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ADHERENCE OF PATIENTS TO ORAL ANTINEOPLASTIC THERAPY: INFLUENTIAL FACTORS

ADESÃO DE PACIENTES AO TRATAMENTO COM ANTINEOPLÁSICOS ORAIS: FATORES INFLUENTES

ADHESIÓN DE PACIENTES AL TRATAMIENTO CON ANTINEOPLÁSICOS ORALES: FACTORES INFLUYENTES

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Objective: to evaluate the adherence of patients to oral antineoplastic therapy and identify the factors influencing it. Method: quantitative and prospective study with non-experimental design carried out between July 2013 and January 2014 in an oncology hospital in the state of Minas Gerais, Brazil. The instruments used were: questionnaire for socio-demographic and clinical variables, the Therapy Adherence Measurement scale and the Questionnaire on Factors Influencing Medication Adherence. Data were submitted to descriptive statistics and to correlation tests. Results: the mean adherence was 6.02 ± 0.8 points and six (4.9%) patients showed to be non-adherent to treatment. The most frequent factors hindering adherence were: difficulty in acquiring the antineoplastic drug (36.1%) and use of many drugs (14.8%). Conclusion: the rate of adherence to oral antineoplastic therapy is high, but there are still many factors that hinder adherence and the continuity of care.

Keywords: Neoplasms; Antineoplastic therapy; Nursing; Health Care Acceptance by the Patient.

Objetivo: avaliar a adesão de pacientes aos tratamentos antineoplásicos orais e identificar os fatores que a influenciam. Método: estudo quantitativo, prospectivo, de delineamento não experimental, realizado entre julho de 2013 e janeiro de 2014, em um hospital oncológico no interior do estado de Minas Gerais, Brasil. Os instrumentos utilizados foram: questionário sociodemográfico e clínico, escala Medida de Adesão ao Tratamento e Questionário dos Fatores que podem Influenciar a Adesão ao Tratamento. Os dados foram submetidos a estatística descritiva e testes de correlação entre variáveis. Resultados: a média de adesão foi de 6,02 ± 0,8 pontos, e seis (4,9%) pacientes se mostraram não aderentes ao tratamento. Os fatores que mais dificultaram a adesão foram: dificuldade para a aquisição do antineoplásico (36,1%) e utilização de muitos medicamentos (14,8%). Conclusão: a taxa de adesão ao uso de antineoplásicos orais é alta, entretanto ainda há muitos fatores que dificultam a adesão e a continuidade do tratamento.

Descritores: Neoplasias; Antineoplásicos; Enfermagem; Aceitação, pelo Paciente, de Cuidados de Saúde.

Objetivo: evaluar la adhesión de pacientes a los tratamientos antineoplásicos orales e identificar los factores que la influyen. Método: estudio cuantitativo, prospectivo, de delineado no experimental, realizado entre julio de 2013 y enero de 2014 en hospital oncológico del interior de Minas Gerais, Brasil. Se utilizaron: cuestionario sociodemográfico

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y clínico, escala Medida de Adhesión al Tratamiento y Cuestionario de Factores que pueden influir en la Adhesión al tratamiento. Los datos fueron sometidos a estadística descriptiva y tests de correlación entre variables. Resultados: la media de adhesión fue de 6,02 ± 0,8 puntos, y seis (4,9%) pacientes no adhirieron al tratamiento. Los factores que más dificultaron la adhesión fueron: dificultado para adquirir el antineoplásico (36,1%) y utilización de muchos medicamentos (14,8%). Conclusión: la tasa de adhesión al uso de antineoplásicos orales es alta, aunque aún existen numerosos factores que dificultan la adhesión y la continuidad del tratamiento.

Descriptores: Neoplasias; Antineoplásicos; Enfermería; Aceptación de la Atención de Salud.

Introduction

Cancer treatment comprises different modalities: surgery, radiotherapy, chemotherapy, immunotherapy, hormone therapy and targeted therapy. These forms of treatment aim local or systemic control and result in lower recurrence and higher survival of patients. Some of these treatments, such as chemotherapy, hormone and targeted therapy are performed by orally administered drugs[1].

The use of oral antineoplastic drugs has the advantage the empowering patients in their own treatment, as this is a less invasive therapy, unlike intravenous alternatives. Furthermore, oral antineoplastic therapy promotes a better quality of life because it enables the continuity of the patient daily activities and family life and obviate the need for hospitalization to undergo treatment[2]. Other advantages are that the treatment is painless, does not need specialized professional administration, and lead to significantly fewer side effects compared with chemotherapeutic agents administered by other routes[3].

However, in the case of patients with clinical manifestations such as vomiting, dysphagia and neurological deficit, the indication of oral antineoplastic therapy is not possible, representing a disadvantage for those patients who need it[4]. It is also important to note that oral therapy requires longer time of treatment, possibly lasting for years, what may also be regarded as a disadvantage for some patients[5].

In this context, the benefits of oral antineoplastic therapy, especially as regards the comfort and consequent better quality of life of the patient, are considered important factors and capable of contributing to a better compliance to drug therapy. However, it is important to emphasize that, even knowing these benefits, it is unclear whether patients are able to maintain drug adherence in the home environment[6].

Adherence to treatment is defined by the World Health Organization as "[...] to which extent the behavior of a person towards therapeutic drug-taking, following a diet, and/or making changes in lifestyle coincides with the recommendations prescribed by a health professional"[7:3]. The expression "adherence to drug treatment" does not refer only to the condition of taking or not a medicine, but to how the prescription is followed by the patient in relation to dose, time, frequency and duration of treatment[6].

Regarding the treatment of chronic diseases, individuals and caregivers are the ones responsible for managing care. For this, besides compliance with medical guidelines, it is necessary to understand, agree and adhere to the prescribed treatment[8]. There is no standard agreement determining what is the ideal rate of adherence to oral antineoplastic drugs, however the value above 90% is appropriate according to a clinical trial designed to see which would be the complete molecular responses[6].

Several factors influence adherence to treatment, among which stand out the age, cognitive weaknesses, level of education, knowledge that the individual has about the disease, relationship with health professionals and complexity of the treatment. It is necessary that professionals evaluate each patient

individually, considering the social, cultural and beliefs. Involvement with the disease and the treatment in a positive way promotes better adherence to treatment[9].

Also in this context, the nursing team professionals have a fundamental role as educators of patients and their families[8]. Communication is the main way to start a relationship. It helps to make people understand and adhere to treatment. The nursing team uses listening and communication skills with patients in order to meet the psychobiological needs linked to cancer care[10].

Thus, the aim of the present study was to evaluate the adherence of patients to orally administered cancer treatments and identify the factors that influence it.

Method

This is a cross-sectional study with quantitative approach and non-experimental design. Data collection was conducted from July 2013 to January 2014 in a large hospital, a reference in cancer treatment in the Midwest region of Minas Gerais, Brazil.

The sample size was defined by simple random sampling test for finite population and had as parameters the estimated prevalence of oral antineoplastic drugs available in the market equal to 10%[6], the population of 796 patients during the data collection period, significance level of 5% and sample power of 95%, resulting in a minimum size of 118 patients.

The study included 122 individuals selected according to the following inclusion criteria: individuals diagnosed with cancer, aged 18 years or older, undergoing oral antineoplastic treatment for at least three months, wiith the cognitive ability assessed through the Mini-Mental State Examination[11] and with ability of verbalization.

The study was submitted to the Ethics Committee of both institutions involved (Opinion n. 322, 506/2013). Potential participants were surveyed in the list of patients using oral antineoplastic drugs provided by the pharmaceutical industry of the hospital. This survey enabled the daily consultation of the medical schedule to identify which patients were eligible for the study. Thus, during the waiting moments before medical consultation, patients were invited to participate and given the necessary clarifications about the research objectives. Data collection was conducted in private rooms through individual interviews that lasted 30 minutes on average. Besides the interviews, the medical charts of the participants were consulted.

The instruments used for data collection were: a questionnaire for socio-demographic and clinical variables, the Therapy Adherence Measurement (TAM) scale[12] and the Questionnaire on Factors Influencing Medication Adherence (FIMA)[4].

The questionnaire for socio-demographic and clinical variables, prepared by the authors included the following issues: gender, age, ethnicity, marital status, level of education, current occupation, monthly income of the individual, monthly income of the family, medical diagnosis, how the disease was discovered, treatment time, name of the drug used, time using the drug, presence and types of alternative therapies.

The TAM scale proposed by Morisky in 1986[13] is used to evaluate the patient's behavior in relation to the daily use of medicines. The version was translated, adapted and validated for the Portuguese language and was used to assess adherence to drug treatment in a hypertensive and diabetic population and showed good psychometric results[12,14]. The instrument consists of seven items and the answers are given in a Likert-type scale of six points, ranging from: always (1), almost always (2), often (3), sometimes (4), rarely (5) and never (6). In order to obtain the level of adherence, it is necessary to sum the values of each item and divide the result by the number of items (seven). The value found after this procedure is converted into a dichotomous scale, where values from one to four are considered non-adherent to treatment.

Values between five and six classify the patient as adherent to treatment[12].

The FIMA questionnaire developed by Marques and Pierin in 2008[4] verifies the professional work and the people who are undergoing treatment of chronic diseases. This instrument assesses how a cancer patient behaves in the face of the difficulties involved in such illness, especially in relation to treatment with oral antineoplastic drugs. The following are the evaluated aspects that influence adherence: undesirable effects of drugs; forgetting to take the drug; need for help in the treatment; complexity of treatment in relation to time, cycles and quantity; acquisition of drugs; attendance to medical consultations; relationship with the health team; time for intake of drug and storage of the drug. The answers are given in Likert-type scale with five levels: totally agree, partly agree, indecisive, partly disagree or totally disagree with values of 5, 4, 3, 2, 1, respectively. Scores equal to or less than 34 indicate patients with little or no difficulty to adhere to treatment; values above or equal to 35 indicate patients with difficulty to adhere to treatment[4].

Data were processed and analyzed using the Statistical Package for Social Science (SPSS) program, version 20.0. For the descriptive analysis of data, measures of central tendency (mean, median) and variability (standard deviation) were used for continuous variables, and simple frequency for categorical variables. Before checking the relationships between variables, the assumptions of parametric statistics were checked in the sample through the Shapiro-Wilk test. Thus, in order to investigate the possible relationship between adherence to treatment, factors that influence treatment adherence, time of use of the drug, age, level of education and treatment time, these variables were correlated using the Spearman's coefficient. The strength of the correlations were analyzed. Values between 0.10 and 0.30 are classified as a correlation of weak magnitude; values between 0.4 and 0.6, moderate magnitude; and above 0.7, strong magnitude[15]. The significance level of 5% was adopted for all analyses.

Results

As for socio-demographic data, Table 1 shows the characteristics of the 122 study participants according to gender, age, ethnicity, marital status, level of education and occupation. The average age was 56.12 (± 12.1) years, ranging between 23 and 80 years. The average level of education was 7.8 (± 4.4) schooling years. The average individual income was R$ 1,150.84 (± 803.9) and the family income, R$ 1,910.15 (± R$ 1,108.25).

Table 1 – Distribution of study participants according to gender, age, ethnicity, marital status, level of education and occupation. Divinópolis, MG, Brazil, 2014. (N = 122) (to be continued)

Variables	n (%)
Gender	
Female	83 (68.0%)
Male	39 (32.0%)
Age	
Between 20 and 39 years	8 (6.6%)
Between 40 and 59 years	63 (51.6%)
60 years or more	51 (41.8%)
Ethnic group	
White	80 (66.7%)
Black	15 (12.5%)
Others	25 (20.8%)
Marital Status	
Married/Consensual union	87 (71.9%)
Single	16 (13.1%)

Table 1 – Distribution of study participants according to gender, age, ethnicity, marital status, level of education and occupation. Divinópolis, MG, Brazil, 2014. (N = 122) (conclusion)

Variables	n (%)
Divorced	12 (9.8%)
Widow/widower	7 (5.7%)
Schooling	
1 to 4 years	47 (38.5%)
5 to 10 years	24 (19.7%)
11 or more years	51 (41.8%)
Occupation	
Ativos	57 (46.7%)
Retired	32 (26.2%)
Housewife	18 (14.8%)
Illness aid	15 (12.3%)

Source: Created by the authors.

In relation to clinical variables, 45.9% participants were diagnosed with breast cancer, 18.0% with lymphoma, 10.7% with colon and rectal cancer, 6.6% with lymphoblastic leukemia, 5.7% with prostate cancer, 4.1% with bladder cancer, 4.1% with Hodgkin lymphoma, 2.5% with acute myeloid leukemia and 2.5% with brain tumor.

Among participants, 73 (59.8%) claimed to have discovered the disease after the patient expressed physical symptoms, 32 (26.2%) were diagnosed in routine medical examination, and 17 (14.0%) in self-examination. As for the time of treatment, the mean was 26.1 (± 17.8) months. The antineoplastic drugs used in the treatment by oral route were: tamoxifen citrate (26.2%), capecitabine (25.4%), cyclophosphamide (20.5%), lomustine (8.2%), dasatinib (7.4%), anastrozole (2.5%) and others (9.6%).

Among patient, 30.3% reported they had uses complementary therapies. Among the most cited alternative therapies are homemade remedies (54.1%), spiritistic therapies (10.8%), acupuncture (10.8%) and massage (8.1%).

According to MAT scale, 6 (4.9%) patients showed to be non-adherent to oral treatment. The reliability index (Alpha Cronbach) of this instrument in this sample was 0.65, which is represents an acceptable reliability. The average adherence to treatment was 6.02 points (± 0.8), which means good adherence to treatment. Table 2 shows the distribution of participants on measures of adherence to treatment with oral antineoplastic drugs.

Table 2 – Distribution of participants according to the measures of adherence to treatment with oral antineoplastic drugs. Divinópolis, MG, Brazil, 2014. (N = 122) (to be continued)

Therapy Adherence Measurement (TAM) to Oral Antineoplastic Drug	Always		Almost Always		Often		Sometimes		Rarely		Never	
	N	%	N	%	N	%	N	%	N	%	N	%
Have you ever forgotten to take the medication?	1	0.8	-	-	4	3.3	10	8.2	42	34.4	65	53.3

Table 2 – Distribution of participants according to the measures of adherence to treatment with oral antineoplastic drugs. Divinópolis, MG, Brazil, 2014. (N = 122)

(conclusion)

Therapy Adherence Measurement (TAM) to Oral Antineoplastic Drug	Always		Almost Always		Often		Sometimes		Rarely		Never	
	N	%	N	%	N	%	N	%	N	%	N	%
Have you ever been careless with the times to take the medication for the disease?	2	1.6	2	1.6	6	4.9	15	12.3	42	34.4	55	45.1
Have you ever stopped taking the medication for your illness because you felt better?	1	0.8	-	-	-	-	4	3.3	6	4.9	111	91
Have you ever stopped taking medication for your illness, on your own initiative, after having felt worse?	-	-	-	-	-	-	1	0.8	1	0.8	120	98.4
Have you ever taken more than one or more pills for your illness, on your own initiative, after having felt worse?	-	-	-	-	1	0.8	8	6.6	14	11.5	99	81.1
Have you ever discontinued therapy for your illness for finishing the drugs and not having anyone left?	-	-	1	0.8	1	0.8	6	4.9	17	13.9	97	79.5
Have you ever stopped taking medication for your illness for any other reason but medical indication?	-	-	-	-	2	1.6	1	0.8	5	4.1	114	93.4

Source: Created by the authors.

Note: Conventional sign used:
- Numeric data equal to zero not resulting from rounding.

According to Table 3, the factors and attitudes that most hinder adherence to oral treatment (Table 4) were the difficulty to acquire the oral antineoplastic drug due to its high cost (44/36.1%) and the use of many drugs (18/14.8%). In contrast, factors and attitudes that most facilitated adherence were the help from health team professionals on the correct use of medication (107/87.7%) and less need to be absent from work (99/81.1%).

Table 3 – Distribution of participants according to factors that can influence adherence to oral antineoplastic therapy. Divinópolis, MG, Brazil, 2014. (N = 122)

(to be continued)

Factors and Attitudes	Strongly agree		Partly agree		Indecisive		Partly disagree		Strongly disagree	
	N	%	N	%	N	%	N	%	N	%
1 - Oral medication causes undesirable effects.	8	6.6	20	16.4	1	0.8	20	16.4	73	59.8
2 - I forget to take the medication.	4	3.3	14	11.5	3	2.5	13	10.7	88	72.1
3 - I need help to take the medication.	6	4.9	5	4.1	4	3.3	5	4.1	102	83.6
4 - I have too many drugs to take.	18	14.8	19	15.6	4	3.3	6	4.9	75	61-5
5 - I do not know how to take the medication.	2	1.6	-	-	2	1.6	6	4.9	112	91.8
6 - The oral treatment is complicated, difficult.	1	0.8	1	0.8	2	1.6	4	3.3	114	93.4
7 - I have trouble remembering the day to resume taking the oral medication.	5	4.1	4	3.3	1	0.8	5	4.1	107	87.7
8 - I have trouble buying the oral medication.	44	36.1	19	15.3	3	2.5	-	-	56	45.9
9 - I do not know if I should take the medicine before, after or along with the meals.	9	7.4	3	20.5	7	5.7	7	5.7	96	78.7
10 - The medication is hard to swallow.	2	1.6	3	2.5	3	2.5	10	8.2	104	85.2
11 - I forget to attend the consultations.	-	-	4	3.3	3	2.5	7	5.7	108	88.5
12 - Treatment with oral medication promotes less work absenteeism.	99	81.1	7	5.7	8	6.6	4	3.3	4	3.3
13 - The health team has helped in the treatment with oral medication.	107	87.7	7	5.7	1	0.8	3	2.5	4	3.3

Table 3 – Distribution of participants according to factors that can influence adherence to oral antineoplastic therapy. Divinópolis, MG, Brazil, 2014. (N = 122)

(conclusion)

Factors and Attitudes	Strongly agree		Partly agree		Indecisive		Partly disagree		Strongly disagree	
	N	%	N	%	N	%	N	%	N	%
14 - I have specific times to take the medication.	89	73	15	12.3	3	2.5	6	4.9	9	7.4
15 - I check the name and dose before taking it.	92	75.4	14	11.5	7	5.7	3	2.5	6	4.9
16 - I store the medication in a suitable place.	113	92.6	6	4.9	2	1.6	-	-	1	0.8
17 - I take the medicine even when I feel bad.	118	96.7	3	2.5	1	0.8	-	-	-	-

Source: Created by the authors.

Note: Conventional sign used:
- Numeric data equal to zero not resulting from rounding.

Test results of the Shapiro-Wilk test showed that among the variables measured on adherence to treatment, factors that may influence adherence to treatment, time using the drug, level of education and treatment time did not have normal distribution; and the variable age had normal distribution. Regarding the inferential analyses, Spearman's correlation results showed that adherence to treatment was not associated with the other variables. The values found were: time using the drug ($r = -0.073$; $p \leq 0.424$), age ($r = -0.012$; $p \leq 0.899$), level of education ($r = 0.072$, $p \leq 0.431$) and treatment time ($r = -0.087$; $p \leq 0.341$). The variable Factors Influencing Medication Adherence was not associated with the following variables: time using the drug, age, level of education and treatment time. The following correlation results indicate this finding: time using the drug ($r = 0.090$; $p \leq 0.324$), age ($r = 0.126$; $p \leq 0.166$), level of education ($r = -0.151$; $p \leq 0.97$) and treatment time ($r \leq 0.103$; $p = 0.258$).

Discussion

Due to the increased number of new cancer cases in recent years, it is essential that monitoring of morbidity and mortality be incorporated into the health management routine. This way, prevention and control of cancer and their risk factors can be implemented. This monitoring includes supervision and evaluation programs as necessary actions to know the situation and the impact on people's morbidity and mortality profile, as well as to maintain a surveillance system with timely and qualified information to suport epidemiological analysis for decision making. It is known that early detection provides a more favorable condition for treatment and consequent cure[16].

Despite the importance of cancer prevention actions such as screening tests currently available, it was observed in this study that most patients claimed to have discovered the disease after the clinical symptoms appeared. It is thought that although people have knowledge about preventive actions, these actions are often overlooked because cancer is considered a chronic and life-threatening illness, and this causes worries and fears related to the prognosis of the disease, side effects of treatment and the very survival of the patient[17].

Regarding the duration of treatment with oral antineoplastic drugs, the average time found in this study was 26 (± 17.7) months. This data corroborates a Brazilian study[18] where the treatment time ranged from one to 60 months, with an average of 23.06 (± 16.7) months. Although the association between adherence to treatment and the treatment time was not statistically significant, the time of use of the medication to achieve optimal benefits is long, and that can lead to discouragement and abandonment of the therapy. This, therefore, is a factor that can influence the adherence rates and deserves special attention from the nursing staff[4].

Intravenous chemotherapy regimens carried out in hospitals are characterized by higher drug concentrations aimed to promote tumor cell death within a short period of time. In turn, chemotherapy with oral antineoplastic drugs has the same effectiveness, but with other features. These involve the periodic and constant use of the drug for longer times, and can be administered by the patient in the home environment. It is expected that the future perspectives give increasingly preference for the oncological home care model. In addition to generating significant cost savings for the health system, this model has the benefit of lower incidence of side effects and provides better quality life for the patient[3].

Regarding the use of complementary treatments, only 20 (16.4%) patients reported the use of houseplants, massage, acupuncture, yoga or spiritistic therapies. The use of complementary or alternative practice has increased in present days, and many treatment centers invest, for example, in the use of meditation and acupuncture techniques to reduce the side effects of antineoplastic drugs. Among the most commonly used therapy is the intake of natural products including herbs, vitamins, minerals and probiotics. Although studies investigating the effects of such products are available, further research is needed, especially on the possible interactions with antineoplastic drugs[19].

The present study also showed high adherence to oral antineoplastic therapy (6.02 ± 0.8 points). It is known that cancer has been given a social symbology directly linked with death. Thus, due to the fear of dying and the very diversity of therapies available for treatment, many patients tend to follow all treatment recommendations proposed[20]. On the other hand, it is important highlight that adherence to treatment of chronic diseases tends to decrease with time, mainly due to the changes in the life context[5].

As for the factors that influence the non-adherence to oral treatment, the most frequently mentioned were the difficulty of buying oral medications and the need to take several other medications. It is known that the chronic nature of cancer and the prolonged duration of treatment can make the patient feel discouraged throughout therapy. Another aspect is the presence of comorbidities and the need to ingest a high number of drugs. Thus, it has been shown that the adherence may decrease with the increased frequency and number of further drugs[21].

As for the difficulties related to the purchase of medicines in this study, it was found that the high cost can be a factor of non-adherence to treatment. In order to ensure access to medicines, it is important to create strategies to make communication between patients and professionals of the Unified Health System (SUS) more efficient, as required by Brazilian health policies. Therefore, it is important to share welfare information, projects, programs and policies, especially those related to pharmaceutical care[22].

Among the factors that influenced the better adherence to oral therapy are the informative assistance carried out by health professionals regarding the correct use of medicines and less need to be absent from work due to treatment. It is believed that the use of oral antineoplastic drugs is a breakthrough in the treatment of this disease. These drugs act suppressing the activity of specific enzymes in the cell cycle or in growth factor receptors involved in cell proliferation.

Thus, this type of treatment has the advantage of being less toxic, more effective, non-invasive, and free from the need for clinical inpatient care[23].

Still in this context, the study aimed to evaluate the adherence of women with breast cancer using oral hormonal therapy, and low adherence was found. This was related mainly to the unintentional but frequent behavior of forgetfulness[18]. Therefore, it is important to consider that the periodic monitoring by the multidisciplinary health team is essential to better adherence to treatment. This mey serve to educate the patient about the ingestion, dosage and proper storage of medicines, as well as to provide information on mitigating side effects and on main drug interactions, in addition to encouraging the use of strategies to fight non-adherence factors such as forgetfulness[24-25].

Also in this aspect, it is important to state that optimal adherence to oral therapy depends mainly on the patient. However, it is known that, due to the proximity of nursing professionals to these patients, they also play an important role in promoting strategies aimed at increasing adherence to oral therapy. It is assumed that the provision of oral and written information, including the goals of treatment, the importance of following the drug prescription and the most common side effects, ensure continuity, avoid non-compliance and, consequently, improve the effects of drug therapy[8].

Among the limitations of this study, one can cite the difficulty of access patients because they often do not need to go to the hospital for receiving antineoplastic medicine, as family members, by presenting the legal documents, can collect the medication in the absence of patient.

It is expected that the results of the present study help clarifying the complexity of the factors associated with non-adherence to the use of oral antineoplastic drugs, and may support the nursing practice in the search for strategies to increase adherence to oral antineoplastic therapy.

Conclusions

The results of this study showed a high rate of patient adherence to oral antineoplastic therapy. It was possible to identify many of the factors that positively and negatively interfere with medication adherence. These are also reported in the international literature. They are the large number of drugs associated with oral antineoplastic therapy, information provided by health professionals and the exempt from the need for clinical hospitalization to perform the treatment.

It is important noting that patients differed in age, comorbidities and especially in the severity of side effects presented. Therefore, individualized care is necessary. Nurses can provide these patient a more comprehensive assistance, particularly offering information related to the adverse effects and benefits of adherence. It is essential to educate them so that they become determinedly active during the continuation of drug therapy.

Collaborations:

1. conception, design, analysis and interpretation of data: Ana Gabriela Silva, Cissa Azevedo and Luciana Regina Ferreira da Mata;

2. writing the article and relevant critical review of the intellectual content: Ana Gabriela Silva, Cissa Azevedo and Luciana Regina Ferreira da Mata;

3. relevant critical review of the intellectual content and final approval of the version to be published: Christiane Inocêncio Vasques.

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