dealing with the reality that a neoplasia brings in its wake include coping, here understood as a way to confront a situation that causes stress. Coping strategies are as cognitive and behavioral mechanisms and methods that aim mostly to deal with internal or external demands, be them caused by disease or some other event the individual perceives as stressful, in order to establish balance between the demands, which can “overload or exceed their personal resources” and internal resources[16].

This study is justified by the need of understanding how adult and elderly cancer patients, in different stages of the disease, deal with the demands of neoplasms, in order to give them individualized support and address their concerns. To do so, we will use psychometric methods, which attempt to explain the meaning of the answers the participants give to a research[17].

Considering these needs, our objective was to compare the coping strategies of adults and elders in different stages of a neoplasm.

METHODOLOGY

This is a cross-sectional, descriptive, exploratory, and quantitative research. The study was carried out in the city of Mossoró-RN, in the units I and II of the hospitals of the Liga Mossoroense de Estudos e Combate ao Câncer (LMECC - the Mossoró League of Studies to Combat Cancer). We followed STROBE checklists, guaranteeing, as a result, a quality, more assertive presentation of our study[18].

The participants were cancer patients, above 18 years old, who were under treatment in any LMECC unit. Due to the regional relevance of these oncologic hospitals, they attend, together, nearly 280 patients a day. From 2006 to 2016, the LMECC attended more than 6,000 patients, from 94 cities in the states of Rio Grande do Norte, Ceará, and Paraíba. The sample for this study included n=182 participants, chosen by convenience. At first, a sample of 231 was calculated, using data from the mean of 574 patients attended each semester and considering a confidence interval of 95% and the margin of error of 5%. Nonetheless, we could not achieve this number due to the COVID-19 pandemic, since the institution where data was collected restricted the access of researchers as a form of prevention and care, leading to a deficit of 49 patients in this study.

Inclusion criteria considered cancer patients attended in an LMECC unit, older than 18 years, and being at the LMECC at the time of interview. Exclusion criteria eliminated participants with no psychological and/or physical conditions to answer the questionnaire, and those with disabilities that would prevent their communication with the interviewer.

Data was collected using an objective interview. In order to do so, the questionnaire was organized in statements, whose potential answers followed a psychometric Likert scale which represented the theory and technique of mental process measurement.

The first part of the instrument was used to identify the patient. The data collected included number of the medical record, age, sex, educational level, place of origin, and religion). The second part included questions from the Ways of Coping Scale (WCS), with answers in a Likert. Its goal is to understand what form of coping with the health situation the patient chose.

The WCS was based on an interactional model of the stressing factors and determines coping strategies as a set of actions to respond to stressful circumstances. After a factorial analysis, four factors were created, related with coping strategies focused on the problem itself; emotion; religious behavior; and on the search for social support[19]. The WCS was chosen because it is a scale validated to the Brazilian population, and adequate for patients with severe illnesses, in addition to being easy to understand and apply.

After data was collected using this instrument, some information was searched in the records of patients, to verify their diagnosis; type of neoplasia; cancer stage and severity of their clinical state; and then, their responses to the questionnaire were compared.

Then, an exploratory analysis was carried out using the data found to seek for potential omissions in their answers. Data was input and analyzed using the Software Statistical Package for the Social Sciences 21.0 (SPSS), to rigorously follow the requirements of the psychometric scale. Therefore, it is possible to find whether the patient is coping with his focus on the issue at hand, their emotion, their religion, or on the search for social support.

The normality of the distribution of the quantitative data was verified using the Kolmogorov-Smirnov test. Its results were described using mean and standard deviation or median and interquartile range, depending on their normality or asymmetry. Categorical data were presented in the form of absolute and relative frequencies. To compare the means, Student's t test was used, as well as the ANOVA Variance Analysis with Sidak's Post-Hoc. For the association between categorical variables, we used Pearson's chi-squared and Fisher's exact. We used Pearson's Coefficient to check for a correlation between quantitative variables. We analyzed data using the software SPSS 21.0, considering results with $p<0.05$ as significant.

The research project was submitted and approved by the Research Ethics Committee (REC), from the State University of Rio Grande do Norte (UERN), linked to LMECC, under the CAAE 14616619.3.0000.5294. All participants signed the Free and Informed Consent Form (TCLE).

RESULTS

The research included 182 participants, with a mean age of 54.6 ±14.3 years, and an interval from 20 to 85 years. Most participants were below 60 years (61.5%), female (69.2%), catholic (61.5%), and had incomplete elementary school (34.4%). In regard to their age group, most men were older, while women were often younger ($p=0.001$). Illiterate participants and those with no formal studies were mostly older, while those with complete high school tended to be younger ($p<0.001$). Other variables showed no significant statistical difference according with the age group of the evaluated (Table 1).

Most patients were undergoing chemotherapy (38.1%), and their disease was in TNM stages II (26.9%) and III (26.9%). Regarding the stages of located, advanced, or absent diseases, most patients had advanced cases (49.7%), classification which includes TNM stages III and IV. Patients undergoing radiotherapy were older ($p=0.045$). There was no significant statistical association between age group and stage of the disease (Table 1).

We would like to highlight that, to better classify the state of health of patients, the stages of the disease were divided in three categories. The "located" category includes stages I and II of the TNM classification system. The "advanced" category, in turn, includes stages III and IV. The patients whose disease had not progressed in several years and those who had finished their treatment were included in the "absent" category.

Table 1. Sociodemographic, health, and treatment characteristics of the entire sample according with the age group of cancer patients attended at the Mossoró League of Studies to Combat Cancer – RN (n=182)

Sociodemographic characteristics	**Total sample n (%)**	**Age 20-59 Mean±SD n=112**	**Age 60-85 Mean±SD n=70**	**p**
Sex				0,001[b]
Male	56 (30.8)	24 (21.4)	32 (45.7)	
Female	126 (69.2)	88 (78.6)	38 (54.3)	
Educational level				<0.001[b]
Illiterate or with no formal study	26 (16.9)	7 (7.1)	19 (34.5)	
Incomplete elementary school	53 (34.4)	35 (66.0)	18 (32.7)	
Complete elementary school	18 (11.7)	10 (10.1)	8 (14.5)	
Complete high school	43 (27.9)	37 (37.4)	6 (10.9)	
Complete higher education	14 (9.1)	10 (10.1)	4 (7.3)	
Religion				0.959[b]
Catholic	112 (61.5)	68 (60.7)	44 (62.9)	
Evangelical	54 (29.7)	34 (30.4)	20 (28.6	
Other religions/beliefs	16 (8.8)	10 (8.9)	6 (8.6)	
Stage of the disease (6 categories)				0.630[c]
Stage 0	2 (1.2)	1 (1.0)	1 (1.4)	
Stage I	15 (8.8)	7 (6.9)	8 (11.6)	
Stage II	46 (26.9)	27 (26.5)	19 (27.5)	
Stage III	46 (26.9)	28 (27.5)	18 (26.1)	
Stage IV	39 (22.8)	22 (21.6)	17 (24.6)	
Absent	23 (13.5)	17 (16.7)	6 (8.7)	
Stage of the disease (3 categories)				0.300[b]
Located disease	63 (36.8)	35 (34.3)	28 (40.6)	
Advanced disease	85 (49.7)	50 (49.0)	35 (50.7)	
Absent	23 (13.5)	17 (16.7)	6 (8.7)	
Treatment				0.045[b]
Chemotherapy	69 (38.1)	47 (42.0)	22 (31.9)	
Radiotherapy	48 (26.5)	22 (19.6)	26 (37.7)	
Other type of therapy	34 (18.8)	21 (18.8)	13 (18.8)	
No therapy	30 (16.6)	22 (19.6)	8 (11.6)	

P: a: Student's t test; b: Pearson's chi-squared; c: Fisher's exact.

SD: standard deviation.

Note: there was no educational level data for 28 participants, no stage data for 11, and no treatment data for 1.

Central tendency measures for the scores and the total WCS scale are in Table 2.

Table 2. Coping strategy according with the Ways of Coping Scale (WCS) for cancer patients attended in the Mossoró League of Studies to Combat Cancer – RN (n=182)

Coping strateg y	**Mean±SD or Median (I-I)**
Factor 1 - Focused on the problem	4.48±0.39
01 - I consider the positive side of things	4.68±0.81
03 - I focus on something good that can come out of this situation	4.73±0.88
10 - I insist and fight for what I want*	4.66±0.91
14 - I find different solutions for my problem*	4.06±1.56
I try to be stronger and more optimistic	4.84±0.63
16 - I try to avoid my feelings from getting in the way of other things in my life	3.85±1.66
17 - I focus on the good things in life*	4.92±0.43
19 - I accept the sympathy and understanding of someone	4.73±0.77
24 - I know what must be done and I am making more efforts to succeed	4.87±0.61
28 - I am changing and becoming a more experienced person	4.82±0.70
30 - I keep reminding myself that things could be worse	3.0 (1.0-5.0)
32 - I try not to act so fast or follow my first idea*	4.34±1.31
33 - I change something so things can turn out fine	4.29±1.31
36 - I face the situation in stages, one thing at a time	4.17±1.48
39 - I will leave this experience better than I entered it	4.86±0.60
40 - I tell myself how much I have already done**	4.75±0.86
42 - I made a plan of action to solve my problem, and I am following it	4.75±0.89
45 - I try not to close doors. I try to leave myself open to many ways to leave the problem behind	4.34±1.41
Factor 2 - Focused on emotion	2.01±0.59
02 - I blame myself	1.0 (1.0-3.0)
05 - I try to find something or someone to blame for this situation	1.0 (1.0-1.0)
11 - I refuse to believe this is happening	1.0 (1.0-1.0)
12 - I fight against myself; I tell myself what I should do*	4.0 (1.0-5.0)
13 - I turn my bad feelings onto others	1.0 (1.0-1.0)
18 - I would like to change the way I feel	4.0 (1.0-5.0)
20 - I show anger towards those who caused the problem	1.0 (1.0-1.0)
22 - I notice that I brought the problem to myself*	1.0 (1.0-2.0)
23 - I feel bad that I could not avoid the problem*	1.0 (1.0-4.5)
25 - I think people were unfair with me	1.0 (1.0-2.3)
29 - I blame others	1.0 (1.0-1.0)
34 - I try to get away from people in general*	1.0 (1.0-2.5)
35 - I imagine and have feelings about how things could happen	4.02±1.60
37 - I find who is or was more to blame*	1.0 (1.0-1.0)
38 - I think of fantastic or unreal things that make me feel better*	1.0 (1.0-2.5)
Factor 3 - Religions practices/fantasies	4.37±0.53
06 - I hope that a miracle would occur	4.92±0.48
08 - I pray	4.86±0.57
21 - I practice more religion since I got this problem	5.0 (1.0-5.0)
26 - I dream or imagine a better time than the current one*	4.77±0.84

Coping strateg y	**Mean±SD or Median (I-I)**
27 - I try to forget the problem as a whole	3.62±1.71
41 - I would like to be able to change what happened to me	4.12±1.58
44 - I cling to my faith to overcome this situation	4.90±0.52
Factor 4 - Search for social support	3.83±0.82
04 - I try to keep my feelings to myself	3.0 (1.0-5.0)
07 - I ask a relative or friend I respect for advice	3.53±1.74
09 - I talk to people about how I am feeling	4.09±1.37
31 - I talk to someone who can do something to solve my problem	4.40±1.29
43 - I talk to someone to find information about my situation*	4.38±1.33
Total score	11.81±1.12

SD: standard deviation; I-I: interquartile range.

Note: Variables with * had missing data for one participant, while those with ** had missing data for three. Results were adjusted.

The score of younger patients in the WCS was higher both for focusing on the problem (p=0.031) and for searching for social support (p=0.011). Other factors and scores showed no difference between adults and elders (Table 3).

Table 3. Coping strategy according with the Ways of Coping Scale (WCS), according with age group, for cancer patients attended in the Mossoró League of Studies to Combat Cancer – RN (n=182).

Coping strateg y	**Age**		**p**
	20-59 Mean±SD n=112	**60-85 Mean±SD n=70**	
Factor 1 - Focused on the problem	4.53±0.35	4.40±0.43	0.031
Factor 2 - Focused on emotion	1.99±0.59	2.03±0.58	0.689
Factor 3 - Religions practices/fantasies	4.41±0.52	4.30±0.55	0.200
Factor 4 - Search for social support	3.95±0.78	3.63±0.84	0.011
Total score	11.92±1.07	11.64±1.19	0.108

SD: standard deviation.

P: Student's t test.

In the factor 4 of the WCS, the mean scores for located diseases was below the mean scores for absent diseases (p=0.039). There was no significant difference in the scores of the other WCS factors according with the stage of the disease.

Table 4. Coping strategy according with the stage of the disease of cancer patients attended in the Mossoró League of Studies to Combat Cancer - RN (n=171).

Coping strategy	Stage of the disease			p
	Located disease n=63	Advanced disease n=85	Absent n=23	
Factor 1	4.4±0.4	4.5±0.3	4.5±0.5	0.470
Factor 2	1.9±0.5	2.0±0.6	2.1±0.7	0.468
Factor 3	4.3±0.6	4.4±0.5	4.4±0.5	0.159
Factor 4	3.6^{a}±0.8	$3.9^{a,b}$±0.8	4.1^{b}±0.5	0.039
Total score	11.5±1.1	11.9±1.1	12.1±1.1	0.056

Factor 1: Focused on the problem; Factor 2: Focused on emotion; Factor 3: Religious practices/fantasies; Factor 4: Search for social support. Absent: Absence of progression/continuation.

P: ANOVA with Sidak's post-hoc. Different low-case superscript letters indicate a significant statistical difference; equal letters indicate no difference. The data are described according with mean ± standard deviation.

DISCUSSION

Most of our sample was comprised by females, which can be explained by the projections and statistics from the Brazilian Institute of Geography and Statistics (IBGE), which show that the female population in Brazil in 2021 is nearly approximately of 51.12% and, in Rio Grande do Norte, 51.27%[20]. Still regarding this element, a study which evaluated sociodemographic characteristics of patients with noncommunicable diseases, among which cancer, showed that women used health services more often. Also, they felt more limited by pathologies, which led them to search for medical services, exams, and preventive practices more often. Women with no chronic diseases would also search more often for health services, seeking for practices of disease prevention and prenatal care[21]. This also suggests that women in this study were younger than men because they discovered their diagnoses earlier.

On the other hand, the male population tends to neglect symptoms of diseases, taking longer to seek medical care. Men also do not adhere as much to protocols for cancer prevention and early diagnosis. These factors, coupled with a delayed search for health services, lead them to be diagnosed in more advanced stages of the disease, with, consequently, few changes of finding a cure and a rehabilitation. Furthermore, even after diagnosed with a malignant tumor, men are less likely to accept treatment which is often invasive and to adapt to the routine of care the pathology requires of them[22]. These factors can lead to the reality described by the study, in which men were older and less numerous.

In regard to educational level, older patients presented a lower mean. This data is in accordance with research by Getúlio Vargas Foundation (FGV), which showed that, in 2018, nearly 30% of illiterate people are elders, and, in the more educated public, that is, those with 11 years of more or formal education, only 5.8% were older than 65 years. The same research showed that the elderly represented only 10% of those with complete higher education[23].

More than half the participants of the study declared themselves to be catholic, while the second most common religion was evangelicalism. This is in accordance with IBGE data from 2010, which showed that the catholic religion is the most present in the Brazilian population (64.6%), followed by evangelicalism, which was the religion of 22.2% of those interviewed. This data is also coherent with those from the records of the Catholic Church of Brazil. Catholicism was, at one point, during the time of the regal *padroado*, the official region in the country. It influenced the formation of Brazilian society with its religious and moral values, which guided the construction of the current form of our nation. Moreover, to adapt to unfavorable circumstances, the institution was molded through syncretism, in order not to lose believers[24].

Regarding stage of the disease and treatment, it stands out that our study is in line with the findings of Surimã et al.[25], in whose study most patients were in an advanced stage of the disease and undergoing chemotherapy. The fact that older patients were under radiotherapy is in accordance with other findings in scientific literature. An example is the study by Daher et al.[26], which analyzed epidemiological data from the radiotherapy service of the Central Army Hospital, finding that patients presented a mean age of 63 years, which is explained by the fact that radiotherapy can be used as a curative measure, but also as a palliative one, in which case its function is to alleviate symptoms and improve the quality of life of the diseased, a situation often found among the elderly.

From the answers to the WCS instrument, we could extract the most significant sentences regarding each factor. Regarding factor 1, there are sentences that relate to a problem-focused approach. The sentences "I focus on the good things in life (mean, 4.92) and "I know what must be done and I am making more efforts to succeed" (mean 4.87) were the closes to the mean of 5, meaning that many participants gave it a score of 4 (I do this a lot) or 5 (I always do this). These sentences show that they are accepting their current condition well and addressing the issue at hand, which can indicate they are adjusted to the new reality that is the disease. In factor 2 (coping focused on emotion), the sentences "I imagine and have feelings about how things could happen" (mean 4.02) and "I would like to change the way I feel" (mean 4) were the most significant. These answers show that they are experiencing negative emotions due to contact with the stressor, showing feelings such as anger, denial, and evasion[27].

In factor 3, which involves religious practices and fantasies, the most representative sentences were "I hope that a miracle would occur" (mean 4.92) and "I practice religion more since I got this problem" (mean 5). This shows that patients use faith as a bridge towards restoring their health, also showing that their lives are intimately tied with the divine dimension and that they seek, in their faith, the strength they need to deal with the problem[27].

In factor 4 (search for social support), the most relevant sentences were "I talk to someone who can do something to solve my problem" (mean 4.40) and "I talk to someone to find information about my situation" (mean 4.38). These sentences indicate that this type of coping helps patients adapt by managing their emotions, reducing isolation, and broadening their social relations[28].

Comparing the coping strategies used by adults and elders with cancer, we find that individuals from 20 to 59 years old had higher scores for coping focused on the problems and on social support. The focus on the problem takes place when the coping strategy is directed towards an external stressor. This could involve a negotiation to solve a conflict or an active search for the help of others. When this type of coping is targeted at the individual themselves, the stressing element can be given a new meaning. Therefore, problem-focused coping includes actions to deal with the disease that were planned by collecting information about the stressing circumstances[29].

Coping that is focused on social support is based on the conviction that the individual must be appreciated and receive care from others who worry with him, creating a mutual aid network, with obligations. This coping strategy can be used to avoid psychological diseases such as depression and anxiety, as well as other pathologies[30]. A study by Felicio[31] found that individuals with more symptoms of stress searched more often for social support, possibly due to how hard it was for them to deal with conflicts with no external help, or, also, due to the fact that more stressed persons are exposed to more situations of conflict, and thus, strongly require help.

Although this study was unable to establish what was the coping strategy the elderly used the most, due to the lack of statistically significant data, other studies, such as the one by Silva et al.[32] found that many elders were already in an advanced, metastatic stage. This makes it more difficult for them to adapt to the treatment, since, in addition to physical symptoms such as nausea and fatigue, elders also have emotional requirements that cannot be unattended during treatment. This finding is especially related with late diagnoses, which reduces the possibility of curative therapeutic options. It also indicates the presence of palliative approaches. The elder in a palliative state, therefore, shows uncertainty, sadness, and hopelessness in regard with the neoplasia, and maintaining their hope and spirituality become part of the coping process in this age group[4].

Religious coping can be found in this age group, as it has a significant positive potential for the individual, promoting health and more quality of life. Still, religious coping can have a negative influence on the quality of life of the person who use it. This can happen when the individual who attempts to cope through these means interprets the situation they are dealing with as a consequence of a previous act, or even as divine punishment[33].

When we analyze the association between different neoplasms and stages with the ways of coping that are used, we find that patients with located diseases, that is, those in the early stages of the disease, used less social support coping than those whose disease had been absent, that is, with no further progression or follow up after the end of treatment. This finding is in accordance with a study by Leite and Amorim[34], which showed that women diagnosed with stage I breast cancer used problem-focused coping strategies more often than social support. We hypothesize that, since early-stage cancer has a better prognosis of survival, the patient does not require as much social support in this period. Also, patients in the post-treatment period usually were submitted to several therapies and feelings throughout the journey of cancer treatment, leading them to resort to their social support as a way of coping, as a protective mechanism, and, also, as a factor that promotes resilience[35].

Many pieces of literature have shown that cancer patients were more likely to use problem-focused coping strategies when they found that the situation they were in could still be changed. This mainly happens in the earlier stages of cancer. The emotion-focused strategy, in turn, was mostly used when it was found that little could be done to try and improve the patient's health condition[36], since strategies that focus on emotion are mostly a set of efforts that can be directed to deal with somatization and direct feelings, in order to provoke an emotional change on the patient.

These actions aim to reduce bothering bodily sensations caused by stress. Coping strategies based on emotion also seek to placate or change emotional effects of stress. To do so, the individual uses defensive processes to avoid contact and direct conflicts with the stressing agent. Distancing, evasion, and search for emotional support are part of this type of coping[29].

Our hypothesis for the fact that we could not find a specific coping strategy used by patients whose disease was in an advanced stage (III and IV), is the idea that these patients usually have a worse prognosis[37]. A study by Medeiros et al.[38] showed that women with breast cancer that was already advanced at time of diagnosis had a lower chance of survival. Their quality of life and therapy was also more strongly compromised. Considering these factors, patients in more advanced stages tend to be submitted to a larger variety of treatments, which can often be invasive and have significant collateral effects. These include surgeries that can maim their bodies and change their feelings as they are confronted with their new body image. These factors could explain why these patients seek different coping strategies, not focusing on a single one[34].

The difficulties in finding associations between ways of coping and the different populations is manifested in the issue of personality and introspection in coping. The clinical aspect can interfere, but the psychological aspect does have a role in coping. According to Lashbrook et al.[39], a literature review that addressed many studies about different types of cancer found that coping strategies not only vary from person to person, but also through time. In addition, many patients combined certain aspects of emotion-focused coping with reason-focused coping. Some patients, in qualitative studies, had unique strategies to attend to their own demands regarding the disease. This shows the complexity of coping and its impact in the struggle against cancer. It is often necessary for a strategy to be analyzed from a quantitative and qualitative standpoint in order to provide an integral approach, that enables perceiving associations in a health disease process that is so multifactorial, as is the case of cancer.

Finally, it is also important to understand how coping strategies can be important for the population and the promotion of their health. A form of coping that is not adaptive can lead to higher mortality and low quality of life, as shown in a study carried out in Egyptian women diagnosed with breast cancer, where emotion outbursts and denial were the coping strategies most commonly used in those with metastases (Stage IV)[40]. In this regard, raising the awareness of the individual about how they face their problems may lead them to seek multiprofessional help, to change the goals of coping. This would lead to a healthier form of coping, improving quality of life, with less mortality, and greater promotion of health.

The coping strategies found to be positive, as well as their practical applications have also been related with the reduction of pain in cancer patients, as well as with a greater promotion of health and quality of life. According with Godoy (2014)[41], there are advanced stages of cancer in which conventional treatments no longer have any effect. In these cases, the search for social support (from family and friends) and religious coping were paramount for the provision of palliative care to cancer patients. These strategies helped finding an effective type of treatment and improve the levels of positive religious modulation. Once more, it becomes evident how the knowledge about positive and negative coping strategies can help the medical team and the health services to elaborate measures to promote the health of the patients attended, be it in psychological approaches, through the application of integrative practices in health, or spiritual actions within hospitals.

A cross-sectional study can provide information about a population in a specific point in time[42]. As a result, we would like to mention, as strong points of this study, the fact that our methodology was appropriate in regard to the moment of diagnosis and treatment of the sample. Additionally, the data collection instrument provided an integral analysis, considering several variables to translate some of the complexity of coping strategies considering bio-psycho-socio-spiritual subjects. Furthermore, this study uses a quantitative approach in a complex and introspective subject, providing statistically significant results and objective explanations focused on numerical data, while in this context, most works are qualitative.

The limitations of this study include the fact that the data collection instrument is long and was applied to a population that is affected by a highly debilitating pathology. The fact that medical records had to be consulted was also a limitation, since not all physicians take the necessary care when filling these records in, resulting in the lack of information, incorrect use of the forms, or lack of updated information or details in some cases. Additionally, the COVID-19 pandemic paralyzed research throughout the world and limited researcher access to the patients and facilities of the cancer service in the final stages of data collection, leading to a deficit of 49 patients in regard to the predicted sample.

CONCLUSION

We were able to clarify, through this research, some important correlations, such as the fact that younger patients are more likely to devote themselves to problem-focused coping and the search of social support. Problem-focused coping is more used by the younger, since, in this age group, cancer has more options for treatment and the organism responds better, meaning there are still many chances to change the stressful situation. Regarding social support coping, it is frequently used by cancer patients due to how hard it is to interact socially and participate in activities and events, due to the limitations imposed by the disease. To overcome this difficulty, the adult population uses this type of social-support focused coping.

Additionally, patients in the early stages of the disease (I and II) sought less social support coping than patients whose cancers were absent and was not progressing or being followed up after treatment. This can be explained because, usually, earlier cancer stages require less invasive treatment, with better prognosis and higher survival rates. On the other hand, patients who are in the follow up after a cancer treatment have been through all collateral effects that can be associated with therapeutic procedures, while also having lived with the disease for longer. As a result, they can be victim to several conflicting emotions that lead them to search for help in their social support.

Considering these findings, it is evident that a multidisciplinary approach in the fight against cancer is the only way to provide the best possible assistance to cancer patients. Considering the bio-psycho-social nature of individuals, it is clear that the way in which they cope with the changes caused by cancer is a product of personal characteristics and resources, and from the medical therapy provided. Therefore, getting to know coping strategies and sociodemographic characteristics is essential, as these factors influence the ways to cope with cancer. In addition, it is clear that the response to stressors depends on the individual, collective, and institutional contexts where the patient is inserted.

Furthermore, accessing the way of coping used by cancer patients can help physicians, health teams, and the hospital where the treatment is carried out to provide more support and improve the mental health of the cancer patient. The provision of psychological support services, according with the focus of the coping, can facilitate the approach of the oncologic patient, improving their reception in the service, their adherence to the treatment, and their quality of life, while minimizing their global psychic suffering.

REFERENCES

1. Liu SJ, Dang HX, Lim DA, Feng FY, Maher AC. Long noncoding RNAs in cancer metastasis. Nature Reviews Cancer [Internet]. 2021. [cited 2022 dec 18];21:446–460. Available from: https://www.nature.com/articles/s41568-021-00353-1#citeas.

2. Kahouli I, Malhotra M, Westfall S, Alaoui-Jamali MA, Prakash S. Design and validation of an orally administrated active L. fermentum-L. acidophilus probiotic formulation using colorectal cancer Apc Min/+ mouse model. Applied Microbiology and Biotechnology [Internet]. 2017. [cited 2022 dec 18];101(5):1999-2019. Available from: https://pubmed.ncbi.nlm.nih.gov/27837314/.

3. Rosa LPS, Cruz DJ. Efeitos dos imunomoduladores na oncologia: revisão de evidências científicas. Revista Saúde. Com [Internet]. 2016. [cited 2022 dec 18];12(2):561-565. Available from: https://docplayer.com.br/35475322-Efeitos-dos-imunomoduladores-na-oncologia-revisao-de-evidencias-cientificas.html.

4. Ministério da Saúde. Instituto Nacional de Câncer José Alencar Gomes da Silva (BR). Conceito e magnitude. Rio de Janeiro (RJ): Ministério da Saúde; 2021.

5. Carter BW, Lichtencerger JP III, Benviniste MK, De Groot PM, Wu CC, Erasmus JJ, et al. Revisions to the TNM Staging of Lung Cancer: Rationale, Significance, and Clinical Application. RadioGraphics [Internet]. 2018. [cited 2022 dec 18];38:374–391. Available from: https://pubs.rsna.org/doi/full/10.1148/rg.2018170081.

6. Organização Pan-Americana de Saúde. Câncer. Brasília (DF): OPAS; 2020.

7. Hemmi APA, Baptista TWF, Rezendo M. O processo de construção da Política Nacional de Atenção Integral à Saúde do Homem. Physis: Rev. de Saúde Coletiva [Internet]. 2020 [cited 2021 apr 8];30(3):e300321. Available from: https://doi.org/10.1590/S0103-73312020300321.

8. Martins AM, Nascimento ARA. Representações sociais de corpo após o adoecimento por câncer na próstata. Psicologia em Estudo [Internet]. 2017

[cited 2021 apr 10];22(3):371-381. Available from: https://doi.org/10.4025/psicolestud.v22i3.31728.

9. Andrade AMR, Azevedo JMH. O impacto do diagnóstico oncológico: contribuições da Terapia Cognitivo-Comportamental. Revista Cientifica HSI [Internet]. 2018. [cited 2022 dec 18];(2):36-40. Available from:https://revistacientifica.hospitalsantaizabel.org.br/index.php/RCHSI/article/view/109/91.
10. Barsaglini RA, Soares BBNS. Impactos de adoecimento de longa duração: experiência de adultos jovens com Leucemia Mieloide Aguda. Ciência & Saúde Coletiva [Internet]. 2018. [cited 2022 dec 18];23(2):399-408. Available from: https://www.scielo.br/j/csc/a/cPHjD9kqHdvxzjzrTXWM8VB/abstract/?lang=pt.
11. Moura LM, Shimizu HE. Representações sociais de saúde-doença. Physis Revista de Saúde Coletiva, Rio de Janeiro [Internet]. 2017. [cited 2022 dec 18]; 27(1):103-125. Available from: https://www.scielo.br/j/physis/a/cCmqRNCyH7qVspLW5RyVKHD/?lang=pt.
12. Brito ATB, Silva SS, Oliveira REG, Oliveira AB, Reis MS, Mendes ABM. Impactos psicológicos causados em mulheres com diagnóstico de Câncer, acolhidas na instituição Lar das Marias, na cidade de Manaus - AM. Brazilian Journal of Development [Internet]. 2022. [cited 2022 dec 18];8(7): 50710-50730. Available from: https://ojs.brazilianjournals.com.br/ojs/index.php/BRJD/article/view/50174/pdf.
13. Santos MN, Brito RG. Qualidade de vida em pacientes com diagnóstico de câncer no Brasil: uma revisão sistemática. Research, Society and Development [Internet]. 2022. [cited 2022 dec 18];11(8):1-14. Available from: https://rsdjournal.org/index.php/rsd/article/view/30635/26516.
14. Luvisaro BMO, Menezes JR, Rodrigues CF, Soares ALAG, Muzi CD, Guimarães RM. Equivalência conceitual de itens e semântica da versão brasileira do instrumento EORTC QLQ-ELD14 para avaliação de qualidade de vida em idosos com câncer. Revista Brasileira de Geriatria e Gerontologia [Internet]. 2017. [cited 2022 dec 18];20(1):1-14. Available from: redalyc.org/articulo.oa?id=403850707003.
15. Martins AM, Modena CM. Estereótipos de gênero na assistência ao homem com câncer: desafios para a integralidade. Trabalho, Educação e Saúde [Internet]. 2017 [cited 2021 apr 16];14(2):399-420. Available from: https://doi.org/10.1590/1981-7746-sip00110.
16. Akram B, Ahmad MA, Akram A. Coping mechanisms as predictors of suicidal ideation among the medical students of Pakistan. Journal Of The Pakistan Medical Association [Internet]. 2018 [cited 2021 june 2];68(11):1608-1612. Available from: https://jpma.org.pk/PdfDownload/8923.
17. Pasquali L. Psicometria. Revista da Escola de Enfermagem da USP [Internet]. 2009 [cited 2021 june 24];43(Esp):992-99. Available from: https://www.scielo.br/j/reeusp/a/Bbp7hnp8TNmBCWhc7vjbXgm/?lang=pt.
18. Cuschieri S. The STROBE guidelines. Saudi Journal of Anaesthesia [Internet]. 2019. [cited 2022 dec 18];13(1):31-44. Available from: https://pubmed.ncbi.nlm.nih.gov/30930717/.
19. Seidl EMF, Tróccoli BT, Zannon BT. Análise Fatorial de Uma Medida de Estratégias de Enfrentamento. Psicologia: Teoria e Pesquisa [Internet]. 2001 [cited 2022 jan 10];17(3):225-34. Available from: https://doi.org/10.1590/S0102-37722001000300004.
20. Instituto Brasileiro de Geografia e Estatística. Projeção da população do Brasil e das unidades da federação. Brasília: IBGE; 2021. https://www.ibge.gov.br/apps/populacao/projecao/index.html.
21. Malta DC, Bernal RTI, Lima MG, Araújo SSC, Silva MMA, Freitas MIF, et al.

Noncommunicable diseases and the use of health services: analysis of the national health survey in brazil. Revista de Saúde Pública [Internet]. 2017 [cited 2021 july 4];51(1):1-10. Available from: https://doi.org/10.1590/S1518-8787.2017051000090.

22. Araujo JS, Zago MMF. Masculinidades de sobreviventes de câncer de próstata: uma metassíntese qualitativa. Rev Bras Enferm [Internet]. 2019 [cited 2021 july 5];72(1):240-9. Available from: https://www.scielo.br/j/reben/a/SxMspXQLqnYRHWDpRxyMbBh/?format=pdf&lang=pt

23. Neri M. Onde estão os idosos? Conhecimento contra o Covid-19. Rio de Janeiro: Fundação Getúlio Vargas; 2020. https://cps.fgv.br/covidage.

24. Sofiati FM, Moreira AS. Catolicismo brasileiro: um painel da literatura contemporânea. Religião & Sociedade [Internet]. 2018 [cited 2021 july 5];38(2):277-301. Available from: http://dx.doi.org/10.1590/0100-85872018v38n2cap10.

25. Surimã RN, Júnior SAS, Lima KB, Melo JC, Oliveira DN, Almeida RLF. Características epidemiológicas dos pacientes com câncer de pulmão em tratamento quimioterápico no Ceará. Brazilian Journal Of Development [Internet]. 2020 [cited 2021 july 10];6(7):45270-45277. Available from: http://dx.doi.org/10.34117/bjdv6n7-228.

26. Daher R, Tamm M, Vasconcellos H, Lannes AM. Distribuição epidemiológica dos casos de câncer tratados no primeiro ano da retomada de funcionamento do serviço de radioterapia do hospital central do exército (HCE) 2016-2017. Revista Científica do HCE [Internet]. 2017 [cited 2021 july 9];1(1):1-5. Available from: http://ebrevistas.eb.mil.br/HCE/article/view/829/874.

27. Leite FMC, Amorim MHC, Castro DS, Primo CC. Estratégias de enfrentamento e relação com condições sociodemográficas de mulheres com câncer de mama. Acta Paulista de Enfermagem [Internet]. 2012 [cited 2021 july 10];25(2):211-217. Available from: https://doi.org/10.1590/S0103-21002012000200009.

28. Machado RHI, Souza JR. Pacientes mulheres com câncer de mama metastático: impacto do diagnóstico e estratégias de enfrentamento. Brasília Med. [Internet]. 2022 [cited 2021 july 18];59:1-23. Available from: https://doi.org/10.5935/2236-5117.2022v59a246.

29. Folkman S. Stress, coping, and hope. Psycho-Oncology [Internet]. 2010 [cited 2021 jul 19]; 19(9): [901-908]. Available from: https://doi.org/10.1002/pon.1836.

30. Cobb S. Social Support as a Moderator of Life Stress. Psychosomatic Medicine [Internet]. 1976 [cited 2021 aug 15]; 38(5):300-14. Available from: https://journals.lww.com/psychosomaticmedicine/Abstract/1976/09000/Social_Support_as_a_Moderator_of_Life_Stress.3.aspx.

31. Felicio AS. Ansiedade, Estresse e Estratégias de Enfrentamento (Coping) em Adolescentes de Instituições Particulares que irão prestar vestibular [dissertação]. Sergipe: Universidade Federal de Sergipe; 2019. 78 p.

32. Silva NM, Santos MA, Oliveira RAA, Storti LB, Souza IMO, Formighieri PF, Marques S. Idosos em tratamento quimioterápico: relação entre nível de estresse, sintomas depressivos e esperança. Psicologia: Teoria e Pesquisa [Internet]. 2019 [cited 2021 sept 2];35(1):1-7. Available from: https://doi.org/10.1590/0102.3772e35441.

33. Batista NT, Trettene AS, Farinha FT, Nunes CRM, Razera APR. Espiritualidade no paciente oncológico: uma forma de alimentar a esperança e promover um enfrentamento positivo contra a doença. Rev. Bioética [Internet]. 2021 [cited 2021 sept 9];29(4):791-7. Available from: https://doi.org/10.1590/1983-80422021294512.

34. Leite FMC, Amorim MHC. A relação entre as modalidades de enfrentamento e as variáveis clínicas de mulheres com diagnóstico de câncer de mama em uso de tamoxifeno. Rev. Bras. de Pesquisa Em Saúde [Internet]. 2009 [cited 2021 sept 10];11(4):55-61. Available from: https://periodicos.ufes.br/rbps/article/view/356.

35. Juliano MCC, Yunes MAM. Reflexões sobre rede de apoio social como mecanismo de proteção e promoção de resiliência. Ambiente & Sociedade [Internet]. 2014 [cited 2021 sept 10];17(3):135-45. Available from: https://www.scielo.br/j/asoc/a/BxDVLkfcGQLGXVwnHp63HMH/?lang=pt&format=pdf.

36. Yahaya NA, Subramanian P, Bustam AZ, Taib NA. Symptom Experiences and Coping Strategies among Multi-ethnic Solid Tumor Patients Undergoing Chemotherapy in Malaysia. Asian Pacific Journal Of Cancer Prevention [Internet]. 2015 [cited 2021 set 27]; 16(2): [723-730]. Available from: https://pubmed.ncbi.nlm.nih.gov/25684515/.

37. Silva FC, Ferreira LJ, Costa CM, Pernambuco AP. Avaliação da qualidade de vida em mulheres com câncer de mama submetidas í intervenção cirúrgica. Fisioterapia Brasil [Internet]. 2018 [cited 2021 sept 28];19(4):524-531. Available from: https://doi.org/10.33233/fb.v19i4.1316.

38. Medeiros GC, Teodózio CGC, Fabro EAN, Aguiar SS, Lopes AHM, Conte BC, et al. Fatores Associados ao Atraso entre o Diagnóstico e o Início do Tratamento de Câncer de Mama: um Estudo de Coorte com 204.130 Casos no Brasil. Rev. Bras. de Cancerol [Internet]. 2020 [cited 2021 oct 2];66(3):e-09979. Available from: https://doi.org/10.32635/2176-9745.RBC.2020v66n3.979.

39. Lashbrook MP, Valery PC, Knott V, Kirshbaum MN, Bernardes CM. Coping strategies used by breast, prostate, and colorectal cancer survivors. Cancer Nursing [Internet]. 2018 [cited 2021 oct 5];41(5):23-39. Available from: https://doi.org/10.1097/NCC.0000000000000528.

40. Elsheshtawy EA, Abo-Elez WF, Ashour HS, Farouk O, Zaafarany MIE. Coping Strategies in Egyptian Ladies with Breast Cancer. Breast Cancer: Basic and Clinical Research [Internet]. 2014. [cited 2022 dec 18];8:1-5. Available from: https://journals.sagepub.com/doi/full/10.4137/BCBCR.S14755.

41. Godoy MFG, Pereira LMG, Barufi S, Godoy JMP. Pain in breast cancer treatment: aggravating factors and coping mechanisms. International Journal of Breast Cancer [Internet]. 2014. [cited 2022 dec 18]; 2014:1-4. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4198815/.

42. Pereira MG. Epidemiologia: teoria e prática. Rio de Janeiro (RJ): Guanabara Koogan; 1995.