

# Construction and validation of an instrument for nursing consultation in outpatient chemotherapy

Construção e validação de instrumento para consulta de enfermagem em quimioterapia ambulatorial Construcción y validación de instrumento para consulta de enfermería en quimioterapia ambulatoria

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#### **ABSTRACT**

**Objective:** Construct and validate instrument content for nursing consultation in an adult chemotherapy outpatient clinic. **Method:** Methodological study composed of two stages: elaboration of the instrument and validation of content. A literary review of the dimensions of customer care was carried out in the light of Theory of Basic Human Needs Theory, culminating in two instruments: one for admission consultation and other for follow-up. The content was validated by the evaluation of listed experts based on the adapted Fehring's Validation Model. **Results:** In the first round, two items of the admission instrument and three items of follow-up required reformulation. In the second round, there was an increase in agreement rate: 11% in the instrument of admission and 10% in follow-up. **Final Consideration:** The instrument represents a guideline for the Nursing Process and future research, but it cannot be seen as a substitute for nurses' knowledge and clinical reasoning.

**Descriptors**: Oncology Nursing; Nursing Process; Office Nursing; Validation Studies; Nursing Care.

#### **RESUMO**

**Objetivo:** Construir e validar conteúdo de instrumento para consulta de enfermagem em ambulatório de quimioterapia de adultos. **Método:** Estudo metodológico composto por duas etapas: Elaboração do instrumento e validação de conteúdo. Foi realizada revisão literária das dimensões do cuidado da clientela, à luz da Teoria das Necessidades Humanas Básicas, culminando em dois instrumentos: Um para consulta de admissão e outro de seguimento. O conteúdo foi validado pela avaliação de *experts* listados com base no Modelo de Validação de Fehring adaptado. **Resultados:** Na primeira rodada, dois itens do instrumento de admissão e três de seguimento necessitaram de reformulação. Na segunda rodada, houve aumento da taxa de concordância: 11% no instrumento de admissão e 10% de seguimento. **Considerações Finais:** O instrumento representa um norteador do Processo de Enfermagem e de futuras pesquisas, mas não pode ser visto como um substituto do conhecimento e do raciocínio clínico do enfermeiro.

**Descritores:** Enfermagem Oncológica; Processo de Enfermagem; Enfermagem no Consultório; Estudos de Validação; Cuidados de Enfermagem.

## **RESUMEN**

**Objetivo:** Construir y validar contenido de instrumento para consulta de enfermería en ambulatorio de quimioterapia de adultos. **Método:** Estudio metodológico compuesto por dos etapas: elaboración del instrumento y validación de contenido. Se realizó una revisión literaria de las dimensiones del cuidado de la clientela, a la luz de la Teoría de las Necesidades Humanas Básicas, culminando en dos instrumentos: uno para consulta de admisión y otro de seguimiento. El contenido fue validado por la evaluación de expertos listados con base en el Modelo de Validación de Fehring adaptado. **Resultados:** En la primera ronda, dos ítems del instrumento de admisión y tres de seguimiento necesitaban reformulación. En la segunda ronda, hubo aumento de la tasa de concordancia: 11% en el instrumento de admisión y 10% de seguimiento. **Consideraciones Finales:** El instrumento representa un orientador del proceso de enfermería y de futuras investigaciones, pero no puede ser visto como un sustituto del conocimiento y del raciocinio clínico del enfermero.

**Descriptores**: Enfermería Oncológica; Proceso de Enfermería; Enfermería de Consulta; Estudios de Validación; Atención de Enfermería.



#### INTRODUCTION

Cancer is the chronic-degenerative disease most feared by society, because it is socially stigmatized, complex, long-lasting, and significantly compromises the lives of patients. Considered a worldwide public health problem, the National Cancer Institute of Brazil (INCA) has estimated the occurrence of approximately 600,000 new cases for Brazil in the biennium 2016-2017<sup>(1)</sup>.

Among the therapeutic modalities available to treat cancer, chemotherapy is the most used, since it consists of a systemic treatment, which allows early treatment of undetectable metastases of solid tumors and onco-hematological diseases. The drugs act at the cellular level, interfering in the processes of growth and division of the cells, causing the death of both the neoplastic cells and the healthy cells. This lack of specificity promotes adverse events and, consequently, requires the knowledge of the nurse to identify them, with the intention of preventing them or mitigating their impact, through appropriate management.

In order to promote the integration between nurse-patient and nurse-family/community, as well as the quality of the care provided, the legislation determines some attributions to the professional, such as the consultation based on the Nursing Process (NP), and the recording of information and statistical data relevant to nursing care. However, it is observed in practice that the instruments are mostly restricted to the collection of sociodemographic data, physical examination in a generalized way, Nursing Diagnoses and Interventions (which are not evolved), being based on the biomedical model<sup>(2-3)</sup>.

These factors make it difficult to meet all the peculiarities of the cancer patient regarding the clinical and psychological changes resulting from the treatment, in addition to spending more time in nursing, without solving the problem effectively or contributing to the formation of records that enable the collection of statistical data and subsidize the construction or consolidation of scientific knowledge in this area.

Given that health quality has become an imperative and requires the systematization of all its practices and processes, there is a concern to obtain instruments of data collection with variations of form and content, in order to obtain data, the most possible, both from the point of view of quantity and quality, according to the clientele assisted<sup>(4)</sup>. Given this reality, is it possible to develop a scientifically based instrument for nursing consultation in an adult chemotherapy outpatient clinic?

#### **OBJECTIVE**

This study aims to construct and validate instrument content for nursing consultation in an adult chemotherapy outpatient clinic.

#### **METHOD**

# **Ethical aspects**

Paper approved by the Research Ethics Committee of the Universidade Federal de São Paulo.

# **Design and period**

This is a methodological study composed of two stages: elaboration of the instrument and validation of the content, carried out in the period from 2016 to 2017.

#### **Methodological procedures**

For the construction of the instrument, the following question guided the literature review: What are the characteristics that reflect the physical, functional, emotional, social and spiritual dimensions of patients with cancer, considering them in the light of Theory of Basic Human Needs (NHB - *Teoria de Necessidades Humanas Básicas*) by Wanda Horta<sup>(5)</sup>?

The search was carried out in the following databases/libraries: Latin American and Caribbean Literature in Health Sciences (LILACS), Scientific Electronic Library Online (SciELO), National Library of Medicine (PUBMED), Cochrane Library, Brazilian Digital Library of Theses and Dissertations (BDTD - Biblioteca Digital Brasileira de Teses e Dissertações) of the Coordination for the Improvement of Higher Education Personnel (CAPES - Coordenação de Aperfeiçoamento de Pessoal de Nível Superior). The descriptors used in different combinations were: "cuidados de enfermagem" ("nursing care"), "Processo de Enfermagem" ("Nursing Process"), "quimioterapia" ("chemotherapy"), "enfermagem oncológica" ("oncology nursing"), "oncologia" ("oncology"), as well as not controlled terms such as "dimensão do cuidado" ("care dimension") and "instrumentos" ("instruments") - the latter to try to find other models that could help. Articles and dissertations/theses published in Portuguese, English and Spanish were included, with no temporal delimitation, excluding articles in other languages, expert opinion and letter to the editor.

It was assumed that the first nursing consultation should be broad, in order to guarantee the planning of an effective assistance capable of promoting self-care in the demands of post-chemotherapy, differing from the follow-up visit, whose purpose should be to identify the results achieved or not, of the interventions implemented. It was then decided to construct two different instruments: one for patient admission and another for subsequent care, both of which were composed of ten items.

The instruments were submitted to a pre-test with specialized Oncology nurses and with experience in Outpatient Chemotherapy to evaluate the internal relevance, comprehension and consistency of the instruments and the dynamics adopted (electronic medium).

In the second stage, the objective was to guarantee the accuracy of the instruments, through the evaluation of listed experts based on the Fehring's Validation Model<sup>(6)</sup> adapted to the theme, whose minimum inclusion score was 5 points (Chart1). Regarding the sample size, Pasquali was adopted as the framework, establishing a minimum of six experts<sup>(7)</sup>.

The selection of the experts was made, first, through a search in the Lattes Platform of the website of the Brazilian National Council for Scientific and Technological Development (CNPq - Conselho Nacional de Desenvolvimento Científico e Tecnológico), through the subject criteria (Chemotherapy and Oncology) and update of the curriculum in the last 24 months. The experts who agreed

to participate in the study, after sending an invitation letter, by signing the Informed Consent Form were asked to recommend other professionals, always based on the established criteria.

**Chart 1** – Criteria established for the identification of the experts of the study, São Paulo State, Brazil, 2017

| Criteria  | Score |
|---|-------|
| Master's Degree in Nursing  | 4     |
| Master's Degree in Nursing with dissertation directed to content relevant to the study  | 1     |
| Research published on Systematization of Nursing Care directed at patients with cancer in reference journals  | 2     |
| Article published on Systematization of Nursing Care directed at patients with cancer and with content relevant to the area of focus (chemotherapy) | 2     |
| Doctorate on Systematization of Nursing Care or Chemotherapy  | 2     |
| Recent clinical experience of at least 1 year in the thematic area addressed  | 1     |
| Training (specialization) in Oncology   | 2     |

Source: adapted of Fehring(6). p. 59.

# Collection and organization of data

The instruments elaborated were transposed in an online form, which simultaneously enabled access and evaluation, which were sent to the experts via electronic mail, with recommendation of return, after analysis and opinion, within 30 days.

In order to evaluate the instrument, a script was developed with the following criteria to evaluate the items: objectivity, simplicity, clarity, relevance, precision, language, breadth and balance. The judges considered the variables: "contemplates strongly" (value 4), "contemplates in parts" (value 3), "indefinite" (value 2), "does not contemplate" (value 1) for each criterion established. At the end of the evaluation of each item of the instrument, there was an open space for observations and/or suggestions<sup>(7)</sup>.

### **Data analysis**

The scripts were read one by one, paying attention to the comments. The opinions were distributed in a table in the program

Microsoft Excel 2010, according to the weights assigned to the responses of the predetermined Likert scale, and we calculated the weighted average of each characteristic, classifying it according to the Content Validity Index (CVI)<sup>(7-8)</sup>.

To evaluate each item individually, the formula CVI = number of responses "3" and "4" / total number of responses was considered. In order to evaluate the instrument as a whole, it was considered the division of the total number of items considered as relevant (answers 3 and 4) by the judges by the total number of items<sup>(7)</sup>. On the other hand, the agreement was judged according to the proportion of judges who evaluated the item as valid to remain in the protocol divided by the total of judges.

The characteristics with a score  $\geq$  0.80 were classified as adequate, those with a score <0.80 and> 0.61 were reevaluated according to the observations made and those with a score  $\leq$  0.60 were excluded<sup>(7)</sup>.

#### **RESULTS**

Four studies were found that guided the construction of the dimensions of the desired care<sup>(9-12)</sup> and six other investigations<sup>(13-18)</sup> allowed to extract complementary factors of the care of patients with cancer undergoing chemotherapy.

These data were analyzed from the perspective of the NHB theory for the construction of the instruments. Horta's nursing history models I and II were used as guides for the organization of information in items. However, the psychobiological, psychospiritual and psychosocial NHB categories did not follow a classification sequence.

In the instrument of admission nursing consultation, the information was organized, according to Chart 2. And added: header with space for the institutional logo, title and subtitle of the instrument, and date of service; and, at the end of the instrument, as recommended by the legislation, field for signature and stamp of the nurse responsible for the care.

The follow-up consultation instrument was designed to evaluate the results of the actions defined in the previous consultation, in addition to inhibiting the duplicate recording of information in the medical record (see Chart 3). The aspects of the header and the completion of the instrument of entry were preserved.

Chart 2 - Items of admission nursing consultation instrument, São Paulo State, Brazil, 2017

| Item  | Subitens   |
|---|--|
| 1. Identification                               | Name, hospital record, date of birth, age, gender, nationality, naturalness, provenance, educational background, occupation, ethnicity, marital status if you have children (how old and their age), who you live with, telephone number and name of the responsible for reporting collected data  |
| 2. Information regarding diseases and treatment | Medical diagnosis; chemotherapy protocol; cycle, day and interval of chemotherapy; purpose of treatment (cure, palliation, concomitant with radiotherapy); complaints; awareness about disease/treatment; previous treatment of the disease and adverse reactions, as well as measures and effectiveness of the adopted behaviors; family history of cancer; personal history that represents risk for complications throughout the treatment; surgical history; and medicines of habitual use (prescribed by medical team or self-medication) |
| 3. Health habbits                               | Social history (smoking, alcoholism and use of illicit drugs) and allergies, health control (periodicity of routine exams, dental evaluation, body care and hand hygiene) and habits related to psychobiological and psychosocial needs (feeding, hydration, urinary elimination and intestinal, sexual and reproductive function, locomotion and mobility, sleep pattern, physical activity, recreation, and leisure and housing)   |
| 4. Physical examination                         | Weight, height, Body Mass Index, body surface, blood pressure, heart and respiratory rate, oxygen saturation, temperature, vascular access, presence of devices, oral cavity evaluation, skin integrity, pain, pressure ulcer, and field for the description of other changes observed during the physical examination   |

To be continued

Chart 2 (concluded)

| Item                                   | Subitens   |
|--|--|
| 5. Psychosocial aspects                | Communication, work, support, family support/friends, religion/belief, how the person perceives themselves before illness and treatment, self-esteem, changes in Daily Life Activities, expectation regarding treatment and nursing consultation, interest in participating of treatment                   |
| 6. Laboratory and imaging examinations | Hemoglobin, hematocrit, leukocytes, neutrophils, platelets, renal function (creatinine and urea), liver enzymes, previous echocardiogram, pulmonary function evaluation and open field to record unrelated and relevant exams according to chemotherapy protocol   |
| 7. Nursing Diagnoses                   | Open field for description by the professional, according to the problems raised   |
| 8. Nursing Interventions               | Open field for description by the professional, according to the existing evidence in the literature or institutional protocols  |
| 9. Referrals                           | Constituted by some areas (Physiotherapy, Psychology, Nutrition, Speech Therapy, Social Work and Stomatherapy) in a checklist format and an option called "other" with space for specification of other specialties, besides contemplating a field for the description of the justification of the request |
| 10. Extravasation                      | Puncture place, material used in the procedure, extravasated medication, time of installation and extravasation, signs and symptoms presented, actions taken, referral to the vascular surgeon, extravasation evaluation based on the Common Terminology Criteria for Adverse Events scale, version 4.0    |

Chart 3 - Composition of the follow-up nursing consultation instrument, São Paulo State, Brazil, 2017

| Item   | Subitens   |
|--|--|
| 1. Identification                              | Name, HR, age and identification of the person responsible for the information given in the evaluation (patient and/or companion)  |
| 2. Information regarding disease and treatment | Medical diagnosis, chemotherapy protocol, treatment purpose (as it may be altered), evaluation of oral chemotherapy compliance (if applicable to the context) and adverse reactions, based on the reference Common Terminology Criteria for Adverse Events, version 4.0 <sup>(14)</sup>  |
| 3. Physical examination                        | Same to the instrument of admission, with the addition of the scales of evaluation of phlebitis and infiltration as possible complications of the intravenous therapy  |
| 4. Psychosocial aspects                        | Maintained the evaluation of communication, perception of illness and treatment, self-esteem and maintenance of Daily Life Activities  |
| 5. Laboratory and imaging examinations         | Preserved the standard of the admission instrument   |
| 6. Nursing Diagnoses                           | I (included), M (maintained), P (worsened), Im (improved) and E (excluded), with the insertion of columns to the right of the description field of diagnosis with header for identification of the evaluation date. The aim of this study was to optimize consultation time and make it less tiring for the patient when the chemotherapy protocol provides more than 1 consecutive day of application (e.g., protocols with D1-D3 or D1-D5) |
| 7. Nursing Interventions                       | Preserved the standard of the admission instrument   |
| 8. Nursing Evolution                           | Field for free filling in accordance with Brazilian legislation  |
| 9. Referrals                                   | Preserved the standard of the admission instrument   |
| 10. Extravasation                              | Preserved the standard of the admission instrument   |

In the pre-test, nine nurses were contacted, but only six accepted the invitation and of these, four delivered the questionnaire. The average time of the professionals was 4 years and 75% of them had research or publications related to the Systematization of Nursing Assistance (SAE - Sistematização da Assistência de Enfermagem) in the thematic of the study.

The instruments were evaluated separately, and a concordance index was observed in practically all the criteria and items of the instrument, except item 7 (Nursing Diagnoses) of the instrument of admission, whose CVI, in the precision and language criteria, was of 0.75, but without justification of the nurse evaluator, who, in the same item of the follow-up instrument (item 6, Nursing Diagnoses) signaled the simplicity and language as indefinite criteria. Given the divergence and the absence of suggestion, the CVI of the item as a whole was considered 0.92, and the format presented for submission to the experts was chosen.

As for the group of experts, 32 candidates were selected in the Lattes Platform and there were 15 indications, but four of the

indications did not meet the criteria. Fourteen accepted to participate, but only 12 experts submitted the questionnaire. Their time ranged from 5 to 25 years, with an average time of 13.25 years. All were female and had clinical experience in chemotherapy. As for titling, 54% were Masters; 27% were PhD; 18% were Doctors and 9% were specialized in Oncology. Of the sample, 81% had research/publications on SAE related to patients with cancer.

In the first round of evaluation by the experts, the admission nursing consultation instrument presented significant CVI (above 0.80) in almost all items and criteria, except for items 7 and 8, whose criteria, when evaluated separately, obtained scores between 0.58 and 0.75 and, when fully evaluated, reached between 0.64 and 0.75, requiring reformulation guided by the considerations of the experts. Regarding the evaluation of the instrument as a whole, CVI was 0.92 for the amplitude and balance criteria, and the agreement rate was 0.89.

All suggestions were read and analyzed based on the theoretical framework adopted, with the highest agreement index prevailing.

Even items that achieved a significant CVI were reformulated as recommended by experts. In item 1, the sub-items were added to the telephone field and the caregiver's education level (expert D). In item 2, the following suggestions were adopted: Insertion of a column next to each medication to identify medications prescribed by the medical team and self-medication (experts E, F and K); TNM (experts B, D and K); period, dose and type of radiotherapy previously performed (experts D, E and K); excluding the 'day' item of the chemotherapy protocol (experts A and J) and dismantling the subitem 'awareness about disease/ treatment' (experts E and J); the description "when", in the subitem previous history of chemotherapy, for "date" and subitem "complaints", for "current complaints" (expert G); including pre and post-bone marrow transplantation options for the purpose of treatment (expert B). The recommendations to change from subitem "complaints" to "reporting of health conditions" (expert C) and "awareness about disease/treatment" to "self-management capacity of disease and treatment effects" (expert B) were open question for voting in the next phase.

In item 3, the following were adopted: number of vesico-bowel elimination episodes, and sub-items vaginal dryness and weekly frequency of food consumption (experts C, E, J, K, L). Expert G questioned the feasibility of the item in an outpatient clinic.

In item 4, the field of assessment of the peripheral venous condition was expanded (expert J) and the sub-item "heparinization" was changed to "maintenance" (expert G). In item 5, family income and means of transport used to the treatment center (experts B and F) were inserted, and the expectation of treatment and nursing consultation subitems (F and L experts) were excluded; the expert G opined that all issues of the item should be worked out by the psychologist.

Regarding item 6, the subitem date of the exam was included (expert F). In item 7, 67% of the experts requested the adoption of the main diagnosis in the form of a checklist, culminating in a review of the national literature<sup>(14-16,19)</sup>, which resulted in the collection of 45 diagnoses, of which 23 were selected to compose the checklist, and 11 fields were left for free description.

This positioning was also adopted in item 8, where the experts A, B, C, E, G, J and K requested checklist compliance, and expert H suggested free field for description by the professional. The literature was used to relate the diagnoses listed to interventions with Levels of Evidence I, II and III<sup>(20-23)</sup>, and it was also decided to leave room for the writing of non-related interventions by the care nurse.

In item 9, the suggestion of expert C to change the title of the item to "request for evaluation" was put to the vote. The expert G considered the item unnecessary and justified that a psychologist and nutritionist should be part of the fixed team of a chemotherapy outpatient clinic.

In item 10, the following were added: estimated extravasated volume, infusion type, puncture device size, drug characteristic, date of return for evaluation and the version of the Common Terminology Criteria for Adverse Events scale<sup>(14)</sup> (experts A, B, C and F).

Regarding the follow-up consultation instrument, CVI was satisfactory - except for items 7 and 8, whose CVI was 0.75. In the evaluation of the instrument as a whole, CVI was 0.83, and the agreement rate was 0.88. Regarding the item considerations, some notes were disregarded because they were already included in the instrument, as

item 1, in which the expert C requested the inclusion of the date of the consultation. However, in item 8, a column for date was added, as suggested by expert J. No other suggestions were made, but only the questions of the experts B, F and J on how to record the evolution of the patient in a day of care. It was decided to clarify the intention of the item at the time of its conception and to wait for the positioning of the experts. In *Referrals*, in item 9, expert K requested that the outcome of the request be added.

The results showed a good concordance index, but significant differences were verified in the evaluation of items present in both instruments, as verified in Table 1. This diverges from the evaluator's own opinion, as verified in the items Nursing Interventions and Extravasation.

**Table 1** - Comparison of the Content Validity Index of the items that composed both instruments in the initial phase, São Paulo State, Brazil, 2017

| Manua                                      | Content Validity Index |           |
|--|------------------------|-----------|
| Items                                      | Admission              | Follow-up |
| Physical examination (4;3)*                | 1.0                    | 1.0       |
| Laboratory and imaging examinations (6;5)* | 1.0                    | 1.0       |
| Nursing Diagnoses (7;6)*                   | 0.64                   | 0.55      |
| Nursing Interventions (8;7)*               | 0.71                   | 0.75      |
| Referrals (9;9)*                           | 0.92                   | 0.92      |
| Extravasation (10;10)*                     | 0.83                   | 0.92      |

Note: \* Corresponding item number in the instrument of admission nursing and follow-up, respectively.

After the analysis, the instruments were reformulated and returned, along with the opinion, to the experts, for a new round of validation. Of the 12 experts who participated in the first stage, only seven delivered the questionnaire in the second round.

In the admission consultation instrument, there was an increase in CVI in items 3, 4 and 9 of 0.08 and, in items 7, 8 and 10, of 0.36, 0.29 and 0.17, respectively. In the evaluation of the instrument as a whole, CVI was 1.0 (mean weight 3.71), as well as the concordance rate.

Regarding the suggestion in item 2 to change the title from the subitem of "current complaints" to "reporting of health conditions", 71% of the experts opposed and 57% of them disagreed on changing the subitem "knowledge about disease and treatment". While in item 9, the assessment of the title of the item resulted in the change to "Request for Evaluation" by 71% of the opinions.

In item 7, it was requested to include the diagnoses "Risk of allergic response" (expert C), "Risk of bleeding", "High core body temperature" and "Risk of falls" (expert D). The latter was already contemplated in the instrument, "Risk of bleeding" was included, and the others were not included, as they are not included in the current taxonomy of the North American Nursing Diagnoses Association (NANDA)<sup>(19)</sup>. In item 10, it was accepted the suggestion to include follow-up by photographic registry (yes or no) (experts D and J).

In the follow-up consultation instrument, it was possible to observe an increase in CVI in items 4, 6, 7, 9 and 10. Item 8, despite the total CVI of 0.83, it was observed that the experts C and F did not made a point to guide changes, but revealed doubts about how to register the evolution and expressed lack of confidence

in the registry of assistance professionals. The evaluation of the item as a whole resulted in a CVI of 1.0 and a concordance rate of 0.98. Considering the observations and values, the process of validation of the instruments after the above mentioned.

#### DISCUSSION

A significant amount of studies related to the topic of patient care in chemotherapeutic treatment were found, but they did not explicitly or summarized the factors that permeate each dimension of care. Most of them were restricted to mentioning that care should include physical, functional, emotional, social and spiritual aspects. This difficulty was also reported in the study developed by Lancker et al. (10), when trying to make the same survey for the construction of an instrument.

Regarding the choice of the theoretical framework, other instruments constructed from the NHB theory can be observed in the literature, and there is a similarity in the context of the application of the referential strands used and validated by the experts, differing only in the specificity of the care related to the public interest<sup>(24-25)</sup>. The construction and use of an instrument based on the contributions of Wanda Horta can contribute to the rescue of the principles of NHB, collaborating for a truly holistic assistance<sup>(26)</sup>.

The choice and quantity of experts tend to be worrisome when one wishes to validate an instrument, since the literature reveals the difficulty of obtaining them, both in terms of acceptance and permanence until the conclusion of the study because each round performed there is the possibility of loss of participants but without implications in the analysis of the research data<sup>(27)</sup>. Thus, the reduction of 12 experts to seven did not compromise the quality or the outcome of the study.

The experts' concern about contemplating all specific care has been verified, but it is valid to say that each type of neoplasm carries with it some particular implications, just as the patient has its singularities. It is up to the nurse, therefore, to have the knowledge to identify and contemplate them, enabling the individuality of care<sup>(28)</sup>.

The request to change titles of items and sub-items demonstrates that nurses seek the innovation of care. Although the subtitle "self-management capacity of disease and treatment effects" has not been accepted, it is possible to identify the understanding of the need to ascertain the knowledge and coping strategies used by the patient at the time of treatment, as they determine how he sees self-care<sup>(29)</sup>.

The insertion of the patient's relative/caregiver data in the instrument contributes to the professional-patient-family/caregiver interaction and transforms them into active agents in the treatment. This action promotes support, understanding and effective coping of the process of illness, demystifying and/or strengthening cultural beliefs and values. However, attention should be paid to family behaviors that instead of helping they may hamper the actions of the health team<sup>(30)</sup>.

The expert's manifestation of incomprehension of the presence of an item to request evaluation of other members of the health team can refer to the experience of a reality in which the multidisciplinarity of care is not observed in the common use of instruments and the presence of other categories professionals in the service whose aspects are not covered by it.

In the context of oncological care, the toxicity of the treatment greatly affects the patients' quality of life. Despite being the subject of numerous studies, in practice it is still neglected or poorly evaluated, justifying the experts' concern about having a support material to guide the professional's action and record, and to standardize the evaluation method. A study revealed that 61.1% of nurses almost always do not provide oral mucosa care<sup>(31)</sup>. Another record showed that only 25% of women with cancer performed oral hygiene after each meal. It is worth noting that, based on the literature, 40% of the patients under chemotherapy treatment develop variable mucositis<sup>(32)</sup>.

Failure to adopt actions capable of preventing other toxicities, mainly dermatological and renal, are observed because they require a change of behavior and purchasing power by the patients. This contributed to the experts' perception of the need to identify issues of social and economic aspects in the data collection, as these factors may interfere in a negative way in adherence to treatment<sup>(32)</sup>.

To ensure behavioral changes, it is critical to understand the need to empower the cancer patient and to include them in the care process, valuing their ideas. Such actions allow the reduction of anxiety, acquisition of confidence and better adherence to the guidelines/treatment<sup>(24)</sup>. Even given the benefits of health education, studies reveal a deficiency in the educational role of the nursing team, compromising self-care<sup>(28-32)</sup>.

On the other hand, Møller et al. (33) demonstrated that systematic, individualized and supervised educational action is able to reduce catheter-related infections, but it is necessary to respect the decisions and limits of the patient and family in the educational process.

Other pertinent questions have emerged with some contributions. Among them, the unpreparedness of some professionals in dealing with emotional, social and spiritual needs. Papastavrou et al.<sup>(31)</sup> found that 32.5% of professionals often did not offer emotional support to the patient/family. This data contrasts with the positioning of an expert, who considered that the assessment of the patient's emotional aspects was irrelevant, leaving only the psychologist. In this situation, it is possible to infer the inability of the professional to provide emotional support to the patient, and to deal with their own emotions in the face of the suffering of the other, in addition to their work overload or lack of knowledge<sup>(28)</sup>. There are Nursing Diagnoses and Interventions that cover this dimension of care, as well as the spiritual dimension, since religiosity, in some cases, is used as a pillar of support and serenity.

Regarding the quality of the records, the experts' concern is justified because studies reveal low quality or lack of information. The low frequency in the identification of certain diagnoses can be underestimated, as demonstrated in a retrospective study that analyzed charts to verify the absence of data or to deepen in certain questions<sup>(24)</sup>. This conduct is concerning, since it causes imperfections in the entire assistance process and makes it difficult to carry out evaluative studies.

Records in all NP instances are essential, and it is essential to develop instruments that facilitate the recording and retrieval of data, providing autonomous, specific, qualified and quality nursing care<sup>(24)</sup>. The quality of the record is a reflection of the quality of the assistance, contributes to the construction of assistance practices and collaborates with actions aimed at improving

operational results. Therefore, the records must be both concise and complete. In this context, Virgínio and Nobrega<sup>(29)</sup> confirm the practicality of the screening system, reminding the professional of the priorities to be evaluated, although this system limits the nurses' expression about findings considered relevant in care. This explains the request of the experts to present the main Nursing Diagnoses and Interventions in a checklist, but with a good acceptance of the permanence of fields for free description.

Despite the approval, the evolution item remained an unexplained point on the part of some experts. The evolution record consists of the annotation of data that allows analyzing the care plan outlined: "improvement, worsening or maintenance of the previous situation, prescribed recommendations compliance and the appearance of new problems" (24).

Considering that, in our country, cancer is the second cause of mortality, it is essential to rethink strategies and priorities in the training of nurses by educational institutions, even in specialization courses in Oncology, since studies reveal practices still mechanistic and unpreparedness to deal with the emotional aspects of patients with cancer<sup>(24,34)</sup>.

It is the responsibility of the nurse to keep up to date, especially in the area of Oncology, where the findings occur at all times. However, it is also the responsibility of the institutions to invest in their employees and to guarantee a Permanent Education team.

Implanting and implementing a well-structured NP (professionals, physical and material structures, institutional organization) represents a way of organizing the knowledge of the profession. However, the NP cannot be dissociated from other assistance conditions, since it alone does not guarantee the qualified, comprehensive and humanized assistance - and, mainly, individualized.

The discussions and results presented here demonstrate that, despite being known to nursing professionals "research and discussions are still necessary for the permanent maintenance of the logical"<sup>(35)</sup>. It is imperative to transform the discursive practices of Oncology Nursing into concrete practices.

# **Study limitations**

As study limitation we had the lack of studies on cancer patient care objectively and of testing the instruments in practice.

#### Contributions for the sector of Oncology Nursing

This study contributes with the legal precepts of the record of the nursing consultation, and the formation of records that allow the collection of statistical data and subsidize the construction or consolidation of the scientific knowledge in Oncology Nursing, identifying the actual care needs of the patient with cancer submitted chemotherapy and favoring the planning of appropriate interventions.

#### **FINAL CONSIDERATIONS**

Constructing and validating instrument content for nursing consultation in a chemotherapy outpatient clinic were reached with the methodology adopted. The literature review revealed gaps in the research developed on Oncology. After all, what are the reliable factors that permeate the care dimensions of patients with cancer? The validation of content with experts revealed that "sharing knowledge" is of utmost importance for the construction of knowledge, besides showing how much the nursing professionals must mature to contribute to the construction of a valued and recognized Nursing.

It should always be borne in mind that the instrument represents a guideline of the EP and future research, and cannot be seen as a substitute for the knowledge and clinical reasoning of the nurse, who has the responsibility to seek constant improvement to ensure a safe assistance with quality.

The process of cooperation with Oncology Nursing does not end at this moment; on the contrary, it begins. New flights should be raised, such as conducting a pilot test of the instruments in different service centers to attest its applicability in practice. Keeping them shelved represents the stagnation of the knowledge of all employees who were part of the constructive process.

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