Nursing diagnoses in surgical clinic

Diagnósticos de enfermagem em clínica cirúrgica

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Abstract

Objective: To identify the frequency of nursing diagnosis in patients in surgical clinic.
Methods: A transverse, descriptive and exploratory study of quantitative approach, with data referring to 28 patients. The data collection instrument was developed by the researchers based on health functional patterns.
Results: In total, 301 nursing diagnosis were found, with an average of 12 per patient. Only four diagnoses showed frequency above 50 percent. The most frequent were 'risk for infection', 'impaired skin/tissue integrity', 'readiness for enhanced spiritual well-being', 'sexual dysfunction' and 'disturbed sleep pattern'. The diagnoses that fit in domain 13 (Growth/Development) were not documented in this sample.
Conclusion: The findings demonstrated a wide variety of diagnoses in the study population, a reflex of the diversity of care provided. Identifying the care needs favors the implantation of specific interventions, contributing to the quality of nursing assistance.

Resumo

Objetivo: Identificar a frequência dos diagnósticos de enfermagem em pacientes de clínica cirúrgica.
Métodos: Estudo transversal, descritivo e exploratório, de abordagem quantitativa, com dados referentes a 28 pacientes. O instrumento de coleta de dados foi desenvolvido pelos pesquisadores, com base em padrões funcionais de saúde.
Resultados: Foram encontrados 301 diagnósticos de enfermagem, com média de 12 por paciente. Somente quatro diagnósticos apresentaram frequência acima de 50%. Os mais frequentes foram: "risco de infecção", "integridade da pele/tissular prejudicada", "disposição para bem-estar espiritual", "disfunção sexual" e "padrão do sono perturbado". Diagnósticos que se enquadram no domínio 13 (Crescimento/Desenvolvimento) não foram documentados nesta amostra.
Conclusão: Os achados demostraram ampla variedade de diagnósticos na população estudada, reflexo da diversidade de cuidados a serem prestados. A identificação das necessidades de cuidados favorece a implantação de intervenções específicas, contribuindo para a qualidade da assistência de enfermagem.

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Introduction

The movement for the uniformity of the language used by nurses brought significant changes in the care process. We can cite the ability to formulate diagnosis, the choice for the most proper interventions for each situation, and the description of the outcome of these interventions implementation.

The nursing diagnosis stands out because in addition to being a guide for planning, selection and implementation of care, it is also an important source for the specific knowledge of the profession. It eases the teaching, research and emancipation of clients in the therapeutic plan.[1,2]

In this scenario, the assessment of nursing diagnoses in specific populations allows knowing altered human responses, contributing to reach an individualized and holistic assistance.[3]

Several authors have focused on identifying nursing diagnoses in specific groups, like the elderly with cardiac insufficiency, patients of surgical clinic, oncologic clinic, the elderly, transplanted patients etc.[4-8]

This study aimed to identify the frequency of the main nursing diagnoses in hospitalized patients in surgical clinic. This identification is justified as the subsidy of interventions that are effective and adequate to the individual needs of each patient, as well as the prevision and provision of workload of the nursing staff, besides contributing to the continuing education in quality of care.

Methods

This is a descriptive, exploratory and cross sectional study of qualitative approach. Data collection happened in the clinical-surgical hospitalization unit of a teaching-hospital in the period from April to August of 2012. The sample was constituted of 28 patients. The inclusion criterion adopted for the group was: not being in the first postoperative day, regardless of gender or age range. In this study, patients were not evaluated in the first 24 hours after surgery, since this is a critical moment in which the hemodynamic aspects are altered by the anesthesia, changing the care needs.

For data collection, the unit was visited in alternate days. All individuals that fit the inclusion criterion and accepted to participate in the research were included. The data collection instrument was developed by the researchers and contained sociodemographic and clinical variables that were evaluated according to the health functional patterns proposed by Gordon, present in the Taxonomy II of the North America Nursing Diagnosis Association (NANDA). Nowadays there are many data collection instruments - all based on nursing, theoretical and conceptual approaches, but none is universally accepted.[9,10]

The nursing diagnoses found were interpreted from the defining characteristics, related and risk factors, and imminent risk situations identified in the clients through interview, physical examination and consulting the medical records.

Descriptive statistics elements, such as absolute and relative frequency were used for data analysis. The development of study met the national and international criteria for research involving human beings.

Results

Fourteen (50%) female patients and 14 (50%) male were part of the randomized sample, and 14 (50%) of them were between 40 and 59 years old. The majority of patients was white skinned (67.8%), had incomplete elementary school (57.1%) and was living in the city of Maringá (64.2%).

The most prevalent surgery was appendicectomy (21.4%), followed by exploratory laparotomy and video cholecystectomy (17.8%). Other surgical procedures are described in table 1.

Table 1. Surgical procedures according to absolute frequency and percentage, in adults hospitalized in surgical clinic

Surgical procedures	n(%)
Appendectomy	6(21.4)
Exploratory laparotomy	5(17.8)
Video cholecystectomy	5(17.8)
Face surgeries (maxillofacial)	3(10.7)
Hernioplasty	2(7.1)
Amputation of RIM	1(3.6)
Orthopedic surgery	1(3.6)
Debridementin RSM	1(3.6)
Perianal condyloma cauterization	1(3.6)
Cystostomy	1(3.6)
Exeresis for tumors of the face tumor exeresis	1(3.6)
Thyroidectomy	1(3.6)
Total	28(100)

RIM – right inferior member; RSM – right superior member

Table 2 shows the period of patients' surgical treatment when they were submitted to physical examination, during data collection.

Table 2. Period of surgical treatment according to absolute frequency and percentage, of the patients hospitalized in surgical clinic

Surgical period	n(%)
Preoperative	5(17.8)
2º Postoperative	12(42.8)
3º Postoperative	2(7.1)
4º Postoperative	1(3.6)
9º Postoperative	1(3.6)
10º Postoperative	2(7.1)
11º Postoperative	2(7.1)
12º Postoperative	1(3.6)
13º Postoperative	1(3.6)
15º Postoperative	1(3.6)
Total	28(100)

In total, 301 nursing diagnoses were documented for the 28 patients. An average of 12 diagnoses per patient was found. Among the 201 titles described by NANDA, 55 (27.4%) were identified.

The most prevalent nursing diagnoses were: risk for infection (100%), impaired skin/tissue integrity (92.8%), readiness for enhanced spiritual well-being (75%), sexual dysfunction (53.5%), disturbed sleep pattern (42.8%), readiness for enhanced coping (39.3%), impaired walking, bathing/hygiene self-care deficit, readiness for enhanced sleep, acute pain and risk for constipation (32.1%), delayed surgical recovery (28.5%), dressing/grooming self-care deficit, ineffective health maintenance (25%) and risk for impaired skin integrity (21.4%). Other diagnoses can be observed in table 3.

Table 3. Frequency of nursing diagnoses according the domains of NANDA (2009-2011) Taxonomy II, identified in adult individuals hospitalized in surgical clinic

Domain	Diagnosis categories	n(%)
Health promotion	Innefective health maintenance	7(25.0)
	Behavior of health search	2(7.1)
	Ineffective management of therapeutic regimen	2(7.1)
Nutrition	Imbalanced nutrition: >than body requirements	4(14.2)
	Risk for impaired liver function	4(14.2)
	Risk for imbalanced fluid volume	4(14.2)
	Risk for deficient fluid volume	1(3.5)
	Deficient fluid volume	2(7.1)
Elimination and Exchange	Risk for constipation	9(32.1)
	Impaired urinary elimination	5(17.8)
	Ineffective airway clearance	2(7.1)
	Impaired gas exchange	2(7.1)
Activity/rest	Disturbed sleep pattern	12(42.8)
	Bathing/hygiene self-care deficit	9(32.1)
	Impaired walking	9(32.1)
	Readiness for enhanced sleep	9(32.1)
	Delayed surgical recovery	8(28.5)
	Ineffective peripheral tissue perfusion	8(28.5)
	Dressing/grooming self-care deficit	7(25.0)
	Impaired physical mobility	7(25.0)
	Impaired bed mobility	4(14.2)
	Risk for activity intolerance	3(10.7)
	Dysfunctional ventilatory weaning response	1(3.5)
	Activity intolerance	1(3.5)
	Ineffective breathing pattern	1(3.5)
	Sleep deprivation	1(3.5)
Perception/ cognition	Disturbed thought processes	1(3.5)
	Disturbed sensory perception (hearing)	1(3.5)
	Chronic confusion	1(3.5)
	Impaired verbal communication	4(14.2)
Self-perception	Risk forloneliness	5(17.8)
Roles and relationships	Impaired social interaction	8(28.5)
	Interrupted family processes	4(14.2)
	Ineffective role performance	1(3.5)
Sexuality	Sexual dysfuntion	15(53.5)
	Ineffective sexuality pattern	3(10.7)
Confrontation/ stress tolerance	Readiness for enhanced coping	11(39.2)
	Anxiety	4(14.2)
	Fear	5(17.8)
	Chronic sorrow	1(3.5)
	Innefective coping	1(3.5)
	Relocation stress syndrome	1(3.5)
	Impaired individual resilience	1(3.5)
Life principle	Readiness for enhanced spiritual well-being	21(75.0)
	Risk for spiritual distress	5(17.8)
	Risk for impaired religiosity	4(14.2)
	Impaired religiosity	2(7.1)
Security/protection	Risk for infection	28(100)
	Impaired skin/tissue integrity	26(92.8)
	Risk for impaired skin/tissue integrity	6(21.4)
	Risk for falls	3(10.7)
Comfort	Acute pain	9(32.1)
	Nausea	3(10.7)
	Impaired comfort	2(7.1)
	Social isolation	1(3.6)

Discussion

The limitations of this study involve fact that a clinical evaluation is a subjective process and,

therefore, the diagnosis process is subject to uncertainties. However, the results of this study favored the identification of the care needs of sick people hospitalized in a surgical clinic, contributing to the assessment of specific nursing interventions. The diversity of nursing diagnoses shown by this specific clientele denotes the variety of care to be given by nursing professionals. The assessment of such varied diagnoses gives greater clinical power to professional nurses. It also provides base for the teaching of nursing diagnoses, both for nurses of the sector in question and for undergraduate students that were part of the study.

The present study results are very similar to those found by studies carried out in medical, surgical and orthopedic clinics. Studies like this can be applied to several knowledge areas and with more numerous populations, for the validation of results, and can help to expand nursing knowledge by linking the nursing diagnoses, interventions and results. From the characterization of care required by the clients of medical-surgical unit, were found 10.6 diagnoses per patient in average, corroborating to the need for scientific and specific knowledge of nurses, in order to plan the care for the patients assisted.[5]

The diagnosis 'risk for infection' defined as a 'state in which the individual has increased risk of being invaded by pathogenic organisms', is commonly identified in patients submitted to surgical procedures. It was present in 100% of the sample and was related to invasive procedures before, during and after an operation. Similar studies also highlight the high frequency of this diagnosis and point to the invasive procedures resulting from hospitalization as one of the main causes of this occurrence.[7,11]

Nevertheless, other factors can also be associated to this diagnosis as, for example, obesity. Four patients (14.3%) were obese and, therefore, presented 'imbalanced nutrition: more than body requirements'. Studies point that fat tissue thickness has direct and proportional influence on infection rates. The reasons for such susceptibility are related to the local irrigation of fat tissue, poorly vascularized, and to the longer duration of surgical procedures.[4]

It is also observed that 26 patients (92.8%) of this sample had 'impaired skin/tissue integrity'. All the patients were submitted to invasive procedures like surgery (82.1%), administration of medicines, collection of biological material for exams and venous puncture. However, the pathology, immobilization in bed, decrease of motor activity and lack of proper peripheral profusion were also responsible for tissue lesion. Three similar studies have identified frequencies above 60% in this diagnosis.[7,12]

The increased readiness for spiritual well-being, i.e., the increased capacity of experiencing and integrating meaning to life through a connection with oneself, with other people, or with a greater being, was found in 75% of the sample. Most of the clients showed belief in a superior being, verbalized faith, hope and courage as answer to the spiritual belief. Patients with this diagnosis have potential resources to use when facing an illness or a threat to their well-being. If the patient does not know how to use the resources to face health problems, the nurse must offer support to explore the diverse options.[13]

This diagnosis was not reported in other studies. Authors argue that the difficulty in finding the changes in patterns of belief, values and religious convictions is due to the little time of interaction with patients. However, the defining characteristics of these diagnoses are expressed in the bond of the therapeutic treatment, and the diagnosis itself can be confirmed by the patients' self-report, with the nurses responsible only for the qualified listening.[13-15]

It is noticed that little has been done in terms of spiritual needs. Therefore, there is a gap in assistance, in opposition to the theory of Wanda Horta, which points spirituality as a basic need of human beings to be observed and cared for by the nurses in their care planning. In professional practice, there is still lack of holistic view, in other words, the need to see human beings as 'bio-psycho-social-spiritual' beings who transcend the physical aspect.[10,14]

'Readiness for enhanced coping' (39.3%) was not identified in other studies. This may occur be-

cause it is associated with 'Increased readiness for spiritual well-being', although NANDA does not directly report it.[9]

The 'disturbed sleep pattern', which means 'interruptions in sleep quantity and quality, limited by time and resulting from external factors',[9] occurred in 42.8% of subjects. Sleeping is considered a basic human need and becomes one of the factors that influence quality of human life. Aging, physical inactivity, stress, illness, medications, depression and personal habits affect the quality of sleep or the level of partition of the various sleep stages.[7,9]

In the present study, the most frequent causes related to the disturbed sleep pattern reported by patients were the following: excessive manipulation by health professionals at night, excess of lighting, noise and lack of adaptation to hospitalization.

'Impaired walking' (32.1%) was frequent in this and other studies.[4,8] It is important to observe that it constitutes one of the main factors related to other nursing diagnoses such as 'bathing and hygiene self-care deficit' (32.1%), 'dressing and grooming self-care deficit' (25%) and 'risk for impaired skin integrity' (21.4%). The association among diagnoses must be studied deeper, because it may be possible to identify a diagnostic profile in patients of medical, surgical and orthopedic clinics.

A study with 250 patients in a surgical unit identified 2,973 diagnoses among more than 50 different statements. The most frequent were 'risk for imbalanced body temperature' (66%), 'risk for infection' (51%), and 'pain' (50%). Those results are similar to these of the present study, however, the diagnosis 'impaired tissue integrity' (risk or current) that belongs to the Physical Lesion domain, was not identified as the most frequent, which is common to expect in the profile of patients from a medical surgical clinic.[9] However, the prevalence of nursing diagnoses depends on the perioperative scenario and the type of clientele that configures it.[8,9]

The diagnosis 'acute pain' (32.1%) had lower frequency than in similar studies, however, it is always found among the most prevalent, confirming that this symptom must be a continued focus of attention of nurses.[8,11] The professional capacitation for the relief of pain is important in order to increase the quality of care provided.[11]

Sexual dysfunction was found in 32.1% of patients. The formulation of this diagnosis was based on the actual limitations imposed by the disease and/or the therapeutic and the change in the relationship with the significant person. This is a diagnosis usually found between the diverse studied groups.[7]

Unlike other researches, that identified the diagnosis 'constipation' as the most prevalent in domain III - Elimination and Exchange, this study found 'risk for constipation' (32.1%) as the most frequent of this class. Lack of ambulation, pathologies and therapeutic process are some of the many reasons that make patients of surgical and orthopedic clinics more prone to disturbances in intestinal motility.[4,7]

Through these results, we realized the need for interventions aiming at preventing risks during hospitalization, in order to decrease health aggravations. Similar studies can be carried out in diverse areas of knowledge and with more numerous populations for results validation, and they must help to expand nursing knowledge by linking the nursing diagnoses with the interventions and outcomes.

Conclusion

The main nursing diagnoses found were the following: 'risk for infection', 'impaired skin/tissue integrity', 'readiness for enhanced spiritual well-being', 'sexual dysfunction', 'disturbed sleep pattern', 'readiness for enhanced coping', 'impaired walking', 'bathing/hygiene self-care deficit', 'readiness for enhanced sleep', 'acute pain' and 'risk for constipation', 'delayed surgical recovery', 'dressing/grooming self-care deficit', 'ineffective health maintenance' and 'impaired skin integrity risk'.

The identification of relevant diagnoses in surgical clinic, as in other specific populations, will allow

evidence-based care, and contribute to the advancement of nursing research.

Collaborations

Novaes ES contributed to the project design, research execution, writing of the article, relevant critical review of intellectual content and final approval of the version to be published. Torres MM collaborated with relevant critical review of intellectual content and final approval of the version to be published. Oliva APV cooperated with the project design, research execution, writing of the article, relevant critical review of intellectual content and final approval of the version to be published.

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