Construction of an Instrument to Assess Knowledge about Malignant Neoplastic Wounds

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Construção de um Instrumento para Avaliação do Conhecimento sobre Ferida Neoplásica Maligna Construcción de un Instrumento para Evaluar Conocimientos sobre Heridas Neoplásicas Malignas

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ABSTRACT

Introduction: Malignant neoplastic wounds (MNW), also called oncological, tumoral or fungoid lesions, occur due to the infiltration of malignant tumor cells in skin structures. **Objective:** To build and validate a questionnaire to assess the knowledge of nurses specialized in oncology about the care of patients with MNW. **Method:** Cross-sectional, quantitative approach study, divided int two steps. Step 1 consists in preparing the questionnaire and step 2 comprises the validation. **Results:** All 11 invited specialists agreed to participate in the study, being classified according to the criteria proposed, showing an average score of 11. Among the specialists, 18.18% were stomal therapists, 18.18% were Masters, 54.55% were Ph.D graduated and 9.09% postdoctoral fellows. A 4 response options questionnaire containing 18 multiple-choice questions was developed, covering the following topics: incidence, definition, oncogenesis process and MNW, characteristics and symptoms, staging, treatment and nursing interventions, basic and specific interventions in the management of MNW, peripheral skin protection and specificity of MNW compared with wounds of other etiologies. Validation was performed through the concordance coefficient among the evaluators using Kendall's coefficient, with an overall result equal to 0.0941, indicating a good degree of concordance. **Conclusion:** The present study contributes to the Oncology Nursing area both in terms of educational institutions that have a postgraduate program in oncology and health institutions with the aim of guiding the development of permanent education programs.

Key words: oncology nursing; wound healing; wounds and injuries; palliative care; neoplasms.

RESUMO

Introdução: Feridas neoplásicas malignas (FNM), também denominadas de lesões oncológicas, tumorais ou fungoides, ocorrem pela infiltração das células malignas do tumor nas estruturas da pele. Objetivo: Construir e validar um questionário para avaliar o conhecimento do enfermeiro especialista em Oncologia sobre o cuidado com o paciente portador de FNM. Método: Estudo transversal, com abordagem quantitativa, dividido em duas etapas. A etapa 1 consiste na elaboração do questionário e a etapa 2 compreende a validação. Resultados: Todos os 11 especialistas convidados aceitaram participar do estudo, sendo realizada a classificação segundo critérios propostos no processo de elaboração e validação, mostrando pontuação média de 11. Entre os especialistas, 18,18% eram estomaterapeutas, 18,18% mestres, 54,55% doutores e 9,09% pós-doutores. Foi elaborado um questionário contendo 18 questões de múltipla escolha com quatro opções de respostas abrangendo os seguintes temas: incidência, definição, processo de oncogênese e FNM, características e sintomatologia, estadiamento, tratamento e intervenções de enfermagem, intervenções básicas e específicas no manejo da FNM, proteção da pele periferida e especificidade da FNM comparada a feridas de outras etiologias. A validação foi realizada por meio do índice de concordância entre os avaliadores usando o coeficiente de Kendall, com resultado geral igual a 0,0941, indicando um bom grau de concordância. Conclusão: O presente estudo contribui para a área de Enfermagem Oncológica tanto no que tange às instituições de ensino que possuem o programa de pós-graduação em Oncologia como às instituições de saúde com o intuito de direcionar o desenvolvimento de programas de educação permanente.

Palavras-chave: enfermagem oncológica; cicatrização; ferimentos e lesões; cuidados paliativos; neoplasias.

RESUMEN

Introducción: Las heridas neoplásicas malignas (HNM), también llamadas lesiones oncológicas, tumorales o fungoides, se producen por la infiltración de células tumorales malignas en estructuras cutáneas. Objetivo: Construir y validar un cuestionario para evaluar el conocimiento de enfermeras especializadas en Oncología sobre el cuidado de pacientes con HNM. Método: Estudio transversal con enfoque cuantitativo, dividido en dos etapas. El paso 1 consiste en preparar el cuestionario y el paso 2 comprende la validación. Resultados: Los 11 especialistas invitados aceptaron participar en el estudio, siendo clasificados según los criterios propuestos, presentando una puntuación media de 11. Entre los especialistas, el 18,18% eran terapeutas estomales, el 18,18% maestros, el 54,55% médicos y 9,09% becarios postdoctorales. Se desarrolló un cuestionario que contiene 18 preguntas de opción múltiple con 4 opciones de respuesta, cubriendo los siguientes temas: incidencia, definición, proceso de oncogénesis y HNM, características y síntomas, estadificación, tratamiento e intervenciones de enfermería, intervenciones básicas y específicas en el manejo de la HNM, protección de la piel periférica y especificidad de la HNM en comparación con heridas de otras etiologías. La validación se realizó mediante el índice de concordancia entre los evaluadores utilizando el coeficiente de Kendall, con un resultado global igual a 0,0941, lo que indica un buen grado de concordancia. Conclusión: Este estudio aporta al área de Enfermería Oncológica tanto en cuanto a las instituciones educativas que cuentan con un programa de posgrado en Oncología como a las instituciones de salud con el objetivo de orientar el desarrollo de programas de educación permanente. Palabras clave: enfermería oncológica; cicatrización de heridas; heridas y lesiones; cuidados paliativos; neoplasias.

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INTRODUCTION

Cancer is one of the main factors responsible for the change of the sickening profile of the Brazilian population¹. For each year of the triennium 2020-2022, except non-melanoma skin cancer (177 thousand), it is anticipated 625,000 new cases of cancer in Brazil, the most incident are breast cancer (66 thousand), prostate (66 thousand), colorectal (41 thousand), lung (30 thousand) and stomach (21 thousand)².

Nearly 5 to 10% of the patients with cancer will develop wounds from a primary tumor or by metastases, directly impacting the quality of life, self-esteem, self-image because of pain, feeling of impairment, social changes due to frequent hospitalizations and social isolation³.

Malignant neoplastic wounds (MNW) are more frequently caused by breast and head and neck cancers, however, wounds may be associated with lung, ovarian, genitourinary cancers, sarcomas and melanomas⁴.

MNW also called oncologic, tumoral or fungal (mushroom-like) lesions occur by the infiltration of the tumor's malignant cells in the skin structures, eventually forming the exophytic wound through breakdown of the tissue integrity resulting from oncogeneses-caused disordered cellular growth⁵.

This process accounts for the peculiarities of the symptomatology of the wounds of this etiology because they cause the growth of the tumor, neovascularization and invasion of tumor cells in healthy tissues; it provokes occlusion of blood vessels and hypoxia, reduces oxygen supply, and formation of necrotic tumor tissue possibly contaminated by bacteria and eventually increasing the exudate and fetid odor³.

Terminally-ill patients with disfiguring MNW are anguished because healing is not possible and often manifest hard to control symptoms⁵.

Pain, fetid odor, exudate, bleeding, pruritus, infections, fistulae and progressive body disfiguring are among the main signs and symptoms. Proper management is paramount because the patient diagnosed with cancer experiences physical and psychological suffering, social isolation, damaged body image and embarrassment which causes repulsion for itself^{4,6}.

The disordered tumor growth invading or pressing nervous structures and terminations causes neuropathic pain but it can also be caused by inadequate management during dressing change⁴.

Bleeding is directly related to the physiopathology and malignancy-related elements as thrombocytopenia and disseminated coagulation. It may also be associated with physiologic disorder due to tumor growth, reducing the platelet function, increase of the friable neovascular network, in addition to dressing-change trauma, erosion of adjunct vessels because of the proliferation of malignant cells or even rupture of the main tumor vessels caused by radiotherapy^{4,7}.

Exudate is attributed to the inflammatory process and vasodilation from increased capillary permeability in the wound directly related to tissue catabolism provoked by bacterial proteases⁷.

Odor is another symptom quite frequent in MNW negatively impacting the patients' and their caretakers' quality of life, causing feeling of guilt and disgust, social isolation and eventually depression. It is associated with the disordered growth of the tumor creating necrotic tumor mass in the wound bed, typically preceding the contamination with aerobic and anaerobic organisms. These bacteria exhale volatile fatty acids as acetic and caproic acid and gases putrescine and cadaverine, responsible for the fetid odor⁷.

Pruritus is rarely found, however, they occur more frequently in cases of breast cancer and cutaneous infiltration related to the release of histamines by the inflammatory process provoked by the aggressive growth of tumor lesion⁴.

The treatment of MNW is associated with the therapy of the baseline disease, but the management is the nurse's responsibility, requiring knowledge of the oncologic etiology, particularities, staging of the lesion, biopsychosocial condition of the patient and specific products and coverage for signs and symptoms. Full care to the patient and its family is the ultimate goal of the skilled nurse while managing MNW's specificities⁵.

Emphasis sould be given to the physical and psychological impact these wounds provoke in the life of oncologic patients; training and expertise are required for proper choice of covers, minimization of the impact and improvement of the quality-of-life⁶.

Nurses play core roles in managing MNW among the health team because they supervise their subordinates, in addition to evaluating and performing the required care. They should have skills and technical capacity to control MNW symptoms for full and individualized care to the patients and their families⁸.

Management of MNW are specific to control the symptoms rather than wound healing and differ from conducts adopted to wounds of other etiology. The current studies emphasize the necessity of developing focused researches in order to validate protocols for better management of the symptoms, improving the procedures and reducing the stress the patients, their families and health professional live⁶.

Based in the complexity of the oncologic patient with MNW, in addition to the necessity of checking what the

expert nurses know since they are responsible for planning the care to these patients, the research question is: "what are the important technical-scientific information required to evaluate the knowledge of the oncology expert nurse about the care to the patient with MNW?" The current study has the objective of constructing and validating the questionnaire to respond this question.

METHOD

Cross-sectional, quantitative approach study to investigate, organize and analyze data to construct and validate an instrument to evaluate nurses' knowledge; the study population consisted of MNW experts divided in two stages: elaboration and validation.

Nurses should meet some criteria to be classified as MNW expert. Each criteria has a score, five points should be obtained at least to reach the expert level (criteria/scores: Master's Degree in Nursing: 4; Master's Degree in Nursing with dissertation about MNW: 1; publication of article about MNW in reference journals: 2; article published about wounds with relevant content: 2; PhD in Oncology: 2; clinical practice of at least one year in Oncology: 1; and specialization (certificate) in Nursing Enterostomal and Dermatology: 2). The higher the score, higher the evaluation will be⁹.

The sample consisted of 11 Brazilian nurses with at least scholar formation as experts in enterostomal and dermatology. Professionals with less than 5 points according to Fehring¹⁰ criteria were excluded. The selection was the result of active search of experts in Lattes Platform, National Council of Scientific and Technological Development – Lattes Curriculum and Directory of Clinical Trials.

Ties of judges decisions were avoided with an odd number of participants who received an invitation e-mail with the ICF (Informed Consent Form), objectives, a date to respond and a link to access the questionnaire applied through Google Forms[®]. The first screen presented the ICF, it was considered "accepted" when the nurses moved to the next screens containing the first part with sociodemographic data, scholar formation, time of work in oncology and an 18-questions questionnaire, with even (1 to 4) Likert-scale from "fully agree" to "fully disagree" and fields to submit the suggestions. The evaluation period was August 1-30, 2019.

DESIGN OF THE STAGE 1: CONSTRUCTION OF THE QUESTIONNAIRE

An 18-questions questionnaire was constructed, based in several references including scientific articles and books, with Health Sciences Descriptors (DeCS) utilizing the Boolean operators AND among the descriptors: oncologic nursing, palliative care, wound healing, neoplasms, wounds and lesions, quality of life in the databases and/ or electronic libraries LILACS, MEDLINE (PubMed), IBECS, SciELO, Cochrane Library and Google Scholar. The definition of the number of questions is based in the content according to the literature addressing the theme MNW.

This stage, including its validation was concluded upon IRB approval.

DESIGN OF STAGE 2: VALIDATION OF THE OUESTIONNAIRE

The method of validation of the questionnaire was based in experts' (judges) evaluation of the content according to the Delphi technique, a method that pursues a consensus – semantic, idiomatic and conceptual^{11,12} – on different questions. The objective was to revise the questionnaire in the perspective of the judges.

Below each question, a Likert-scale was presented to check the expert's agreement or disagreement followed by comments of what is being evaluated¹³.

The results based in the review of the questions and in the judges' conclusion were analyzed. In a second round, the questionnaire was resent with a letter containing the results of the Likert-scale and description of the questions most quoted and/or more relevant to reach the final opinion.

Kendall's W, a measure of agreement among judges on specific themes with characteristics was utilized to evaluate the judge's agreement on the validation of the content. The result ranges from 0, full disagreement and 1, full agreement¹⁴.

The Institutional Review Board approved the study, number 3.458.402, in compliance with Resolution CNS 510/16¹⁵.

RESULTS

11 skilled nurses were invited to participate as experts and responded to the questionnaire.

63.6% had PhD degree, one, post-doctorate, 18.1%, Master of Science and 18.1%, experts in enterostomal therapy. The mean of experience in the area was 9.6 years, ranging from 2 to 14 years.

Table 1 shows the time of the participants' work in oncology to validate the questionnaire.

According to Fehring¹⁰ criteria, the mean was 11 points as Table 2 portrays.

18 multiple choice questions with 4 response options were prepared on the following themes: incidence, definition, oncogeneses process and MNW, characteristics and symptomatology, baseline and specific MNW management interventions, periwound skin protection

Table 1. Time of work in oncology of the judges validating the MNW questionnaire. São Paulo, 2021

Time of work in oncology	%
2 to 4 years	45.4
5 to 7 years	9.0
8 to 10 years	18.1
11 to 13 years	9.0
> 17 years	18.1

and specificity of MNW compared with wounds of other etiologies.

Chart 1 contains the questionnaire's 18 questions validated.

For the validation of the questionnaire in Stage 2, all the 18 questions were revised: the statement and response options were modified in eight questions, in six, the statement was modified and in four, the response options. The main changes addressed the terminology of oncology and MNW management such as "fast and disordered tumor growth" changed to "infiltration of neoplastic cells in the connective tissue"; "fragile and engorged" to "dilated"; "stage" to "staging"; "avoid the debridement" to "debride surgically".

Based in Kendall's W, the rate of agreement among the judges was 69.3%, a good outcome of the validation of the questionnaire's specific technical-scientific queries. For each question, from 1 (fully agree) to 4 (fully disagree) were attributed.

The numerator of the rate was the number with the best response, 1 and the denominator, the mean of the values. The 11 judges calculated the rate of concordance of each question and then the general concordance for the 18 questions, whose outcome was a general concordance of 0.0941. Table 3 shows these results.

DISCUSSION

The proposal to create a two-stages 18-questions questionnaire with structured set of queries to collect data met the study goal. No consensus exist in the literature regarding the number of questions¹⁶, but it must be enough to meet the objectives and not too extensive to avoid the interviewees' disinterest¹⁷.

Most of the questions were revised based on semantic, idiomatic, conceptual and grammatical consistencies during construction and validation. In order to motivate the respondent, simple, straight and objective language was adopted in addition to instructions to clarify the nature and relevance^{12,18}. This is a two-phase process, development and expert's judgment to reach a consensus¹⁹.

The Delphi technique, a robust investigation strategy was utilized in validation, it gathers experts opinions geographically distant leading to palpable results on complex and comprehensive themes because it stimulates the analysis of opinions, search for consensus and identification of discordant themes¹¹. It is a low-cost, accessible and easy method allowing the participation of many experts from elsewhere²⁰.

Table 2. Classification of each judge's validation of the MNW questionnaire. São Paulo, 2021

Reference value	Judge 1	Judge 2	Judge 3	Judge 4	Judge 5	Judge 6	Judge 7	Judge 8	Judge 9	Judge 10	Judge 11
4	4	4	4	4	4	4	4	4	4	-	-
1	-	-	-	-	-	-	-	-	-	-	-
2	2	2	-	2	2	2	2	2	-	-	-
1	1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2	2
2	2	2	2	2	2	-	2	-	-	2	2
2	2	2	2	2	2	2	2	-	-	-	-
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^(*) Area of interest of the study: malignant neoplastic wound.

1. Check the CORRECT response for most incident tumors causing malignant neoplastic wounds:

- a) Breast, lung and colorectal
- b) Head, neck and breast
- c) Colorectal, genitourinary and non-Hodgkin lymphoma
- d) Sarcomas, colorectal and breast

2. Define malignant neoplastic wounds:

- a) Infiltration of malignant cells in the skin structures, including blood and/or lymph vessels
- b) Physiologic alteration of the multiplication of cells from primary benign and/or metastatic tumor
- c) Interruption of the skin continuity affecting its integrity exclusively related to the metastatic process
- d) Superficial or profound, closed or open, simple or complex resulting from chronic inflammatory process

3. Check the CORRECT option related to the oncogenesis process of malignant neoplastic wounds:

- a) Result of the oxygen deficit and nutrients to skin extremities
- b) Result of the tumor growth, neovascularization and invasion of health tissues, respectively
- c) Resulting from the pressure of the tumor amidst bony prominences, leading to local ischemia and increased risk of metastasis
- d) Consequence of an inflammatory process from the tumor infiltration in the skin structures

4. Pain is a symptom frequently related to malignant neoplastic wound. Based in this, check the options describing the possible causes of pain in wounds of this etiology:

- a) Resulting from the infectious condition caused by the management and wrong choice of cover or dressing
- b) Related to traumatic, infectious or inflammatory affections from the infiltration of neoplastic cells in the connective tissue
- c) Consequence of the rapid tumor growth invading and pressing nervous terminations and structures and/ or wrong management during dressing change
- d) Related to inflammatory exacerbation and also associated with anxiety and anticipation of pain during management

5. Odor is considered the most devastating symptom for patients with malignant neoplastic wounds because of nausea and imposed social isolation. Check the option that justifies the nature of this symptom:

- a) Destruction of cutaneous layers as epidermal and dermal, possibly reaching deeper anatomic structures
- b) Difficult tissue respiration from neovascularization damaged by the tumor mass
- c) Colonization of bacteria present in the transient microbiota of the skin affected by the malignant neoplastic disease
- d) Presence of devitalized tissue and mixture of volatile gases (putrescine, cadaverine) produced by anaerobic and aerobic bacteria present in the wound bed

6. Bleeding in malignant neoplastic wound may be associated with radiotherapy and trauma during the removal of the dressing. However, other factors favor the development of this event among which:

- a) Physiologic disorder, diminishing of the thrombocytes function, friable neovascular network, rupture of vessels found in the tumor
- b) Inflammatory process, fluctuations of the blood flow, rupture of vessels in the tumor, accelerated tumor growth
- c) Degeneration of the base of the membrane of carcinogenic cells, action of hydrolytic enzymes, diminishing of the thrombocytes function, inadequate cleaning techniques
- d) Dilated capillaries, interaction of the bacterial flora, increase of thrombocytes function and capillary permeability

7. Exudate, further to provoking discomfort in patients with malignant neoplastic wounds can also contribute for the presence and/or exacerbation of the odor. Therefore, it is possible to affirm that the cause of the exudate increase is related to:

- a) Infectious process, increase of capillary permeability, presence of devitalized tissue and pruritus
- b) Expressive depth, infectious and inflammatory process and hypoxia provoked by tumor process
- c) Increase of capillary permeability, release of volatile gases and neovascular fragility of the tumor
- d) Secretion of the factor of vascular permeability, release of histamines and cutaneous infiltration by malignant cells

to be continued

Chart 1. continuation

- 8. Pruritus is a symptom present particularly in patients with malignant neoplastic wounds with breast cancer and cutaneous infiltration. Check the correct option where this symptom is associated with:
- a) Inflammatory process and release of histamines
- b) Colonization of anaerobic bacteria and proteolytic enzymes
- c) Fistula and release of exudate
- d) Oncogeneses process and volatile acids
- 9. Female, 48 years of age, with invasive ductal carcinoma, malignant neoplastic wound in the left breast involving the epidermal, dermal and subcutaneous with regular depth, but with protrusions and irregular formation, friable, with areas of ulceration and liquefied necrotic tissue, fetid odor, exudative, vegetative cauliflower feature. Review the description and check the option matching the wound staging according to INCA classification:
- a) Stage II
- b) Stage IV
- c) Stage I
- d) Stage III
- 10. The aim of basic interventions related to nursing management of the malignant neoplastic wound is to:
- a) Control signs and symptoms whose objective was not wound healing
- b) Favor the healing process and emotional wellness
- c) Promote healing and minimize physical and psychological problems
- d) Favor healing and prevent the onset of new lesions
- 11. Women, 54 years of age, with cauliflower-like malignant neoplastic wound at the breast, frequent pain during wound management, prescription of intravenous opioid if needed. During wound dressing, it should:
- a) Administer intravenous opioid 1 hour before the dressing
- b) Administer opioid according to pre-established schedule prescription
- c) Report the medical team in charge requesting topic prescription because intravenous route was not that effective
- d) Administer intravenous opioid 5 minutes prior to dressing
- 12. Patient with malignant neoplastic wound in cervical region with nauseating odor, keeping family and friends apart. Evaluation requested for this patient. Check the correct option matching the management of this symptom:
- a) Topic and/or systemic metronidazole, essential fatty acid, dressing with activated carbon
- b) Systemic metronidazole, topic metronidazole and/or antimicrobial agents, dressing with activated carbon
- c) Papain, topic and/or systemic, metronidazole, activated carbon dressing
- d) Papain, polyhexamethylene biguanide, calcium alginate
- 13. 57-years old male, squamous epidermoid carcinoma in esophageal, neoplastic wound at the neck with fetid odor even with occlusive dressing. Check the correct option to classify the odor according to INCA classification:
- a) Grade 0
- b) Grade 1
- c) Grade 2
- d) Grade 3
- 14. Female patient with malignant neoplastic wound with active bleeding needs conduct for immediate control. Check the right option matching the conduct:
- a) Local pressure with gauze, compress or towel
- b) Application of silver-impregnated foam
- c) Lukewarm compress soaked with essential fatty acid
- d) Application of silver nitrate
- 15. 64-years old male with stomach adenocarcinoma, malignant neoplastic wound in hypogastric region, tissue loss and great amount of exudate. Check the option matching the management for this symptom:
- a) Calcium alginate and absorptive activated carbon dressing and gauze compress as secondary cover
- b) Hydrogel and activated carbon secondary cover and/or calcium alginate
- c) Hydrocolloid plaque and/or hydrofiber and gauze compress as secondary cover
- d) Hydrogel and/or silver-impregnated foam and gauze compress as secondary cover

to be continued

16. 48-years old female, malignant neoplastic wound at left breast, intense pruritus in perilesional region. Check the right option matching the management of this symptom:

- a) Chamomile tea sprinkler bath, medical prescription of silver sulphadiazine
- b) Investigate the cause, medical prescription of topic corticoid and evaluate necessity of systemic therapy
- c) Systemic prescription of anti-inflammatory, prolonged lukewarm chamomile tea bath
- d) Investigate the cause, prescription of topic anti-inflammatory
- 17. 32-years old female patient, soft parts sarcoma in outpatient follow-up, malignant neoplastic wound at left inguinal region, in use of silver sulphadiazine, with large quantity of exudate, perilesional hyperemic skin, extreme discomfort. To protect perilesional skin, the patient should be guided to perform the following procedures at home:
- a) Corticoid-base cream to avoid infections and dressing change at each 24 hours
- b) Zinc oxide as protective barrier and dressing change at each 12 hours
- c) Hydrogel to reduce the skin irritation and dressing change 4 times a day
- d) Available protective barrier such as polymeric lotion and dressing change when humid
- 18. Male, 55 years of age, carrier of laryngeal metastatic spinocellular carcinoma to lung and central nervous system with malignant neoplastic wound in the right cervical region, 11 cm width and 6 cm length, with presence of brown necrosis in approximately 40% of the area of the wound and 60% of live red tissue. Presents lesion by pressure in the sacrum with presence of softened necrosis, brown color in approximately 70% of the area of the wound and the remaining 30% with granulated tissue. Review the case and check the option matched to the correct conduct:
- a) Debride the area of the necrosis of both wounds and apply product to stimulate healing of granulation areas because the conduct is not contingent on the etiology of the wounds
- b) Perform autolytic debridement in the lesion by pressure, but the malignant neoplastic wound should be approached otherwise because of its specificity
- c) Surgically debride both lesions because oncologic patients have thrombocytopenia and high risk of bleeding during the procedure
- d) Debride the lesion by pressure utilizing surgical instrument and the malignant neoplastic wound with collagenases; for the granulation tissue, utilize dressing that does not cause trauma

Table 3.Likert-scale score of the judge's concordance on the evaluation of the MNW questionnaire. São Paulo, 2021

Question	Judge 1	Judge 2	Judge 3	Judge 4	Judge 5	Judge 6	Judge 7	Judge 8	Judge 9	Judge 10	Judge 11	Mean	Agreement (%)
# 01	1	2	2	1	1	1	1	1	1	1	1	1,182	84.62
# 02	1	1	1	1	1	1	4	1	1	1	1	1,273	78.57
# 03	1	2	1	1	1	1	3	2	2	1	2	1,545	64.71
# 04	2	3	1	1	1	1	3	2	2	1	1	1,636	61.11
# 05	1	4	1	1	1	1	3	1	2	1	1	1,545	64.71
# 06	1	1	1	1	1	1	3	1	1	1	1	1,182	84.62
# 07	1	2	2	1	1	1	3	1	2	1	1	1,455	68.75
# 08	1	2	3	1	1	1	2	1	2	1	1	1,455	68.75
# 09	1	3	1	2	1	1	2	1	2	1	1	1,455	68.75
# 10	2	1	1	1	1	1	2	1	1	1	1	1,182	84.62
# 11	3	1	1	1	4	1	1	1	1	1	1	1,455	68.75
# 12	1	2	1	1	1	1	2	1	2	1	1	1,273	78.57
# 13	1	4	1	1	1	4	1	2	2	1	1	1,727	57.89
# 14	4	4	2	1	1	1	4	1	2	1	1	2,000	50.00
# 15	4	1	1	1	1	1	2	2	2	1	1	1,545	64.71
# 16	4	4	2	1	1	1	1	2	1	1	1	1,727	57.89
# 17	1	4	1	1	1	1	2	1	2	1	1	1,455	68.75
# 18	3	2	1	1	1	1	1	1	2	1	1	1,364	73.33

General concordance: 69.3%

It permitted to reach a consensus among experts about MNW in relation to the consistencies mentioned earlier based in Likert-scale and suggestions, which allows the expert to express how much it agrees or disagrees with a particular statement¹³. The advantages are its simplicity and the use of affirmations not implicitly connected to the attitude investigated which favors the inclusion of any item cohesive with the final outcome²¹.

11 experts validated the questionnaire, two enterostomal therapists and nine *stricto sensu* post-graduates who conducted researches in oncology and treated patients with wounds.

No consensus in literature exist about the ideal number of judges to evaluate instruments¹³, but it is recommended from three to ten judges to validate the content based in the experience and because the judgment is individual²². When two or more judges demonstrate the evidence of the validity of the content of the instrument utilized in the study, subjectivity is excluded, which ensures reliability of the outcomes²³.

The choice of experts anchors the studies utilizing this methodological approach because a wrong selection tampers the veracity of the results; these experts are responsible for judging to what extent each question is relevant to evaluate the nurses' knowledge on MNW in oncology²⁴.

Most of the experts (81.8%) have Master's and PhD degrees and based in Fehring¹⁰ criteria, the mean of 11 points was reached. According to the literature, a minimum of five points should be attained to be eligible to join the experts panel for content validation^{25,26}.

Regarding the time of experience in oncology, 45.4% have between 2 and 4 years but 18.1%, more than 17 years. This variable is important to identify an expert because it can help to meet the study objective since clinical experience accumulates proportionally with practice. It is a core topic influencing decision-taking²⁷.

The degree of expertise depends on the number of publications, time of clinical practice and titles²⁴.

Good level of concordance was reached (0.0941) utilizing Kendall's W, this method measures the agreement among three or four raters since they classify various themes according to a specific characteristic²⁸.

The reality of the unfeasibility of the cure determined by the oncologic disease leading to non-healing of the wound is frustrating for the nurse and possible disinterest for MNW²⁹. In a national study with the objective of investigating the scientific production about "chronic wounds", MNW were defined as "of least interest" with only one article, merely reaching 2% of the sample³⁰.

MNW is a complex theme and barely addressed in oncology teaching and research. It is important, however,

to understand the nurse's knowledge both in practice and while still in educational formation, preceding the effective communication to create bonds and trust between the patient and the nursing team²⁹.

CONCLUSION

The limitation of this study is the lack of sociodemographic characteristics of the judge's panel as age, time of professional practice, connection with the theme (care, research, teaching), essential to select an expert.

It contributed for the teaching institutions with graduation programs in Oncologic Nursing and to health institutions to guide the development of continuous education as it supports the evaluation of the professionals knowledge, a key theme for the quality of life of the oncologic patient. The questionnaire for oncologic expert nurses and/or professionals should continue to be applied.

CONTRIBUTIONS

Both authors contributed substantially for the study design, collection, analysis and/or interpretation of the data, wording, critical review and approved the final version to be published.

DECLARATION OF CONFLICT OF INTERESTS

There is no conflict of interests to declare.

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