



IMPAIRED COMFORT AT THE END OF LIFE: AN ASSOCIATION WITH NURSING DIAGNOSIS AND CLINICAL VARIABLES

Karine Marques Costa dos Reis¹ © Cristine Alves Costa de Jesus¹ ©

¹Universidade de Brasília, Programa de Pós-Graduação em Enfermagem. Brasília, Distrito Federal, Brasil.

ABSTRACT

Objective: to analyze the associations between the clinical variables and the Nursing diagnoses of NANDA-I Taxonomy II with the presence of Impaired comfort.

Method: a quantitative and analytical study conducted with 66 individuals with end-of-life oncological disease, admitted to a specialized institution in the Federal District, Brazil. Primary data were collected between February and November 2018, which covered social, demographic and clinical variables, in addition to three validated scales to identify Nursing diagnoses. To assess the association of impaired comfort (dependent variable) as a function of the independent variables (Nursing diagnosis and clinical variables), the Mann-Whitney non-parametric test and Pearson's chi-square test were used, considering p < 0.05 as significant.

Results: a total of 960 diagnoses were identified in 66 patients. There was a positive relationship with Impaired comfort for the following Nursing diagnoses: Chronic pain; Impaired physical mobility; Self-care deficit (for feeding, bathing, intimate hygiene and dressing); Chronic sorrow and Dysfunctional family processes. The following clinical variables showed a statistically significant relationship regarding impaired comfort: time of palliative care, pain, tiredness, appetite, sorrow, anxiety and well-being.

Conclusion: an association of the pain, impaired physical mobility, self-care deficit and chronic sorrow nursing diagnoses with impaired comfort was identified. Among the clinical variables, there was a relationship between time of palliative care and symptoms.

DESCRIPTORS: Patient comfort. Palliative care. Oncology nursing. Nursing diagnosis. Nursing evaluation. Standardized terminology in nursing. Signs and symptoms.

HOW CITED: Reis KMC, Jesus CAC. Impaired comfort at the end of life: an association with nursing diagnosis and clinical variables. Texto Contexto Enferm [Internet]. 2021 [cited YEAR MONTH DAY]; 30:e20200105. Available from: https://doi.org/10.1590/1980-265X-TCE-2020-0105





CONFORTO PREJUDICADO NO FIM DE VIDA: UMA ASSOCIAÇÃO COM DIAGNÓSTICO DE ENFERMAGEM E VARIÁVEIS CLÍNICAS

RESUMO

Objetivo: analisar as associações entre as variáveis clínicas e os diagnósticos de enfermagem da Taxonomia II da NANDA-I com a presença do Conforto prejudicado.

Métodos: estudo quantitativo e analítico de 66 indivíduos com doença oncológica em final de vida, internados em instituição especializada do Distrito Federal, Brasil. Coletaram-se dados primários, entre fevereiro a novembro de 2018, os quais abrangiam variáveis sociais, demográficas e clínicas, além de três escalas validadas para identificação dos diagnósticos de enfermagem. Para avaliação da associação do Conforto prejudicado (variável dependente) em função das variáveis independentes (diagnóstico de enfermagem e variáveis clínicas), utilizou-se o teste não paramétrico de Mann-Whitney e o Qui-quadrado de Pearson, considerando significativo p < 0,05.

Resultados: em 66 pacientes, identificaram-se 960 diagnósticos. Observou-se relação positiva com o Conforto prejudicado para os diagnósticos de enfermagem: dor crônica; Mobilidade física prejudicada; Déficit no autocuidado (para alimentação, banho, higiene íntima e vestir-se); Tristeza crônica e processos familiares disfuncionais. Apresentaram relação estatisticamente significativa quanto ao conforto prejudicado as seguintes variáveis clínicas: tempo de cuidados paliativos, dor, cansaço, apetite, tristeza, ansiedade e bem-estar.

Conclusão: identificou-se associação dos diagnósticos de enfermagem dor, mobilidade física prejudicada, déficit no autocuidado e tristeza crônica com o conforto prejudicado. Entre as variáveis clínicas, tiveram relação o tempo de cuidados paliativos e sintomas.

DESCRITORES: Conforto do paciente. Cuidados paliativos. Enfermagem oncológica. Diagnóstico de enfermagem. Avaliação em enfermagem. Terminologia padronizada em enfermagem. Sinais e sintomas.

DETERIORO DE LA COMODIDAD AL FINAL DE LA VIDA: ASOCIACIÓN CON DIAGNÓSTICOS DE ENFERMERÍA Y VARIABLES CLÍNICAS

RESUMEN

Objetivo: analizar las asociaciones entre las variables clínicas y los diagnósticos de enfermería de la Taxonomía II de NANDA-I con la presencia de Confort deteriorado.

Métodos: estudio cuantitativo y analítico de 66 individuos con enfermedad oncológica al final de la vida, ingresados en una institución especializada en el Distrito Federal, Brasil. Los datos primarios se recolectaron entre febrero y noviembre de 2018, y cubrieron variables sociales, demográficas y clínicas, además de tres escalas validadas para identificar diagnósticos de enfermería. Para evaluar la asociación entre el deterioro de la comodidad (variable dependiente) en función de las variables independientes (diagnóstico de enfermería y variables clínicas) se utilizó la prueba no paramétrica de Mann-Whitney y la prueba de Chi-cuadrado de Pearson, sobre la base de un nivel de significación de p <0,05.

Resultados: en 66 pacientes se identificaron 960 diagnósticos. Hubo relación positiva entre el Deterioro de la Comodidad y los siguientes diagnósticos de enfermería: dolor crónico; Alteración de la movilidad física; Déficit en el autocuidado (para la alimentación, baño, higiene íntima y vestimenta); Tristeza crónica y procesos familiares disfuncionales. Las siguientes variables clínicas mostraron una relación estadísticamente significativa con respecto a la alteración de la comodidad: duración de los cuidados paliativos, dolor, cansancio, apetito, tristeza, ansiedad y bienestar.

Conclusión: se identificó asociación entre los diagnósticos de enfermería dolor, deterioro de la movilidad física, déficit en el autocuidado y tristeza crónica y el deterioro de la comodidad. Entre las variables clínicas, hubo relación con la duración de los cuidados paliativos y los síntomas.

DESCRIPTORES: Comodidad del paciente. Cuidados paliativos. Enfermería oncológica. Diagnóstico de enfermería. Evaluación de enfermería. Terminología de enfermería estandarizada. Signos y síntomas.

INTRODUCTION

The decrease in the birth rate associated with longer life expectancy and care technology led the world to a demographic and epidemiological transition with an increased prevalence of chronic-degenerative diseases. Among them, cancer, a life-threatening disease that, from the diagnosis to terminality, causes multidimensional distress in the subjects and their family, with the need for holistic and interdisciplinary assistance.^{1–3}

In a chronic disease with risk of death, assistance and interventions must be aimed at comfort. This is due to the numerous psychosocial, spiritual and physical symptoms of patients at the end of life, which lead to discomfort and reverberate in the worsening of quality of life and well-being.⁴

In light of this, the philosophy of palliative care and comfort, as a goal of Nursing interventions, is widely debated in the literature.^{5–6} Discussed by Katharine Kolcaba, who made the conceptualization and operationalization of the construct, comfort is an immediate, subjective and variable experience with satisfaction of the needs for relief, tranquility and transcendence. In addition, it directs intervention measures in the four contexts of human experience, whether physical, psycho-spiritual, socio-cultural and environmental, in addition to sharing attributes common to well-being and quality of life.^{7–10}

In the NANDA-International taxonomy, comfort is highlighted as a multidimensional approach. As proposed by Kolcaba, comfort stands out as a domain and also as a diagnosis, in the physical, environmental and social classes. The Impaired comfort diagnosis is defined as the perception of lack of comfort, relief and transcendence in the physical, psycho-spiritual, environmental, cultural and/ or social dimensions. This concept has also been ratified by other authors, who demonstrated the evolution and characterization of the construct in addition to the validation of the Impaired comfort diagnosis. 10,12–13

In view of the Taxonomy, in order to reach a diagnosis focused on the problem, it is necessary to identify the clinical manifestations or signs and symptoms and the related or etiological factors. Among the factors related to the Impaired comfort Nursing Diagnosis (ND) are aspects linked to the environmental conditions; the associated conditions involve the treatment regimen and symptoms related to the disease. NANDA-I also highlights the signs and symptoms, such as inability to relax, fear, discomfort with the situation, and irritability, among others. Also on the taxonomy of the diagnosis, in a study to validate the defining characteristics, greater expressiveness of the physical manifestations of discomfort, anxiety, report of symptoms of distress, fear, report of feeling uncomfortable, restlessness, inability to relax, disturbed sleep pattern and report of feeling limited were evidenced.

The fact is that, in the panorama of life transition, the identification of the uncomfortable defining characteristics, associated with the reception and preparation for death, are essential conditions for comfort in terminality. ¹⁴ In this context, the study innovates when investigating other diagnoses associated with Impaired comfort in cancer patients at the end of life, bringing a future perspective of developing a syndrome-like diagnosis.

In this way, the study allows for the reflection on the nurse's practice from the Nursing diagnosis, allowing greater sensitivity in the act of diagnosing, culminating in greater visibility and recognition of the profession as a science and knowledge field. Thus, the objective of this study was to analyze the associations between the clinical variables and the Nursing diagnoses of NANDA-I Taxonomy II with the presence of Impaired comfort.

METHOD

An analytical and quantitative study carried out in a reference hospital in high complexity care for end-of-life cancer patients. The unit consists of 19 beds, all intended for adult cancer patients with no possibility of physical cure of the disease.

In order to define a significant sample with external validity, a comfort ratio among those exposed of 60% in a one-tailed test was considered. A pilot study and admissions from the previous year in the same period (80 hospitalizations) contributed to sample calculation. Therefore, assuming a 5% margin of error and a 90% confidence level, the sample consisted of 66 individuals.

The inclusion criteria adopted were the following: oncological individuals in end-of-life care, lucid, in clinical conditions to fully participate in the study, between February and November 2018. The exclusion criteria were individuals undergoing palliative chemotherapy or radiotherapy. This restriction minimized possible selection biases, since it does not include individuals with clinical and psychological repercussions resulting from the treatment.

The selection was made at admission or up to 48 hours after admission, and the individuals selected by simple random probability sampling were invited to participate in the research. After consent, primary data were collected from an instrument that contained social, demographic and clinical data, in addition to validated scales.

In the data collection instrument, in addition to the scales, social and demographic evaluation, subjective and objective data were also included, which supported diagnostic reasoning. This was created by the authors, based on the theory of comfort by Katharine Kolcaba and reviewed by specialists in the area of Oncology, Nursing Process and palliative care.

Among the validated scales, all in the public domain, which were the basis for clinical decision-making and for the identification of the ND, were used, namely: a ESAS-r (Edmonton Symptoms Assessment Scale) with a reliability from 0.70 to 0.95, which assesses pain, tiredness, nausea, drowsiness, lack of appetite, shortness of breath, as well as depression, anxiety and well-being on a Likert scale from zero to ten, where zero represents absence of symptom and ten intense symptom; and the PPS (Palliative Performance Scale), whose purpose is to conduct the functional assessment of the patient with indexes ranging from 100% (without evidence of the disease) to 0 (death), based on the analysis of walking, activity and evidence of the disease, self-care, intake and level of consciousness.

To assess comfort, the questionnaire of comfort in relation to planning for the final phase of life was used, created by nurse Katharine Kolcaba and validated for Portuguese, whose Cronbach's alpha is 0.98. This scale was used as the gold standard for the Impaired comfort diagnosis. The instrument has 28 positive and negative questions, based on a Likert scale with five items, in which the highest value to be achieved is 140 points, related to greater comfort, and the lowest value, 28 points. Scores below 96 indicated Impaired comfort. This cutoff point was based on the pilot study as well as on an article evaluating comfort in patients with heart failure.¹⁶

In the identification of the Nursing diagnoses, reasoning based on the Risner¹⁷ process and on NANDA-I Taxonomy II was used. The inclusion of diagnoses combined three criteria: ratification of the diagnosis based on validated scales, legitimation of the individual regarding the presence of the diagnoses and agreement between the researchers and an expert validator, the latter with more than 20 years of experience with Nursing diagnoses, PhD in the area and member of NANDA-I. The reconciliations between researchers and validator were made separately from the data collection instrument and completely blind.

The data were analyzed using the SPSS software. Initially, the null hypothesis of normality of clinical data was rejected, assessed using the Kolmogorov-Smirnov test, using Mann-Whitney's U

nonparametric test. To analyze the relationship of the Impaired comfort Nursing diagnosis (binary, categorical and dependent variable) in function of the independent variables (other associated Nursing diagnoses), Pearson's chi-square test was used. All the effects and relationships associated with *p*-values < 0.05were considered significant.

All the ethical principles governed by research with human beings were obeyed. In this sense, all the participants signed the Free and Informed Consent Form, after obtaining the approval of the Research Ethics Committee of the Health Sciences School of the University of Brasília.

RESULTS

Table 1 presents the general characteristics of the 66 participants with an assessment of association with Impaired comfort. Of these, 52% were female, with a mean age of 58.64 years old, and low schooling with complete elementary education (62.1%). As for religiosity, the majority reported to be catholics (43.9%) and had a family member as their caregiver (77.7%). The predominant indication for hospitalization was pain (46.9%), followed by dyspnea (24.2%). The most prevalent primary location of tumors was gastrointestinal (36.3%), followed by cancer of the reproductive system cancer (28.78%). None of the qualitative variables were associated with the dependent variable.

Table 1 – Analysis of the association of the qualitative variables associated with Impaired comfort in oncology patients at the end of life. Brasília, DF, Brazil, 2018. (n=66)

	Impaired		
Variables	No	Yes	P *
	n (%)	n (%)	
Gender			0.745
Male	11 (45.8)	21 (50.0)	
Female	13 (54.2)	21 (50.0)	
Schooling			0.340
Illiterate	5 (20.8)	8 (19.0)	
Elementary	16 (66.7)	25 (59.5)	
High School	2 (8.3)	9 (21.4)	
Graduation	1 (4.2)	0 (0.0)	
Marital status			0.081
Single	3 (12.5)	12 (28.6)	
Married	10 (41.7)	21 (50.0)	
Divorced	8 (33.3)	4 (9.5)	
Widow/Widower	3 (12.5)	5 (11.9)	
Religion			0.092
No religion	5 (20.8)	6 (14.3)	
Catholic	7 (29.2)	22 (52.4)	
Evangelical	10 (41.7)	13 (31.0)	
Spiritist	2 (8.3)	1 (2.4)	
Caregiver			0.684
Abandonment	2 (8.3)	7 (16.7)	
Family	20 (83.3)	31 (73.8)	
No degree of kinship	2 (8.3)	4 (9.5)	

Table 1 - Cont.

	Impaired		
Variables	No	Yes	P *
	n (%)	n (%)	
Primary location of the tumor			0.614
Respiratory	5 (20.8)	10 (23.8)	
Gastrointestinal	7 (29.2)	17 (40.5)	
Reproductive	9 (37.5)	10 (23.8)	
Head and neck	1 (4.2)	2 (4.8)	
Central nervous system	2 (8.3)	1 (2.4)	
Non-solid tumor	0 (0.0)	2 (4.8)	

^{*}Pearson's Chi-square test.

Table 2 shows the quantitative variables associated with Impaired comfort. The variables with a statistically significant relation to the diagnosis were ESAS-total and its components of pain, tiredness, appetite, sorrow, anxiety and well-being and the time of admission to palliative care.

Table 2 – Analysis of the association of the quantitative variables with Impaired comfort in end-of-life patients. Brasília, DF, Brazil, 2018. (n=66)

	Impaired			
Variables	No	Yes	P *	
	Median (IQ)	Median (IQ)		
Age	59.5 (15.8)	59.5 (24.0)	0.487	
Time of diagnosis (months)	15.0 (33.0)	10.0 (20.3)	0.513	
Time of palliative care (months)	1.5 (2.0)	1.0 (1.0)	0.048	
Length of hospital stay (days)	16.5 (15.0)	11.0 (23.2)	0.217	
ESAS† Total	36.5 (18.8)	59.0 (15.5)	<0.001	
ESAS Pain	4.5 (3.8)	7.0 (3.5)	0.019	
ESAS Tiredness	6.0 (5.8)	8.0 (3.5)	0.049	
ESAS Sleepiness	5.0 (2.0)	7.0 (4.0)	0.075	
ESAS Nausea	2.0 (5.0)	4.0 (4.0)	0.328	
ESAS Appetite	6.0 (5.75)	8.0 (4.0)	0.012	
ESAS Dyspnea	3.5 (6.5)	4.0 (6.5)	0.264	
ESAS Depression	2.0 (7.8)	6.0 (3.5)	0.005	
ESAS Anxiety	4.5 (4.0)	8.0 (2.0)	0.003	
ESAS Well-being	4.0 (4.8)	8.0 (2.0)	<0.001	
PPS [‡]	40.0 (7.5)	30.0 (10.0)	0.178	

^{*}P: Significance level, Mann-Whitney's U test, †ESAS: Edmonton Symptom Assessment System, †PPS: Palliative Performance Scale.

Regarding the assessment of the Nursing diagnoses, the participants (66) presented 960 NDs (considering, of course, that NDs are repeated among the patients), with 53 different labels of NANDA-I Taxonomy II focusing on the problem, distributed in 9 NANDA-I domains. The mean number of NDs per individual was 14.54, with a standard deviation of 3.24. In absolute numbers, a minimum of 7 NDs per individual and a maximum of 23 were identified.

The most prevalent diagnoses of physical context with a focus on the problem were the following: Insomnia (77%), Constipation (76%), Imbalanced nutrition: less than body requirements (70%), Fatigue (68%), Nausea (59%), Chronic pain (56%) and Impaired physical mobility (50%). The most prevalent psycho-spiritual context diagnoses were: Death anxiety (48%), followed by Chronic low self-esteem (38%), Chronic sorrow (36%), Fear (35%) and Spiritual distress (33%). In the socio-cultural context, the most prevalent diagnoses were: Dysfunctional family processes (32%) and Stress in the caregivers role (30%).

Extrapolating the descriptive assessment, in Table 3 it is possible to analyze the Nursing diagnoses with an incidence greater than or equal to 30% in relation to the Impaired comfort diagnosis. As all the Nursing diagnoses are binary categorical variables (yes/no), it was possible to calculate the Odds Ratio (OR).

Patients with impaired comfort were 9.01 $(\frac{1}{0,111})$ and 12.20 $(\frac{1}{0,082})$ times more likely to present Self-care deficit (for feeding, bathing, intimate hygiene and dressing) and Chronic pain, respectively, in relation to patients with comfort. Patients with Impaired comfort also were 7.58 $(\frac{1}{0,132})$, 4.76 $(\frac{1}{0,210})$ and 4.54 $(\frac{1}{0,220})$ times more likely to present Impaired physical mobility, Dysfunctional family processes and Chronic sorrow, respectively, in relation to patients with comfort.

Table 3 – Analysis of the association of the Nursing Diagnoses in relation to the absence of Impaired comfort in end-of-life patients. Brasília, DF, Brazil, 2018. (n=66)

	Impaired comfort					
	No	Yes	P *	OR [†]	CI [‡] (95%)	
	n (%) n (%)				-	
Constipation						
Yes	18 (75.0)	32 (76.2)	0.914	0.938	0.292- 3.006	
No	6 (25.0)	10 (23.8)				
Self-care deficit (for feeding, bathing, intimate hygiene and dressing)						
Yes	4 (16.7)	27 (64.3)	<0.001	0.111	0.032- 0.386	
No	20 (83.3)	15 (35.7)				
Chronic pain						
Yes	5 (20.8)	32 (76.2)	<0.001	0.082	0.024- 0.277	
No	19 (79.2)	10 (23.8)				
Fatigue						
Yes	16 (66.7)	29 (69.0)	0.842	0.897	0.307- 2.618	
No	8 (33.3)	13 (31.0)				
Insomnia						
Yes	20 (83.3)	31 (73.8)	0.374	1.774	0.496- 6.349	
No	4 (16.7)	11 (26.2)				
Impaired physical mobility						
Yes	5 (20.8)	28 (66.7)	<0.001	0.132	0.041- 0.426	
No	19 (79.2)	14 (33.3)				
Nausea						
Yes	14 (58.3)	25 (59.5)	0.925	0.952	0.344 -2.637	
No	10 (41.7)	17 (40.5)				

Table 3 - Cont.

	Impaired comfort				
	No	Yes	P *	OR†	CI [‡] (95%)
	n (%)	n (%)			
Imbalanced nutrition: less than body requirements					
Yes	15 (62.5)	31 (73.8)	0.336	0.591	0.202- 1.733
No	9 (37.5)	11 (26.2)			
Ineffective breathing pattern					
Yes	9 (37.5)	22 (52.4)	0.244	0.545	0.196- 1.519
No	15 (62.5)	20 (47.6)			
Death anxiety					
Yes	8 (33.3)	24 (57.1)	0.063	0.375	0.132- 1.067
No	16 (66.7)	18 (42.9)			
Chronic low self-esteem					
Yes	8 (33.3)	17 (40.5)	0.565	0.735	0.258- 2.099
No	16 (66.7)	25 (59.5)			
Fear					
Yes	6 (25.0)	17 (40.5)	0.204	0.490	0.161- 1.488
No	18 (75.0)	25 (59.5)			
Spiritual distress					
Yes	6 (25.0)	16 (38.1)	0.278	0.542	0.178- 1.651
No	18 (75.0)	26 (61.9)			
Chronic sorrow					
Yes	4 (16.7)	20 (47.6)	0.012	0.220	0.064- 0.755
No	20 (83.3)	22 (52.4)			
Dysfunctional family processes					
Yes	3 (12.5)	17 (40.5)	0.017	0.210	0.054- 0.817
No	21 (87.5)	25 (59.5)			

^{*}P: Pearson's Chi-square test, †OR: Odds Ratio, ‡CI: Confidence Interval.

DISCUSSION

The sample of the present study is characterized by women, adults and older adults with incomplete elementary education. The predominant clinical diagnosis is cancer in the digestive tract. Of these characteristics, gender, age and medical diagnosis stand out, which are well documented by annual censuses and corroborate the present sample.^{3,17}

As for the clinical factors significantly associated with Impaired comfort, attention is drawn to the time of admission to palliative care and poorly controlled symptoms. It is well known that patients and family members with a longer period of care with an interdisciplinary team have greater sensation of comfort, based on multidimensional interventions.¹⁹ Numerous studies also point out the effectiveness of the early insertion of individuals with severe and progressive diseases in palliative care, whose interdisciplinary comfort-based care minimizes symptoms, hospitalizations and costs.^{18–19}

Regarding the association between the Impaired comfort Nursing diagnosis with other diagnoses, the use of the NANDA-I terminology is ratified. The findings demonstrate the harmony of the classification with the complexity of the construct, confirming the association of diagnoses in several domains with Impaired comfort. In this regard, there was a positive association with Impaired comfort of diagnoses

present in the activity/rest domain, coping domain, roles and relationships, principles of life and the comfort domain itself, all from NANDA-I Taxonomy II. The results herein presented corroborate the cross-sectional evaluation of 127 patients, in which quality of life was influenced by physical function, role performance, global health and symptoms such as fatigue, insomnia, loss of appetite and pain.²⁰

Recognized as factors that significantly impact on comfort during disease progression, the symptoms inflict multidimensional distress on the patient. 12,18,19 In this sense, pain is among the symptoms that most reverberate at the end of life. 21–22 Thus, from the chronic pain ND, the present study indicated the positive relationship with Impaired comfort. In Brazilian consensus, the importance of good pain management for better quality of life and longer survival is evident, and this assessment must be multidimensional. 21 This fact is ratified in a longitudinal assessment with patients with advanced cancer disease, in which there was high prevalence of pain as well as reverberation in comfort, quality of life and well-being. 22

Another diagnosis associated with Impaired comfort was chronic sorrow. In spite of sorrow, translated by depression, having large incidence in the entire world population, the patients who are victims of an oncological disease have twice as many risks in their development and the prevalence is 69% with an important impact on comfort.^{23–24} More diagnoses identified due to the great extent of the disease, but little associated in the literature with Impaired comfort, were Impaired physical mobility and Self-care deficit (for food, bath, intimate hygiene and dressing).

Defined as "Limitation on the independent and voluntary movement of the body or one or more extremities" by NANDA-I 2018¹¹, Impaired physical mobility is a broader diagnosis, which may encompass several conditions associated with immobility or difficulty in carrying out transfers or locomotion, being found in 50% of the sample. Self-care deficit involves the inability to independently perform at least one of the activities of daily living, such as eating, completing body cleaning activities, performing tasks associated with urinary or intestinal elimination, dressing or removing clothes independently.¹¹

In a qualitative study on the repercussion of immobility and physical dependence, an important reverberation of functionality in social life was evidenced, when the subject with impaired mobility feels a burden.²⁰ This feeling contributes to the increase of pain, fatigue and anxiety. However, there are mental adaptations that each subject makes about their significant activities and, with these adjustments, more autonomy and independence are guaranteed, in addition to promoting a sense of purpose and meaning in life, with the feeling of being healthier and more independent.²⁵

Another study, with 47 participants, victims of severe and progressive cancer, showed a positive relationship between functionality and mobility with mood, survival and comfort.²⁶ There is also a study that deals with the positive relationship of the increase in the perception of dignity with autonomy and independence.²⁷ Thus, this study shares the understanding, from a specialized scale, about the influence of functional dependence on mood and dignity, reflecting on comfort.

Finally, the dysfunctional family processes ND, which showed an association with Impaired comfort. In a cross-sectional study, the social, physical and psycho-spiritual impacts of the disease on 309 family members were evidenced.²⁸ Such impacts lead to ineffective coping strategies, leading to less support and culminating in even more distress for the patient.^{17,29}

Thus, diagnoses of the physical, psycho-spiritual and sociocultural contexts, covering the domains of Kolcaba's comfort theory, were able to support the Impaired comfort Nursing diagnosis. This assessment expanded the existing knowledge about comfort, helping nurses to perform the diagnoses, planning and implementation of their interventions. In addition, it contributed to foster future research studies on the review of the level of evidence of the Impaired comfort Nursing diagnosis, which currently is 2.1, as well as the perspective of developing a syndrome-like diagnosis.

In view of the results presented, the limitation of this research is related to the observational methodology and unique measurement of the study. This methodology does not establish an association

with a high level of evidence between the chances of having a certain defining characteristic and Impaired comfort, leading to limitations in the conclusions. In addition, another limiting factor was the absence of diagnoses of the environmental context in the research due to the limiting condition of the theory with the NANDA-I Taxonomy.

CONCLUSION

The pain, tiredness, appetite, sorrow, anxiety and well-being clinical variables are ratified as significant for Impaired comfort. There was also the improvement of clinical reasoning based on NANDA-I Taxonomy II, by associating the Impaired comfort diagnosis with the chronic pain, chronic sorrow, impaired physical mobility, sSelf-care deficit (for food, bath, intimate hygiene and dressing) and dysfunctional family processes nursing diagnoses. Thus, this article provided the identification of important associations between clinical variables and Nursing diagnoses to the condition of comfort, more specifically to Impaired comfort, based on a mid-range Nursing theory and on the Nursing Process.

REFERENCES

- Agarwal R, Epstein AS. Advance care planning and end-of-life decision making for patients with cancer. Semin Oncol Nurs [Internet]. 2018 [cited 2020 Apr 08];34(3):316-26. Available from: https://doi.org/10.1016/j.soncn.2018.06.012
- 2. Awal AA. Application of Katharine Kolcaba comfort theory to nursing care of patient. Int J Sci Res Publ [Internet]. 2017 [cited 2020 Apr 08];7(3):104-7. Available from: http://www.ijsrp.org/research-paper-0317/ijsrp-p6314.pdf
- Instituto Nacional de Câncer José Alencar Gomes da Silva (INCA). Estimativa 2020: incidência de câncer no Brasil. [Internet] 2019 [cited 2020 Apr 08]. Available from: https://www.inca.gov.br/ sites/ufu.sti.inca.local/files/media/document/estimativa-2020-incidencia-de-cancer-no-brasil.pdf
- Wilson O, Avalos G, Dowling M. Knowledge of palliative care and attitudes towards nursing the dying patient. Br J Nurs [Internet]. 2016 [cited 2020 Apr 08];25(11):600-5. Available from: https:// doi.org/10.12968/bjon.2016.25.11.600
- Lafond DA, Bowling S, Fortkiewicz JM, Reggio C, Hinds PS. Integrating the comfort theory Into pediatric primary palliative care to improve access to care. J Hosp Palliat Nurs [Internet]. 2019 [cited 2020 Apr 08];21(5):382-9. Available from: https://doi.org/10.1097/njh.000000000000538
- 6. Sanches KS, Rabin EG, Teixeira PTO. The scenario of scientific publication on palliative care in oncology over the last 5 years: a scoping review. Rev Esc Enferm [Internet]. 2018 [cited 2020 Apr 08];52:e03336. Available from: https://doi.org/10.1590/s1980-220x2017009103336
- 7. Ponte KMDA, Silva LDF. Comfort as a result of nursing care: an integrative review. Rev Pesqui Cuid Fundam Online [Internet]. 2015 [cited 2020 Apr 08];7(2):2603. Available from: http://seer. unirio.br/index.php/cuidadofundamental/article/view/3569
- 8. Pinto S, Fumincelli L, Mazzo A, Caldeira S, Martins JC. Comfort, well-being and quality of life: discussion of the differences and similarities among the concepts. Porto Biomed J [Internet]. 2017 [cited 2020 Apr 08];2(1):6-12. Available from: https://doi.org/10.1016/j.pbj.2016.11.003
- 9. Puchi C, Paravic-Klijn T, Salazar A. The comfort theory as a theoretical framework applied to a clinical case of hospital at home. Holist Nurs Pract [Internet]. 2018 [cited 2020 Apr 08];32(5):228-39. https://doi.org/10.1097/hnp.0000000000000275
- Pereira CSCN, Mercês CAMF, Lopes ROP, Souza JF, Souto JSS, Brandão MAG. Analysis of the concept of comfort: contributions to the diagnosis of readiness for enhanced comfort. Esc Anna Nery. 2020 [cited 2020 Apr 08];24(2):e20190205. https://doi.org/10.1590/2177-9465-ean-2019-0205

- 11. Herdman TH, Kamitsuru S. Nursing Diagnoses definitions and classifications 2018-2020. New York (US): Thieme; 2018.
- 12. Gonçalves MCS, Brandão MAG, Duran ECM. Validation of the defining characteristics of the nursing diagnosis impaired comfort in oncology. Acta Paul Enferm [Internet]. 2016 [cited 2020 Apr 08];29(1):115-24. https://doi.org/10.1590/1982-0194201600016
- 13. Pinto S, Caldeira S, Martins JC. A Systematic literature review toward the characterization of comfort. Holist Nurs Pract [Internet]. 2016 [cited 2020 Apr 08];30(1):14–24. https://doi.org/10.1590/1982-0194201600016
- 14. Krikorian A, Maldonado C, Pastrana T. Patient's Perspectives on the notion of a good death: a systematic review of the literature. J Pain Symptom Manage [Internet]. 2020 [cited 2020 Apr 08];59(1):152-64. Available from: https://doi.org/10.1016/j.jpainsymman.2019.07.033
- Trotte LAC, Lima CFM, Pena TLN, Ferreira AMO, Caldas CP. Cross-cultural adaptation of the end of life comfort questionnaire-patient to Brazilian Portuguese. Rev Enferm [Internet]. 2014 [cited 2020 Apr 08];22(4):461-5. Available from: https://doi.org/10.1590/S0066-782X2008001700009.4
- 16. Risner PB. 1990. Nursing diagnosis: diagnostic statements. In: Christensen PJ, Kenney JW, eds. Nursing process: application of conceptual modes. 3rd ed. St. Louis (US): Mosby. p. 121-151.
- 17. Siegel R, Ward E, Jemal A. cancer statistics, 2019. CA Cancer J Clin [Internet]. 2019 [cited 2020 Apr 08];57(1):43–66. Available from: https://doi.org/10.3322/canjclin.57.1.43
- Kavalieratos D, Corbelli J, Zhang D, Dionne-Odom JN, Ernecoff NC, Hanmer J, et al. Association between palliative care and patient and caregiver outcomes: a systematic review and metaanalysis. JAMA [Internet]. 2016 [cited 2020 Apr 08];316(20):2104-14. Available from: https://doi. org/10.1001/jama.2016.16840
- 19. May P, Normand C, Cassel JB, Del Fabbro E, Fine RL, Menz R, et al. Economics of palliative care for hospitalized adults with serious illness: A meta-analysis. JAMA Intern Med [Internet]. 2018 [cited 2020 Apr 08];178(6):820-9. Available from: https://doi.org/10.1001/jamainternmed.2018.0750
- 20. Freire MEM, Costa SFG, Lima RAG, Sawada NO. Health-related quality of life of patients with cancer in palliative care. Texto Contexto Enferm [Internet]. 2018 [cited 2020 Apr 08];27(2):e5420016. Available from: https://doi.org/10.1590/0104-070720180005420016
- 21. Wiermann EG, Diz MPE, Caponero R, Lages PSM, Araujo CZS, Bettega RTC, et al. Consenso Brasileiro sobre o manejo da dor relacionada ao câncer. Rev Bras Oncol Clínica [Internet]. 2015 [cited 2020 Apr 08];10(38):132-43. Available from: https://www.sboc.org.br/sboc-site/revista-sboc/pdfs/38/artigo2.pdf
- 22. Campbell CL, Kelly M, Rovnyak V. Pain management in home hospice patients: a retrospective descriptive study. Nurs Health Sci [Internet]. 2017 [cited 2020 Apr 08];19(3):381-7. Available from: https://doi.org/10.1111/nhs.12359
- 23. Alt-Epping B, Seidel W, Vogt J, Mehnert A, Thomas M, Van Oorschot B, et al. Symptoms and needs of head and neck cancer patients at diagnosis of incurability prevalences, clinical implications, and feasibility of a prospective longitudinal multicenter cohort study. Oncol Res Treat [Internet]. 2016 [cited 2020 Apr 08];39(4):186-92. Available from: https://doi.org/10.1159/000445307
- 24. Jho HJ, Choi JY, Kwak KS, Chang YJ, Ahn EM, Park EJ, et al. Prevalence and associated factors of anxiety and depressive symptoms among bereaved family members of cancer patients in Korea. Medicine (Baltimore) [Internet]. 2016 [cited 2020 Apr 08];95(22):e3716. Available from: https://doi.org/10.1097/MD.000000000003716
- 25. Deckert AL, Gheihman G, Nissim R, Chung C, Schimmer AD, Zimmermann C, et al. The importance of meaningful activity in people living with acute myeloid leukemia. Leuk Res [Internet]. 2018 [cited 2020 Apr 08];67:86-91. Available from: https://doi.org/10.1016/j.leukres.2018.02.009

- 26. Santos DZ, Cristina I, Leite G, Guerra MR. Functional status of patients with metastatic spinal cord compression. Support Care Cancer. 2018 [cited 2020 Apr 08];26(9):3225:3231. Available from: https://doi.org/10.1007/s00520-018-4182-5
- 27. Franco ME, Salvetti MG, Donato SCT, Carvalho RT, Franck EM. Perception of dignity of patients in palliative care. Texto Contexto Enferm [Internet]. 2019 [cited 2020 Apr 08];28:e20180142. Available from: https://doi.org/10.1590/1980-265X-TCE-2018-0142
- 28. Yu H, Li L, Liu C, Huang W, Zhou J, Fu W, et al. Factors associated with the quality of life of family caregivers for leukemia patients in China. Health Qual Life Outcomes [Internet]. 2017 [cited 2020 Apr 08];15(1):55. Available from: https://doi.org/10.1186/s12955-017-0628-6
- 29. Azevedo C, Dias J, Pessalacia R, Lourdes E, Pavone C. Interface between social support, quality of life and depression in users eligible for palliative care. Rev Esc Enferm USP [Internet]. 2017 [cited 2020 Apr 8];51:e03245. Available from: https://doi.org/10.1590/S1980-220X2016038003245

NOTES

ORIGIN OF THE ARTICLE

Extracted from the thesis - "Comfort-Based Care", presented to the Graduate Program in Nursing, *Universidade de Brasília*, in 2020.

CONTRIBUTION OF AUTHORITY

Study design: Reis KMC, Jesus CAC.

Data collection: Reis KMC.

Data analysis and interpretation: Reis KMC.

Discussion of the results: Reis KMC.

Writing and/or critical review of content: Reis KMC, Jesus CAC. Review and final approval of the final version: Reis KMC, Jesus CAC.

APPROVAL OF ETHICS COMMITTEE IN RESEARCH

Approved by the Ethics Committee in Research with Human Beings of the *Faculdade de Ciências da Saúde, da Universidade de Brasília*, opinion No. 2,136,574, Presentation Certificate for Ethical Appreciation 66315117.0.0000.0030.

CONFLICT OF INTEREST

There is no conflict of interest.

EDITORS

Associated Editors: Selma Regina de Andrade, Gisele Cristina Manfrini, Elisiane Lorenzini, Ana Izabel Jatobá de Souza.

Editor-in-chief: Roberta Costa.

HISTORICAL

Received: April 09, 2020. Approved: June 15, 2020.

CORRESPONDING AUTHOR

Karine Costa Marques dos Reis karinereisdf@gmail.com