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Sociodemographic factors and nursing diagnoses in patients undergoing orthopedic surgeries

Fatores sociodemográficos e diagnósticos de enfermagem em pacientes submetidos às cirurgias ortopédicas

Factores sociodemográficos y diagnósticos de enfermería en pacientes sometidos a cirugías ortopédicas

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ABSTRACT

Objective: To identify the most frequent nursing diagnoses and verify their associations with sociodemographic factors in patients undergoing orthopedic surgeries. **Method:** Observational, analytical and cross-sectional study, developed in the orthopedics unit of a teaching hospital. For data collection we used structured instruments, anamnesis and physical examination. Data were analyzed using the Statistical Package for Social Sciences program. **Results:** Of the 201 patients evaluated, 68.2% were men. The most frequent nursing diagnoses were: risk of infection (100%), impaired skin integrity (100%), impaired tissue integrity (97.5%), bathing self-care deficit (90.5%), acute pain (80.6%), risk of falls (76.6%) and anxiety (70%). Associations were found between acute pain and participation in family income and between self-care deficit for bathing and marital status. **Conclusion and Implications for practice:** The analysis of the sociodemographic profile of a population favors the planning of safe care and decision making based on scientific evidence. Minimize potential complications, promote the appropriation of nursing diagnoses, improve the quality of care, reduce operating costs for healthcare institutions, and promote patient safety.

Keywords: Nursing Diagnosis; Nursing Process; Nursing; Orthopedics.

RESUMO

Objetivo: Identificar os diagnósticos de enfermagem mais frequentes e verificar suas associações com fatores sociodemográficos em pacientes submetidos às cirurgias ortopédicas. **Método:** Estudo observacional, analítico e transversal, desenvolvido na unidade de ortopedia de um hospital-escola. Para coleta de dados utilizou-se instrumentos estruturados, anamnese e exame físico. Os dados foram analisados pelo programa *Statistical Package for Social Sciences*. **Resultados:** Dos 201 pacientes avaliados, 68,2% eram homens. Os diagnósticos de enfermagem mais frequentes foram: risco de infecção (100%), integridade da pele prejudicada (100%), integridade tissular prejudicada (97,5%), déficit no autocuidado para banho (90,5%), dor aguda (80,6%), risco de quedas (76,6%), e ansiedade (70%). Constatou-se associações entre a dor aguda e participação na renda familiar e entre o déficit no autocuidado para banho e estado civil. **Conclusão e implicações para a prática:** A análise do perfil sociodemográfico de uma população favorece o planejamento de uma assistência segura e a tomada de decisões pautada em evidências científicas. Minimizar possíveis complicações, promover a apropriação de diagnósticos de enfermagem, bem como melhorar a qualidade da assistência, reduzir custos operacionais para as instituições de saúde e promover a segurança do paciente.

Palavras-chaves: Diagnóstico de Enfermagem; Processo de Enfermagem; Enfermagem; Ortopedia.

RESUMEN

Objetivo: Identificar los diagnósticos de enfermería más frecuentes y verificar sus asociaciones con factores sociodemográficos en pacientes sometidos a cirugías ortopédicas. **Método:** Estudio observacional, analítico y transversal, desarrollado en la unidad de ortopedia de un hospital docente. Para la recolección de datos utilizamos instrumentos estructurados, anamnesis y examen físico. Los datos se analizaron mediante el programa *Statistical Package for Social Sciences*. **Resultados:** De los 201 pacientes evaluados, el 68,2% eran hombres. Los diagnósticos de enfermería más frecuentes fueron: riesgo de infección (100%), deterioro de la integridad de la piel (100%), deterioro de la integridad del tejido (97.5%), déficit de autocuidado en el baño (90.5%), dolor agudo (80,6%), riesgo de caídas (76,6%) y ansiedad (70%). Se encontraron asociaciones entre el dolor agudo y la participación en el ingreso familiar y entre el déficit de autocuidado para bañarse y el estado civil. **Conclusión e implicaciones para la práctica:** El análisis del perfil sociodemográfico de una población favorece la planificación de la atención segura y la toma de decisiones basadas en evidencia científica. Minimiza las posibles complicaciones, promueve la apropiación de los diagnósticos de enfermería, mejora la calidad de la atención reduce los costos operativos para las instalaciones de atención médica y promueva la seguridad del paciente.

Palabras Clave: Diagnóstico de Enfermería; Proceso de Enfermería; Enfermería; Ortopedia.

INTRODUCTION

Orthopedic trauma is a public health problem and affects a considerable portion of the world population annually, both due to external causes and the increase in life expectancy, which can even be associated with disabling events and cause physiological fractures.[1-3]

Orthopedic trauma leads to an increase in hospital admissions and treatment costs, long periods of rehabilitation and a strong socioeconomic impact.[2,3]

Orthopedic nursing is an important specialty in providing care to victims of trauma, congenital malformation, degenerative diseases and other impairments of the musculoskeletal system, both in the surgical and in the rehabilitation and prevention phases.[3-6] However, it is still little explored in the literature, being necessary to work on the complexity of the theme.

The nurse must provide systematic and scientific assistance; propose interventions based on Evidence-Based Practice, in a proactive and effective way; and be able to evaluate the results of your clinical practice.[4,7,8]

The Nursing Process (NP) aims to organize the knowledge and conditions necessary for comprehensive and humanized assistance to the individual, the family and the community.[7] It is organized into five interrelated and interdependent stages: data collection; Nursing Diagnosis (ND); planning; implementation and evaluation.[4,7,8] The effective implementation of the NP still presupposes challenges, such as limited knowledge to perform the clinical examination, absence of proper registration, including inconsistent and non-consistent nursing prescriptions reliable, and resilience of the team itself.[4,7]

Nursing Diagnostics (DE), according to NANDA *International*, Inc. (NANDA- (2015-2017)[9] constitute a clinical judgment about human responses to a certain situation and support the elaboration of care for individualization and excellence in patient care.[4,7] However, nursing still has difficulty in identifying accurate diagnoses, since human responses are complex, subjective and cannot be measured using technological devices, making diagnostic decision-making[10] more difficult.

Studies on the frequency of ND, its indicators and associations with sociodemographic and clinical factors are essential. Such studies contribute to the planning and implementation of interventions that favor quality, individualized and comprehensive care, in addition to positive results in nursing.[11]

In this context, the objectives of this study were to identify the diagnoses of frequent nursing practices and to verify their associations with sociodemographic factors in patients undergoing orthopedic surgeries.

METHOD

This is an observational, analytical and cross-sectional research, developed in the orthopedics unit of a large public teaching hospital, 100% Brazilian Public Health System (Sistema Único de Saúde, SUS), located in the interior of Minas Gerais and constitutes a regional reference for orthopedic surgeries. The unit has 19 active beds.

The population of this study consisted of patients in the immediate postoperative period (pós-operatório imediato, POI) of orthopedic surgery, admitted to that hospital.

The inclusion criterion adopted was: patients older than 18 years old. Exclusion criteria: patients unable to respond to research instruments.

Structured instruments were developed to identify the sociodemographic, clinical profile and the most frequent ND in these patients. The sociodemographic and clinical factors surveyed were gender, age, marital status, profession/occupation, monthly income, participation in family income, comorbidities, cause/etiological factor, medical diagnoses, type of surgical intervention and orthopedic device used. The ND and related factors identified were based on NANDA *International*, Inc. (NANDA-I) (2015-2017).[9] The instrument in question went through the appreciation of three experienced nurses with ND research before being applied by the researchers.

The sample was of the probabilistic and sequential type. For the sample calculation, the prevalence of 80% of the ND was used: "Impaired Physical Mobility". Value identified from a trial study carried out with ten patients, who were not included in the study, and it is possible to identify the aforementioned ND in 78% of the evaluated patients, as well as already published articles that brought an equivalent percentage to 80% of the same ND.[3,4] Precision of 4% and confidence interval of 95% were considered for a finite population of 420 surgeries, a value found from the half-yearly average of orthopedic surgeries performed at the hospital in question, reaching a sample of 201 subjects.

For data collection, carried out from January to July 2018, the patients included in the research were submitted to anamnesis and physical examination carried out by the researchers and nurses in the sector. To favor the identification of accurate ND, these professionals underwent previous training, considering the RISNER[12] Diagnostic Reasoning and the Basic Human Needs of Wanda de Aguiar Horta,[13] carried out by the Nursing Education at the hospital field of study. The sector in question was also responsible for providing guidance on the proper application of the research instrument developed for data collection. Then, a pilot study was carried out with ten patients to verify the agreement between the diagnosticians.

The identification of ND was performed by nurses in the sector, with the application of the Nursing Care Systematization (*Sistematização da Assistência de Enfermagem, SAE*) and by researchers, also nurses, who performed a new anamnesis and physical examination and recognized the ND of patients in POI. Then, they compared the identified NDs, complementing the research instrument. The collected data were coded, categorized and typed in a Microsoft Excel® spreadsheet for double-entry validation, then exported to the Statistical Package for the Social Sciences (SPSS) software, version 20. Qualitative variables were analyzed using descriptive statistics, with absolute and percentage frequency, and for quantitative variables, descriptive

measures of centrality (mean) and dispersion (standard deviation, minimum and maximum values) were used. Pearson's chi-square or Fisher's exact test (when the percentage of crossing with expected frequency below five was greater than 25%) and multiple binomial logistic regression were used to verify the associations between the most frequent sociodemographic and ND factors. For analysis, NDs were considered frequent, which were identified in at least 70% of patients.

This research was approved by the Research Ethics Committee of a public university and conducted in accordance with Resolution 466/12 of the National Health Council, under opinion number 46331115.9.0000.5154. Patient participation was conditioned to the signing of the Free and Informed Consent Form.

RESULTS

Of the 201 patients who underwent the investigation, 137 were male (68.2%) and 64 female (31.8%). Age ranged from 18 to 91 years, with a mean of 43.41 years, standard deviation ± 17.96 and a median of 42.00. Regarding marital status, 101 (50.3%) reported being married or in a stable relationship, while 100 (49.7%) were single, widowed or divorced.

Here was a predominance of active workers, 117 (58.2%), followed by retirees or pensioners 48 (23.9%) and unemployed 36 (17.9%).

Regarding monthly income, they received up to three salaries 161 (80.1%), had no income 30 (14.9%) and received more than three minimum wages 10 (5%). 171 (85.1%) participated in the family income.

As for comorbidities, they reported not having any 138 (68.6%), had systemic arterial hypertension (SAH) 30 (14.9%), SAH and diabetes mellitus (DM) concomitant 12 (6%), chronic respiratory problems nine (4.5%), DM six (3%) and thyroid disorders six (3%).

Among the main causes of orthopedic surgeries, the motorcycle accident presented 62 (30.8%) victims, work accident 34 (16.9%), fall from height 32 (15.9%), automobile accident 16 (7.9%), being run over nine (4.5%), cancer nine (4.5%), disease progression seven (3.5%), soccer practice six (3%), injury with bladed weapon four (2%), assault three (1.5%), roof fall three (1.5%), wear three (1.5%) and other causes 13 (6.4%).

As for medical diagnoses, 147 (73.2%) fractures, ligament disorders 14 (6.9%), biopsy nine (4.5%), amputation five (2.5%) and others were diagnosed less frequent diagnoses 26 (12.9%).

The most frequent surgery was osteosynthesis in 125 (62.1%) patients, followed by removal of synthesis material in 16 (8%), tumor resections in eight (4%), tenorraphies in seven (3.5%), arthroplasties in five (2.5%), amputations in five (2.5%), neurorraphies in five (2.5%), traction placement in four (2%), debridement in four (2%), and others surgeries in 22 (10.9%) patients.

Surgical interventions occurred predominantly in the lower limbs in 112 (55.7%) patients. The most used device was bandage in 67 (33.3%) patients, plaster cast in 63 (31.3%), external fixation in 35 (17.4%), occlusive dressing in 28 (13.9%) and transeskeletal traction in eight (4%).

Of the patients assessed, 89 (44.3%) were discharged within 48 hours of the operation, 111 (55.2%) remained in the ward for more than two days and one (0.5%) died in the POI.

From the investigation, it was possible to identify 54 ND, with an average of 12.3 diagnoses per patient. The most frequent NDs, which appeared in at least 70% of the patients, are shown in Table 1.

Table 1. Most frequent Nursing diagnoses and related factors according to NANDA *International*, Inc. (NANDA-I) (2015-2017) in patients undergoing orthopedic surgery in a public teaching hospital. Uberaba, MG, Brazil, 2018

Diagnostic title/Related factor	n(%)
Risk of in infection	**201 (100.0)**
Invasive procedure	199(99.0)
Change in skin integrity	2(1.0)
Impaired skin integrity	**201(100.0)**
Mechanical factor (shear forces, pressure, physical immobility)	201(100.0)
Impaired tissue integrity	**196(97,5)**
Surgical procedure	195(99,5)
Mechanical factor	1(0,5)
Deficit in sel-care for bathing	**182(90.5)**
Musculoskeletal damage	180(99.0)
Pain	1(0,5)
Neuromuscular damage	1(0,5)
Acute pain	**162(80,6)**
Physical damaging agent (amputation, cut, surgical procedure, trauma)	128(79.0)
Biological damaging agent (infection, ischemia, neoplasm)	34(21.0)
Risk of falls	**154(76.6)**
Impaired mobility	125(81.1)
Pharmacological agents	12(7.8)
Age greater than or equal to 65 years	8(5,2)
Use of auxiliary devices (walker, wheelchair)	3(2.0)
Use of immobilizers	4(2,6)
Incontinence	2(1.3)
Anxiety	**140(70.0)**
Important change (economic and/ or health condition, environment, condition of the paper, stress)	136(97,2)
Death threat	2(1.4)
Substance Abuse	2(1.4)

Table 2 shows the association between sociodemographic factors and the most frequent ND. The diagnoses risk of infection and impaired skin integrity were present in 100% of the patients, making it impossible to carry out statistical association tests.

In NDs in which associations with sociodemographic factors were found in Pearson's chi-square or Fisher's exact test, multiple binomial logistic regression was applied to verify the adjusted Prevalence Chance Ratio (PCR), as shown in Table 3.

It was identified that those who participate in the family income are two and a half times more likely to have ND in acute pain, as well as individuals who are married or in a stable relationship

Table 2. Association between sociodemographic factors and the most frequent nursing diagnoses in patients undergoing orthopedic surgery in a public teaching hospital. Uberaba, MG, Brazil, 2018

Sociodemographic factors	Nursing diagnosis		*p**
	Yes	No	
	n(%)	n(%)	
	Impaired tissue integrity		
Age group			
18-59 years old	162(97.0)	5(3.0)	0.39[a]
≥ 60 years old	34(100)	0(0.0)	
Gender			
Male	133(97.1)	4(2.9)	0.48[a]
Female	63(98.4)	1(1.6)	
Marital status			
Married/ Stable union	99(98.0)	2(2.0)	0.49[a]
Single/ Windowed/ Divorced	97(97.0)	3(3.0)	
Participation in family income			
Yes	166(97.1)	5(2.9)	0.44[a]
No	30(100.0)	0(0.0)	
	Deficit in self-care for bathing		
Age group			
18-59 years old	151(90.4)	16(9.6)	0.89[a]
≥60 years old	31(91.2)	3(8.8)	
Gender			
Male	125(91.2)	12(8.8)	0.62[b]
Female	57(89.1)	7(10.9)	
Marital status			
Married/ Stable union	96(95.0)	5(5.0)	0.02[b]
Single/ Windowed/ Divorced	86(86.0)	14(14.0)	
Participation in family income			
Yes	156(91.2)	15(8.8)	0.43[b]
No	26(86.7)	4(13.3)	
	Acute pain		
Age group			
18-59 years old	134(80.2)	33(19.8)	0.77[b]
≥ 60 years old	28(82.4)	6(17.6)	

* Indicates significance when *p* is less than or equal to 0.05; a) Fisher's exact test; b) Pearson's chi-square test.

Table 2. Continued...

Sociodemographic factors	Nursing diagnosis		*p**
	Yes	No	
	n(%)	n(%)	
Gender			
Male	111(81.0)	26(19.0)	0.82[b]
Female	51(79.7)	13(20.3)	
Marital Status			
Married/Stable union	81(80.2)	20(19.8)	0.88[b]
Single/ Windwed/ Divorced	81(81.0)	19(19.0)	
Participation in family income			
Yes	142(83.0)	29(17.0)	0.04[b]
No	20(66.7)	10(33.3)	
	Risk of falls		
Age group			
18-59 years old	124(74.3)	43(25.7)	0.07[b]
≥ 60 years old	30(88.2)	4(11.8)	
Gender			
Male	101(73.7)	36(26.3)	0.15[b]
Female	53(82.8)	11(17.2)	
Marital status			
Married/Stable union	79(78.2)	22(21.8)	0.59[b]
Single/ Widowed/ Divorced	75(75.0)	25(25.0)	
Participation in family income			
Yes	133(77.8)	38(22.2)	0.35[b]
No	21(70.0)	9(30.0)	
	Anxiety		
Age group			
18-59 years old	121(72.5)	46(27.5)	0.05[b]
≥ 60 years old	19(55.9)	15(44.1)	
Gender			
Male	101(73.7)	36(26.3)	0.06[b]
Female	39(60.9)	25(39.1)	
Marital status			
Married/ Stable union	65(64.4)	36(35.6)	0.10[b]
Single/ Widowed/ Divorced	75(75.0)	25(25.0)	
Participation in family income			
Yes	119(69.6)	52(30.4)	0.96[b]
No	21(70.0)	9(30.0)	

* Indicates significance when *p* is less than or equal to 0.05; a) Fisher's exact test; b) Pearson's chi-square test.

Table 3. Multiple binomial logistic regression between sociodemographic factors and Nursing Diagnoses in patients undergoing orthopedic surgery in a public teaching hospital. Uberaba, MG, Brazil, 2018

Sociodemographic factors	Nursing diagnosis		
	Gross CPR (CI†)	Adjusted CPR (CI†)	*p**
	Deficit in self-care for bathing		
Age group			
18-59 years old	1.09 (0.30 – 3.98)	1.10 (0.26 – 4.56)	0.88
≥ 60 years old			
Gender			
Male	1.27 (0.47 – 3.42)	1.39 (0.48 – 4.05)	0.53
Female			
Marital status			
Married/Stable relationship	3.12 (1.08 – 9.03)	3.13 (1.07 – 9.13)	0.03
Single/Widowed/ Divorced			
Participation in family income			
Yes	0.62 (0.19 – 2.03)	0.76 (0.22 – 2.61)	0.66
No			
	Acute pain		
Age group			
18-59 years old	1.14 (0.44 -3.00)	0.97 (0.35 – 2.69)	0.96
≥ 60 years old			
Gender			
Male	1.08 (0.51 – 2.28)	1.04 (0.47 – 2.31)	0.91
Female			
Marital status			
Married/Stable union	0.95 (0.47 – 1.91)	0.86 (0.42 – 1.77)	0.69
Single/ Widowed/ Divorced			
Participation in family income			
Yes	2.44 (1.03 – 5.77)	2.53 (1.03 – 6.26)	0.04
No			
	Anxiety		
Age group			
18-59 years old	2.07 (0.97 – 4.42)	1.79 (0.80 – 4.02)	0.15
≥ 60 years old			
Gender			
Male	0.55 (0.29 – 1.04)	0.64 (0.33 – 1.26)	0.20
Female			
Marital status			
Married/Stable union	1.66 (0.90 – 3.05)	1.61 (0.86 – 3.00)	0.12
Single/ Widowed/ Divorced			
Participation in family income			
Yes	0.98 (0.42 – 2.28)	1.07 (0.44 – 2.64)	0.87
No			

† Confidence interval; * Indicates significance when *p* is less than or equal to 0.05.

are approximately three times more likely to have an ND deficit in self-care for bathing.

DISCUSSION

The predominant profile was male, at an economically active age, victims of a motorcycle accident, with fractures in the lower limbs. This information can be justified by socio-cultural issues, in which men are those who are most exposed to risk situations, added to the vulnerability of motorcyclists, which increases morbidity and mortality from external causes, in addition to the high costs to public coffers and to society.[2,14,15]

The increase in motorcycles as a means of transport, associated with the presence of a system road traffic without planning, lack of inspection and disregard for legislation, make traffic accidents among the main causes of death in Brazil.[14,15]

Fractures were the main reason for surgical indication, as corroborating the literature.[1,3,5,16] Related to this, an Australian study showed that the fracture caused by bone fragility is likely to generate new fractures5. This fact is evidenced in the elderly, associated with increased life expectancy and the emergence of disabling events, which increase the chances of immobility and functional dependence.[1,6]

Nursing has an important role in the care provided to orthopedic patients in the postoperative period, in order to promote continuous improvement, rehabilitation and reduction of morbidity and mortality.[3,4,6]

Among the NDs identified, in at least 70% of patients, the most frequent were risk of infection, impaired skin integrity and impaired tissue integrity, which corroborates other studies.[3,4,9] However, these are diagnoses expected for the general postoperative population.

Related to this, special techniques for surgical incisions and traumatic injuries stand out in the literature, such as negative pressure therapy (terapia por pressão negativa, TPN), which proposes to speed up the repair process and prepare the injury bed for definitive coverage.[17] A study shows that this therapy has lower rates of infection and shorter average time to close the lesions, compared to conventional coverings; in addition, the presence of external fixations does not contraindicate TPN.[17]

The deficits in self-care for bathing, acute pain, risk of falls and anxiety are those that most impact the quality of life of individuals undergoing orthopedic surgery, even if they are not identified in all patients evaluated.[9]

The deficit in self-care for bathing is related to the conservation of the individual's independence.[4,9] Dependence for carrying out daily activities arouses feelings of helplessness, fear and anxiety.[3,4]

In this study, an association was found between the deficit in self-care for bathing and marital status. Individuals who were married or in a stable relationship had a greater deficit when compared to single, widowed or divorced people. This relationship can be justified by the trust and responsibility placed on their companions to exercise or assist them in this activity. It can also be considered that many companions, faced with a situation of hospitalization are organized to exercise the responsibility of care and remain as long as possible with their loved ones.[18]

Another study,[19] carried out with the elderly, showed an opposite relationship. It identified that elderly people living with a partner have less decline in functional capacity when compared to single or widowed elderly people[19]. It is understandable that this relationship is due to the care provided by the spouse, which contributes to the care and maintenance of daily activities[19]. Despite the divergence between the results and the fact that they are a specific population, in this case, the elderly, therefore, studies that have already verified the relationship between marital status and functional capacity and/or self-care are identified. However, more research is needed to expand the understanding and relevance of this association.

The high frequency of ND deficit in self-care for bathing refers to the high dependence of patients in the postoperative period of orthopedic surgery, which reflects in nursing work overload in these units.[20-22] It is emphasized that making care quality and safety viable of the patient, includes ensuring adequate staffing.[20-22]

Orthopedic surgery is a major cause of severe pain[23-24]. Acute pain is a subjective experience, it is a common ND in the postoperative period and, when left untreated, it can cause physiological and psychological changes that negatively interfere with recovery.[9,23]

An association was observed between acute pain and participation in family income. It is known that individual factors such as anxiety, important changes, genetic, cultural, situational and environmental factors can influence the incidence and intensity of pain.[25,26]

The orthopedics nurse must assess pain in a multidimensional way, consider the patient's physiological, emotional and behavioral factors, including exploring nursing interventions and non-pharmacological techniques capable of resolving discomfort and avoiding impairment in recovery.[4,23,24]

Music therapy makes it possible to approach physical and psychological aspects, proving to be effective both for the treatment of pain and for the reduction of anxiety.[27]

The sample of adult patients was more apprehensive about the surgical recovery and the change in health status, with signs of anxiety being identified more frequently in this age group when compared to the elderly. The literature[28] has already described a relationship between anxiety and age group. Thus, even if there is no association with statistical significance, ND anxiety deserves more detailed studies. The main factor related problem identified among patients diagnosed with anxiety was "important changes".[9]

During hospitalization, the risk of falls is also expected in patients undergoing orthopedic surgery, especially in relation to musculoskeletal impairment of lower limbs.[9,24] However, it is a health problem that deserves specific studies.[9,24]

The importance of interdisciplinary performance in POI of orthopedic surgeries is highlighted, with collaborative interventions between nursing, social work and psychology, considering that the health situation of their patients can be temporary or permanent and affects their quality of life, as well as family

members. Multi-professional work promotes safe, quality and comprehensive care for patients.[6,29]

The nurse has an indispensable role in care, educational and preventive practices, developed at all levels of care, and should encourage the co-responsibility of the individual in their health-disease process.[5,6] The nurse's network performance and the importance of the referral and counter-referral system are emphasized, in order to promote comprehensive care.[30]

In view of the results, the relevance of the study to assist orthopedics nurses in their clinical practice is evident, developing cognitive, technical, attitudinal and ethical skills for the provision of quality care. Thus, knowing the sociodemographic and clinical profile, identifying accurate ND for a specific population and acting in an interdisciplinary way, is essential to provide comprehensive care, according to the real needs of individuals. The importance of studies that test and validate interventions for orthopedic nursing is also highlighted.

CONCLUSION AND IMPLICATIONS FOR PRACTICE

The most frequent NDs identified in this study were - risk of infection, impaired skin integrity, impaired tissue integrity, deficit in self-care for bathing, acute pain, risk of falls and anxiety. There were associations between marital status and deficit in self-care for bathing and between participation in family income and acute pain.

The study presented as a limitation the simultaneous analysis of several NDs. It is suggested that longitudinal studies should be carried out to monitor only one ND, in order to detail and expand the understanding of possible correlations.

The analysis of the sociodemographic profile of a specific population favors the appropriation of ND and, consequently, the planning of quality care, with decision making based on scientific evidence.

AUTHORS' CONTRIBUTIONS

Study design. Data acquisition and analysis. Results interpretation. Content writing and/or critical review. Approval of the final version of the article. Responsibility for all aspects of the content and integrity of the published article. Lágila Cristina Nogueira Martins. Aldenora Laísa Paiva de Carvalho Cordeiro.

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