



## Elaboration of an educational flyer for patients on oral antineoplastic treatment in a highly complex oncology center

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**ABSTRACT**

The incidence of cancer is growing in Brazil, at a pace that follows the aging of the population due to the increase in life expectancy. In view of the increase in the supply and adherence to treatment through oral chemotherapy, we found the need for nursing to extend to the home, proposing a model of orientation to cancer patients on oral chemotherapy treatment, through a printed brochure. Exploratory research, of the action research type, carried out from the identification of the needs of patients undergoing oral antineoplastic treatment at a High Complexity Oncology Center of a teaching hospital, a reference in oncology. Prepared from a review of the literature published in printed book format and through the databases MEDLINE, LILACS, SIELO, publications of the National Cancer Institute (INCA), in the period between 2015 and 2020. Our main contribution is to promote the understanding and adherence to oral chemotherapy treatment at home, to synthesize the main guidelines given in medical and/or nursing consultations in printed material - folder, so that they can consult it whenever they feel the need.

**Keywords:** Oncology Nursing, Chemotherapy, Oral chemotherapy.

**1 INTRODUCTION**

Aware of the continuous increase in the incidence of cancer in Brazil, through the estimates made and released by the National Cancer Institute (INCA), at a pace that follows the aging of the population due to the increase in life expectancy. "In Brazil, 65,840 new cases of prostate cancer are estimated for each year of the 2020-2022 triennium." Also "for Brazil, it is estimated that there will be 66,280 new cases of breast cancer for each year of the 2020-2022 triennium" (INCA, 2019, p. 34 and 35).

According to INCA (2019): "For Brazil, the estimate for each year of the 2020-2022 triennium points out that there will be 625 thousand new cases of cancer (450 thousand, excluding cases of non-melanoma skin cancer). Non-melanoma skin cancer will be the most common (177,000), followed by breast and prostate cancers (66,000 each), colon and rectum (41,000), lung (30,000) and stomach (21,000)."

According to Bonassa (2005, p.03): "Antineoplastic chemotherapy, that is, the use of chemical agents, alone or in combination, with the aim of treating malignant tumors, has become one of the most important and promising ways to fight cancer. It is a modality of systemic



treatment of the disease, which contrasts with surgery and radiotherapy, which are older and have a local presence." "Antineoplastic drugs can be administered through the following routes: oral, intramuscular, subcutaneous, intravenous, intraarterial, intrathecal, intrapleural, intraperitoneal, intravesical, intracavitary and topical" (BONASSA, 2005, p. 41). Whatever the route of administration, specific care is required.

Among the routes of administration of chemotherapy, we have the oral one. "The oral route is simple, economical, non-invasive, and often less toxic" (BONASSA, 2005, p. 43).

According to Shimada (2016, p. 01): "Although oral chemotherapy has been available since 1953, the increased availability and increasing use has amplified concerns about adherence to prescribed regimens and has become an increasingly important aspect, both from the perspective of professionals and the patient." Thus, in view of the increase in the supply and adherence to treatment through oral chemotherapy, we found the need for nursing not only technical, in the outpatient setting, but also extended care at home, through the care of the patient himself, or of family members and caregivers.

Thus, inserted in a public hospital environment, at the Center for High Complexity in Oncology (CACON), the researchers noticed an increase in the number of patients referred for the continuity of antineoplastic treatment through oral chemotherapy at home, after the conclusion of the chemotherapy protocols. From that moment on, the patient is accompanied exclusively by medical assistance, through pre-scheduled consultations. In them, the new form of treatment and the procedures for access to oral chemotherapy medication are informed. Patients are advised about dosage, side effects, interval between administration cycles, as well as access to the oncological emergency room, if necessary. In addition, new requests for laboratory tests are delivered so that at the next scheduled appointment or even on the day of delivery of the medication, the oncologist on duty evaluates and releases a new dose of the medication.

According to Resolution No. 210/1998 of COFEN (Federal Council of Nursing) It is the function of the nurse to "develop therapeutic nursing protocols in the prevention, treatment and minimization of side effects in clients undergoing antineoplastic chemotherapy treatment". In view of this, this article aims to propose a model of orientation to cancer patients on oral chemotherapy treatment, through a printed brochure, with the guiding question: how to synthesize and simplify so much information about self-care in the administration of oral chemotherapy?

## 2 METHODOLOGY

This is an exploratory research, of the action research type, carried out from the identification of the needs of the adult chemotherapy outpatient clinic of a teaching hospital, a reference in oncology.

Elaborated from a review of the literature published in printed book format and through the databases MEDLINE, LILACS, SIELO, publications of the National Cancer Institute, in the period between 2015 and 2020. The keywords used were "oncology nursing", "chemotherapy" and "oral chemotherapy". Inclusion criteria were: articles published from 2015 to 2020; articles available free of charge and in full; Articles in Portuguese and English. Exclusion criteria were: monographs, abstracts, reports, dissertations and articles that were not related to the educational approach to cancer patients undergoing oral treatment.

The bibliographic survey generated a total of 18 articles, but after reading the titles of the articles, it was noted that some of them were repeated in the different databases and others did not meet the criteria for inclusion in the study, and ten articles were selected. After reading the studies in full, a total of four articles were selected.

Table 1. Description of the articles according to author, year, type of study and journal of publication

Author/ Year	Type of study	Publication journal
Silva, LCA.; Signor, AC.; Pilati, ACL.; Dalfollo, BR.; Oliveira, DR., 2019.	Exploratory research	Brazilian Journal of Cancerology
Silva, SMO; Holanda, MA; Alves, IDF; Amorim, FTB; Felix, SCN., 2020.	Quantitative	GEP NEWS
Mesquita, MER.; Silva, RP., 2016.	Evaluative, qualitative	Brazilian Journal of Cancerology
Oliveira, PP; Santos, VEP; Bezerril, MS; Andrade, FB; Paiva, RM; Silveira, EAA., 2019.	<i>scoping review</i>	Text & Context

Source: Author's data, 2020

Then, after evaluating the information found about the care that cancer patients should have during oral chemotherapy treatment, a printed information was elaborated, in folder format (in the appendix), simplified and illustrated, in order to make the theme easy to understand, providing accessible information for patients, family members and caregivers.

## 3 LITERATURE REVIEW

According to Pinheiros (1999), nurses, in the performance of their role as educators, aim to promote, maintain and restore health, teaching skills and attitudes, as well as modifying

inappropriate or unacceptable behaviors by society. According to Frias (2000), it is essential for the nurse to guide the patient, at the appropriate time, about the dynamics of the treatment, expected side effects, attendance on the days scheduled for the applications, outpatient returns, resulting in a reduction of anxiety, both for the patient and family as well as for the professional team.

"For many years, pharmacological treatment for cancer used exclusively health services, and these were structured based on this treatment model" (LOPES, 2013). However, as already described, this reality has been modified and today we have more and more patients being included in home chemotherapy treatment, through oral antineoplastic drugs. We then found the need to reinvent and organize ourselves as institutions and health professionals, facilitating and offering these patients educational information that facilitates adherence to oral chemotherapy treatment at home, thus contributing to the improvement of the effectiveness of this treatment modality.

Table 2. Dispensing of the Pharmacy of the HUPAA Outpatient Clinic. Antineoplastic Drugs, from 2017 to 2020.

PRODUCT	PCS	Qty 2017	Qty 2018	Qtd 2019	Qtd 2020
ANASTROZOLE 1mg	Comp.	45.780	52.320	57.598	68.876
BICALUTAMIDE 50mg	Comp.	5.123	5.563	8.397	7.630
CAPECITABINA 500mg	Comp	12.933	15.291	19.763	12.929
CYCLOPHOSPHAMIDE 50mg	Comp.	2.081	2.057	1.366	1.420
EXEMESTANO 25mg	Comp.	2.520	2.610	2.850	2.220
IMATINIBE 100mg	Comp	1.080	600	1.920	3.670
IMATINIBE 400mg	Comp	10.560	12.180	13.770	15.900
TAMOXIFENO 20mg	Comp.	54.690	45.030	44.130	45.660
VINOELBINA 30mg	Comp.	230	518	424	284
TOTAL	Comp.	134.997	136.169	150.218	158.589

Pcs. (unit), Comp. (tablet), Qty. (quantity)  
Fonte – HUPAA/UFAL, 2021

By working with the multidisciplinary team in a university hospital environment in Alagoas, at CACON, the researcher noticed an increase in the number of patients referred for the continuity of their antineoplastic treatment through oral chemotherapy at home. To prove the veracity of this fact, the pharmaceutical team of this health institution was asked to survey the quantity of chemotherapy pills dispensed in the period from 2017 to 2020. Thus, as shown in Chart 2, we verified and proved the veracity of the increase in cancer patients' adherence to oral chemotherapy treatment.

"Oral chemotherapy may be more convenient for patients and offer a better quality of life. It offers less interference with professional and social activities, avoids painful injections and prolonged infusion times, and gives more autonomy over treatment with self-administration.



However, this implies shifting some traditional roles and responsibilities from oncologists, nurses, and pharmacists to patients and caregivers" (SHIMADA, 2016, p. 01).

Based on the guidelines of Bonassa (2005, p. 43 and 44) and the Cancer Center, some prerequisites and information are essential for inclusion and adherence to oral chemotherapy treatment. Such as:

- Patient fully conscious, free of vomiting and swallowing difficulties;
- Do not handle the tablet, wear gloves, disposable cups. If unavoidable, wash your hands thoroughly with soap and water before and after handling the medication;
- Do not cut or chew the tablet;
- Take medication with water;
- Medication schedules;
- What to do if you forget to take a dose;
- Do not suspend medication without medical advice;
- Not getting pregnant;
- Do not breastfeed;
- Adequate temperature to maintain the medication;
- Elimination of medication and excreta care;
- Beware of vomiting;
- Keep the patient informed about side effects; - Specific guidelines for the oral antineoplastic drug in use;
- Keep the medical team aware of the difficulties faced during treatment;
- Signs and symptoms that determine immediate contact for the referral hospital.

Thus, in view of the increase in the inclusion of patients in the modality of oral chemotherapy treatment at home, it is essential that patients, family members and caregivers have the necessary information and guidance at home, and that these are easy to understand, and that they remember and complement the guidance received and often forgotten during medical and nursing consultations.

#### **4 CONCLUSION**

By conceiving that nursing guidelines for self-care during oral chemotherapy at home are essential for complete adherence to treatment, making it as less painful as possible, bringing a



sense of responsibility and persistence to the patient, family members and caregivers, transforming oral chemotherapy treatment at home into a shared responsibility between the institution, health professionals, patients, family members and caregivers, It does not exempt the health team from monitoring, ascertaining and providing guidance that facilitates adherence to this treatment modality.

Thus, our main contribution is to favor the understanding and adherence to oral chemotherapy treatment at home, to synthesize the main guidelines given in medical and/or nursing consultations in printed material - folder, so that they can consult it whenever they feel the need, facilitating adherence to treatment, reducing the risks of abandonment due to doubts and insecurity.

In view of the facts exposed, we were able to prepare an explanatory folder, with an educational approach, validated at the High Complexity Oncology Center of a teaching hospital, a reference in oncology in Alagoas.



## REFERENCES

Bonassa, EMA; Santana, RT. Enfermagem em terapêutica oncológica – 3ª ed. – São Paulo. Atheneu, 2005.

Frias, M. A. E. Bases da enfermagem em quimioterapia. São Paulo: LEMAR, 2000.

Instituto Nacional de Câncer José Alencar Gomes da Silva. Estimativa 2020: incidência de câncer no Brasil. INCA. Rio de Janeiro:2019.

Instituto Nacional de Câncer (Brasil). Ações de enfermagem para o controle do câncer: uma proposta de integração ensino-serviço. INCA. 3ª Ed. Rev. Atual. Ampl. – Rio de Janeiro. 2008.

Lopes, A, Chammas, R. Iyeyasu, H. Oncologia para graduação. 3. ed. São Paulo: Lemar. 2013.

Mesquita, MER; Silva, RP. Autocuidado e quimioterapia oral domiciliar: avaliação das práticas educativas dos enfermeiros sob a perspectiva de pacientes. Disponível em: <<https://rbc.inca.gov.br/revista/index.php/revista/article/view/165/93>> Acesso em 16 Jun. 2020.






Oliveira, PP; Santos, VEP; Bezerril, MS; Andrade, FB; Paiva, RM; Silveira, EAA. Segurança do paciente na administração de quimioterapia antineoplásica e imunoterápicos para tratamento oncológico. Scoping review. Disponível em: <<http://dx.doi.org/10.1590/1980-265X-TCE-2018-0312>> Acesso em: 17 Jun. 2020.

Shimada, CS. Adesão ao tratamento com medicamentos orais. Rio de Janeiro: Elsevier, 2016.

Silva, LCA; Signor, AC; Pilati, ACL; Dalfollo, BR; Oliveira, DR. Abordagem educativa ao paciente oncológico: estratégias para orientação acerca do tratamento quimioterápico. Disponível em: <https://rbc.inca.gov.br/revista/index.php/revista/article/view/305/212.pdf> Acesso em: 14 Jun. 2020.

Silva, SMO; Holanda, MA; Alves, IDF; Amorim, FTB; Felix, SCN. Consulta de enfermagem no ambulatório de quimioterapia do centro de assistência de alta complexidade em oncologia – HUPAA. Disponível em: <<https://www.seer.ufal.br/index.php/gepnews/article/view/4687>> Acesso em: 15 Jun. 2020.

APPENDIX – Oral Chemotherapy: guidelines for home treatment.

 <p><b>Importante.</b> Informe a equipe de saúde sobre qualquer problema que você apresentar durante a quimioterapia, como problemas no estômago, vômitos e náuseas. Pode ser necessário fazer algumas alterações em seu esquema de tratamento.</p>  <p><b>ATENÇÃO!!!</b></p> <ul style="list-style-type: none"><li>- Lave bem as mãos, com água e sabão, antes e após o manuseio do medicamento e evite que outras pessoas toquem nele.</li><li>- A medicação é eliminada pela urina e pelas fezes. Por isso, é importante alguns cuidados especiais: sempre que utilizar o vaso sanitário, lembre-se de dar a descarga por duas vezes, com a tampa fechada. Utilize água sanitária para finalizar a limpeza.</li><li>- O medicamento também pode ser eliminado pelo vômito. É importante que a pessoa que for limpar use luvas. A limpeza deve ser feita de fora para dentro, utilizando um papel absorvente, que deve ser jogado no lixo em dois sacos plásticos bem fechados. Utilize água sanitária para finalizar a limpeza.</li><li>- Caso o quimioterápico oral seja suspenso, você deverá devolvê-los à farmácia, pois os quimioterápicos não podem ser jogados em lixo comum.</li></ul>	<p>Hospital Universitário Professor Alberto Antunes HUPAA</p>  <p><b>ATENÇÃO – CUIDADO IMEDIATO!!!</b></p> <p>Caso apresente algum desses sintomas abaixo, você deverá <b>procurar imediatamente o hospital</b>:</p> <ul style="list-style-type: none"><li>➤ febre (temperatura igual ou maior que 37,8°C);</li><li>➤ falta de ar ou dificuldade respiratória;</li><li>➤ sensação de dor ou ardência ao urinar;</li><li>➤ diarreia;</li><li>➤ constipação (prisão de ventre) por mais de dois dias;</li><li>➤ dor de localização ou intensidade anormal;</li></ul> <p>manchas e placas vermelhas muito extensas;</p> <ul style="list-style-type: none"><li>➤ sangramentos que demoram a estancar.</li></ul> <p><b>Centro de Assistência de Alta Complexidade em Oncologia (CACON)</b></p> <p>Recepção: 3202-3792 Enfermagem: 3202-3778 Farmácia: 3202-3826</p> <p>Fontes consultadas e das imagens: <a href="https://www.inca.gov.br/">https://www.inca.gov.br/</a> <a href="http://www.santacasabhs.org.br/">http://www.santacasabhs.org.br/</a> <a href="http://www.cccancer.org/">http://www.cccancer.org/</a> <a href="http://www.google.com">http://www.google.com</a></p>	 <p><b>QUIMIOTERAPIA ORAL</b></p>  <p><b>Orientações para o tratamento em domicílio.</b></p> <p><b>“Autocuidado</b> é o conjunto de ações que cada indivíduo exerce para cuidar de si mesmo e promover melhor qualidade de vida para si mesmo. <b>É hora de cuidar de você !”</b></p> <p>Elaborado por: Enfª Sâmela Oliveira Especialista em Enfermagem Oncológica Mestranda em Oncohematologia.</p>
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