

Nursing diagnosis “nausea” during chemotherapy: concept analysis

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ABSTRACT

A study with the objective to analyze the concept nausea in chemotherapeutic treatment, to improve the nursing diagnosis “nausea”. We used the model proposed by Walker and Avant as a theoretical reference and, we conducted an integrative review in the databases PUBMED, EMBASE, CINAHL, and LILACS, with no time restriction. Thirty articles composed the sample, we identified 44 antecedents, being 25 related to the patient/biophysical, eight to the treatment/pharmacological factors and, 11 related to psychological factors. In the same sample, we identified 17 consequents, being the most frequent: “reduction of quality of life”, “chemotherapy can be cancelled, altered, dose reduced or interrupted treatment” and “decrease of nutrition/bad nutrition”. In the nausea definitions, the chemotherapeutic treatment is not cited as a cause. The precedents of this concept should be investigated in the clinical practice in an individualized way. The assessment of the consequents in this clientele can allow early interventions and decrease the undesirable nausea effects.

Descriptors: Nausea; Drug Therapy; Oncology Nursing; Concept Formation.

INTRODUCTION

The incidence of nausea during chemotherapeutic treatment is primarily related to the emetic potential of the drugs used, associated with individual variations of each patient⁽¹⁾. The assessment of the emetic potential of the chemotherapeutic scheme and the patient’s risk factors, through the anamnesis, is essential to create a plan of care to meet the needs of this clientele. Its occurrence results in an impact on the nutritional state and quality of life, after the administration of the cytotoxic chemotherapy⁽²⁻³⁾.

Nausea was included as a nursing diagnosis (ND) in the North American Nursing Diagnosis Association

– International (NANDA-I) in 1999⁽⁴⁾ and it went through revisions in the subsequent editions that resulted in changes in its definition, as well as, its defining characteristics and in the factors related to it⁽⁵⁻⁷⁾. Within its editions that presented nausea related changes, the NANDA-I of 2007 and 2008⁽⁶⁾ brought a larger quantity of reviews and almost all diagnoses presented few changes in its defining characteristics and in factors related to it or, of risk factors. It was in this edition that it was observed the removal of “chemotherapeutic agents” from the nursing diagnosis “nausea”, which is still absent in the current edition⁽⁷⁾.

As nursing diagnoses have a conceptual nucleus, systematic methods are needed for its development and for its improvement⁽⁸⁾. For this reason, the concept analysis is considered an important systematic method in the development of new diagnoses, as well as, in the improvement of the existing terms in the NANDA-I⁽⁹⁾.

The present study aimed to analyze the nursing diagnosis “nausea” in chemotherapeutic treatment. The concept nausea was chosen for analysis because researchers identified in the clinical practice, that managing the patient when having this adverse event without having protocols or systematized assistance, has been challenging. Besides, nausea is a symptom referred by patients in chemotherapy treatment with a 10.3% frequency when prior treatment⁽¹⁰⁾, of 40.7% when acute and, 47.1% when late⁽¹¹⁾. This symptom can affect children until elderly, independent of sex, and it can result in negative changes in the quality of life, and it can lead to treatment abandonment^(10,12-13).

Regarding the justification to conduct this conceptual analysis, this type of study can contribute to the improvement of this concept; it can value and subsidize the clinical practice of nurses working in the care for oncologic patients and, consequently, it can qualify the assistance provided.

For this motive, to explore this concept will bring the foundation to continue developing the validation of this nursing diagnosis, besides guiding oncologic nurses to create a complete nursing process, since data collection, planning of interventions and its consequent evaluation.

METHODS

This is a concept analysis of the nursing diagnosis “nausea”, related to patients submitted to chemotherapeutic treatment. It is noteworthy that NDs present the following components: diagnostic statement (attribution of a name to the diagnosis); definition (a clear and precise description, design of its meaning and support in its difference within other similar diagnoses); defining characteristics (observative inferences that are pooled as manifestations of a real ND or of well-being); related factors (factors that demonstrate some type of standardized relationship with the nursing diagnosis. They can be described as prior to, associated with, related to, contributing to or stimulators) and/or risk factors (environmental factors and physiological, psychological, genetic or chemical elements that increase the vulnerability of the individual, family or community before an unhealthy event)^(5,7).

To conduct a concept analysis, we opted for the model proposed by Walter and Avant⁽⁹⁾, and we followed some of the steps: concept selection, the objective of the conceptual analysis, determination of

the concept use, revision of the concept definition, and the identification of defining, precedent and consequent attributes.

The first step developed refers to the concept selection, which normally reflects the theme or the nursing practice. It can be generated from research in this field, designed with a basis in an incomplete theory or that has concepts that are not yet clear. It should be of interest for the researcher or to bother the researcher in some way⁽⁹⁾.

To perform the steps – use of the “nausea” concept, revision of the definition and identification of the defining, precedent and consequent attributes, we conducted a bibliography research, an integraty review⁽¹⁴⁻¹⁵⁾. The bibliographic survey was conducted in the databases PUBMED, EMBASE, CINAHL and, LILACS. The controlled descriptors were neoplasm, antineoplastic agent and nausea; and the non-controlled varied according to each database. We conducted search strategies for each database, respecting its specificities, as each database has different non-controlled descriptors. The advanced form was used in all databases, as well as, the boolean operators AND and NOT between the controlled descriptors and, OR between the non-controlled descriptors, as presented in Chart 1.

Chart 1: Distribution of consulted databases, according to controlled and non-controlled descriptors used in the study searches.

(continue)

Databases	Controlled descriptors	Non-controlled descriptors	Search strategies
PUBMED	neoplasms	Tumors; tumor; neoplasia; neoplasm; cancer; cancers	("Neoplasms"[Mesh] OR (Tumors) OR (Tumor) OR (Neoplasia) OR (Neoplasm) OR (Cancer) OR (Cancers)) NOT "Neoplasm Metastasis"[Mesh] NOT "Pregnancy Complications, Neoplastic"[Mesh] AND ("Antineoplastic Agents"[Mesh] OR (Agents, Antineoplastic) OR (Antineoplastic Drugs) OR (Drugs, Antineoplastic) OR (Antineoplastics) OR (Chemotherapeutic Anticancer Drug) OR (Drug, Chemotherapeutic Anticancer) OR (Antitumor Drugs) OR (Drugs, Antitumor) OR (Cancer Chemotherapy Agents) OR (Agents, Cancer Chemotherapy) OR (Chemotherapy Agents, Cancer) OR (Cancer Chemotherapy Drugs) OR (Chemotherapy Drugs, Cancer) OR (Drugs, Cancer Chemotherapy) OR (Chemotherapeutic Anticancer Agents) OR (Agents, Chemotherapeutic Anticancer) OR (Anticancer Agents) OR (Agents, Anticancer) OR (Antitumor Agents) OR (Agents, Antitumor)) AND "Nausea"[Majr:NoExp] NOT "Chemoradiotherapy"[Mesh] NOT "Radiotherapy"[Mesh] NOT "Brachytherapy"[Mesh] NOT "surgery"[Subheading]
	antineoplastic agents	agents, Antineoplastic; antineoplastic Drugs; drugs, Antineoplastic; antineoplastics; chemotherapeutic Anticancer Drug; drug, Chemotherapeutic Anticancer; antitumor Drugs; drugs, Antitumor; cancer Chemotherapy Agents; agents, Cancer Chemotherapy; chemotherapy Agents, Cancer; cancer Chemotherapy Drugs; chemotherapy Drugs, Cancer; drugs, Cancer Chemotherapy; chemotherapeutic Anticancer Agents; agents, Chemotherapeutic Anticancer Anticancer agents; agents, Anticancer; antitumor Agents; agents, Antitumor	
	nausea	-	Filters: Humans; English; Spanish; Portuguese

Chart 1: Distribution of consulted databases, according to controlled and non-controlled descriptors used in the study searches.

(continue)

Databases	Controlled descriptors	Non-controlled descriptors	Search strategies
EMBASE	neoplasm	acral tumor; cancer; cancers; neoplasia; neoplasms; neoplasms by histologic type; neoplasms, cystic, mucinous, serous; neoplasms, embryonal mixed; neoplasms, germ cell embryonal; neoplasms, glandular epithelial; neoplasms, 'hormone dependent'; neoplasms, 'post traumatic'; neoplastic disease; section 16; tumor; tumour	'neoplasm'/exp OR (acral AND tumor) OR cancer OR cancers OR neoplasia OR neoplasms OR (neoplasms AND by AND histologic AND type) OR (neoplasms, AND cystic, AND mucinous, AND serous) OR (neoplasms, AND embryonal AND mixed) OR (neoplasms, AND germ AND cell AND embryonal) OR (neoplasms, AND glandular AND epithelial) OR (neoplasms, AND 'hormone dependent') OR (neoplasms, AND 'post traumatic') OR (neoplastic AND disease) OR (section AND 16) OR tumor OR tumour NOT 'benign tumor'/exp NOT 'metastasis'/exp AND 'antineoplastic agent'/exp OR (anti AND cancer AND drug) OR (anti AND neoplastic AND agent) OR (anticancer AND agent) OR (anticancer AND drug) OR anticancerogen OR anticarcinogen OR (anticarcinogenic AND agents) OR (antineoplastic AND agents) OR (antineoplastic AND agents, AND combined) OR (antineoplastic AND agents, AND phytogetic) OR (antineoplastic AND immunosuppressive AND agents) OR (antineoplastic AND combined AND chemotherapy AND protocols) OR (antineoplastic AND drug) OR (antineoplastic AND peptide) OR (antitumor AND agent) OR (antitumor AND drug) OR (cancer AND chemotherapeutic AND agent) OR (cancer AND inhibitor) OR (carcinostatic AND drug) OR (drug, AND antineoplastic) OR (tumor AND inhibitor) AND 'chemotherapy induced nausea and vomiting'/exp NOT 'surgery'/exp NOT 'brachytherapy'/exp NOT 'chemoradiotherapy'/exp NOT 'radiotherapy'/exp
	antineoplastic agent	anti cancer drug; anti neoplastic agent; anticancer agent; anticancer drug; anticancerogen; anticarcinogen; anticarcinogenic agents; antineoplastic agents; antineoplastic agents, combined; antineoplastic agents, phytogetic; antineoplastic immunosuppressive agents; antineoplastic combined chemotherapy protocols; antineoplastic drug; antineoplastic peptide; antitumor agent; antitumor drug; cancer chemotherapeutic agent; cancer inhibitor; carcinostatic drug; drug, antineoplastic; tumor inhibitor	
	chemotherapy induced nausea and vomiting	-	

Chart 1: Distribution of consulted databases, according to controlled and non-controlled descriptors used in the study searches.

(continue)

Databases	Controlled descriptors	Non-controlled descriptors	Search strategies
CINAHL	náusea	-	(MH"Nausea/BL/CF/CI/CL/CO/DI/DH/DT/EC/ED/EM/EP/EI/EH/ET/FG/HI/IM/LJ/ME/MI/MO/NU/OG/PA/PP/PC/PR/PF/RA/RH/RF/SS/TH/TM/TD/US/UR") AND
	neoplasms	-	(MH"Neoplasms/AN/BL/BS/CF/CI/CL/CO/DI/DH/DT/EC/ED
	antineoplastic agents	-	/EM/EP/EI/EH/ET/FG/HI/IM/LJ/ME/MI/MO/NU/OG/PA/PP/PC/PR/PF/RA/RH/RF/SS/TH/TM/TD/US/UR") AND (MH"Antineoplastic Agents/AD/AE/AA/AN/AI/BL/CF/CL/CT/DU/DE/EC/EI/HI/IM/LJ/ME/PD/PK/PH/PO/RE/ST/SD/TU/UR")
LILACS	neoplasms	neoplasias; câncer; cancro (tumor maligno) ; neoplasmas; tumor; tumores; neoplasia; neoplasia maligna	"neoplasms" OR "neoplasias" OR "Câncer" OR "Cancro (Tumor Maligno)" OR "Neoplasmas" OR "Tumor" OR "Tumores" OR "Neoplasia" OR "Neoplasia Maligna" OR "C04\$" OR "SP4.001.012.098\$" OR
	antineoplastic agents	antineoplásticos; antineoplásticos; agentes antineoplásticos; fármacos antineoplásticos	"SP4.046.452.698.879.165 \$" [Palavras] AND "Antineoplastic agents" OR "antineoplásticos" OR "antineoplásticos" OR "Agentes Antineoplásticos" OR "Fármacos Antineoplásticos" OR
	náusea	nausea; enjojo	"D27.505.954.248\$" [Palavras] AND "Náusea" OR "nausea" OR "nausea" OR "enjojo" OR "C23.888.821.712\$" [Palavras]

In this review, we included primary studies, published in full, addressing nausea in human beings during venous chemotherapeutic treatment. Studies should be published in Portuguese, English or Spanish. We did not establish a limit of time for study publications. The exclusion criteria were: review articles, thesis, dissertations, letters, editorials, case studies, pilot studies, articles with subjects presenting advanced cancer, metastatic cancer or in palliative treatment; articles related to patients submitted to surgery or radiotherapy concomitant to the cytotoxic chemotherapy.

Of the 1,258 titles and abstracts, we excluded 1,198, noting: a) studies not addressing the theme (916); b) studies assessing nausea in patients during palliative care, with advanced cancer or metastatic (44); c) studies assessing nausea in patients during oral chemotherapy (3) or radiotherapy (2); d) review articles or meta-analysis (191); e) case studies, pilot studies, letters or editorials (36); f) articles duplicated in other databases (6). It is important to note that the exclusion of most articles, in all databases, occurred because they did not answer the guiding question: "What is the evidence in relation to related factors and defining characteristics of the nursing diagnosis nausea in patients with neoplasms submitted to chemotherapeutic treatment?". Nausea, when cited in the assessed studies, did not address their related factors and defining characteristics. Most of these studies made comparisons about the efficacy of anti-emetic medications and cited nausea as one of the diverse symptoms of the chemotherapeutic treatment.

We selected 60 articles for full reading. From those, we excluded 30, as they were constituted as studies assessing nausea in patients in palliative care, with cancer or metastasis (11); studies assessing nausea in patients receiving oral chemotherapy (4) or radiotherapy (3); review articles or meta-analysis (1) and, articles that did not present distinction in results between nausea and vomits (11).

The final sample of this integrative review was 30 studies, being one located at EMBASE and 29 articles located at PUBMED.

After, we conducted exploratory reading in all articles by two authors, and we extracted data with the help of an instrument⁽¹⁶⁾ containing the following items: study identification, introduction, objectives, methodological characteristics, results, and conclusions.

All the information referring to the steps of concept analysis, like, defining, antecedent and consequent attributes of the "nausea" concept, were also extracted by exploratory reading. This information was pooled, and we verified the frequency that they appeared in the analysed studies. For each sample article, we filled the instrument, and we catalogue each study in crescent order in relation to their year of publication.

We pooled in charts and tables the data referring to the characteristics of studies, as well as, information regarding factors related to nausea in oncologic patients receiving chemotherapy, and we analyzed them descriptively.

RESULTS

The first step developed was the review of definitions. It was possible to identify the definition

“nausea” in the introduction of six articles^(11,17-21) of the 30⁽¹⁷⁻⁴⁵⁾. Such definitions are described in Chart 2, as well as, the NANDA-I definition⁽⁷⁾.

Chart 2: Nausea denfinitions according to NANDA-I, 2012-2014 editions⁽⁷⁾ and the selected studies.

Concept definition of “nausea”
A subjective phenomenon of an unpleasant sensation, in the back of the throat and in the stomach, that can result or not in vomit ⁽⁷⁾ .
Nauseas refer to an unpleasant sensation in the posterior part of the throat and of the stomach, and it can cause vomits ⁽¹¹⁾ .
Anticipatory nausea is a conditioned answer to one or more characteristics of the environment – conditioned stimulus – associated to emetogenic chemotherapy administration – non-conditioned stimulus ⁽¹⁷⁾ .
Nausea is a common answer, unpleasant and subjective, to the treatment of cancer, through chemotherapeutic drugs ⁽¹⁸⁾ .
Nausea is an onipresent sensation, highly aversive, unpleasant ⁽¹⁹⁾ .
Nausea is an unpleasant sensation, subjective, that can signal the imminent vomit ⁽²⁰⁾ .
Nausea is an unpleasant sensation, subjective, that can provoke vomits ⁽²¹⁾ .

* Definitions translated from the articles composing the integrative review by the authors of the present study.

We proceeded with the investigation of the clinical indicators of the phenomenon, which refer to characteristics appearing more frequently, that is, the ones that appear many times in repetition.

We identified 14 attributes, distributed in six sample articles^(17,19,22-25). The frequency of each attribute present in the articles was low: it varied from one to four times (Table 1).

Table 1: Distribution of defining attributes of nausea in the selected studies, according to their absolute (N) and relative (%) frequencies. Ribeirão Preto, SP, Brazil, 2013.

Clinical indicators of the phenomenon	N	%
To sweat/transpire ^(19,22-25)	4	13.3
Pupil dilation ^(19,24)	2	6.7
Report of nausea ^(17,23)	2	6.7
Salivation ^(19,24)	2	6.7
To feel weakness ^(22,25)	2	6.7
To feel harm or hot ^(22,25)	2	6.7
Cutaneous vasodilation (paleness) ^(19,24)	2	6.7
Tightening in the stomach ⁽²³⁾	1	3.3
To cover the mouth ⁽²³⁾	1	3.3
To make faces ⁽²³⁾	1	3.3
Intestinal motility ⁽²⁴⁾	1	3.3
To ask for help ⁽²³⁾	1	3.3
Secretion of gastric acid ⁽²⁴⁾	1	3.3
Tachycardia ⁽¹⁹⁾	1	3.3

The most frequent defining attribute was “to swear/transpire”, cited in four articles^(20,23-24,26). “To sweat/transpire” refers to the abundant elimination of sweat, that is also called diaphoresis, and it can be detected by the nurse through inspection when the skin gets a smooth and humid aspect⁽⁴⁶⁾.

Innumeros physiological alterations mediated by the autonomous nervous system occur simultaneously with nausea; for example, one alteration is the sudoresis. However, few studies have been conducted to characterize the specific autonomic changes presented by the individual after the administration of an emetic agent, in this case, the cytotoxic chemotherapeutic, associated with the appearance of nauseas⁽²⁰⁾.

Following, the last but one step investigated was the one referring to antecedents. We identified 44

antecedents^(21-23,26-36), and from those, 25 were related to the patient/biophysical, eight related to the treatment/pharmacological factors and, 11 to psychological factors. The most frequent of each category are presented in Table 2.

Table 2: Distribution of the most frequent nausea antecedents, according to their absolute (N) and relative (%) frequencies. Ribeirão Preto, SP, Brazil, 2013.

Antecedents	N	%
Related to the patient/biophysical		
Age (less than 50 years) ^(11,20,22,25-35)	14	46.7
Movement disease ^(18-20,22,25,27,29,31,33-35)	11	36.7
Female sex ^(11,20,27-35)	10	33.3
Related to the treatment/pharmacological factors		
Chemotherapy emetic potential ^(11,17,19-20,24,26-27,33,36-37)	10	33.3
Chemotherapeutic agents ^(25-26,31-32,35,38)	6	20
Chemotherapeutic doses ^(11,26,38)	3	10
Psychological/situational factors		
Anxiety ^(21,25-29,34-35,39-40)	9	30
Conditioned stimuli (classic conditioning): vision and smells of the clinic, the nurse's voice, color of the chemotherapeutic drugs, to see the oncologist, images of the chemotherapy, food aversion ^(17,21,22-23,26,28-29,39,41)	9	30
Expecting nauseas after treatment ^(20,25,26,29,31;33;44)	7	23.3

To finalize the analysis, we explored the consequents of the “nausea” concept. Consequent are situations or incidents that occur as a result of the concept appearance⁽⁸⁾. We identified 17 nausea consequents in 18 studies^(11,17-24,30-32,35-37,39,42-43) assessed in this review. The most frequent ones are presented in Table 3:

Table 3: Distribution of nausea consequents in studies of the IR, according to their absolute (N) and relative (%) frequencies. Ribeirão Preto, SP, Brazil, 2013.

Consequents	N	%
Reduction of quality of life ^(4,6,12-13,20-21,23,26-29)	11	36.3
Chemotherapy can be cancelled, altered, drug reduced or interrupted treatment ^(1,4,11,18,20,22-23,27)	8	26.7
Nutrition reduction/bad nutrition ^(11,18,20,26,29)	5	16.7

DISCUSSION

When comparing the definitions found in the studies like the one presented in NANDA-I⁽⁷⁾, we observed that the word “unpleasant” was present in five^(11,18-21) of six studies; the word “subjected” and the expression “it can cause vomit” in three^(11,18,20-21).

In a qualitative study, “nausea” definition was presented through the patient’s perception. Participants identified nausea as being a difficult symptom to describe, and they characterized them as a physical sensation located in a certain part of the body. Two specific categories of nausea definitions arose: to feel the need to vomit and sensations as pain, uneasiness, unstable feelings located in the stomach and, in one participant, in the chest also⁽⁴⁶⁾.

While reading the selected articles, we observed that authors little explore the defining attributes that, in this context, consist of nausea signals and symptoms. The motives can be diverse, as the symptom subjectivity, the emphasis given to vomit and, consequently, in the anti-emetic therapy, and the little value

given to nausea by health professionals and patients⁽⁴⁷⁾. We also add the difficulty related to nausea data collection, as in the majority of times, the symptom is referred by patients and not perceived by the researcher. Such conditions are attributed to symptom subjectivity, especially in cases of late nausea.

Regarding nausea antecedents, elderly are less susceptible to present chemotherapy induced nausea and vomits (CINV) when compared to young people and, in many situations, they receive less toxic chemotherapy and in low doses⁽¹³⁾. In the second and third treatment cycle, the CINV were more significantly incident in reports of young than in older patients, and also, the young patients referred more the negative impact in their daily life activities⁽⁴⁸⁾. Young age was independently associated with a significantly increased risk of CINV⁽⁴⁹⁾.

The movement disease is a condition characterized by the sensation of seasickness or nausea when moving in any kind of transportation (bus, boat, airplane, car). This disease is a discomfort experienced when the perceived movement disturbs the balance organs, and it refers to a combination of autonomic and cognitive signals and symptoms. It can include symptoms as nausea, vomits, paleness, cold sweats, drooling and headache. The control and prevention of these symptoms include pharmacological, behavioral and, complementary therapies⁽⁵⁰⁻⁵¹⁾.

The antecedent female sex was noted as susceptible to a higher incidence of CINV⁽⁴⁹⁻⁵³⁾. Higher nausea and vomit incidence in women can be explained by the frequent use of protocols with higher emetogenic potential and low alcohol consumption⁽⁵⁴⁾.

The emetic potential of chemotherapeutics has been associated for a long time as a triggering factor for nausea and vomits, especially the anticipatory ones⁽⁵⁴⁾.

From the triggering factors for nausea, to be female, the moderate and high emetogenic chemotherapy is highlighted⁽⁵²⁾. The patients treated with high emetogenic chemotherapy has 5.61 more chances to have CINV in the first cycle than patients treated with moderate emetogenic chemotherapy⁽⁴⁹⁾.

Anxiety is a complex answer; it can be influenced by how the patient deals with cancer. Individuals that are confident and secure in their ability to deal with cancer and its treatments can be less anxious and, as a consequence, less vulnerable to present nauseas and vomits⁽⁵⁵⁾.

The nausea intensity is related to the anxiety variable. Patients who reported high anxiety levels before receiving chemotherapy had high nausea intensity, regardless of sex, age, administered drugs and number of previous infusions⁽⁴⁰⁾.

The development of anticipatory nauseas and vomits have been conceptualized as the result of a respondent conditioning⁽⁵⁶⁾. Because of the chemotherapy cycle repetition, stimuli that before were considered neutral (for example, smells, visions, and thoughts of the treatment environment), become conditioned stimuli, which can provoke nausea, vomits and anxiety as responses⁽⁵⁷⁾.

Patients classified as high level of expectation presented significantly higher means of nausea occurrence when compared to those classified as little expectants and the ones who did not have expectations⁽⁵⁸⁾.

Acute and CINV remain poorly controlled, and they significantly interfere with the quality of life of patients⁽⁵⁹⁾. In a descriptive study conducted with 79 women with breast cancer during chemotherapeutic treatment, 93% had nausea, and 87% vomited at least once during treatment, and their quality of life was assessed using the instrument European Organization for Research and Treatment of Cancer Quality of Life Questionnaire – C30 (EORTC-QLQ-C30), and it presented a small decrease⁽⁶⁰⁾.

The results of a study that assessed the CINV impact in the daily life of patients, found that on the fifth day after chemotherapy administration, there was a significant drop in the quality of life associated with nausea, with a mean score of 36.5 in the Functional living index-emesis (FLIE) scale, against 57.4 points for patients without nausea⁽³⁷⁾.

Nausea and vomits, when intense, affect the nutritional condition, daily life activities, hydroelectrolyte balance and, the quality of life of patients; besides being the source of anxiety and stress and not rarely, they contribute for treatment abandonment^(53,61).

Because nausea is a key-symptom associated to other symptoms, like vomit, it is imperative that more attention should be given to its control through pharmacological measures, as well as, by non-pharmacological ones, as nutritional interventions⁽⁶¹⁾.

From the concept analysis of “nausea”, it was possible to build the following “nausea” definition in the chemotherapeutic treatment: nausea consists of an unpleasant sensation, subjective, it can lead to vomit, it is mainly manifested by sudoresis. According to antecedents, young patients, females, with movement disease and, who received protocols with higher emetogenic potential, are more susceptible. It will also be manifested more frequently in anxious patients, with a high level of expectation in presenting nausea and conditioned stimuli. The consequents presented that it can decrease the quality of life and the nutritional condition, and the chemotherapeutic treatment can be postponed or interrupted.

CONCLUSION

This concept analysis allowed to perceive that the “nausea” definition of the NANDA-I is adequate for the investigated population; however, the term “chemotherapeutic treatment” or the word “chemotherapy” should be included in the list of factors related to the “nausea” nursing diagnosis of the NANDA-I.

On the other hand, the information referring to defining characteristics of the nursing diagnosis “nausea” and the defining attributes of this concept is incipient, and more research is needed in this context.

It is also evident the need for nurses to investigate the antecedents of this concept and to create an assistance plan based on all elements involving it, paying attention to the fact that this investigation and planning should be individualized.

At last, it is evident that the assistance nursing plan should consider the individual risk factors, besides the emetogenic potential of the proposed scheme.

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