Nursing interventions in pain*

Intervenções de enfermagem na dor

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ABSTRACT

BACKGROUND AND OBJECTIVES: Nursing interventions are any care based on nurses' judgment and clinical knowledge, based on a scientifically supported action, carried out and planned for patients' benefit. These are very important to control pain since pain, when inadequately treated, affects the quality of life of patients and caregivers in physical, psychological, social and spiritual dimensions. So, this study aimed at identifying nursing interventions to handle pain and whether they relate to those proposed by the Nursing Interventions Classification.
CONTENTS: This is an integrative literature review, carried out in LILACS, Scielo and Medline databases. Nine articles published between 2001 and 2011 were selected. These articles describe nursing interventions to handle pain in different contexts.
CONCLUSION: Most nursing interventions mentioned by the articles are related to those described by the Nursing Interventions Classification. The scarcity of clinical studies related to nursing interventions to handle pain was also observed.
Keywords: Nursing, Pain, Pain handling.

RESUMO

JUSTIFICATIVA E OBJETIVOS: As intervenções de enfermagem referem-se a qualquer cuidado baseado no julgamento e conhecimento clínico do enfermeiro tendo por base uma ação fundamentada cientificamente, realizada e prevista em benefício do paciente. Estas assumem grande importância no controle da dor, uma vez que a dor, quando não tratada adequadamente, afeta a qualidade de vida dos pacientes e de seus cuidadores nas dimensões física, psicológica, social e espiritual. Sendo assim, o objetivo deste estudo foi conhecer as intervenções utilizadas pelos enfermeiros para o manuseio da dor e se estas se relacionam com as propostas pela *Nursing Interventions Classification*.
CONTEÚDO: Trata-se de uma revisão integrativa da literatura, realizada nas bases de dados LILACS, Scielo e Medline**.** Foram selecionados nove artigos publicados entre 2001 e 2011. Esses artigos descrevem intervenções de enfermagem prestadas para o manuseio da dor em diferentes contextos.
CONCLUSÃO: A maioria das intervenções de enfermagem citadas nos artigos possui relação com as descritas pela *Nursing Interventions Classification*. Também foi observada a carência de estudos clínicos relacionados às intervenções de enfermagem para manuseio da dor.
Descritores: Dor, Enfermagem, Manuseio da dor.

INTRODUCTION

Nursing Assistance Systematization (NAS) has helped nursing teams to organize and direct their actions to the specific needs of each patient, in a context where the individual is seen as a whole. Started in the1950s, NAS is becoming increasingly necessary in health institutions where nursing actions are developed, aiming at offering humanized care to patients[1].
Supported by resolutions of the Federal Council of Nursing[2,3], the Nursing Process (NP), by means of NAS, allows assistance to be planned to meet specific patients' needs, through a holistic approach which helps assuring that interventions are individually planned[1].
Nursing Diagnosis (ND), essential NP stage, is the basis for the choice of adequate interventions for each patient. Currently, classification systems standardize the language used by nurses to define health problems faced by patients, through diagnostic terminologies, of which the North American Nursing Diagnosis Association International (NANDA)[4] is the most popular.
An accurate ND leads nurses to prepare an assistance plan with adequate nursing interventions in a case-by-case basis. These interventions are any care based on nurses' judgment and clinical knowledge, based on a scientifically supported action, carried out and planned for patients' benefit[5].
These are very important to control pain since pain, when inadequately treated, affects the quality of life (QL) of patients

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and caregivers in physical, psychological, social and spiritual dimensions.

Nursing teams have a taxonomy which includes actions recommended for care, such as Nursing Interventions Classification (NIC), which aims at improving clinical documentation, communication of the intervention, data integration in automated systems, data utilization by nurses from different clinics and institutions, and is a data source for studies, productivity indicators, evaluation of competence, payment for services and curricular structuring[6].

However, even with classification systems and pain measurement tools, pain is still underidentified and undertreated[7], fact which may impair patients' recovery and negatively impact their QL.

It is possible to infer that a difficulty to adequately handle pain is the inadequacy of pain evaluation models and gaps in health professionals' qualification about pain and analgesia, resulting in the incorrect use of analgesic therapies, which may be considered as possible causes of insufficient pain relief[7].

To better understand nursing actions when handling pain in different care contexts, we decided to carry out this study with the purpose of understanding nursing actions to handle pain and check whether they are related to those proposed by NIC. With this, it is possible to enhance nursing actions, providing subsidies for critical thinking development of effective assistance plans to meet the needs of each patient, especially those feeling pain.

CONTENTS

This is an integrative literature review. The guiding question was: which are nursing interventions to handle pain that are being described in the literature?

As from this question, articles from LILACS, Scielo and Medline (via National Library of Medicine) were included. The query used Health Sciences Descriptors (DeCS) from the Medicine Regional Library BIREME: pain, nursing and interventions. The Boolean operator AND was used to combine DeCS.

Articles addressing nursing interventions to handle pain in adult patients, written in Portuguese, Spanish or English, in the period between 2001 and 2011, and fully available for free were included. We decided for a 10-year period because an increase in the number of publications, especially nursing publications, was observed during this period.

To put together the database, information extracted from articles were summarized and organized through a data collection tool containing title, authors, publication year, journal, language, objective, type of study and nursing interventions. After detailed analysis of the articles, nine studies were selected, of which six were published in the last five years, fact that shows the increasing interest for this subject in recent years, especially with regard to nursing interventions.

Most studies (six) were review articles, systematic reviews and literature reviews. Remaining articles were exploratory retrospective research, case-control study and case study (Table 1). These data show that nursing is still focused on review studies, carrying out few clinical studies, especially in this area. Nursing daily practice is rich in situations which would justify the development of clinical studies to improve painful patients' assistance.

It is important to stress the number of articles published in Brazilian journals, showing that Brazilian nursing is dedicated to producing studies involving pain-related nursing interventions. Interventions similar to those described by NIC with their respective frequencies were: analgesic and drug administration (4), cold/heat application (3), assistance to patient-controlled analgesia (PCA) (1), environment control: comfort (2), pain control (6), energy control (1), recreation (2), teaching: procedure/treatment (3), imagination stimulation (1), coping improvement (1), massage (2), music therapy (1), progressive muscular relaxation (1) relaxation therapy (1) and touch (1) (Table 2).

Some interventions described by articles were not part of NIC, such as decreasing anxiety (1), scent therapy (2) and sleep promotion (1).

Some articles[5,12] have used the intervention pain control, as well as its activities, showing the importance of using a standardized language for nursing assistance to painful patients. Other articles[8] have mentioned only some activities of this intervention, such as analgesic and drug administration, which may represent a difficulty in distinguishing between interventions and activities.

Table 1. Sample characterization

Cod.	Authors	Methodology	Studied population
1A	Paula et al.[8]	Systematic review (BIREME)	Orthopedic patients
2A	Restrepo-Medrano e Rojas[9]	Thematic review	Fibromyalgia patients
3A	Abreu et al.[10]	Systematic review	Breast cancer patients
4A	Popov & Peniche[11]	Exploratory, retrospective, descriptive with quantitative approach	Patients in post-anesthetic recovery
5A	Gomes et al.[12]	Case study	Churg-Strauss syndrome patients
6A	da Silva & Marques[13]	Literature review	Sickle cell anemia patients
7A	Rigotti & Ferreira[5]	Review article	Patient with pain
8A	Heye et al.[14]	Case-control study	Patients in preoperative period
9A	Niño[15]	Review article	Burned patients

Table 2. Description of interventions

Interventions	
Touch	Blood transfusion
Music	Pain control/sensory perception
Scents	Rest
Imagination stimulation	Promote comfort carefully positioning painful areas
Evaluation of pain, intensity and factors interfering with pain	Use of patient-controlled analgesia
Pharmacological analgesia	Establish relationship with painful patients
Heat application	Teach patient about pain response
Massage	Use patient/group situation
Stretching exercises	Deal with other people who are in contact with patient
Sleep improvement	Provide other sensory impulses
Relaxation techniques	Use imagined analgesia
Pain handling	Use a different professional
Decreased anxiety	Remain with patient
Energy handling	Explain that the source of nociceptive stimuli was removed or decrea-
Environment handling	sed and help assimilating pain experience
Improve coping	Educative movie
Educative strategies for patients, relatives and professionals (educative programs)	Avoid subcutaneous route
	Explain procedures
Cognitive-behavioral interventions (guided imagery)	Evaluate patient's emotional status
Heart and vital signs monitoring	Change dressing rapidly, but smoothly
Safety maintenance (high grids and security tracks)	Capillary perfusion
Pain-related observation	Mental state
Physical and emotional status evaluations	Administration of rescue drug
Oxygen therapy	Observation
Relief vesical probe	
Hydration	
Dressings	
Additional exams	
Washing and replacement of indwelling vesical proble	

Nursing intervention is described by NIC as "any treatment, based on judgment and clinical knowledge, carried out by a nurse to improve patient/client results. Nursing interventions include both direct and indirect assistance, those focusing on individuals, relatives and communities, and those for treatments started by nurses, physicians or other caregiver"[16].

Activities, on the other hand, are defined as "specific nurses' behaviors or actions to implement an intervention and which help patients/clients to advance toward expected results. Nursing activities are within a concrete action level. A series of activities is needed to implement an intervention"[16].

It is worth stressing that NIC is being constantly updated and reviewed, carrying out studies to include or exclude interventions and activities, thus contributing to increasingly standardize the language used by nursing.

It was also observed that non-pharmacological pain relief methods are increasingly present in studies, which shows a new vision of professionals, especially of the nursing team, who promote painful patients' education and encourage them to look for such resources.

Finally, it has been observed that preoperative orientations about pain were present in three articles and have shown to be effective in decreasing anxiety and decreasing reports of postoperative pain.

CONCLUSION

Most interventions mentioned in the articles are part of the activities of the intervention pain control proposed by NIC. However, there are few clinical trials about this subject, especially with adults, result which may be related to the difficulty in evaluating pain in the clinical practice, as well as to the lack or records about its evaluation. It is suggested, then, that such studies are carried out to link theory to practice, contributing to a moment where evidence-based nursing is present and is increasingly getting stronger.

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