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Original Article

Social and clinical aspects of oncological patients of a chemotherapy service

Aspectos sociais e clínicos de pacientes oncológicos de um serviço quimioterápico

Aspectos sociales y clínicos de pacientes oncológicos de un servicio de quimioterapia

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Objective: to identify the social and clinical aspects of oncological patients undergoing chemotherapy in a health clinic. **Methods:** it is an epidemiological cross-sectional research. A semi-structured script was used, applied to 156 patients. **Results:** there was a larger proportion of men (51.9%); age range between 51 to 60 years (30.8%); married (30.8%); incomplete and complete grade school (61.6%); retired/pensioners (57.0%); catholic (80.8%); nonsmokers (80.1%); non alcoholic beverages, users (60.9%) and sedentary (75.6%). The larger proportion of cancer was breast cancer (19.9%) and 37.2% in stages 3 and 4. The diagnosis and the treatment occurred in a period equal or inferior to six months. Most of the patients did not show chronical diseases (51.9%) and without the continuous use of medicine (51.9%). **Conclusion:** the knowledge of the social and clinical aspects of the patients under chemotherapy allows the nurse the planning assistance to the specific demands aiming at the biopsychosocial maintenance.
Descriptors: Oncology Nursing; Neoplasms; Medical Oncology; Drug Therapy; Social Conditions.

Objetivo: identificar os aspectos sociais e clínicos de pacientes oncológicos submetidos à quimioterapia ambulatorial. **Método:** pesquisa epidemiológica, transversal. Utilizado roteiro semiestruturado, aplicado a 156 pacientes. **Resultados:** houve maior proporção de homens (51,9%); faixa etária entre 51 e 60 anos (30,8%); casados (30,8%); ensino fundamental incompleto e completo (61,6%); aposentados/pensionistas (57,0%); católicos (80,8%); não fumantes (80,1%); não usuários de bebida alcoólica (60,9%) e sedentário (75,6%). A maior proporção do câncer foi o de mama (19,9%) e 37,2% nos estadiamento 3 e 4. O diagnóstico e o tratamento ocorreram em período igual ou inferior a seis meses. A maioria não referia doença crônica (51,9%) e sem o uso contínuo de medicamentos (51,9%). **Conclusão:** o conhecimento dos aspectos sociais e clínicos dos pacientes em quimioterapia permite ao enfermeiro o planejamento de assistência às demandas específicas visando à manutenção biopsicossocial.
Descritores: Enfermagem Oncológica; Neoplasias; Oncologia; Quimioterapia; Condições Sociais.

Objetivo: identificar los aspectos sociales y clínicas de pacientes oncológicos sometidos a quimioterapia. **Método:** investigación epidemiológica, transversal. Utilizado guión semiestructurado, aplicado a 156 pacientes. **Resultados:** hubo mayor proporción de hombres (51,9%); edad 51-60 años (30,8%); casados (30,8%); enseñanza primaria completa e incompleta (61,6%); jubilados/pensionistas (57,0%); católicos (80,8%); no fumadores (80,1%); usuarios de bebidas alcohólicas (60,9%) y sedentarios (75,6%). Mayor proporción del cáncer fue de mama (19,9%) y 37,2% para estadios 3 y 4. El diagnóstico y tratamiento se produjeron en un período igual o inferior a seis meses. La mayoría no informó enfermedad crónica (51,9%) y sin uso continuo de medicación (51,9%). **Conclusión:** el conocimiento de los aspectos sociales y clínicos de los pacientes en quimioterapia permite al enfermero la planificación de la atención a las demandas específicas destinadas a mantenimiento biopsicosocial.
Descriptores: Enfermería Oncológica; Neoplasias; Oncología Médica; Quimioterapia; Condiciones Sociales.

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Introduction

Cancer is a serious problem of public health in Brazil as well as worldwide, aggravated in the last years due to the population aging in the countries under development[1]. It is a disease differentiated of the other chronical diseases due to the fact that its pathology, from the moment of diagnosis, provokes deformities, pain and mutilations, psychological impact, negative feelings among others[2].

Advancement in the diagnosis and in the treatment of cancer has made the enhancing of possibility of cure, whose real therapeutic objective occurs in 50% of the diagnosed cases. The main forms of treatment are highlighted as follows: the surgery, the radiotherapy, the chemotherapy, the hormone therapy, the biologic therapy, being those treatments isolated or combined[3].

The use of antineoplastic chemotherapy has become one of the most important and promising ways to fight cancer, being employed for healing or palliative purposes. The purification of the drugs and the elaboration of protocols of administration makes the use of more than one compound simultaneously possible, as well as the overcoming of side effects through the application of rescue and protective therapy[4]. However, several factors must be considered in its planning, such as the characteristics of the patients and the disease, such as age, nutritional condition, renal hepatic and lung functions, presence or not of infections, type of the tumor, presence of metathesis, and the conditions of life[5].

Among its advantages are the potentiality of the therapeutic effects of a drug with the use of another; the delay of the tumor resistance; possibilities of a smaller dose and, consequently, the decrease of the toxic and side effects[3].

The technological progress of the diagnosis means and of the therapeutic procedures has enhanced the life of the patient. During the period of their lifetime, morbidity is an impacting aspect, especially during the treatment, preventing the patient to exercise their liberal, social and routine activities normally[6].

With that, information on the high incidence of people attacked by cancer has made the attention to an early diagnosis mandatory as well as adequate treatment, besides the restlessness of the person facing his own life, so that he can obtain a satisfactory quality of life and emotional condition[7].

In the scope of nursing and the chemotherapy treatment, the promotion of a holistic assistance is desired; whose nursing team must assist the biopsychosocial and spiritual needs of the patients. Together with the development of a whole care, it is necessary to develop actions of quality aiming at widening the welfare of these patients during the time of the treatment[8].

Due to the multidimensionality of the inherent factors to cancer and the human vanity, it is necessary for the nursing team to have an individualized planning of the assistance, understanding and valuing their relation to cope with the disease, under the view of the patient, in order to achieve quality practice[6].

Facing these meanings and recognizing the importance to know the different aspects of the people who undergo chemotherapy treatment with the purpose to plan and promote a whole nursing care the present study was developed, with the objective to characterize the social and clinical aspects of the oncological patients submitted to chemotherapy treatment in a county of Minas Gerais.

Method

It is an epidemiological, descriptive, cross-sectional study with quantitative approach, made in a health clinic of oncology, of a general hospital of average size in a southern county of the state of Minas Gerais, Brazil. In this unit, there are approximately 600

people with cancer and, about 225 under intravenous chemotherapy treatment. Through random sampling, adopting error of 5% and confidence interval of 95%, the sampling figures showed a sample of 142 patients[9]. Nevertheless, data were collected from 156 patients; therefore, this is the sampling figure of the research.

The criteria of inclusion were as follows: people ≥ 18 years of age, with cancer diagnosis and under intravenous chemotherapy treatment.

The data collection occurred from January to May, 2013. For this stage a semi-structured questionnaire was used having socio demographic variables related to the treatment and habits of life. This instrument was submitted to a process of refining, through the evaluation of five judges experienced in that area. Afterwards, the instrument was submitted to a pilot test with 10 oncological patients. The subjects who participated in this test were not discharged from the sampling, once no difficulties were evident to answer it, and there were no modifications made in the instrument.

The variables contemplated in the study related to the personal characteristics were: gender; age range; marital status; number of children and monthly family income. In order to recognize the social aspects the following items were included: schooling; occupation; housing; religion and county of residence. In the evaluation of the vices harmful to health, the following issues were included: the use of cigarettes (smoking) and alcohol, adopting as criteria: light (drank alcoholic beverages in the last month, but the consumption was less than once a week); moderate (drank alcoholic beverage weekly, but not every day during the last month); heavy (drank alcoholic beverage daily during the last month), as to lifestyle: practice of physical exercises. Regarding cancer the variables were: cancer site; stage of the disease (based on the criterion used by the Institute of Cancer); time of diagnosis of the current cancer; time of chemotherapy treatment; number of chemotherapy sessions; another type of treatment for cancer besides chemotherapy; presence of cancer in another organ and type of assistance. Other variables such as the presence of a chronical disease and medicine of daily use concluded the characterization of the sample.

The MS-Excell spreadsheet, version 2010, was used for the double typing of the data bank. Afterwards, and for the descriptive statistical analysis, the Statistical Package for Social Science software, version 17.0 was used.

The study was approved by the Committee of Ethics in Research of the Universidade Federal de Alfenas, under legal opinion no. 91.918. A previous authorization was asked to the administration to the institution where the study was made, as well as the signature of the Free Inform Consent Form by the participants of the research, and their anonymity and the right of waiver was guaranteed at any time of the research, according to Resolution no. 466/2012, which deals with researches involving human beings.

Results

Of the 156 patients undergoing chemotherapy treatment, the male sex had the larger proportion (51.9%). The age range was from 18 to 19 years or more, (with an average of 59.61 and standard deviation of 13.375), and the age range between 51 and 60 years had the largest proportion (30.8%). Among them, 64.1% were married, with 1 to 5 children (71.8%) (with an average of 2.83 and standard deviation of 2.512). The family income was obtained in Brazilian currency (Reals) and varied from R$650.00 to R$2,400.00 or more (equivalent to approximately from 240 to 889 U$ Dollars). The average amount of the income was R$1,147.02 and the standard deviation was R$884.055 (equivalent to approximately 425 U$ Dollars).

Table 1 - Characterization of the 156 patients with cancer under chemotherapy treatment according to gender, age range and family income

Variables	n (%)
Gender	
Male	81 (51.9)
Female	75 (48.1)
Age range (in years)	
18 - 30	6 (3.8)
31 - 40	4 (2.6)
41 - 50	19 (12.2)
51 - 60	48 (30.8)
61 - 70	47 (30.1)
> 70	32 (20.5)
Marital Status	
Married	100 (64.1)
Single	25 (16.0)
Widow(er)	21 (13.5)
Divorced	10 (6.4)
Number of children	
None	27 (17.3)
1 - 5	112 (71.8)
> 6	17 (10.9)
Monthly family income (Reals)	
≤ 650.00	28 (17.9)
651.00 – 1,200 .00	91 (58.3)
≥ 1,201.00	37 (23.8)

Table 2 - Distribution of the 156 patients with cancer according to schooling, occupation, housing, religion and county of residence

Variables	n (%)
Schooling	
Illiterate	15 (9.6)
Complete/Incomplete grade school	96 (61.6)
Complete/Incomplete high school	36 (23.0)
Complete University	9 (5.8)
Occupation	
Retired/Pensioner	89 (57.0)
Sick leave	38 (24.4)
Unemployed	15 (9.6)
Others	14 (9.0)
Housing	
Own house	134 (85.9)
Rented house	14 (9.0)
At the work site	6 (3.8)
Rest home	2 (1.3)
Religion	
Catholic	126 (80.8)
Protestant	27 (17.4)
Spiritualist	1 (0.6)
Buddhism	1 (0.6)
No religion	1 (0.6)
County of residence	
Others	116 (74.4)
Alfenas	40 (25.6)

The complete and incomplete grade school represented the largest part of schooling (61.6%). Most part of the subjects was retired or pensioners (57.0%), owners of their house (85.9%) and catholic (80.8%). Regarding the county of residence, they lived in neighboring counties to the county of Alfenas, MG (74.4%), town research headquarters (Table 2).

In Table 3, 32.1% of the subjects presented different types of cancer, informed as 'others', such as cancers of peritoneum, parotid gland, mouth, prostate, larynx, skin, leukemia, ovarian, lymphoma, liver, pancreas, urethra, bladder and brain. The largest proportion of cancer was the breast cancer (19.9%). Concerning the stage of the disease 3 and 4 together represented 37.2% of the total sampling.

Table 3 - Distribution of the 156 patients with cancer, according to the cancer site and stage of the disease

Variables	n (%)
Cancer site	
Others*	50 (32.1)
Breast	31 (19.9)
Intestine	22 (14.1)
Bone	18 (11.5)
Lung	13 (8.3)
Uterus	8 (5.1)
Stomach	7 (4.5)
Esophagus	7 (4.5)
Stage of the disease	
0	1 (0.6)
1	3 (2.0)
2	28 (17.9)
3	39 (25.0)
4	19 (12.2)
Not informed	66 (42.3)

*Other cancers: peritoneum, parotid gland, mouth, prostate, larynx, skin, leukemia, ovarian, lymphoma, liver, pancreas, urethra, bladder and brain

The largest proportion of the patients receive the diagnosis of cancer in a period of six months (53.2%) (average of 8.29 and standard deviation of 5.842), before the interview, whose chemotherapy had started six months before (61.5%), (average of 6.34 and standard deviation of 5.103). And most of them (54.5%), received their diagnosis after six sessions of chemotherapy (average of 6.78 and standard deviation of 5.183) (Table 4).

Table 4 - Time of the diagnosis of the current cancer, of the chemotherapy and number of sessions of chemotherapy among the 156 patients with cancer

Variables	n (%)
Time of diagnosis of the current cancer	
≤ 6	83 (53.2)
7 - 12	49 (31.4)
≥ 13	23 (15.4)
Time of chemotherapy	
≤ 6	96 (61.5)
7 - 12	45 (28.8)
≥ 13	15 (9.7)
Sessions of chemotherapy	
≤ 6	85 (54.5)
7 - 12	56 (35.9)
≥ 13	15 (9.6)

Concerning the practice of physical exercises the largest proportion consisted of sedentary patients (75.6%). As to their lifestyle the majority (80.1%) did not smoke. Among the smokers, the largest part smoked 10 cigarettes a day (average of 9.52 and standard deviation of 9.973). When investigating the consumption of alcoholic beverages, 60.9% reported not to drink. Of those who reported to drink alcoholic beverages 60.7% were light users, that is, they drank alcoholic beverages in the last month, but the consumption was less than once a week. Concerning the variable type of assistance, all the patients (156; 100%), reported to be assisted by the Unified Health System. Besides the chemotherapy, the patients reported not having had any other kind of therapeutics (51.3%). However, 52.6% reported to have had surgical procedure. And, of all the patients studied, 75% reported cancer in another organ and 48.1% with high blood pressure (data not available in the Tables).

Discussion

The findings of the present study confirm the ones presented by the National Institute of Cancer, highlighting the incidence of cancer in patients of the male sex in the State of Minas Gerais[8]. The age range corresponding to the beginning of the third age is a factor which strongly influences this morbidity, once neoplasia is more common in the extreme points of age[10].

Regarding the marital, status is important to highlight that the support of the spouse or family members to the person who has a disease who threatens life such as cancer has a grade importance, once the family is the main source of support for the patient, where cancer must be treated as a problem and not as a family question[11].

Regarding the monthly income, the World Health Organization reports that more than 70% of the deaths caused by cancer are predominant in countries of low and average income, once the resources available for the prevention, diagnosis and treatment are limited and sometimes inexistent, there is an estimate that 17 million people will die due to cancer in 2030[12].

Still regarding the association of cancer and the monthly family income, it is highlighted that cancer is intimately linked to poverty. So, the subjects with the load of cancer in countries of low income have less access to the service of health and also receive the smallest parcel of the expenditures corresponding to the health public services regarding cancer. This unequal distribution of resources is a worldwide chronic problem, but the problem is much bigger in countries with limited resources, reducing the access to the services of health because of ignorance and lack of communication[13].

The level of grade school is similar to another study, which researched women with cervical cancer. Probably this fact is resulting from the fact that both researches were developed in units of the Unified Health System[14].

The spiritual beliefs work as a facilitator in order to cope with difficult situations along their lives. Facing a stigmatizing disease, chances of cure can be seen, so the pursuit for faith, and those people who follow a religion present better condition to cope with difficult situations in life, which is the case of cancer[15].

In a study made with patients with malign neoplasia who have had at least two sessions of chemotherapy, aiming at evaluating the performance of physical activity and the quality of life and observing their possible correlations in oncological patients during the chemotherapy treatment showed that the physical activity seemed to be related to different aspects of the quality of life of oncological patients[16]. So, it is important to provide stimulus to the development of activities during the course of the disease.

There is a narrow association between the smoking of cigarettes and lung cancer, whose evidences show the development of other malign tumors, such as the ovarian and colon. It should be highlighted that smoking is the main cause of cancer in the world[17].

International institutions concluded that there is not a level of consumption of alcohol where cancer is null. So, health professional should promote orientations to the users of the services which focus the non-use of alcoholic beverages and as to those who drink them, they should incentive that such consumption should be reduced[18].

The lack of a national program of tracing breast cancer has taken each one of the cities to the development of strategies, with distinct populations. In the present research, the fact that breast cancer is outstanding among the others, does not have well defined characteristics, however the State of Minas Gerais had a high coverage of mammography to the women above forty years of age. Another fact can be related to the social economic condition if the population, whose rates of breast cancer have a higher proportion in countries under development[19].

In an inquiry made with the objective to evaluate the difference between the stage of the colon-rectal cancer in private clinics and from the Unified Health System showed a higher frequency in patients of the male sex, with tumors in stages 2 and 3, confirming the data of the present research. So, it is necessary to have the implementation of strategies of treatment and interdisciplinary interventions[20].

Concerning the time of treatment of cancer in a study made in São Paulo, which investigated the data of public domain of the Unified Health System, referring to the assistance production for oncological surgery, chemotherapy and radiotherapy, the average time of treatment estimated of one case of cancer in the state of São Paulo using chemotherapy was 7.3 months[21], similar to the one observed in the present study.

It is obvious to emphasize that the choice of effective treatment for cancer must be made based mainly in the stages, aiming not only at the control of the primary tumor, but also possible metastasis, decreasing of symptoms, improvement in the quality and life of the patient[22].

Epidemiological factors reinforce the right on the need of attention to health of men through comparative researches with women. The cares with health and the security of lifestyle would be attributions which are not identified with the conception of men, once they have a bigger resistance in searching for the services of health for associating prevention and self-care to frailty and insecurity, confronting with virility, cultural traces of a supreme vision of manhood causing diseases in their health and early death[23]

Therefore, the importance of the swiftness for the beginning of the chemotherapy treatment, as well as the adoption of preventive measures are aspects which improve the control of the diseases reducing the risk of complications resulting from the disease[10].

So, it is possible to highlight the complexity of living with cancer under chemotherapy treatment. It is relevant to reinforce the need of implementation of the nursing care in services of oncology, making

them holistic and personalized. It is highlighted and indispensable the professional interaction among nurses, patients and family members, thus contributing to reduce the emotional load of those people, promoting personal interactions, identifying the need of nursing care and allowing trust during the chemotherapy treatment[24].

Conclusion

In this study, it is possible to conclude that the oncological patients under chemotherapy treatment belong mostly to the male gender, in the age range between 51 and 60 years, married, with one to five children, low schooling, retired or pensioners, having their own house and catholic. It also congregated non-smokers and non-alcoholic beverage drinkers. The largest proportion belonged to diagnosed breast cancer, early treated (up to six months) and with the beginning of the cycles of chemotherapy, they were not submitted to any other kind of treatment, besides chemotherapy.

Such evaluation, can provide the nurse with the planning of a nursing assistance, making directed strategies and actions feasible which assist the different needs, keeping humanization, integrality and quality in mind, being aware for the particularities of each one.

So, nursing must promote the involvement of strategies and actions in its assistance which aim at the biopsychosocial maintenance of the patient under chemotherapy treatment and offer help to those with the need of assistance, once the biopsychosocial rehabilitation does not and after the discovery of the cancer, nor at the end of treatment. It is also necessary to have the continuity of exchanges of information on the side effect of the treatment and manner of care which can avoid the complications resulting from the disease.

Collaborations

Leite MAC contributed for the conception of the work, analysis, data collection, interpretation of the data and writing of the article. Terra FS contributed for the conception of the work, analysis, interpretation of the data and final approval of the version to be published. Nogueira DA contributed for the conception of the work, analysis, data collection, interpretation of the data and writing of the article.

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