Original Article

ICNP® terminological subgroup for palliative care patients with malignant tumor wounds

Subconjunto terminológico CIPE® para pacientes em cuidados paliativos com feridas tumorais malignas

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Abstract

Objective: To develop and validate a terminological subgroup using the International Classification for Nursing Practice for palliative care patients with malignant tumor wounds.

Methods: A methodological study with an integrative literature review that searched empirical evidence related to malignant tumor wounds and nursing interventions for the management of symptoms in MEDLINE, CINAHL, LILACS and COCHRANE, time frame from 2002 to 2015. After crossing the evidence with 2013 ICNP® terms based on the Model 7 Axis, statements were prepared as diagnoses and nursing interventions, distributed according to basic human needs of the conceptual framework of Wanda Horta, and evaluated by experts.

Results: From 51 affirmative diagnoses and 134 nursing interventions, 84.31%, and 91.04% were validated, respectively, establishing the subgroup.

Conclusion: The instrument may constitute an easy access reference for nurses, providing wound care based on evidence and a unified nursing language.

Resumo

Objetivo: Desenvolver e validar um subconjunto terminológico, utilizando a Classificação Internacional para Prática de Enfermagem para pacientes em cuidados paliativos com feridas tumorais malignas.

Métodos: Estudo metodológico com revisão integrativa da literatura, que busca evidências empíricas relacionadas às feridas tumorais malignas e intervenções de enfermagem para manejo dos sintomas, nas bases de dados *MEDLINE*, *CINAHL*, *LILACS* e *COCHRANE*, recorte temporal de 2002 a 2015. Após cruzamento das evidências com termos da CIPE® 2013, baseado no Modelo 7 Eixos, foram elaboradas declarações de diagnósticos e intervenções de enfermagem, distribuídas de acordo com necessidades humanas básicas do referencial conceitual de Wanda Horta e avaliadas por peritos.

Resultados: Das 51 afirmativas de diagnósticos e 134 intervenções de enfermagem, 84,31% e 91,04% foram validadas respectivamente, sendo elaborado o subconjunto.

Conclusão: O instrumento poderá constituir-se numa referência de fácil acesso para enfermeiros, propiciando um cuidado da ferida baseado em evidências e linguagem de enfermagem unificada.

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Introduction

Advances in cancer treatment provide a significant increase in survival of patients with cancer. According to the World Health Organization, in most of the world, most of these patients will already be at an advanced stage of the disease when they are first seen by a health professional. For them, the only realistic treatment option is pain relief and palliative care.[1]

Five to ten percent of patients with advanced cancer will develop malignant tumor wounds during the last six months of life as a result of the primary or metastatic tumor.[2-4] The malignant tumor wounds are formed by infiltration of malignant tumor cells into the skin structure, with a break in the integrity of the skin due to uncontrolled cell proliferation that the oncogenesis process induces.[5]

Despite the lack of accurate statistics on the incidence, the amount of time spent by nurses caring for these patients is recognized, in terms of evaluation and management of the wound, as well as psychosocial support.[3,4,6]

The Nursing Care System (NCS) presents itself as a nursing work organization tool, and the International Classification for Nursing Practice (ICNP®) emerges as a unifying framework of language in this area, providing a standardized terminology of care that facilitates the communication of nurses among themselves and with other health professionals responsible for policy decisions, so that the data and resulting information is used for planning and management of nursing care and the development of policies.[7-9]

Based on identified demand with the patients treated in a high complexity care oncology unit (Unacon),[10] the study aimed to answer the question: "What nursing diagnoses and interventions can be attributed to patients in palliative care with malignant tumor wounds, based on scientific evidence?" Thus, the objective of this study was to develop and validate a terminology subgroup, using the International Classification for Nursing Practice, for patients in palliative care with malignant tumor wounds. It seeks to contribute to decision making by nurses, based on evidence, that support effective and efficient nursing interventions for the management of symptoms, providing a consistent basis for the practice of nursing documentation and contributing to patient safety.

Methods

This was a methodological, descriptive study with a quantitative approach, performed in a General Hospital registered as Unacon, and developed in four stages.

In the first stage, an integrative literature review was performed in MEDLINE, CINAHL, LILACS, and COCHRANE, to answer the following question: "What nursing diagnoses and interventions can be attributed to patients in palliative care with malignant tumor wounds based on scientific evidence?" As inclusion criteria, a temporal cut from 2002 to 2015 was used, along with publications in English, Spanish, and Portuguese, online full text, and adherence to the theme. Exclusion criteria included publications with the theme involving children and adolescents. Thus, 43 articles became part of the study, as described in figure 1.

To construct the subgroup the conceptual reference of the Theory of Basic Human Needs was used, following the recommendation of the International Council of Nurses, which guides the use of theoretical or conceptual models for better organization listed in the catalog.[7] From reading articles in the historic stage of nursing, 30 pieces of empirical evidence were identified related to malignant tumor wounds. They have been organized into a framework for better identification. In the nursing diagnosis stage, the evidence was submitted to cross-mapping with the 2013 ICNP® version,[11] following the 7-Axis Model, generating 51 affirmative diagnoses that were grouped by basic human needs.

In the stage of the care plan, nursing interventions indicated for each diagnosis constructed were organized in a framework, according to

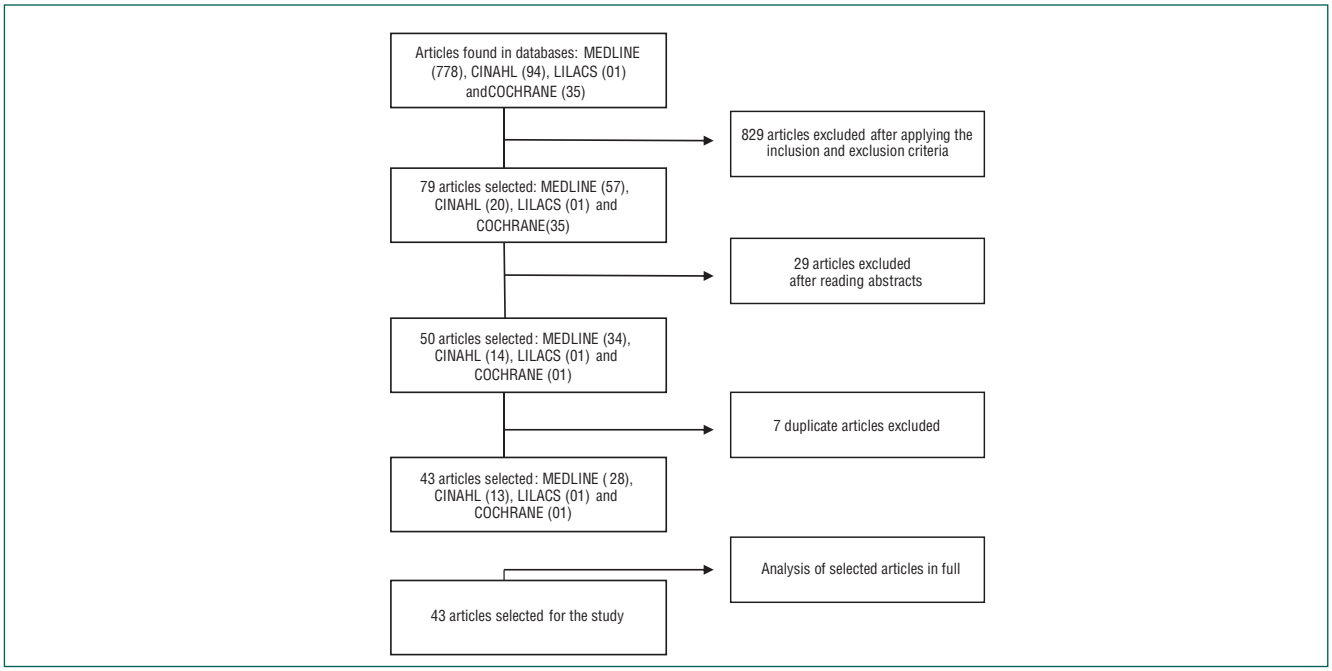

Figure 1. Strategy for article selection

its purpose in the care of the malignant tumor wound and, subsequently, the cross-mapping was performed in terms of ICNP®, developing 134 nursing interventions.

In the consulted articles, the most cited empirical evidence was: odor (100%), exudate (90%), psychosocial impact (93%), bleeding (83%), pain (76%), infection (74%) and necrosis (62%). Nursing interventions were constructed from the nursing diagnoses based on the most cited empirical evidence.

In the third stage, the validation of the ICNP® nursing diagnosis statement and interventions was performed, based on the opinion of expert nurses. Data collection occurred in November of 2014 to January of 2015.

The study included nine expert nurses, with a daily practice caring for cancer patients with malignant tumor wounds in palliative care, with practice areas in dermatological nursing (1), surgery (2), medical clinic (3), hematology (1), and emergency service (2). Experts were asked to give an opinion regarding their degree of agreement with regard to the statements, according to the following criteria: adequacy, relevance, clarity, precision, and objectivity. These criteria were selected in order to cover representative aspects of this phenomenon, understanding, and applicability. The degree of expert agreement on each criterion was assessed using a Likert scale, with scores from 1 to 5, where 1 - Poor, 2 - Fair, 3 - Average, 4-Good, 5 - Excellent.

In the fourth stage, the instrument was developed containing the validated diagnoses and nursing interventions with the terms of the 2013 ICNP® version,[7,11] organized according to the postulates of the conceptual framework of Wanda Horta.[9]

For data analysis, the concordance index (CI) of the participants was calculated by means of simple statistical analysis. For each degree of agreement, a classification has been defined as follows: 1 = 0; 2 = 0.25; 3 = 0.50, 4 = 0.75; and 5 = 1. We considered the statements which obtained an IC ≥ 0.8 in the overall average valid.

The development of the study followed the 466/2012 Resolution[12] of the National Council on Research, which regulates research with human beings. It was approved by the Research Ethics Committee of the institution on October 11, 2013, with protocol number: 422494. Participants signed the Terms of Free and Informed Consent form.

Results

From the intersection of empirical evidence with the terms of the 2013 ICNP® version, following the 7-Axis Model 51 nursing diagnoses were developed.

Following the recommendation of the International Council of Nurses, which guides the use of theoretical or conceptual models for a better organization listed in the catalog, the Theory of Basic Human Needs of Wanda de Aguiar Horta was used as a conceptual reference. Thus, after the composition of nursing diagnoses, these were distributed according to the physiological, psychosocial and psycho-spiritual needs. Among the psychobiological needs, nursing diagnoses were identified for neurological regulation, thermal regulation and elimination subgroups (Chart 1).

Of nursing interventions indicated for empirical evidence, most cited in the texts, 134 nursing interventions were developed, and of these, 122 were validated by experts (91.04%) (Chart 2).

Discussion

Among the 51 proposed nursing diagnoses, 43 were validated by experts, achieving ≥ 0.8 CI (84.31%).

The following diagnoses did not receive a score needed for validation: caregiver stress risk, spiritual distress, impaired family relationship, stigma, lack of social support, anger, impaired psychological condition, and shame.

Of the eight diagnostic statements that were not validated, six were related to the psychosocial domain, one to the psychobiological domain, and one to the psycho-spiritual domain. The psychosocial and spiritual nature of the patient are areas which are scarcely addressed by health professionals, and even professionals trained in palliative care realize the difficulty of analyzing, addressing, and integrating the different dimen-

Chart 1. Nursing diagnoses distributed according to the physiological, psychosocial and psycho-spiritual needs of the theory of basic human needs

Physiological needs	
Subgroup	**ICNP® Diagnosis**
Perception of sensory organs	Wound pain
	Cancer pain
	Nausea
	Foul odor
	Itching
Oxygenation	Upper airway obstruction risk
Vascular regulation	Bleeding
	Bleeding risk
	Hemorrhage
	Hemorrhagic risk
Hydration	Peripheral edema
Feeding	Impaired appetite
	Malignant wound
	Maceration of the skin surrounding the wound
Physical integrity	Risk of maceration of the skin surrounding the wound
Physical activity	Fatigue
	Impaired mobility
Body care	Impaired ability to perform hygiene
Physical security / Environment	Infection
	Infection risk
	Septic shock
	Wound with secretion
	Tumor wound infestation by fly larvae
Sexuality	Sexual behavior impaired
Regulation: cell growth	Healing
	Impaired Wound
	Necrosis
Sleep and rest	Impaired Sleep
Therapeutics	Complex Care Provider Role
	Caregiver Stress Risk
Psychosocial needs	
Subgroup	**ICNP® Diagnosis**
Leisure	Social isolation
	Impaired socialization
Emotional security	Anxiety
	Low confidence
	Fear
	Anger
Love and acceptance	Stigma
	Lack of social support
	Impaired family relationship
Self-esteem, self-confidence and self-respect	Low self-esteem
	Negative Self-Concept
	Impaired Coping Process
	Depression
	Hopelessness
	Disturbed body image
	Suffering
	Impaired Psychological condition
	Shame
Liberty and participation	Helplessness
Health education/learning	Health Knowledge Deficit
Autorrealização	Impotence
Psycho-spiritual needs	
Subgroup	**ICNP® Diagnosis**
Religiosity/Spirituality	Spiritual Distress

Chart 2. Validated interventions

ICNP® Nursing interventions for the diagnosis, "foul odor"
1- Apply wound dressing.
2- Do debridement.
3- Assess the need for debridement surgery.
4- Gently rub the wound with gauze dressing and saline.
5- Gently rub the wound with gauze dressing and solution to clean.
6- Irrigate the wound with saline solution in syringe with needle.
7- Authorize bathing the wound in the shower.
8- Apply topical antibiotic therapy.
9- Apply occlusive dressing wound.
10- Guide the wound exchange dressing every day.
11 - Instruct on wound care.
12- Manage the control of the foul odor at the wound site.
13- Implement aromatherapy at the wound site.
14- Encourage ability to perform hygiene.
15- Guide patient and family about the disposal of bandages after changing.
16- Instruct on odor control at home.
17- Ventilate the house when changing the dressing.
18- Evaluate the need to administer antibiotics.
19- Avoid demonstrating discomfort with the foul odor.
20- Provide instructional material on control of the foul odor at the wound site.
ICNP® nursing interventions for the diagnoses: "Anxiety", "Low Self-Esteem," " Negative Self-Concept ", "Low Confidence", " Impaired Coping process", "Depression", "Helplessness", "Hopeless", "Stigma" "Lack of Social Support", "Disturbed Body Image ", "Impotence", "Fear", "Anger", "Impaired Socialization", "Suffering", "Impaired Psychological Condition" and "Shame"
1- Protect the patient's autonomy.
2- Engage the patient in the decision-making process.
3- Develop ability to communicate with the patient.
4- Develop ability to communicate with family members.
5- Explain about the wound.
6- Refer to social services.
7- Refer for support group therapy.
8- Guide in relaxation technique.
9- Guide in music therapy.
10- Assess social support.
11- Promote social support.
12- Wound care.
13- Teach about the wound care.
14- Assess the psychosocial response to the instruction on the wound.
15- Provide emotional support.
16- Assess exhaustion.
17- Palliate.
18- Advise on hope.
19- Assess fear.
20- Assess self-image.
21- Assess psychological well-being.
22- Assess coping capacity.
23- Assess depression.
24- Assess expectations.
25- Advise on fear.
26- Assess suffering.
27- Assess stigma.
28- Teach adaptation techniques.
29- Identify psychosocial status.
30- Maintain dignity and privacy.
31- Promote self-esteem.
32- Promote social welfare.
33- Promote hope.
34- Reinforce personal identity.
35- Encourage socialization.

ICNP® nursing interventions for the diagnosis, "Wound with secretion"
1- Apply wound dressing.
2- Apply a drainage bag.
3- Maintain integrity of skin proximal to the wound site.
4- Apply topical antibiotic therapy.
5- Clean the wound with appropriate solution.
6- Manage control of secretion at the wound site.
7- Assess the need to administer antibiotics.
8- Instruct on wound care.
Nursing interventions for the diagnosis, "Bleeding"
1- Prevent bleeding at the wound site.
2- Apply a non-adherent wound dressing.
3- Compress with wound dressing.
4- Press the wound site.
5- Apply hemostatic agent at the wound site.
6- Apply cold compress on the wound.
7- Apply cold saline in the wound.
8- Implement care technique with malignant wound.
9- Instruct about wound care.
10- Instruct the patient how to prevent bleeding at the wound site.
11- Instruct family on how to prevent bleeding at the wound site.
12- Instruct the patient to control bleeding at the wound site.
13- Instruct the family to control bleeding at the wound site.
14- Provide instructional material on bleeding control at the wound site.
15- Plan action for bleeding at the wound site.
16- Assess the need for blood therapy.
17- Refer to the physician.
18- Refer to emergency service.
Nursing interventions for the diagnosis, "Wound pain"
1- Administer pain medication before caring for the wound.
2- Care for the malignant wound.
3- Moisturize the gauze dressing with saline before removal.
4- Clean the wound with saline solution in syringe with needle.
5- Use saline solution at a comfortable temperature for the patient.
6- Keep the wound moist.
7- Assessing the need for pain medication at the wound site.
8- Apply cold compress pad to the wound site.
9- Maintain the integrity of skin proximal to the wound site.
10- Treat condition of skin proximal to the wound site.
11- Control foul odor in the wound.
12- Assessing infection at the wound site.
13- Avoid handling wound if not necessary.
14- Teach about wound care.
15- Assess pain when changing wound dressing.
16- Provide instructional material for pain control at the wound site.
Nursing interventions for the diagnosis, "Cancer pain"
1- Evaluate the pain.
2- Evaluate the need for pain medication.
3- Assess response to pain management.
4- Guide the patient about pain management.
5- Guide patient-controlled analgesia use.
6- Guide the family about pain management.
7- Promote the use of devices to aid memory.
8- Assess adherence.
9- Encourage family and patient participation in pain control.
10- Guide relaxation technique.
11- Guide music therapy.
12- Refer for physiotherapy.
13- Report to physician about pain control.
14- Provide instructional material on pain control.

To be continued

Continuation

Nursing interventions for the diagnosis, "Infection"
1- Apply wound dressing.
2- Implement aseptic technique when caring for malignant wound.
3- Apply topical therapy with appropriate solution.
4- Perform debridement.
5- Apply topical antibiotic therapy in wound.
6- Assess the susceptibility for wound infection.
7- Assess the need to administer antibiotics.
Nursing interventions for the diagnosis, "Necrosis"
1- Assess the need for debridement.
2- Perform debridement.
3- Apply wound dressing.
4- Assess the need to administer antibiotics.

sions of the human being, especially in situations that refer to mortality.

Studies reinforce that the complexity of the wound means a challenge for the lay caregiver and the patient during the caregiving. The time spent trying to manage the signs and symptoms, the constant and visible reminder of the progression of cancer and terminal illness, exhibited by the wound, bring important repercussions on various aspects of their lives (physical, psychological, social, spiritual and economic).[4,5,13]

Stigma, anger, anguish and shame are aspects mentioned by authors that permeate the experience of having a malignant tumor wound, resulting in an impact on mental and emotional well-being, and loss of patient dignity,[3,13,14] which indicate the need of further reflection on these aspects by nurses involved in the care of these patients.

In hospitals, the environment where the instrument was administered, the patient and his family are cared for by a whole team, which may also have influenced the non-validation of these proposed diagnoses, as in this context some questions do not emerge as priority.

Of the 134 developed nursing interventions, 122 obtained ≥0.8 CI (91.04%), while 12 reached <0.8 CI (8.96%). Among those which did not reach the ≤ 0.8 CI, 16.67% were interventions for "foul odor", 22.27% for "wound with exudates", 22.22% of interventions for "oncological pain", and 12.50% for "infection".

The main aim of the therapeutic approach in the care of the malignant tumor wound is no longer wound healing, but a focus on patient comfort about the wound and the prevention and relief of local symptoms, which include odor reduction, management of exudates, pain relief, skin integrity maintenance around the wound, prevention and control of bleeding, debridement if indicated, reduction of the bacterial flora, and the use of appropriate products and supplies.[2-5,13-15]

It is a challenge for nurses to use appropriate interventions for the management of a malignant tumor wound, providing functional dressings, with comfort and relief to the patient.[2-5,13-15]

Knowing the treatment options increases the safety of the nurse at the time of evaluation and development of the care plan. The evolution of these wounds is very fast, which implies constant assessment and possible changes for every dressing.[2-5,13-15] Using the subset constructed by means of study, the nurse may have a tool for clinical decision making and managing care decisions, which enables better organization of work and greater effectiveness in nursing actions.

Of the nine nurses who participated in the survey, six were assigned to inpatient units and two nurses practiced in the emergency service. The peculiar characteristics and working conditions of these environments are factors that may have influenced the non-validation of certain intervention statements.

The non-validation of some of both the diagnostic and intervention statements indicates the need for further studies, considering the complexity of care provided to clients in palliative care with malignant tumor wounds, and the diversity of work environments in which these patients may be integrated at different times during their clinical disease course.

Conclusion

The aim of this study was achieved, from the development of the subset of of diagnoses and nursing intervention statements that can serve as an easily accessible reference for nurses providing care. Thus, individualized care plans can

be developed and offer a more reflective, evidence-based, practice for the patient with malignant tumor wounds. The ICNP® subsets provide an opportunity for nurses to organize their work process, being able to optimize the time available to the patient during the provision of care Similarly, the ICNP® allows the existence of a common language for all nurses, facilitating communication among themselves as well as a record of their actions. A common, adequate and shared language can contribute to the consolidation of the nursing work process, as a member of a multidisciplinary team, with its well-defined competence and awareness of its importance and contribution to the completeness and resoluteness of care. The complexity and uniqueness of patient care with a malignant tumor wound justifies quantitative diagnoses and interventions validated by expert nurses, which aims to include the different models of palliative care, which are hospital, home and outpatient care. The lack of knowledge mentioned by the participants regarding the ICNP® and palliative care was initially identified as a possible limitation of the study, but the high validation index demonstrated the relevance of the proposal and the importance of the results achieved.

Collaborations

Castro MCF participated in the design, analysis, data interpretation and writing of the article. Fuly PSC collaborated with the analysis, interpretation of data, relevant critical review of the intellectual content, and final approval of the version to be published. Garcia TR participated in the design, analysis, data interpretation and critical review of relevant intellectual content. Santos MLSC contributed to the relevant critical review of the intellectual content.

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