TELEPHONE CONTACT AS A STRATEGY FOR THE PROMOTION OF COMFORT TO THE PATIENT SUBMITTED TO CHEMOTHERAPY

Elaine Barros Ferreira¹, Flávia Oliveira de Almeida Marques da Cruz², Cristine Alves Costa de Jesus³, Diana Lúcia Moura Pinho⁴, Ivone Kamada⁵, Paula Elaine Diniz dos Reis⁶

ABSTRACT
Objective: to monitor the adverse effects of antineoplastic chemotherapy in patients undergoing outpatient treatment through the telephone follow-up as a strategy to provide comfort, according to the assumptions of Katherine Kolcaba. Method: longitudinal, prospective, quantitative-qualitative study, carried out at the High Complexity in Oncology Center (CACON). Quantitative data were analyzed using descriptive statistics using Microsoft® Excel software. The qualitative data were analyzed following the steps recommended by the Content Analysis, in the Categorical Analysis modality. Results: twenty-one subjects, aged between 30 and 78 years, composed the study sample. A total of 147 telephone contacts (seven per patient) were collected and data were collected on the main signs and symptoms reported by them: nausea, weakness, vomiting, inappetence, alopecia and decreased food intake. Conclusion: the telephone contact, as a form of intervention, consists of an adequate and important comfort strategy during the patient's follow-up by the nursing team. Descriptors: Oncology Nursing; Drug Therapy; Nursing Theory.

RESUMO
Objetivo: monitorar os efeitos adversos da quimioterapia antineoplásica em pacientes submetidos a tratamento ambulatorial por meio do acompanhamento telefônico enquanto estratégia de provimento de conforto, de acordo com os pressupostos de Katherine Kolcaba. Método: estudo longitudinal, prospectivo, com abordagem quanti-qualitativa, realizado no Centro de Alta Complexidade em Oncologia (CACON). Os dados quantitativos foram analisados por meio de estatística descritiva, utilizando o software Microsoft® Excel. Os dados qualitativos foram analisados seguindo as etapas preconizadas pela Análise de Conteúdo, na modalidade Análise Categorial. Resultados: vinte e um indivíduos, com faixa etária entre 30 e 78 anos. Foram realizados 147 contatos telefônicos (sete por paciente) e coletados dados dos principais sinais e sintomas relatados por eles, a saber: náuseas, fraqueza, vômitos, inapetência, alopecia e diminuição da ingestão de alimentos. Conclusão: o contato telefônico, como forma de intervenção, consiste em adequada e importante estratégia de conforto durante o acompanhamento do paciente pela equipe de Enfermagem. Descritores: Enfermagem Oncológica; Quimioterapia; Teoria de Enfermagem.

Original Article
Telephone contact as a strategy for the promotion of comfort to the patient submitted to chemotherapy

Elaine Barros Ferreira (¹), Flávia Oliveira de Almeida Marques da Cruz (²), Cristine Alves Costa de Jesus (³), Diana Lúcia Moura Pinho (⁴), Ivone Kamada (⁵), Paula Elaine Diniz dos Reis (⁶)

ABSTRACT
Objective: to monitor the adverse effects of antineoplastic chemotherapy in patients undergoing outpatient treatment through the telephone follow-up as a strategy to provide comfort, according to the assumptions of Katherine Kolcaba. Method: longitudinal, prospective, quantitative-qualitative study, carried out at the High Complexity in Oncology Center (CACON). Quantitative data were analyzed using descriptive statistics using Microsoft® Excel software. The qualitative data were analyzed following the steps recommended by the Content Analysis, in the Categorical Analysis modality. Results: twenty-one subjects, aged between 30 and 78 years, composed the study sample. A total of 147 telephone contacts (seven per patient) were collected and data were collected on the main signs and symptoms reported by them: nausea, weakness, vomiting, inappetence, alopecia and decreased food intake. Conclusion: the telephone contact, as a form of intervention, consists of an adequate and important comfort strategy during the patient’s follow-up by the nursing team. Descriptors: Oncology Nursing; Drug Therapy; Nursing Theory.

RESUMO
Objetivo: monitorar os efeitos adversos da quimioterapia antineoplásica em pacientes submetidos a tratamento ambulatorial por meio do acompanhamento telefônico enquanto estratégia de provimento de conforto, de acordo com os pressupostos de Katherine Kolcaba. Método: estudo longitudinal, prospectivo, com abordagem quanti-qualitativa, realizado no Centro de Alta Complexidade em Oncologia (CACON). Os dados quantitativos foram analisados por meio de estatística descritiva, utilizando o software Microsoft® Excel. Os dados qualitativos foram analisados seguindo as etapas preconizadas pela Análise de Conteúdo, na modalidade Análise Categorial. Resultados: vinte e um indivíduos, com faixa etária entre 30 e 78 anos. Foram realizados 147 contatos telefônicos (sete por paciente) e coletados dados dos principais sinais e sintomas relatados por eles, a saber: náuseas, fraqueza, vômitos, inapetência, alopecia e diminuição da ingestão de alimentos. Conclusão: o contato telefônico, como forma de intervenção, consiste em adequada e importante estratégia de conforto durante o acompanhamento do paciente pela equipe de Enfermagem. Descritores: Enfermagem Oncológica; Quimioterapia; Teoria de Enfermagem.

© Nurse, Master. Doctorate. Post-Graduate Program in Nursing/PPGEnf/UnB. Brasilia (DF), Brazil. E-mail: elaine.barros@gmail.com; ²Nurse, Master, Resident of the Multiprofessional Residency Program in Cancer Care, University Hospital of Brasilia (HUB), Brasilia (DF), Brazil. E-mail: flaviaoacruz@gmail.com; ³Nurses, Professors, PhDs, Nursing Department, College of Health Sciences, UnB/FS, Post-Graduate Program in Nursing/PPGEnf, Brasilia (DF), Brazil. E-mail: cristine@unb.br; diana@unb.br; Kamada@unb.br; ⁴Nurse oncologist, Professor, PhD in Nursing, Department of Nursing, Faculty of Health Sciences, UnB/FS, Post-Graduate Program in Nursing/PPGEnf, Brasilia (DF), Brazil. E-mail: pauladiniz@unb.br

English/Portuguese
1936

ISSN: 1981-8963
DOI: 10.5205/reuol.11077-98857-1-5M.1105201724
INTRODUCTION

Antineoplastic chemotherapy is a systemic form of cancer treatment that targets both healthy and tumor cells. Thus, treatment may result in the appearance of several adverse reactions, such as nausea, vomiting, mucositis, weakness, diarrhea, inappetence, among others.1 Orient the patient on the possible adverse effects of the drugs and how to control them is part of the assistance provided by the nurse and contributes to patient comfort during treatment.2

According to the Comfort Theory, of Katharine Kolcaba, comfort is an expected result of Nursing care and favors the adoption of adequate health behaviors by the patient, as well as the achievement of better treatment results. Kolcaba defines three types of comfort: (1) relief, when there is a specific need for comfort attended; (2) tranquility, state of calm and contentment, and (3) transcendence, when the patient overcomes his problems and his pain.3

Holistic comfort is the satisfaction of these three types of comfort in four contexts of patient experience, namely: (1) physical context - physiological sensations of the individual; (2) psycho-spiritual context - patient's inner consciousness, self-esteem, identity, sexuality, and meaning of life; (3) environmental context - conditions of the environment in which the patient lives and (4) socio-cultural context - interpersonal, family and social relations, including traditions, rituals and religious beliefs.4

The telephone contact for follow-up of the patient during the antineoplastic treatment provides a greater link between the health team and the patient, increasing the relationship of trust and creating opportunities for the clarification of doubts and desires. Moreover, it is an opportunity to reinforce important guidelines for the control of the adverse effects of antineoplastic chemotherapy, while favoring the monitoring of signs and symptoms and the early identification of complications.5,7

This study aimed to monitor the adverse effects of antineoplastic chemotherapy in patients undergoing outpatient treatment and to describe the telephone follow-up as a strategy to provide comfort, according to the assumptions of Katherine Kolcaba.

METHOD

A longitudinal, prospective study with qualitative-quantitative approach, performed at the High Complexity in Oncology Center (CACON) of the University Hospital of Brasilia (HUB), located in Brasilia, Federal District. This center offers, on an outpatient basis, oncological treatments in the modalities of antineoplastic chemotherapy and radiotherapy.

The sample consisted of adult patients, aged over 18 years, diagnosed with some form of malignant neoplasm, with a medical indication to start treatment at the Chemotherapy Outpatient Clinic and who expressed the acceptance by signing the Free and Informed Consent Form.

Before starting the first cycle of antineoplastic chemotherapy, the patient and his or her companion/caregiver, when present, participated in the Nursing consultation, in which they received verbal and written guidance (guidelines manual) about the proposed treatment and the specific care related to the protocol Chemotherapy that would be initiated by each patient.

Subsequent Nursing consultations were conducted weekly by telephone, and seven (07) telephone contacts were performed, with each participant followed, with a one-week interval between the two. During the telephone conversation, the patient was asked about the occurrence of signs and symptoms related to the adverse effects of antineoplastic chemotherapy, and how comfortable they were regarding the management of these signs and symptoms.

For the collection of data, a checklist format was used, based on the scientific literature,5-9 to identify the occurrence of possible signs and symptoms of anticancer chemotherapy related to gastrointestinal, cardiopulmonary, immune, nervous Central and peripheral, urinary and integument.7 The patients’ reports during the telephone contact were also recorded and directed the nurse’s specific guidelines for each sign and symptom referred to. During telephone consultations, we sought to verify if any type of comfort was achieved by the patient according to each adverse effect presented, namely: relief, tranquility or transcendence, as well as within which context(s) the patient experienced the comfort: physical, psycho-spiritual, environmental and / or socio-cultural, according to the frame established in Katharine Kolcaba’s Theory of Comfort.4

Data collection took place from October 2012 to February 2013. Quantitative data were analyzed using descriptive statistics using Microsoft® Excel software. The qualitative data were analyzed following the steps recommended by the Content Analysis.
in the modalide Categorical Analysis. The categories that emerged were related to the type and comfort context of Katherine Kolcaba’s Comfort Theory, namely: “Relief in the Physical Context”, “Transcendence in the Psycho-Spiritual Context” and “Tranquility in the Physical, Psycho-Spiritual and Sociocultural Contexts”.

The research was carried out after approval of the Research Ethics Committee of the Faculty of Medicine of the University of Brasília (UnB), Consubstantiated Opinion nº 89/2011.

RESULTS

Twenty-one (21) participants, aged between 30 and 78 years, comprised the study sample. The protocols related to the antineoplastic therapy established to the patients in question were: 1) Taxol; 2) AC-T (Adriamycin + Cyclophosphamide + Docetaxel); 3) FLOX (5-fluorouracil + leucovorin + oxaliplatin); 4) Fluorouracil + Leucovorin; 5) Carboplatin + gemcitabine; 6)

Table 1. Occurrence of adverse effects reported by patients during follow-up by weekly telephone contact (CT). Brasilia (DF), Brazil, 2015.

<table>
<thead>
<tr>
<th>Adverse Effects</th>
<th>CT 1 n (%)</th>
<th>CT 2 n (%)</th>
<th>CT 3 n (%)</th>
<th>CT 4 n (%)</th>
<th>CT 5 n (%)</th>
<th>CT 6 n (%)</th>
<th>CT 7 n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nausea</td>
<td>18(85.7)</td>
<td>9(42.9)</td>
<td>8(38.1)</td>
<td>6(28.6)</td>
<td>10(47.6)</td>
<td>5(23.8)</td>
<td>6(28.6)</td>
</tr>
<tr>
<td>Vomiting</td>
<td>3(14.2)</td>
<td>1(4.8)</td>
<td>2(9.5)</td>
<td>0(0.0)</td>
<td>0(0.0)</td>
<td>1(4.76)</td>
<td>0(0.0)</td>
</tr>
<tr>
<td>1x</td>
<td>7(33.3)</td>
<td>2(9.5)</td>
<td>3(14.3)</td>
<td>5(23.8)</td>
<td>1(4.8)</td>
<td>3(14.3)</td>
<td>5(23.8)</td>
</tr>
<tr>
<td>2 - 5x</td>
<td>0(0.0)</td>
<td>0(0.0)</td>
<td>0(0.0)</td>
<td>0(0.0)</td>
<td>2(9.5)</td>
<td>0(0.0)</td>
<td>0(0.0)</td>
</tr>
<tr>
<td>6 - 10x</td>
<td>15(71.4)</td>
<td>6(28.6)</td>
<td>8(38.1)</td>
<td>10(47.6)</td>
<td>12(57.1)</td>
<td>8(38.1)</td>
<td>9(42.9)</td>
</tr>
<tr>
<td>Alopecia</td>
<td>4(19.0)</td>
<td>9(42.9)</td>
<td>6(28.6)</td>
<td>1(4.8)</td>
<td>0(0.0)</td>
<td>0(0.0)</td>
<td>0(0.0)</td>
</tr>
<tr>
<td>Decrease in food intake</td>
<td>2(9.5)</td>
<td>4(19.0)</td>
<td>1(4.8)</td>
<td>6(28.6)</td>
<td>2(9.5)</td>
<td>2(9.5)</td>
<td>1(4.8)</td>
</tr>
</tbody>
</table>

The qualitative data were divided into thematic categories according to the type and comfort context of Katherine Kolcaba’s Comfort Theory that emerged from the patients’ statements: “Relief in the Physical Context”, “Transcendence in the Psycho-Spiritual and Physical Contexts” and “Tranquility In the Physical, Psycho-Spiritual and Sociocultural Contexts”, as described below.

† Relief in the Physical Context

In reporting a decrease in the occurrence and intensity of nausea and vomiting, the patient was relieved as a type of comfort defined by Kolcaba in his physical context of experience, since it refers to the individual’s physiological sensations, as can be observed in the following reports:

With lemon juice [nausea] has improved a lot, I’m doing it every day. (E4)

[…] I speak mainly of acidic juices. I’m sucking a lot of orange and I think this is helping me with nausea. (E8)

◆ Transcendence in the Psycho-Spiritual and Physical Contexts

During the contacts made with the patient, the aspects related to the body image were reinforced, offering support to the patient so that the patient could understand and accept the changes resulting from the treatment. Transcendence, according to Kolcaba, means overcoming problems as well as pain, and the psycho-spiritual context reflects the patient’s inner consciousness, self-esteem, meaning of life for the patient, among others. These concepts could be observed in the following reports:

I was bothered with hair falling and now I’m bald, but I’m just fine. [...] Better life than hair right? (E3)

I’m fine today, thank God. I do not care, but I’m not sad. I try to lead my normal life, in the high spirits. (E17)
Ferreira EB, Cruz FOAM da, Jesus CAC de et al.

It was verified that the frequency of the alopecia report was reduced from the fourth week, showing null in the following ones due to the fact that it is a prolonged event that, after occurring, remains until the end of the treatment, justifying the fall in the reports, since it was not a new episode during the week. Moreover, once transcendence was achieved, the side effect was no longer a concern.

Among the forms that compose holistic comfort, transcendence stands out because it allows the patient to overcome the difficulties encountered. Regarding the nutritional aspects, the patient seeks to adapt as a way of overcoming the new conditions related to their diet, which allows the maintenance of the physiological state, thus benefiting the patient, according to the Theory of Comfort4, mainly in its context Physical, as noted in the following report:

When I arrived at CACON I was weighing 26 kg, but today I’m already 35 kg. The information you told me about how to feed me, what to eat, helped me a lot. (E3)

<> Tranquility in the Physical, Psycho-Spiritual and Sociocultural Contexts

Kolcaba defines tranquility as a kind of comfort that reflects calm and contentment.3 When he is guided about the possible occurrence of weakness, the patient becomes aware of this condition and begins to adopt measures to control this effect, such as rest and rest, as well as passing To calmly respect the new physical limits of your body, which are imposed by the treatment. Therefore, the satisfaction of this comfort is mainly related to the physical and psycho-spiritual contexts, since the patient’s adoption of measures to soften the weakness and respect their restrictions,4 as observed in the following report:

I [the patient] have a lot of weakness, dizziness and numbness in the whole body. But then I lie down, resting and sleep to wake up better, as you told me. (E16)

All participants in the survey reported satisfaction with the telephone follow-up received. Many expressed the magnitude of having direct contact with Nursing professionals, a fact that produced greater safety and control of the treatment by the patients:

It was good too because I had your phone number, I even called you when I was having a bad time, right ?? Give us confidence. (E4)

The first time you called me, I was very sensitive and emotional. My family did not know the right treatment and how to help me. […] when you called me, I realized that I would have much more support than I thought, because I could open myself up with someone who would understand what I was just passing by and could help me too. It was very good to share my suffering, fear and anguish with you, I thank you very much and I think all patients should have this follow up. (E5)

[...] I even told the neighbors that CACON nurses call to hear from the patient, because in another hospital, this does not happen. (E9)

DISCUSSION

It can be seen from the results of this study that most of the adverse effects reported by the patients interfere directly in their comfort. Among them, the most frequent were nausea and vomiting, loss of appetite, decreased food intake, weakness and alopecia.

Approximately 50% of patients undergoing antineoplastic treatment suffer from nausea and vomiting.1 Lack of success in preventing or containing episodes results in worsening of the patient’s physical and mental state that interfere with comfort and can become an obstacle to Therapeutic follow-up. The prevention or relief of symptoms is extremely important for the maintenance of patients’ quality of life for the continuity of their treatment.11 The reduction in the incidence of nausea in the weeks following the follow-up of the patients in this study suggests an improvement of the symptom, corroborating The importance of the guidelines through telephone contact as a tool to provide comfort to the patient.

There are different emetic degrees among the various antineoplastic drugs, and the intensity and frequency of the episodes of vomiting are primarily related to this factor. However, this incidence also involves the individual variations of each patient, such as age, sex, anxiety level, Alcohol consumption, association of radiotherapy in the gastrointestinal tract, and other aspects such as dose, route of administration, speed of application, and the combination of antineoplastic drugs.1 This side effect ends up directly compromising the nutritional state and the activities of Daily life of those who undergo this therapeutic modality.1

The management of gastrointestinal toxicities requires that information be provided to the patient about treatment and guidelines for the management of its adverse effects.1 To this end, the telephone contact characterizes a form of communication that, in turn, allows the professional to reinforce
and Identification of additional guidelines needed by the patient, and are congruent with their verbalizations.

In more advanced cases of cancer, it is identified the loss of appetite or the early satiety, or association of both. Loss of appetite may be a consequence of changes in taste and result not only in weight loss, but also in specific nutrient deficiencies. 12

Nutritional therapy directly and indirectly influences the treatment of patients with antineoplastic chemotherapy. 12 Thus, one should consider the importance of assessing the nutritional status of cancer patients, considering the relationship between nutritional deficit and morbidity and mortality rates, as well as high infection rates, increased hospitalization time and reduced response to the proposed therapy. 13

Weakness, commonly defined by muscle weakness, can be defined as the reduction of the capacity to generate force, which is not relieved by rest, and may be associated with the oxidative stress generated by chemotherapy. 14 In addition, weakness can impact on the related quality of life The health of cancer patients undergoing chemotherapy, 15 being one of the symptoms that may lead patients to seek emergency care. 16

In this study, the telephone follow-up, along with the guidelines provided, was able to provide tranquility to the patient in relation to the weakness, which, according to the Theory of Comfort, is the state of calm and contentment. By being guided about the possible occurrence of weakness, the patient becomes aware of this condition and begins to adopt measures to control this effect, such as rest and rest, as well as serenely respect the new physical limits of his body that is imposed by the treatment. Therefore, the satisfaction of this comfort is mainly related to the physical and psycho-spiritual contexts, 4 since the patient's adoption of measures to soften the weakness and respect their restrictions.

Alopecia is one of the adverse effects of antineoplastic chemotherapy that causes psychological distress to the patient, and hair loss can negatively alter the self-image and self-esteem of these individuals. 17 The absence of verbalization of the nuisance transmits the scope of the aspect of transcendence described in Theory of Comfort as the state of overcoming a given problem, in the psycho-spiritual context of the individual, which is related to identity, self-esteem and sexuality, especially in the case of female patients. 4

Obtaining an accurate view of the adverse reactions experienced by patients submitted to antineoplastic chemotherapy is of great relevance considering that information about the signs and symptoms is related to the need for dose changes, supportive care and education that should be directed to the patient. In addition, adverse reactions determine the cost-benefit of treatment and directly interfere with the quality of life of these patients. 19 All aspects related to the management of the signs and symptoms resulting from antineoplastic therapy interfere directly or indirectly in the patient's comfort, either whether it is promoting relief, transcendence or tranquility.

The strategy used brought benefits to the patients and the professional regarding the effectiveness of their actions and guidelines, however, care should be taken to implement it, since its use should be based on the needs of each patient, in order to attend the subjects involved in an integral way.

**CONCLUSION**

Telephone contact, as a follow-up of patients, may be a good strategy for the identification of signs and symptoms resulting from antineoplastic chemotherapy and promotion of the strengthening of the professional-patient relationship. In this study, the weekly telephone contact made it possible for health education strategies, coping and management of adverse effects to be worked with a view to promoting patient comfort accompanied, either through relief, tranquility or transcendence, as proposed by the Theory Of Comfort of Katharine Kolcaba.

It is suggested that the telephone contact can be an effective strategy to periodically evaluate the patient's knowledge, discuss their concerns and desires and offer means of coping with the individual, besides being important in reinforcing and encouraging behavior and lifestyle changes.

**REFERENCES**


2. Arruda IB, Paula JMSF, Silva RPL. Efeitos adversos da quimioterapia antineoplásica em crianças: o conhecimento dos acompanhantes. Cogitare Enferm [Internet]. 2009 July/Sept...
Available from: http://scielo.isciii.es/pdf/nh/v27n1/08_revisi on_07.pdf


Telephone contact as a strategy for...