ABILITY FOR SELF-CARE IN CLIENTS UNDERGOING ANTINEOPLASTIC CHEMOTHERAPY TREATMENT

CAPACIDADE PARA O AUTOCUIDADO EM CLIENTES SUBMETIDOS A TRATAMENTO QUIMIOTERÁPICO ANTINEOPLÁSICO

Fabiano Henrique Oliveira SABINO[1]; Leidiane Mota de Oliveira CHAGAS[2]; Nathália Silva GOMES[3]; Elizabeth BARICHELLO[4]
1. Nurse. Professor of the Technical Nursing Course at SENAC- Uberaba; 2. Occupational Therapist. Doctoral student of the Graduate Program in Health Care; 3. PhD in Health Care. Primary Health Care Nurse at Patos de Minas City Hall; 4. Nurse. Associate Professor of the Nursing Course at the Federal University of Triângulo Mineiro.

ABSTRACT: This study aimed to identify the self-care capacity of cancer clients treated at the chemotherapy service of a university hospital in Minas Gerais/Brazil. This was a cross-sectional study conducted with 79 adult and elderly participants diagnosed with primary cancer on antineoplastic chemotherapy treatment. Two instruments were used to achieve the proposed objective, one created by the authors for sociodemographic characterization and another translated, adapted and validated to Brazilian Portuguese to assess the capacity of self-care, namely, the Appraisal of Self Care Agency Scale-Revised, the ASAS-R. Most respondents were female (50.6%), married (58.2%), had between five and nine years of schooling (43.0%), had a family income of one to three minimum wages (86.1%) and were predominantly elderly (54.4%). The mean score obtained for self-care capacity was 57.8. A dichotomy between the patients' usual chores and their diagnoses was observed, but the participants also stated that they dedicate time and were willing to take care of their health. They also stated that they looked for the best ways to take care of themselves and sought updated information whenever necessary, although no statistically significant association was found between self-care scores and sociodemographic variables. This study allowed to show that sociodemographic variables such as education, income, religion and cohabitation should be taken into account by health professionals to favor the client's engagement in self-care actions.

KEYWORDS: Self-management. Neoplasia. Chemotherapy.

INTRODUCTION

Self-care is a regulatory function that enables individuals to perform, on their own, activities aimed at preserving life, health, development and well-being. Moreover, besides the ability to take care of oneself, self care integrates the performance of indispensable actions to achieve, maintain or promote good health. It also enables the person to make a self-analysis, recognize signs and symptoms, determine the aggressiveness of the symptoms, and choose appropriate coping strategies to as to minimize them and enhance health. It is preceded by self-perception at the cognitive, psychosocial, physical, demographic and sociocultural level. Thus, its meaning varies according to values, beliefs and attitudes towards life (GALVÃO; JANEIRO, 2013).

The self-care ability of clients undergoing antineoplastic chemotherapy is an important component to be considered in health actions, due to the adverse events caused by both the cancer and its invasive treatment. Adverse events include pain, fatigue, nausea, lack of appetite, alopecia, among other signs and symptoms, which directly affect the health-related quality of life (GOZZO et al., 2015). As a consequence, functionality in the performance of instrumental activities of daily living, rest, leisure and social participation are also impaired (COSTA et al., 2017).

For this reason, non-invasive health actions should also be prioritized as allies to treatment, addressing human complexity and the concept of integral health. Such approaches promote the maintenance of health-related quality of life and functionality through client engagement during treatment, as well as health education strategies based on the relationship and communication between professional and client (GOZZO et al., 2015).

Thus, considering the high degree of incidence and recurrence of cancer cases, whose most indicated treatment - in about 70 to 80.0% of cases - is chemotherapy (LI et al., 2016), the realization of the present study is justified by the impact of adverse events on client adherence to antineoplastic chemotherapy treatment, and thus contribute to ensuring greater chances of survival

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and lower functional impact throughout the life of these clients.

Given the above, the objective of this study was to identify the self-care capacity of cancer patients treated at the chemotherapy service of a university hospital.

MATERIAL AND METHODS

Cross-sectional study carried out in a cancer treatment unit of a university hospital in Triângulo Mineiro, from March to October 2016.

The inclusion criteria were people over 20 years old, diagnosed with primary cancer, undergoing at least one cycle of antineoplastic chemotherapy, and presenting preserved cognitive capacity. Clients who had undergone surgery within less than 40 days were excluded. There was a total of 79 participants.

Two instruments were used for data collection. The first was built by the authors and was aimed at sociodemographic characterization. The second was the Appraisal of Self Care Agency Scale-Revised (ASAS-R) to assess self-care capacity. This instrument was translated, adapted and validated in Brazil (STACCIARINI; PACE, 2014) and is based on the Self-Care Deficit Theory. This is a Likert-type scale consisting of 15 questions, and the answer options are: strongly disagree (1), disagree (2), I don't know (3), agree (4) and totally agree (5). The total score ranges from 15 to 75 points, and the higher the score, the more operationalized is the self-care capacity.

Data collected by the instruments were individually described and analyzed. To this end, a database was created in the Excel for Windows. Then, the variables were subjected to statistical analysis and testing using the Statistical Package for the Social Sciences version 21.0, and the Student's t-test was used to check the associations.

The study complied with the formal requirements set by national and international regulatory standards for research involving human beings.

RESULTS

Regarding sociodemographic characterization, there was equality between females (50.6%) and males (49.4%). Age ranged from 23 to 86 years, with a mean of 56.9 years and predominance of older people, 43 (54.4%), as shown in Table 1 below.

Table 1. Sociodemographic characterization of clients undergoing chemotherapy treatment.

Variables	**n (%)**
Sex	
Female	40 (50.6)
Male	39 (49.4)
Age group (years)	
20-59	36 (50.6)
> 60	43 (54.4)
Marital status	
Married	46 (58.2)
Single	13 (16.5)
Widowed	11 (13.9)
Divorced	09 (11.4)
Cohabitation	
With the spouse	24 (30.4)
Spouse + children	20 (25.3)
Alone	14 (17.7)
Children	10 (12.7)
Relative	08 (10.1)
Spouse + relative(s)	03 (3.8)

Regarding the years of schooling, there was a predominance of five to nine years of schooling, 34 (43%), followed by up to four years of schooling, 29 (36.7%); more than nine years of schooling, nine (11.4%) and, finally, there were seven (8.9%) participants who declared to be illiterate. The family income of most participants was one to three minimum wages, 68 (86.1%), and four to six wages in the case of 11 (13.9%) people.

Of the 79 participants, most were retired, 46 (58.2%); 12 (15.2%) were self-employed; 11 (13.9%) worked with a formal contract; nine

(11.4%) were unemployed; and one (1.3%) was a civil servant.

Regarding religion, most were Catholic, 48 (60.8%); followed by evangelicals, 17 (21.5%); eight (10.1%) were spiritists; and five (6.3%) reported professed no religion. Regarding religious practice, 56 (70.9%) declared to be actively engaged in their religion.

Table 2 shows the frequency distribution of responses related to the self-care scale.

Table 2. Frequency distribution of responses to the ASAS-R items

Items	**Strongly disagree**	**Disagree**	**I don't know**	**Agree**	**Strongly agree**
	n (%)	**n (%)**	**n (%)**	**n (%)**	**n (%)**
As my life changes, I make the necessary changes to stay healthy.	01 (0.3)	02 (0.5)	01 (0.3)	28 (5.4)	47 (9.5)
If my ability to move is decreased, I try to find ways to solve this difficulty.	01 (0.3)	02 (0.5)	09 (1.4)	16 (0.3)	51 (4.6)
When necessary, I set new priorities in my decisions to stay healthy.	01 (0.3)	03 (0.8)	02 (0.5)	26 (2.9)	47 (9.5)
I frequently feel lack of enthusiasm to take care of myself as I know I should.	34 (3.0)	13 (6.5)	03 (0.8)	24 (0.4)	05 (0.3)
I look for better ways to take care of myself.	-	07 (0.9)	01 (0.3)	15 (9.0)	56 (0.9)
When necessary, I have time to take care of myself.	-	02 (0.5)	-	18 (2.8)	59 (4.7)
If I take a new medicine, I obtain information about the side effects.	08 (0.1)	05 (0.3)	-	14 (7.7)	52 (5.8)
In the past, I have changed old habits to improve my health.	05 (0.3)	05 (0.3)	02 (0.5)	27 (4.2)	40 (0.6)
I routinely make decisions to ensure my safety and that of my family.	01 (0.3)	02 (0.5)	04 (0.1)	24 (0.4)	48 (0.8)
I regularly evaluate if the things I do are working to keep me healthy.	01 (0.3)	05 (0.3)	09 (1.4)	23 (9.1)	41 (1.9)
In my daily life, I rarely take the time to take care of my health.	38 (8.1)	25 (1.6)	-	07 (0.9)	09 (1.4)
I am able to obtain the information I need when my health is threatened.	06 (0.6)	04 (0.1)	-	13 (6.5)	56 (0.9)
I seek help when I am unable to care for myself.	04 (0.4)	04 (0.1)	04 (0.1)	15 (9.0)	52 (5.8)
I rarely have time for myself.	44 (5.7)	23 (9.1)	01 (0.3)	05 (0.3)	06 (0.6)
I am not always able to take care of myself the way I would like	15 (9.0)	20 (5.3)	02 (0.5)	23 (9.1)	19 (4.1)

Based on the above data, the highest frequency of "strongly disagree" responses was related to the statements "I rarely take time to take care of my health" and "I rarely have time for myself", corresponding to the items ASAS-R11 (48.1%) and ASAS-R14 (55.7%), respectively. The item ASAS-R11 had the highest frequency of "disagree" responses, with 31.6%.

The “I don't know” option got higher frequency (11.4%) in two items, ASAS-R2 “I try to find ways to solve when my ability to move is decreased”, and ASAS-R10 “I regularly evaluate what I do to keep me healthy”.

The “I agree” response, corresponding to 35.4% of the sample, was more frequent in the item ASAS-R1 “As my life changes, I make the necessary changes to stay healthy”. There was a frequency of 70.9% for “strongly agree” responses in the items ASAS-R5 “I look for better ways to take care of myself” and ASAS-R12 “I am able to obtain the information I need when my health is threatened”.

As to the total score obtained in the ASAS-R, the mean was 57.8, with standard deviation of 5.2.

Table 3 presents the results of the t-test between ASAS-R self-care scores and the means of sociodemographic variables.

Table 3. Results of the Student's t-test to compare mean ASAS-R self-care scores according to sociodemographic variables.

Variables	**Self-care**		
	Mean	**Standard deviation (SD)**	***P* Value ≤ 0.05**
Sex			
Female	57.33	5.52	0.39
Male	58.36	5.01	
Age group			
Adult	58.61	4.74	0.23
Elderly	57.19	5.65	
Cohabitation			
Alone	57.36	6.55	0.71
Accompanied	57.94	5.01	
Schooling			
Illiterate	59.14	5.18	0.50
Literate	57.71	5.30	
Occupation			
Active	59.29	5.53	0.11
Inactive	57.20	5.07	

DISCUSSION

Research in the field of cancer indicates a higher prevalence of women over 60 years of age, family income of up to three minimum wages, and low education, which is in line with the sociodemographic results of the present study (SILVA et al., 2013; MARINHO; PASSOS; FRANÇA, 2016). In the case of chronic degenerative diseases, a worse prognosis is noted when low education and socioeconomic status are associated (SANTOS et al., 2017).

In addition to the greater difficulty of access to health services, these factors influence the type of diet, an item directly linked to a healthy lifestyle and considered a protective factor against various cancers, especially those of the digestive system (BRASIL, 2015; DEON et al., 2015).

Spirituality is an important supportive tool in coping not only with the diagnosis of cancer but also with its treatment, and throughout the life of the cancer survivors and their families (TAIOLI et al., 2014). Religious belief about coping with illness helps in interpreting this situation as test put by God to reaffirm the meaning of life and personal growth (GOZZO et al., 2015; GOMES; SILVA, 2013), leading to greater resilience and hope for improvement (GOZZO et al., 2015).

The dialogue between patient and health professional is essential not only to help the development of strategies for coping with cancer, but also the early identification of signs and symptoms that may impact clients' personal and social activities (LYONS et al., 2018; BAXTER et al., 2017).

The involvement of the client in the various stages of the disease and treatment is influenced by the family and social support network, his future life projects, the type of treatment he has undergone, and his socioeconomic status. In addition to active participation, self-care practices can also occur in a passive and collaborative manner (MOTH et al., 2016).

The sample of this study showed to have operationalized capacity for self-care. The positive result can be linked to the fact that, based on the responses seen in the self-care instrument, it was evident that the participants were involved in taking care of their own health, even abdicating domestic activities and paid work in order to do this. In fact, negative affects of the treatment on the working capacity of the patient are common, often leading to temporary and/or permanent removal from such activity, depending on the prognosis (BARROZO; RICZ; DE CARLO, 2014).

The above data corroborates another study that pointed out that the main need for care reported by cancer clients was not directly related to return to work, but rather to self-care management strategies before the remaining symptoms of cancer and its treatment (BUCKLAND; MACKENZIE, 2017).

It is worth highlighting that, linked to the high self-care scores, a total of 82.3% of the participants reported living with children, spouses and/or relatives. Studies have shown that the relationship between adherence of cancer patients to antineoplastic chemotherapy with family/social support is considered a protective factor for health-related quality of life. Family members are an important support network. After the first impact caused by learning the diagnosis, the family tends to get closer to the patient and provide him with the necessary comfort in each situation (MATSUDA; OLIVEIRA; SALES, 2016; ARBER et al., 2017; SIMÃO et al., 2018).

A study collected data related to the sociodemographic profile and well-being of 96 caregivers of cancer patients in the state of Paraná. The results showed that the care was primarily provided by female spouses, with a mean age of 54.9 years and low education, retired or removed from work due to the caregiving activity, and having an income of 1 to 2 minimum wages (MATSUDA; OLIVEIRA; SALES, 2016). These data are in agreement with the results of the sociodemographic variables of cancer patients in the present study.

Some studies reinforce the importance of including family members in health education practices so as to facilitate and encourage the inclusion of health care in the client's family and social life contexts. Doing so would increase the chances of survival and diminish the functional impairment in this population (MATSUDA; OLIVEIRA; SALES, 2016; ARBER et al., 2017; SIMÃO et al., 2018).

The method used in this study represents a limitation, because a cross-sectional approach prevents the generalization of data to other populations. The size of the sample was another limitation, as it hindered the accuracy of statistical analyses of the type of correlations between variables. Further research is suggested to clarify the possible influent factors on the self-care capacity of people with cancer, even before the start of antineoplastic chemotherapy treatment.

CONCLUSION

It was observed that variables such as low educational level, low income, religion and cohabitation should be taken into consideration by professionals when it comes to self-care strategies and health guidelines, especially by the time of onset of adverse events resulting from antineoplastic chemotherapy. In this context, it is understood that self-care strategies emerge from a continuous and complex process with biopsychosocial repercussions, and should be worked by a multiprofessional team whose goal must be the enhancement of the client's health-related quality of life and survival to the disease and treatment.

RESUMO: Este estudo objetivou identificar a capacidade de autocuidado em clientes oncológicos que são atendidos no serviço de quimioterapia de um hospital universitário de Minas Gerais/Brasil. Trataou-se de um estudo transversal realizado com 79 participantes, adultos e idosos, diagnosticados com câncer primário em tratamento quimioterápico antineoplásico. Utilizou-se um instrumento construído pelos autores para a caracterização sociodemográfica e outro traduzido, adaptado e validado para o português brasileiro para avaliação da capacidade do autocuidado *Appraisal of Self Care Agency Scale-Revised*, o ASAS-R. A maioria dos entrevistados eram do sexo feminino (50,6%), casados (58,2%), anos de estudo entre cinco e nove anos (43,0%), renda familiar de um a três salários minimos (86,1%) e com predominância de idosos (54,4%). A média para a capacidade do autocuidado foi de 57,8. Observou-se que há uma dicotomia entre os afazeres habituais dos pacientes e seus diagnósticos, porém atenta-se que os participantes declararam dedicar tempo e ter disposição para cuidar da saúde, além disso, eles afirmam que procuram as melhores maneiras para se cuidar e buscam novas informações sempre que necessário, embora os resultados apontem que não houve relevância estatística entre os escores de autocuidado e as variáveis sociodemográficas. Os resultados permitem evidenciar que variáveis sociodemográficas como escolaridade, renda, religião e coabitação devem ser consideradas pelos profissionais de saúde para favorecer o engajamento do cliente nas ações de autocuidado.

PALAVRAS- CHAVES: Autogestão. Neoplasias. Quimioterapia.

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