

# Knowledge of Nursing Students about the Care Provided to People with Neoplastic Wounds

**ORIGINAL**

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## Abstract

**Objective:** To investigate the knowledge of nursing students about the care provided to patients with neoplastic wound.

**Method:** This is an exploratory research of a qualitative nature, which was attended by 15 students of the Bachelor's Degree in Nursing from the Center of Education and Health of the Federal University of Campina Grande, campus Cuité - PB, in the period from October to November 2015. For data collection, we used a form for an interview. The data were analyzed through the Technique of Thematic Analysis of Minayo.

**Results:** From the analysis of the empirical material emerged the following thematic categories: Category 1. Defining neoplastic wounds; Category 2. Knowledge incipient on 'neoplastic wounds' for academic and professional practice; Category 3. Envisioning the theme "neoplastic wound" in the Academy; Category 4. Knowledge about methods of evaluation of neoplastic wounds and Category 5. Knowledge of therapeutic modalities of neoplastic wounds.

**Conclusions:** The academics know the evaluative method of a patient with neoplastic wound as integralizadora unit of care process; recognize palliative care as the best therapeutic modality for these customers, especially when they are in completion and indicate the products contraindicated in the treatment of these lesions; however, do not mention the covers and recommended substances for the

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control of the signs and symptoms of these injuries. In this context, it is believed that the creation of academic projects of extension, with the aim of creating opportunities for integration between theory and practice, is one of the ways to improve the knowledge.

#### Keywords

Knowledge; Students of Nursing; Skin Neoplasms.

## Introduction

Cancer is a genetic disease from a result of a series of injuries in the DNA or anomalous expression of normal genes, which will modify the coordinating functions of the proliferation, differentiation and apoptosis cells, leading to the mutation and malignant cellular phenotype. With the replacement of normal cells by the cancerous ones, the invaded tissues become losing their functions and, finally, the appearance of an exophytic lesion occurs [1-2].

The World Health Organization (WHO) has projected some perspectives about cancer, but called attention to a serious situation: we can expect about 27 million incident cases, 17 million deaths and 75 million people alive, annually, with cancer, being the developing countries the most affected ones, among them Brazil. According to estimates from 2016/2017, Brazil should register in the year 2017 about 596 thousand new cases of cancer. Among men, there are expected 295,200 cases, and among women, 300,800 cases [3].

The proportional distribution of the five most estimated types of cancer in 2016/2017, according to the National Cancer Institute [3], has a primary location in the male gender: prostate (28.6%); trachea, bronchi and lungs (8.1%); colon and rectum (7.8%); stomach (6.0%) and oral cavity (5.2%); already in the female gender: breast (28.1%); colon and rectum (8.6%); cervix (7.9%); trachea, bronchi and lungs (5.3%) and stomach (3.7%), not taking into account non-melanoma skin cancer in both genders, considered the most prevalent in Brazil.

Among patients with cancer disease, about 5% to 10% of them progress to wounds, be resulting from a primary tumor or from malignant cell proliferation. These lesions are configured as an interlocutory appeal of the patient's life, because they gradually disfigure the body and become friable, painful, exudative and release a foul odor [1-2, 4].

The neoplastic wounds appear when there is a lesion of the skin, as a result of uncontrolled cell proliferation with subsequent infiltration of malignant cells in the skin structures [5]. These are liable to wound treatment, since cancer is in an early phase and has possibilities of cure; however, when the pathological process is in advanced phase and the antineoplastic treatment is no longer indicated, the conduct is only the palliative one, in order to control the physical and the psychosocial symptoms [6-8].

Generally, tumoral lesions manifest specific symptoms such as intense pain, bleeding, profuse exudation and the presence of a characteristic odor, causing physical and psychological suffering, low self-esteem, social and family isolation, embarrassment, disconsolation and a sense of disgust of self, on the basis of changes of body appearance and problems in the development of activities of daily living. These wounds do not heal and require palliative care, whose objectives are relief of symptoms, reduction of complications and improvement in quality of life [1-2, 4].

The Nursing Professional is the professional who remains closer to the hospitalized patient, therefore, he has the opportunity to contribute to the im-

provement of customer's comfort and relieve of his pain. As a result, he comes as an active member and participant of the palliative care team and typically is responsible for the evaluation and treatment of wounds, as well as the performance of dressings. So, he should develop abilities and competencies in order to identify characteristics of neoplastic lesions, in view to contribute scientifically for the implementation of specific care. In view of this, performing a comfortable and aesthetic dressing is a challenge for the nurse.

Research about the aspects involving treatment of neoplastic wounds is mentioned in Nursing publications [7, 9-14] which highlights the importance and responsibility of the nurse in this process; so, he has to evaluate the lesion and prescribe the most appropriate care, besides guiding and supervising the nursing team in the application of dressing. Therefore, it is essential that the nurse understand that these competences are intrinsic to their care practice. However, the nurse often base the care on fragile evidences those often do not follow the information and the precise and scientifically validated conduct [15].

Nurse's knowledge and his practice based on scientific evidence begin during his undergraduation and are essential factors for the feasibility and implementation of care to prevent and treat wounds. Thus, it becomes of his responsibility, together with other health professionals, the implementation of such measures [16-18].

By the way, national and international studies have investigated the level of knowledge and the situation of clinical practice of nursing professionals and caregivers concerning care of neoplastic injuries [1-2, 4, 8, 19-21].

Like so, the search for nursing knowledge of nurses with regard to care of people with wounds continues to be influenced by specific interest of the topic and this can lead to constant conflicts that the doctor responsible for treatment decision of patients with wounds and consequently, lack of

autonomy of the nurse facing the treatment of lesions [22-23].

Assuming the importance of nursing academic as a future professional in the role of caregiver, your role as disseminator and trainer of opinions with people with injuries and also your responsibility in the process of evaluation and treatment of neoplastic injuries, it is appropriate to carry out this research. Given these considerations, the present study aimed to identify the nursing academic knowledge about the care of the person with cancer wound. Starting from the premise of the importance of the student of nursing as a future professional in the role as a caregiver, his role as disseminator and trainer of opinions with people with lesions and also his responsibility in the process of evaluation and treatment of neoplastic wounds, it is appropriate to carry out this research. Given these considerations, the present study aimed to identify the nursing academic knowledge about the care offered to the person with neoplastic wound.

## Methods

It is an exploratory research with qualitative approach, carried out in the Education and Health Center of the Federal University of Campina Grande, in the city of Cuité-Paraíba, located in the micro-region of Curimataú in the State of Paraíba, which offers the course of Bachelorship in Nursing.

The population determined for the study was composed of nursing students from the abovementioned institution and a sample of 15 nursing students who met the following inclusion criteria: to be duly enrolled in the course and to have studied the subject Evaluation and Treatment of Wounds. There were excluded those with enrollment between the 1<sup>st</sup> and 5<sup>th</sup> semesters of the course.

The data were collected through a semi-structured interview in a reserved classroom of the Education and Health Center, developed in the period of

October and November 2015, in which the speeches were recorded on an MP3 player. Interview time varied according to the ability of study participants to provide the desired information, which lasted approximately twenty minutes. The interviews were transcribed verbatim and later successive reading of the material. The study participants were codified by extracting the categories of discourses grouped by similarity, making possible the formation of the collective corpus of the speeches.

For the analysis of the data, the technique of Minayo Thematic Analysis [24] was defined as the counting of one or several themes, or items of meaning, in a previously determined coding unit.

The research complied with Resolution 466/2012 of the National Health Council [25] that guides research involving human beings, after approval by the Research Ethics Committee (REC) with CAAE N 42223515.0.0000.5182. When invited to participate in the study, the participants were informed about the study objectives; there were assured secrecy, anonymity and withdrawal at any time of the survey, by signing a Free and Informed Consent Term (TCLE), which was provided at the time of the interview; there was also requested permission to record the interviews.

In the presentation of results it is recorded in italic the words of the participants, identified by a code consisting of a letter and a number, as for example E1. The letter E represents student and the number which follows after the letter identifies the order of conducting the interviews.

For the compression of the study object there were used, also, documentary data provided by the institution: Course Political Project, Courses' Plans of the Course, reports of the Structuring Teaching Core of the Nursing Bachelorship Course of the Education and Health Center of the Federal University of Campina Grande, Laws, Norms and Ordinances that regulate the Curricular Guidelines of the Undergraduate Nursing Course.

## Results and Discussion

In respect of the characterization of the interviewees, participated in the study 15 nursing students from the Nursing Bachelorship Course of the Federal University of Campina Grande, campus Cuité – Paraíba; among them, 13 women and 2 men of an average age of 23 years old; inscribed in the 7<sup>th</sup> and 8<sup>th</sup> semesters of the undergraduation course.

Given the data obtained, the analysis was followed up, in which a careful reading of the answers was carried out, in order to reach the proposed objective. The texts were grouped according to the sense nuclei and gave rise to five categories, namely: Category 1. Defining neoplastic wounds; Category 2. Incipient knowledge about 'neoplastic wounds' for academic and professional practice; Category 3. Idealizing the theme "neoplastic wound" in the academy; Category . Knowledge about evaluative methods of neoplastic wounds and Category 5. Knowledge about therapeutic modalities of neoplastic wounds.

### Category 1. Defining neoplastic wounds

The first category expressed the research participants' knowledge in relation to the definition of neoplastic wounds. It is observed the tendency of the students to define the concept of neoplastic wounds of tautological form, as shown below:

*Neoplastic wound is the loss of skin integrity [...] related directly to a neoplasm and disordered growth of cells.*

E1.

*Neoplastic wound is a complication of the cancer. It affects more people with breast cancer [...] it is the externalization of the tumor, reaches the layers of the dermis and it looks like cauliflower.*

E5.

*They are wounds caused as a result of a pathologic process [...] the tumor will extend through the skin, causing the loss of skin surface.*

E13.

*It is an injury that is caused by cancer; it expands in an aggravated way.*

E15.

In the statements it was observed that nursing students define neoplastic wounds casually, but are concerned to specify that it is a complication due to cancer and that there is rupture of the skin by exteriorization of the tumor. However, none of them specified that the neoplastic wound may be related to primary or metastatic cancer, accidental implantation of malignant cells on the epithelium during diagnostic or surgical procedures, and may still develop in chronic wounds, such as the Marjolin ulcer [1-2, 4].

It was noted that one of the participants was beyond definition, because he paid attention to the type of cancer that presents greater occurrence for progression of tumor wound - in this case, breast cancer, and, in addition, highlighted one of the morphological aspects of the neoplastic wound, when he mentioned the appearance of the lesion comparing it to a cauliflower, considered to be the most severe type [6]. This difficulty, evidenced by the incomplete definition of neoplastic wounds, may be related, among other factors, to mechanical learning.

In mechanical learning occurs the incorporation of a new knowledge in an arbitrary way, that is, the student learns without understanding what it is about or understand the meaning of why of the studied phenomenon. This learning also happens in a literal way, the learner studies precisely how it was spoken or written, with no margin of his self-interpretation. Learning happens as a product of the absence of prior knowledge related and relevant to the new knowledge to be learned [26].

Contrary to mechanical learning, in meaningful learning, the learning process happens when new information relates non-arbitrarily with other pre-existing information in the learner's cognitive struc-

ture. In this way, the two ways of knowledge, the new and the old, relate and form a modified third. It should be said that this is a dynamic and different process for each person in which the new concept formed becomes a new knowledge that can serve as an anchor for new learning [26].

In this sense, it is necessary that academics learn significantly about the process of carcinogenesis and, later, make an association between the terms "wound" and "neoplasia", with a view to understanding the definition. It is assets mentioning that knowledge of the definition of neoplastic wound is a priori the main point for understanding the later stages of the concept, such as: pathophysiology, staging, symptomatology, evaluation methods and therapeutic modalities.

## Category 2. Incipient knowledge about 'neoplastic wounds' for academic and professional practice

The knowledge of the nurse and his healthcare practice start during the undergraduate courses and are conditions sine qua non for building care plans with regard to the evaluation and treatment of wounds both in academic practice as a professional. For this reason, it becomes of his responsibility, along with other health professionals, the implementation of such measures. In this context, the nursing student mentions, in the following lines, his criticisms about the theoretical knowledge considered as limited to his academic and professional future practices:

*The people paid an elective subject, the name is 'Wounds' and in a general way, we saw all kinds of wounds and among them, neoplastic, but casually.*

E2.

*We see some basis, but you can't deepen so much [...] to recognize how to take care, really, of neoplastic wounds.*

E3.



*I believe that the knowledge passed along at the college isn't enough for assistance, because we don't see and don't have access to this deeper knowledge, mainly in practice.*

E4.

*I don't consider my knowledge acquired at the college enough to work in practice, because we didn't have practice.*

E5.

*If you do not have such a practice to go to the hospital, to see the patient with that wound, the nurse won't know how to take care of this wound.*

E7.

*What we see of neoplastic wounds are most basic things, we don't have that deep knowledge to know everything. The theory is one thing. When will 'put' in practice is totally different! Because in theory does not have your direct involvement with the patient as occurs in practice.*

E9.

*The people paid a superficial subject about wounds and learned about all the wounds [...] had no focus on neoplastic wounds.*

E10.

*We see the subject about wounds very superficially and it's just theory, lack practice. And for missing practice and for being so fast, some content end up not being seen or are seen in the form of seminar.*

E11.

The research participants mention that all types of wounds, however superficially, were passed on during the programmatic content. In this sense, it is imperative to highlight that the Nursing Bachelorship Course of the Federal University of Campina

Grande, in its curriculum, contains the subject 'Evaluation and Treatment of Wounds and Curatives', considered previously unpublished in the Nursing Undergraduate Courses in higher education institutions.

Urge to mention that up to 2015, the subject mentioned had a workload of 45 hours (3 credits) and was classified as optional. Probably, for this reason, the teacher responsible for the subject was worried about transmitting all the concepts of lesions, in order to include a general knowledge about this subject, since Nursing Undergraduation has a general character.

Nursing students also pointed out some aspects that made difficult the teaching-learning process about neoplastic wounds directly related to the course itself: the fact that the theory is not associated with practice and the workload is insufficient to meet the learning needs. Thus, for the research participants, the academy has a primary role in the teaching-learning process and its role can be seen both as a facilitator and as a difficulty of this process, depending on the way it is developed.

In this context, it is important to note that nurses are one of the health professionals who have a theoretical and practical knowledge, so that their academic training process must contain, in the curriculum, theoretical and practical classes, that is, knowledge and to do, necessary for their training. Of course, doing is consolidated in professional practice, which usually occurs in practical activities and traineeships [27].

In addition to having the goal of practical ability, the practical activities and the internships are part of a pedagogical process of professional formation that tries to interconnect the theoretical-scientific formation to the reality of the environment, enabling the academic to establish correlations between the theoretical referential and everyday situations [27].

In this respect, it is important that the subject offered by the academic unit of nursing until then classified as elective in the old Pedagogical Plan of

Course did not present practical activities in the laboratory, neither activities in the fields of internships, but only technical visits in a philanthropic hospital, where scholars could show some practice exercised by professional nursing staff of the hospital.

In consequence, as it is provided in the Law on Guidelines and Bases of National Education, [28] the institutions that intend to offer the Nursing course need to constantly concern about physical structure and material resources issues that allow the development of teaching-learning strategies; not only of the subject in question, but also of all the minimum content necessary for the training of nurses.

For this reason, the institution's Teaching Plan for the Course (PPC) underwent a theoretical restructuring begun in 2014, whose purpose was to improve the teaching-learning process, with the aim to conduct an overall education, guided by completeness the need of collective work and that the nursing academic had early contact with the reality of the profession, articulating the world of college with the world of work; therefore, an education that stimulates learning to learn, to teach the citizen and the health worker.

As a result, the new PPC came into force in 2016, with the discipline "Evaluation and treatment of wounds and dressings" with a mandatory character, presenting practical classes in the laboratory and practical activities, in order to remedy such discrepancy between knowledge and practice mentioned by the speeches of the students participating in the research as being insufficient for future professional practice.

Once ensured the existence of practical activities is the responsibility of the nursing students learn and face several challenges, among them, taking care of patients with neoplastic wounds.

### Category 3. Idealizing the theme "neoplastic wound" in the academy

In this thematic confluence, nursing students refer to the necessity to formulate a subject that address

ses the issue, seeking to achieve the completeness of the programmatic unit, that is, care with the person with neoplastic wound, within a specific model with attention focused on palliation. In addition, we observe the predominance of the statements about the need of the practical activity for the acquisition of knowledge and future professional practice, as prepared below:

*I think one of the ways well easy to approach the neoplastic wounds is creating a respective subject, like palliative care, and that had a unit just this subject, because many students are interested in the subject but there's nothing specific at undergraduation.*

E2.

*It is setting, in fact, in the curriculum, a required component, because, really, I think it has a great importance the nurse know neoplastic, wounds when I get there in practice, he will need the theoretical and practical knowledge to be able to take care of the wound.*

E7.

*Well, it is necessary to have a subject focusing on palliative care [...] because both the assessment and the treatment has to be differentiated way. It is also necessary to have a really effective practice, not? In practice, you will see that person suffering and raise awareness, yes? And will be able to perform a more effective treatment.*

E9.

*I think that offering more specific grade to this subject [...] for example, have a subject that speaks about palliative care, which speaks of cancer itself, speaks only of neoplastic wounds, it speaks about the subjectivity of the patient.*

E10.

*Could have an internship related only to that, because there are different wounds, because the patient is different. It is a patient who suffers because of the cancer and the wound.*

E14.

The students' interest in the subject points out a factor that contributes significantly to the teaching-learning process. On the other hand, this interest may sometimes be insufficient to optimize learning, when some factors become greater, among them the change in the professional practice of some teachers.

This aspect mentioned by the research participants in presenting interest in learning reports to one of the cornerstones of Significant Learning Theory, since according to Ausubel, the idealizer of this theory, in order to have meaningful learning, the student must be keen on learning new concepts [26].

Under this perspective, it is cost mentioning that undergraduate nursing college should prepare students to perform their activities with technical, scientific, and technical skills, and to raise awareness about the importance of using humanized care technology, and in this way, they will be making a difference. For this, teachers should use a potentially significant material (related to the student's cognitive structure) during classes (theoretical and practical) in order to make learning meaningful, such as theoretical classes with illustrations of the lesions, clinical cases for problem solving and direction of nursing actions, practical classes in the laboratory and in internships.

In this sense, seeking to improve the teaching-learning process for nursing students of the UFCG, campus Cuité regarding this thematic, there was created an elective subject called palliative care and nursing, with time shift of 30 hours (02 credits), which was implemented in the new PPC, in half 2015.2.

The subject Palliative Care and Nursing was created with the need to break the paradigm of the biomedical and hospital-centered model rooted in the academic curricula of the health area, giving margin to implement the holistic model of health, considered as one of the pillars of the palliative philosophy.

The holistic health model presents a complete view of the person, as a biopsychosocial and spiritual being and from the assumptions of Nursing promotes an optimal level of health by including the active participation of the patient in the improvement in his health state [29].

In this context, include palliative care, which consist of a new modality of care by a multidisciplinary team, whose objectives are to improve the quality of life of patients and their families facing a disease without therapeutic possibilities of healing, through prevention and relief of suffering and the early identification, assessment and treatment of pain and other physical, psychological, social and spiritual symptoms [30].

Ayres [31] emphasizes that care has a relational character and presents an encounter of subjectivities; in this sense, the person being cared for is considered a unique being that has a life history, a world view, a way of understanding, feeling and relating and expressing himself. From this understanding, the interactions and meanings attributed to it represent identities and knowledge about health and the process of illness. Moreover, subjectivity becomes the target of investment and transformation of care.

In this context, health care based on the holistic paradigm consists of a rethinking and reconstruction of meanings about oneself, the other and the world, which comprehend meanings about health, illness, quality of life and autonomy, and that requires the construction of a relationship that goes beyond scientific and technological know-how. This reconstruction allows the person to look outside the illness that afflicts him, considering the knowledge



he has about himself, about the process of illness and health, as well as the primordial aspects in the reconstruction of meanings towards healthy life and its diverse particularities [31].

Authors emphasize essentially the relational character of this care, focusing on the production of meanings resulting from the meeting of subjectivities and consider the person to be cared for as a unique being, who has a history, a worldview, a way of understanding, feeling, to relate and express himself, including his troubles. In this conception, the network of interactions and meanings attributed to him is constituent of identities and constructor of knowledge, senses and looks on health and illness. Also in this conception, subjectivity becomes the target of investment and transformation of care [31].

Thus, the health care advocated by the holistic paradigm involves the continuous reconstruction of meanings about oneself, the other and the world, including also meanings about health, illness, quality of life, autonomy, which makes it necessary to create a relational space that goes beyond scientific / technological know-how. This allows one to look at the person beyond the illness he presents, considering his knowledge about himself, about illness and health, as essential foci in the joint reconstruction of the senses towards a healthy life in its various aspects [31].

In this context, the teacher responsible for the subject 'Palliative Care and Nursing' is based on the teaching-learning process in light of Significant Learning Theory, aiming to making learn meaningful.

Meets point out that the Meaningful Learning Theory is based on the cognitive model of learning, where the greatest interest is in the unveiling of the mental processes by means of which becomes effective the distribution of meanings, understanding, processing, storage and use of new information. When it admits the cognition occurring as a construction, comes to constructivism, according to which the student ceases to be seen as passive re-

ceiver of knowledge and be seen as an agent of his own cognitive structure [32].

In this perspective, one can see that some students, from the their speeches, already recognize the holistic health model, including palliative care, as essential to guide the teaching-learning process, in order to better understand the subjectivity of the patient before suffering imposed by the diagnosis of the disease, cancer and wounds by the process of finitude.

#### Category 4. Knowledge about evaluative methods of neoplastic wounds

In this thematic category it is possible to perceive through the speeches of the nursing students, highlighted soon after, that the evaluation process of a neoplastic wound involves not only the evaluation of the wound itself, but the person as a holistic being, seen in the biopsychosocial dimensions and inserted in a family unit.

*The evaluation must be made daily by the nurse, before being made the dressing. Evaluate the features, such as the exudate, the inflammatory process. And everything has to be registered, too, during the evaluation.*

E1.

*Evaluate size, depth, aspect, staining, if there if there's odor exudate.*

E5.

*In the evaluation, we have to involve the family; don't just think of him as a sick person, but as a biopsychosocial being.*

E9.

*The nurse should act holistically; noting the partiality of each patient, because not every cancer wound is equal, then one has to pay attention to the individual characteristics of each cancer wound.*

E10.

*Evaluate the presence of necrotic tissue, fistulas, as well as the pain and how it is affecting the quality of life of patient with the wound; also his image, how he's feeling about that wound. So, should be a complete review, not only focusing on the wound, as well as complications caused by it.*

E13.

*At first, the nurse should know what type of cancer, where it is located, and what characteristics of the wound [...] to know what treatment and if this patient makes use of any medications that can interfere with development of the wound.*

E14.

The evaluation and treatment of wounds has become an increasingly specific and scientific area, differentiating progressively as a specialty in the field of health care.

With regard to the evaluation of the person with neoplastic wounds, it is necessary, initially, to evaluate the person within a biopsychosocial dimension, looking for a humanized approach, inserting the family as a fundamental part of care. In this sense, the testimonies confirm that nursing students know the evaluative method as an integrating unit of the process of caring for people who present a diagnosis of cancer, with presence of neoplastic wound.

Concerning the person with the wound, the academics mentioned the importance of recognizing the type of cancer and the basic treatment. This shows that nursing scholars recognize that there are some cancers that progressively compete for the beginning of neoplastic wounds and that the treatment is often not based on a curative approach. In addition, academics realize how important it is to know the medications used by the patient, since some drugs interfere with the quality of treatment and the progression of the wound.

On the topic of the evaluation of neoplastic wounds, it is possible to observe that the participants know some aspects related to the measurement and characteristics of the lesion; however none of them mention the staging or classification of the neoplastic lesion as an essential part of the evaluation of the wound.

The evaluation of a neoplastic wound involves several aspects, namely: cause, wound area (presentation, location, size, depth, color, amount of secretion, degree of odor, pruritus, pain, fistulas, tunneling), staging, evolution, infectious process, interventions and exams performed [7, 33-34].

Staging is one of the primary aspects of lesion evaluation, since it classifies the wound according to the area of anatomical involvement and explains the signs and symptoms resulting from the lesion. In this sense, it is a fundamental point for an evaluation process and underlying treatment, in order to control the patient's symptoms and comfort [7].

Urge to call attention to that one of the students mention the assistance as a fundamental part of the process of care. In this context, authors [35] consider the nursing record crucial in wound assessment process once they are stored information about the patient's history and characteristics of the wounds, as parameters of measurement, anatomical location, healing conditions, as well as measures for the control of signs and symptoms.

The record of the information inherent to the patient and the wound must be detailed and concise to facilitate the re-evaluation for other professionals. This must contain information inherent to the patient and the wound, interventions and methods used, guidance provided to the patient and the caregiver, and the results obtained during the treatment as well as the evolution of the cicatricle process [36].

Another relevant aspect is the concern that one of the students presented when he said that the assessment of the patient with neoplastic wound needs to go beyond the physical dimension, that

is, attention to the emotional dimension is an essential aspect, once the wound weakens, incapacitating self-care and deteriorates self-image. This demonstrates that nursing academics look at the specificities of people who present wounds within an empathic context.

### Category 5. Knowledge about therapeutic modalities of neoplastic wounds

In this category, the participants cite, superficially, some aspects related to the therapeutic modalities used in neoplastic wounds, as the following statements stand out:

*The dressing requires a certain skill. Have to be clean, with plenty of softness, because they are crispy wounds. I know I can't use PVPI, nor can I use sunflower oil [...] because if I spend mainly sunflower oil, know that it allows the production of more cells, then, I'm getting worse that wound.*

E15.

*When the wound has no chance of cure, the treatment will be palliative. And if palliation [...] is already a point worse because he will know he's not going to improve that, so you have to give a psychological support.*

E9.

*The nurse needs to have enough scientific knowledge to treat neoplastic wound, because this type of wound, if it is unlike other types of wounds, because it is crumbly and not use certain types of chemical components in it and not every professional knows that.*

E10.

*If the nurse is really capable, will see what products are to be used and will not risk putting any extra coverage, as AGE, for example.*

E15.

The treatment of neoplastic wounds goes far beyond performing a dressing. The neoplastic wound involves the person in multiple dimensions of suffering: physical, since pain, odor, bleeding, exudate may be present; psychic, since as a result of the disfigurement, the person presents low self-esteem, feelings of annoyance, alterations of the corporal image; social, because the wound itself contributes to social and spiritual stigma and isolation, since these wounds do not present possibilities for healing, and for this reason, the anguish and fear of death become traumatic.

Within this context, a nursing student mentioned palliative care as being one of the therapeutic modalities necessary for patients with neoplastic wounds, in view of the impossibility of therapeutic healing. This is necessary to a distinguished look of the entire multidisciplinary team to identify the problems related to the physical discomforts psychic, social and spiritual, presented by the patient and help him to find a direction to go on living.

In this perspective, is the nurse, who is a member of the palliative care team and, generally, the professional responsible for the evaluation and treatment of wounds. On this aspect, the nursing scholars mentioned that the nurse requires technical skill and scientific and ethical support, in order to drive efficiently, wound care, since cancer wound presents pathophysiological peculiarities.

In this context, students highlight the cleaning process and the contraindication of some products, such as polyvinylpyrrolidoneiodo (PVPI) and sunflower oil.

With reference to cleanliness, one of the academics mentioned the care in cleaning the lesion gently, given the friability of the lesion. The speech is consistent with what the literature recommends, since neoplastic wounds present important pathophysiological characteristics such as thrombocytopenia and capillary fragility due to neovascularization, that is, they are wounds that bleed to the touch or manipulation [6]. However, the academic

does not emphasize the correct technique for the cleaning, which consists of the irrigation of physiological solution in a jet, as well as the use of the same solution in cold temperature, using a 20 ml syringe with 40 x 12 needle, which favors an ideal pressure, that is, that varies between 4 and 15 psi, thus avoiding profuse bleeding [37].

Proper use of irrigation pressure does not cause trauma to the lesion bed. The values considered normal for cleaning with irrigation under pressure vary between 4 and 15 psi. If the pressure under irrigation is too low, less than 4 psi, cleaning of the lesion will be desirable as it is not efficient and if the pressure occurs with values greater than 15 psi can cause trauma to the wound and spread bacteria to the tissue. The high pressure applied on the wound disperses the fluid and leads to extensive penetration of the fluid to the deeper layers of the lesion tissues [37].

Relating to wound products, one of the students is concerned with the inadvertent use of two products in particular, PVPI and sunflower oil in neoplastic lesions, as complicating factors of this type of lesion. This aspect is consistent with the relevant literature.

Vegetable oils are used in wounds, especially in Latin American countries [38]. In these oils, the most abundant fatty acids are oleic, linoleic and linolenic. All these components act in a way to increase the immune response, accelerating the inflammatory process, and consequently stimulating the healing process through angiogenesis and epithelization, facilitating the entry of growth factors in the cell [39]. In this sense, it is recommended that during the treatment of neoplastic wounds do not use products inducing angiogenesis or cell proliferation, as they favor tumor growth and its dissemination due to vascular support [40].

Iodophors are wide spectrum antimicrobial antiseptics available in various formulations. Studies have already been developed to investigate its effectiveness in different formulations and presen-

tations in the prevention or treatment of wound infection, as well as its influence on the healing process, comparing it or not with other products also used in this therapy. Nevertheless, topical use of iodophors remains controversial [41].

Emphasizes that the use of antiseptics in neoplastic wounds, among them the PVPI, have intended use, although this practice is judged as inappropriate due to cytotoxic effects that cause the viable tissue healing. The concept of palliation and the improvement in quality of life, by the control of signs and symptoms rather than healing make use of antiseptics as measurable option so that were included in the protocol prepared by the INCA [42].

It is appropriate to highlight that the students have not mentioned and recommended products for the control of the signs and symptoms of neoplastic wounds. This demonstrates a weakness in knowledge on treatment, which is in the process of caring for the patient with neoplastic wound.

## Conclusions

With this study, it was possible to identify the academic knowledge about the nursing care to individuals with neoplastic wounds and provide a reflection on the importance of the teaching-learning process within a scientific context and above all practical, with a view to enhance the academic approach of nursing praxis.

The statements are relevant to demonstrate that scholars know the evaluation method of a patient with neoplastic wound as integrative unit of the care process; recognize palliative care as the best therapeutic modality for these customers, especially when they are in complete and indicate the products contraindicate in the treatment of these wounds; however do not mention the covers and substances recommended for the control of the signs and symptoms of these injuries. This is a fact flag the importance of balance between theory and



practice, considering that a fundamental care cannot be learned only in theory.

As a result, it is believed that an important issue to improve this knowledge between nursing students would encourage teachers involved in the project creation screen of academic extension, with the goal of creating opportunities for integration between theory and practice, dialogue enhancement, development of teacher-student relationships and construction of active learning methodologies. At the same time, it is essential to stimulate research into institutionalized programs, with a view to spreading process of caring for patients with neoplastic wounds, since this theme is incipient in national surveys, especially when related to the context of the college.

How the survey was conducted only in a University Center and with a sample of participants, it is important that new studies be conducted in order to better identify the academic knowledge in the process of nursing care to people with neoplastic wounds. This issue might be better addressed in future studies; however with another focus, such as investigating the feelings experienced by nursing students on the care the person with cancer wound.

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