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# Process and results of the development of an ICNP® Catalogue for Cancer Pain\*

PROCESSO E RESULTADOS DO DESENVOLVIMENTO DE UM CATÁLOGO CIPE® PARA DOR ONCOLÓGICA

PROCESO Y RESULTADOS DEL DESARROLLO DE UN CATÁLOGO CIPE® PARA EL DOLOR ONCOLÓGICO

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#### **ABSTRACT**

This was a methodological study conducted to describe the process and results of the development of an International Classification for Nursing Practice (ICNP®) Catalogue for Cancer Pain. According to the International Council of Nurses (ICN), this catalogue contains a subset of nursing diagnoses, outcomes, and interventions to document the implementation of the nursing process in cancer patients. This catalogue was developed in several steps according to the guidelines recommended by the ICN. As a result, 68 statements on nursing diagnoses/outcomes were obtained, which were classified according to the theoretical model for nursing care related to cancer pain into physical (28), psychological (29), and sociocultural and spiritual (11) aspects. A total of 116 corresponding nursing interventions were obtained. The proposed ICNP® Catalogue for Cancer Pain aims to provide safe and systematic orientation to nurses who work in this field, thus improving the quality of patient care and facilitating the performance of the nursing process.

# **DESCRIPTORS**

Pain Neoplasms Oncologic nursing Classification **Nursing process** 

#### **RESUMO**

Estudo metodológico realizado como o objetivo de descrever o processo e os resultados do desenvolvimento de um Catálogo CIPE® para Dor Oncológica, considerado pelo International Council of Nurses como um subconjunto de diagnósticos, resultados e intervenções de enfermagem, para ser utilizado como instrumento para a documentação da implementação do processo de enfermagem em pacientes oncológicos. Em seu desenvolvimento foram realizados passos seguindo as diretrizes preconizadas pelo International Council of Nurses. Como resultados obteve-se 68 afirmativas de diagnósticos/resultados de enfermagem, classificadas de acordo com o modelo teórico para o cuidar de enfermagem em dor oncológica nos aspectos físicos (28), psicológicos (29) e socioculturais e espirituais (11) e, para estas afirmativas, 116 intervenções de enfermagem. Considera-se que a proposta do Catálogo CIPE® para Dor Oncológica pode proporcionar uma orientação segura e sistemática para os enfermeiros que trabalham nessa área, aumentando a qualidade da assistência ao paciente e favorecendo a execução do Processo de Enfermagem.

#### **DESCRITORES**

Dor **Neoplasias** Enfermagem oncológica Classificação Processos de enfermagem

#### RESUMEN

Estudio metodológico realizado con el objetivo de describir el proceso y los resultados del desarrollo de un catálogo CIPE® para el dolor oncológico, considerado por el Consejo Internacional de Enfermeras como un subconjunto de diagnósticos, resultados e intervenciones de enfermería, para ser utilizado como una herramienta para la documentación de la aplicación del proceso de enfermería en pacientes oncológicos y el desarrollo del mismo fue realizado siguiendo las pautas recomendadas por el Consejo Internacional de Enfermeras. Los resultados obtenidos fueron 68 afirmaciones de diagnósticos/resultados de enfermería, clasificados de acuerdo al modelo teórico para el cuidado de enfermería en dolor oncológico, en los aspectos físicos (28), psicológicos (29) y socio-culturales y espirituales (11), y para estas afirmaciones, 116 intervenciones de enfermería. Se considera que la propuesta del Catálogo CIPE® para el dolor oncológico puede proporcionar una orientación segura y sistemática para las enfermeras que trabajan en esta área, aumentando la calidad de la atención al paciente y favoreciendo la ejecución del proceso de enfermería.

# **DESCRIPTORES**

Dolor Neoplasias Enfermería oncológica Clasificación Procesos de enfermería

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# INTRODUCTION

In recent decades, improved cancer treatments have increased the survival of patients and exerted a significant impact on their quality of life. However, patients also can experience pain during the course of the disease. Pain has previously been defined as an *unpleasant sensory and emotional experience associated with actual or potential tissue damage*<sup>(1)</sup>.

However, pain is a subjective, genuinely personal experience that may or may not be associated with actual tissue damage. The perception of pain is a multidimensional experience, which varies in sensory quality and intensity, and pain is influenced by both affective and emotional factors<sup>(2)</sup>. In January 2000, pain was classified as the fifth vital sign, thus highlighting the need to accurately assess and record its level, similar to the other vital signs of pulse rate, temperature, blood pressure, and respiration rate<sup>(3)</sup>.

Cancer pain may be due to the disease itself, its effects, anticancer treatment, or concomitant non-cancer diseases<sup>(4)</sup>. Some authors use the term *total pain* to allude to

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cancer pain<sup>(5)</sup>, as this includes physical, mental, social, and spiritual aspects. Thus, the pain complaints of patients with cancer may not be dismissed, as they could exhibit more than one type of pain at the same time, such as physiopathology-related, psychological, and spiritual pain<sup>(6)</sup>.

Cancer pain is reported by approximate-ly 60% of patients with cancer, 30% of whom describe it as moderate or intense. Cancer pain is not difficult be managed, but it must not be passively tolerated; moreover, the control over pain is the right of the patient that must be fulfilled by healthcare professionals<sup>(5)</sup>.

# Cancer pain has been defined as

concurrent feelings of acute and chronic pain with different levels of intensity associated with the invasive dissemination of the cancer cells across the body, as a consequence of cancer treatment including chemotherapy or cancer-related conditions, such as wound pain. Cancer pain is usually described as imprecise, hurting, aching, frightening, or unbearable, is related to a feeling of intense pain, and is accompanied by difficulties in sleeping, irritability, depression, suffering, isolation, hopelessness, and helplessness<sup>(7)</sup>.

It is believed that the number of cancer cases will increase by 20% in developed countries and 100% in developing countries over the next 30 years, which makes the development of novel treatments to control cancer pain and the training of nurses in the care of such patients urgent<sup>(8)</sup>.

The International Society of Nurses in Cancer Care (ISNCC) published its position on the management of cancer pain based on the assumption that all individuals have a

right to pain relief<sup>(9)</sup>. This document was based on estimates made by the World Health Organization stating that of the 5 million people who die due to cancer every year, 4 million die with uncontrolled pain, which leads to such incalculable suffering and reduction in the quality of life that the affected individuals end up fearing pain more than cancer itself.

The situation described above poses a challenge to healthcare professionals because pain control is a priority, and cancer pain may be effectively controlled in more than 90% of cases. Pain control is a complex process that requires an assessment of its physical, social, spiritual, economic, social, and cultural components.

The International Council of Nurses (ICN) listed cancer care and cancer pain among its priorities for the development of International Classification for Nursing Practice (ICNP®) Catalogues. These goals are defined as subsets of nursing diagnoses/outcomes and interventions for a selected group of clients or a given health priority. The ICNP® Catalogues are expected to contribute to the systematic documentation of nursing practice worldwide by creating datasets that will support and improve clinical practice, decision-making, research, and health policies<sup>(10)</sup>.

In 2007, the ICN formulated a method for the development of ICNP® Catalogues, which includes the following 10 steps: 1) identification of the target clients and health priority; 2) determination of the relevance for nursing; 3) contact the ICN to determine whether other groups are already working on the same health priority to assess the possibilities of collaboration; 4) use of the ICNP® 7-Axis Model to define statements on nursing outcomes and

interventions; 5) identification of additional statements based on literature review and relevant evidence; 6) development of supportive content; 7) testing or validation of the catalogue statements in 2 clinical studies; 8) addition, deletion, or revision of the catalogue statements according to need; 9) collaboration with the ICN in the development of the catalogue final copy; and 10) help ICN in catalogue dissemination<sup>(11)</sup>.

Another process for the development of ICNP® Catalogues or terminology subsets was provided in 2010. This process includes 6 steps related to the main working areas of the life cycle of ICNP® terminology as follows: 1) identification of clients; 2) gathering of terms and concepts relevant for a given health priority; 3) mapping the identified concepts to the ICNP® terminology; 4) structuring of new concepts; 5) finalizing the catalogue; and 6) dissemination<sup>(12)</sup>. The authors of this proposal requested nurses to employ these methods or develop other methods to promote the development of ICNP® Catalogues.

Based on the discussion above, the aim of the present study was to describe the development and results of an ICNP® Catalogue for Cancer Pain to provide a tool for documenting the implementation of the nursing process in patients with cancer.

#### **METHOD**

This is a methodological study that was formulated as a subproject at the Centre for ICNP® Research and Development of the Federal University of Paraíba, Post-Graduate Program in Nursing – Brasil (PPGENF-UFPB ICN Accredited ICNP® Centre, which was accredited by ICN in June 2007.

In compliance with the Resolution no. 196/1996<sup>(13)</sup> and the Ethics Code for Nursing Professionals appended to the Resolution no. 311/2007 of the Federal Concil of Nursing ( Conselho Federal de Enfermagem COFEN)<sup>(14)</sup>, this study was submitted for appreciation to the Research Ethics Committee of Lauro Wanderley University Hospital/UFPB and approved under protocol no 018/2009.

The study was performed in the following 2 stages: 1) the elaboration of statements on nursing diagnoses/outcomes and interventions using the terms included in the ICNP® 7-Axis Model and 2) the structuration of the ICNP® Catalogue for Cancer Pain. The first stage was performed in 5 steps as follows: 1) identification in the ICNP® of clinical and culturally relevant terms for nursing practice in cancer pain; 2) construction of statements on nursing diagnoses/outcomes using the terms identified as being the focus of nursing practice in cancer pain, as well as the remainder of the terms included in the ICNP® 7-Axis Model following the guidelines recommended by the ICN(7) (according to these guidelines, 1 term in the Focus axis and 1 term in the Judgment axis must be included; additional terms in axes of Focus, Judgment, or any other can be included as needed); 3) mapping of the constructed statements on nursing diagnoses/outcomes with those included in the ICNP®; 4) classification of the statements on nursing diagnoses/outcomes according to the theoretical model of cancer pain; 5) construction of statements on nursing interventions relative to the elaborated diagnoses/outcomes using the terms included in ICNP® 7-Axis Model and following the guidelines recommended by ICN<sup>(7)</sup> (according to these guidelines, 1 term in the Action axis and 1 term in the Target axis must be included, which can be include any of the terms in the remainder of the axes except for Judgment, and additional terms in the remainder of the axes must also be included).

The following steps recommended by the ICN<sup>(15)</sup> for the development of catalogues were used in the stage of structuration of the ICNP® Catalogue for Cancer Pain: 1) identification of the target clients and health priority; 2) establishment of the relevance of the catalogue for nursing; and 3) listing of the statements on nursing diagnoses/outcomes and interventions according to the theoretical model of cancer pain developed in the study.

## **RESULTS**

A total of 84 terms from the Focus axis relevant for nursing practice in cancer pain were identified. These terms were used to construct 153 statements on nursing diagnoses/outcomes, which were mapped against the 288 statements included in ICNP®, resulting in the identification of 117 statements on nursing diagnoses/outcomes already included in ICNP® as well as 36 that were not.

In the present study, the term *nursing diagnoses/outcomes* was used to refer to these 2 components of nursing practice because terms from the ICNP® axes Focus and Judgment were used in their construction. The difference between these terms depended on the nurse's assessment of whether a given decision concerned the patient's state, problems, and/or needs (diagnosis) as well as the response to the implemented interventions (outcome).

The 153 statements on nursing diagnoses/outcomes were made uniform, and redundancies were eliminated. For example, in regards to impaired communication and impaired verbal communication, the first expression was kept because it provides a more encompassing meaning. In addition, positive diagnoses were included, such as the ability to adapt and effective family coping, whereas duplicated statements were eliminated, such as deficient food intake and impaired nutritional intake, in which case the second alternative was kept.

Following these changes, only 68 statements remained, which were classified based on the theoretical model of nursing care in cancer pain as physical, psychological, or sociocultural and spiritual aspects. A total of 28 nursing diagnoses/outcomes were classified as physical aspects, 29 as psychological, and 11 as sociocultural and spiritual aspects.

Relative to those 68 nursing diagnoses/outcomes, 252 nursing interventions were constructed and classified according to the theoretical model of cancer pain. Next, the ICNP® Catalogue was structured with an emphasis on the target clients, its relevance for nursing, the structural model, and the nursing diagnoses/outcomes and interventions relative to cancer pain.

According to ICN recommendations<sup>(11,15)</sup>, for the presentation of ICNP® Catalogues, the constructed statements on nursing diagnoses/outcomes and interventions must be listed in alphabetical order and distributed according to the theoretical model.

In the present study, the constructed statements were distributed in alphabetical order according to the theoretical model for nursing care in cancer pain and are presented as Charts relative to the physical, psychological, and sociocultural and spiritual aspects (Charts 1, 2, and 3). In the case of the nursing interventions, following the elimination of repetitions, the original 252 interventions were reduced to 116.

Chart 1 - Nursing diagnoses/outcomes and interventions according to the

physical aspects of cancer pain- João Pessoa, PB, Brazil, 2009			
Nursing diagnoses/outcomes			
1.	Impaired communication	15. Impaired oral mucous membrane	
2.	Constipation	16. Impaired mobility	
3.	Impaired swallowing	17. Nausea	
4.	Acute pain	18. Impaired sleep pattern	
5.	Chronic pain	19. Impaired breathing pattern	
6.	Edema	20. Altered blood pressure	
7.	Somnolence	21. Itching	
8.	Fatigue	22. Impaired rest	
9.	Lack of response to treatment	23. Urinary retention	
10.	Hyperthermia	24. Risk for urinary retention	
11.	Infection	25. Risk for constipation	
12.	Impaired nutritional intake	26. Risk for infection	
13.	Restlessness	27. Disuse syndrome	
14.	Impaired skin integrity	28. Tachycardia	
	Nursing interventions		
1.	Adequate diet to the patient's lifestyle:	20. Identify communication barriers;	

	mestyle,
2.	Administer pain medication
	according to the assessment

- performed:
- Help the patient sit up straight to eat:
- Assess pain according to assessment scales;
- Assess the cause of impaired sleep pattern;
- Assess the causes of impaired nutritional intake;
- Assess care with hygiene;
- Assess the side effects of medication:
- 9. Assess the therapeutic effects of prescribed analgesics;
- 10. Assess the patient's neurological state;
- 11. Assess the patient's susceptibility to infection;
- 12. Control pain by means of pharmacological and nonpharmacological measures;
- 13. Control environmental factors liable to influence the patient's response to discomfort (room temperature, noise, light);
- 14. Communicate according to the patient's sociocultural aspects:
- 15. Teach non-pharmacological techniques such as hypnosis, relaxation, guided image therapy, music therapy, distraction, hot or cold applications, and massages before and after painful activities;

- 20. Identify communication barriers:
- 21. Identify factors that cause or increase nausea:
- Identify cultural issues that interfere with communication:
- 23. Implement the use of patientcontrolled analgesia (PCA) when appropriate;
- 24. Institute measures to stimulate urination, such as suprapubic pads and intimate cleansing;
- 25. Investigate the patient's knowledge and beliefs about pain:
- 26. Keep blood pressure under control:
- Keep the patient dry and free of discharges, and excretions;
- Keep the patient safe in bed using protection bars;
- 29. Monitor the patient's satisfaction with pain control:
- 30. Monitor the reduction in the level of consciousness:
- Monitor the respiratory state relative to the breathing rate. rhythm, depth, and effort;
- 32. Offer communication options such as signs, gestures, paper, pen, and writing board;
- . Offer protection of swollen areas when needed;
- . Give orientation on pharmacological methods for pain relief;
- 35. Weigh the patient every day in a fasting condition;
- 36. Provide foods according to the patient's preferences;
- 37. Provide a quiet and appropriate environment using comfortable beds and the control of noise, light, and temperature

Continue...

#### ..Continuation

#### **Nursing interventions**

- 16. Stimulate fluid intake;
- 17. Avoidance of hot and spicy
- 18. Hydrate the patient's skin with the institution's standard substances:
- 19. Identify and control factors that might trigger fatigue, such as chemotherapy, radiotherapy, prolonged hospital stay;
- 38. Provide rest by adjusting the time for sleep to the schedule of procedures;
- 39. Reduce or eliminate anything that might trigger or increase the experience of pain (fear, fatigue, monotony, and lack of information);
- 40. Request changes in the therapeutic regimen when needed;
- 41. Check vital signs 4 times per day.

Chart 2 - Nursing diagnoses/outcomes and interventions according to the psychological aspects of cancer pain - João Pessoa, PB, Brazil, 2009

#### Nursing diagnoses/outcomes

- 1. Acceptance of health status
- 2. Hallucination
- 3. Distress
- 4. Anxiety
- 5. Conflicting attitude toward therapeutic regimen
- 6. Conflicting family attitude
- 7. Negative self-image
- 8. Situational low self-esteem
- 9. Impaired ability to manage regimen
- 10. Impaired family ability to manage regimen
- 11. Impaired health seeking behavior
- 12. Impaired cognition
- 13. Confusion

- 14. Self-care deficit
- 15. Delirium
- 16. Depression
- 17. Hopelessness
- 18. Disturbed personal identity
- 19. Ineffective family coping
- 20. Ineffective individual coping
- 21. Non adherence to the therapeutic regimen
- 22. Anticipatory grief
- 23. Fear
- 24 Denial
- 25. Impaired parenting
- 26. Altered perception
- 27. Impaired family process
- 28. Chronic sadness
- 29. Powerlessness

# **Nursing interventions**

- 1. Give the patient support along the grief stages of denial, anger, bargaining, and acceptance:
- 2. Support the decision-making process;
- Assist the patient until he or she becomes fit to perform self-care:
- 4. Pay attention to risk of suicide;
- 5. Assess the patient's understanding of the disease process
- 6. Assess the barriers for nonadherence to the therapeutic regimen;
- 7. Assess the causes of the patient's attitude towards the therapeutic regimen;
- 8. Assess the impact of the patient's situation in life on roles and relationships;
- Encourage relatives to stay with the patient as befitting;

- 20. Always make positive statements about the patient;
- 21. Ensure the continuity of care;
- 22. Ensure psychological therapy with the appropriate professional;
- 23. Implement cultural, religious, and social customs in the loss process:
- 24. Manage hallucinations in case of violent or self-aggressive behavior;
- 25. Keep the attitude concerning the disease:
- 26. Keep the environment safe;
- 27. Keep continuous surveillance;
- 28. Look for changes in perception;
- 29. Offer a routine for self-care activities:
- 30. Give relatives orientation on the patient's disease and treatment;

Continue...

#### ...Continuation

#### **Nursing interventions**

- 10. Encourage relatives to express verbally their feelings for the patient;11. Explain to the patient behaviors favorable to his or her health;
- 12. Elucidate the family's conflicting attitudes;
- 13. Establish a trust-based interpersonal relationship with the patient;
- 14. Stimulate the identification of personal coping strategies;
- 15. Stimulate self-care according to the patient's capacity;
- Stimulate dialog and crying as a means to reduce the emotional response;
- Stimulate the patient to accept the caregivers' help when needed;
- Stimulate the patient to look for reasons that promote hope in life;
- 19. Stimulate the patient to identify stress factors;

- 31. Give the patient orientation on his or her actual health status and chances of improvement;
- 32. Give orientation on the process of dying;
- 33. Give orientation on the therapeutic regimen;
- 34. Give orientation on the disease;
- 35. Give orientation on reality orientation therapy;
- 36. Give orientation on the therapeutic regimen guidelines according to the patient's social level:
- Promote support by explaining the function of anger, frustration, and sadness to the patient;
- Promote the patient's selfesteem by encouraging him or her to identify his or her positive aspects;
- Promote the ability to manage the therapeutic plan by giving orientation on the instituted treatment;
- 40. Record the patient's behavior indicative of hallucinations;
- 41. Use a quiet and safe approach.

Chart 3 – Nursing diagnoses/outcomes and interventions according to the sociocultural and spiritual aspects of cancer pain - João Pessoa, PB, Brazil, 2009

### Nursing diagnoses/outcomes

- 1. Conflicting cultural beliefs;
- 2. Lack of social support;
- 3. Lack of knowledge of disease;
- 4. Lack of knowledge of treatment regime;
- 5. Social isolation;
- 6. Risk for spiritual distress;
- 7. Risk for moral distress;
- 8. Risk for helplessness;
- Impaired socialization;
- 10. Spiritual distress;
- Moral distress.

# Nursing interventions

- Adjust the patient's cultural issues to the biomedical model while complying with ethical aspects;
- 2. Assess the patient's spiritual wellbeing;
- 3. Assess the patient's learning ability;
- 4. Assess the causes of cultural conflicts;
- 5. Assess the individual spiritual beliefs;
- 6. Assess the family's spiritual beliefs;
- 7. Assess the caregivers' stress;
- 8. Assess the patient's needs/ desires relative to social support;
- Assess the social support;
- 10. Consult the caregivers about the patient's social aspects;

- 16. Stimulate social and community activities;
- 17. Stimulate the patient to perform his or her role;
- 18. Explain the patient's rights;
- 19. Mention religious services;
- 20. Mention family therapy;
- 21. Mention therapeutic support groups;
- 22. Ensure the continuity of care;
- 23. Identify the patient's attitude toward pain;
- 24. Together with the patient, identify cultural practices that might exert negative influence on his or her health;
- 25. Offer appropriate training of social skills;
- 26. Give orientation on the process of pain;

# Continue...

#### ...Continuation

- 11. Discuss with the patient cultural differences and similarities;
- 12. Encourage the patient's participation in social and community activities;
- 13. Encourage the patient's participation in support groups;
- 14. Encourage greater engagement in existing relationships;
- Engage individuals important for the patient in his or her social activities;

- 27 Give orientation on the process of disease;
- 28. Promote social support;
- 29. Provide cultural adaptation;
- 30. Provide dignity and privacy;
- 31. Protect the patient's rights;
- 32. Provide privacy for spiritual behaviors;
- 33. Acknowledge the patient's cultural experience;
- 34. Acknowledge the patient's spiritual experience.

## **DISCUSSION**

It should be stressed that ICN considers cancer and pain care a priority in the construction of ICNP® Catalogues<sup>(15)</sup>. However, pain is a subjective, legitimately personal experience associated with either actual or potential tissue damage. Cancer pain affects most cancer patients beginning at the time of diagnosis, when patients are subjected to invasive procedures aimed at disease staging, and this pain continues along the phases of treatment including surgery, chemotherapy, and radiotherapy. Eventually, pain reaches the final days of life in the case of terminal disease, which is characterized by pain as a result of tumor invasion.

For oncology nurses to access the knowledge and skills required to improve the management of cancer pain, it is recommended that they assume responsibility to provide patients with cancer pain the greatest relief possible; assume leadership in the identification and assessment of cancer pain, as well as in the implementation, coordination, and assessment of the efficacy of the interdisciplinary management of cancer pain; strive to reduce or minimize the barriers inherent to the healthcare system to provide effective management of pain; insistently request patients and their relatives to report whenever pain relief is not adequate; assume the main responsibility for the education of patients, relatives, healthcare professionals, and the general public regarding the right to cancer pain relief, as well as to the resources available for its assessment and treatment; strive to influence national and international policies relative to the allocation of resources for pain management by contacting politicians and lawmakers; and perform independent and collaborative studies on cancer pain and apply these results to education and clinical practice<sup>(9)</sup>.

The aspects described above account for the significance and relevance of the development of the present catalogue, as this catalogue aims to provide not only oncology nurses but also anyone who provides professional care to cancer patients a systematic approach to establish nursing diagnoses/outcomes and interventions centered on individualized and humanized care.

Although the ICNP® Catalogue for Cancer Pain was designed to serve as a guide to nurses assisting patients with cancer pain, it does not intend to replace the nurses' clinical and therapeutic judgment. In addition, this catalogue also seeks to support the systematic documentation of nursing care through the use of a system of classification. ICNP® defines the client as the subject to whom the nursing diagnosis refers and the receiver of the nursing intervention<sup>(7)</sup>.The present catalogue considers the individual in his or her full dimensions as a cancer pain client, i.e., including not only physical pain but also psychogenic pain, in which psychological, sociocultural, and spiritual aspects play a role and influence the identification and treatment of pain.

Physical pain is subdivided into neuropathic and (somatic and visceral) nociceptive pain and can be caused by the following factors: 1) the cancer itself (46% to 92%), including bone invasion, visceral invasion, invasion of the peripheral nervous system, direct extension to soft tissues, and increases in intracranial pressure; 2) those related to cancer (12% to 29%), including muscle spasm, lymphedema, pressure sores, and constipation; 3) those related to anticancer treatment (5% to 20%), including postoperative (after mastectomy, after amputation), post-chemotherapy (mucositis, peripheral neuropathies, post-herpetic neuralgia, and bladder spasm), and post-radiotherapy pain (mucositis, esophagitis, radiation proctitis, radiodermatitis, radiation myelopathy, radiation-induced brachial, and lumbosacral plexopathy); and 4) concomitant disorders (8 to 22%), including osteoarthritis and spondyloarthrosis, among others<sup>(16)</sup>.

In the present study, the constructed statements on nursing diagnoses/outcomes related to physical pain caused by cancer itself included the following: impaired communication, impaired swallowing, acute pain, chronic pain, and tachycardia. Those statements related to cancer included edema, impaired mobility, and impaired skin integrity, and those related to anticancer treatment were nausea, fatigue, lack of response to treatment, impaired oral mucous membrane, risk for constipation, risk for infection, and risk for urinary retention. Finally, the constructed statements related to concomitant disorders included disuse syndrome, impaired rest, altered blood pressure, and impaired sleep pattern.

Psychogenic pain can be subdivided into the following factors: 1) cultural and spiritual aspects, including cultural beliefs, worldview, cultural diversity, cultural values, and behaviors<sup>(17)</sup>; the corresponding statements on nursing diagnoses/outcomes that were constructed included conflicting cultural beliefs, lack of knowledge of disease, lack of knowledge of treatment regimen, risk for spiritual distress, and spiritual distress; 2) social aspects, including deterioration of the quality of life<sup>(18)</sup>, social disturbance<sup>(19)</sup>, and challenge to dignity<sup>(20)</sup>; the corresponding statements on nursing diagnoses/outcomes constructed included lack of social support,

social isolation, risk for helplessness, risk for moral distress, and moral distress; and 3) psychological aspects, including anguish, guilt<sup>(21)</sup>, depression, anxiety<sup>(5)</sup>, hopelessness, and despair<sup>(22)</sup>; these originated from various statements on nursing diagnoses/outcomes, including anguish, anxiety, negative self-image, delirium, depression, hopelessness, and fear, among others described in Chart 3.

The statements on nursing diagnoses/outcomes, which were constructed and classified in the present study according to the selected model of cancer pain, do not cover the full picture, as individual aspects inherent to each patient were not taken into account. In addition, the full scope of potential nursing interventions was not exhausted, and therefore, nurses must construct the statements relative to the physical, psychological, sociocultural, and spiritual state of the patient experiencing cancer pain.

It is worth noting that the management of cancer pain is an essential part of the practice of oncology nursing because nurses provide care along the course of the disease and are in the ideal place to address this pain. When basic drugs for pain relief are lacking, nurses can use heat, cold, and other therapies, in addition to spiritual counseling. Nurses can also perform an analysis of the meaning of pain, thus reducing the patient's and his/her relatives' fear, hopelessness, and isolation<sup>(9)</sup>.

Once again, the use of the statements on nursing diagnoses/outcomes and interventions included in the proposed ICNP® Catalogue for Cancer Pain does not replace nurses' clinical and therapeutic judgment and decision-making, and nurses are free to choose the statements most appropriate for each client.

# CONCLUSIONS

Pain is a subjective symptom, and as such, it is difficult to assess. As each individual perceives, interprets, and reacts to pain in his or her own singular and particular manner, pain poses a serious problem and must be dealt with expounded in a correct manner. In certain cases, professionals who care for pain clients are rather inexperienced in relation to the assessment and treatment of pain; many professionals do not acknowledge pain as a real event or do not consider it as part of the disease or a disease itself. Because the biomedical model of care is still widely applied, analgesics are administered whenever a patient feels pain, instead of the practical application of the notion of total pain, which in addition to the physical, also takes the psychological, sociocultural, and spiritual aspects of the individual with cancer pain into consideration.

The aim of the present study was to describe the process and results of the development of an ICNP® Catalogue for Cancer Pain, which led to the construction of 68

statements on nursing diagnoses/outcomes. These statements were classified according to the theoretical model of nursing care in cancer pain as corresponding to physical (28), psychological (29), and sociocultural and spiritual (11) aspects. This process further included the construction of 252 nursing interventions corresponding to statements on nursing diagnoses/outcomes, which were classified according to the theoretical model of cancer pain. Following the elimination of repetitions, a total of 116 interventions remained.

The proposed ICNP® Catalogue for Cancer Pain is expected to contribute to the nursing practice by facilitating

the systematization of nursing care. Taking the nursing diagnoses, outcomes, and interventions into consideration, this catalogue contributes to make the nursing process operational. The implications of the present study for teaching are related to its use as the basis for learning nursing nomenclatures and as a stimulus for the appropriate use of a unified language in health services and schools. In addition, the present study also has implications for research, including the clinical validation of the present catalogue, the development of additional catalogues, and studies aimed at including the terms and statements relative to nursing diagnoses/outcomes and interventions in the ICNP®.

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