







THEORY OF UNPLEASANT SYMPTOMS: CRITICAL ANALYSIS

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ABSTRACT

Objective: to analyze the Theory of Unpleasant Symptoms according to the model proposed by Walker and Avant.

Method: a descriptive-reflexive study developed in the first half of 2016. He used the first five phases proposed by the Walker and Avant model: identification of the origins of the theory; examination of the meaning of the theory; logical adequacy; utility; degree of generalization and parsimony of theory.

Results: the study allowed the reflection on the Theory of Unpleasant Symptoms, considering the multidimensionality of the symptoms and the potential stimulation between them. It was identified the relations between the main concepts used to construct the theory: physiological, psychological and situational factors, followed by performance, suffering, duration, quality, intensity and unpleasant symptoms.

Conclusion: the Theory of Unpleasant Symptoms presents a structured theoretical framework, presenting logical meaning, through well-defined concepts and relations, which make possible its use in practice, teaching and nursing research.

DESCRIPTORS: Nursing. Nursing theory. Philosophy in nursing. Evaluation of symptoms. Nursing Research. Methodological research in Nursing.

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TEORIA DOS SINTOMAS DESAGRADÁVEIS: ANÁLISE CRÍTICA

RESUMO

Objetivo: analisar a Teoria dos Sintomas Desagradáveis de acordo com o modelo proposto por Walker e Avant.

Método: estudo de natureza descritivo-reflexiva, desenvolvido no primeiro semestre de 2016. Utilizou as cinco primeiras fases propostas pelo modelo de Walker e Avant: identificação das origens da teoria; exame do significado da teoria; adequação lógica; utilidade; grau de generalização e parcimônia da teoria.

Resultados: o estudo permitiu a reflexão acerca da Teoria dos Sintomas Desagradáveis, considerando a multidimensionalidade dos sintomas e a potencial estimulação entre eles. Identificou-se as relações entre os conceitos principais utilizados para a construção da teoria: fatores fisiológicos, psicológicos e situacionais, seguidos de desempenho, sofrimento, duração, qualidade, intensidade e sintomas desagradáveis.

Conclusão: a Teoria dos Sintomas Desagradáveis apresenta um arcabouço teórico estruturado, apresentando sentido lógico, por meio de conceitos e relações bem definidas, que possibilitam sua utilização na prática, no ensino e na pesquisa da Enfermagem.

DESCRITORES: Enfermagem. Teoria de enfermagem. Filosofia em enfermagem. Avaliação de sintomas. Pesquisa em enfermagem. Pesquisa metodológica em enfermagem

TEORÍA DE LOS SÍNTOMAS DESAGRADABLES: ANÁLISIS CRÍTICA

RESUMEN

Objetivo: analizar la Teoría de los Síntomas Desagradables de acuerdo con el modelo propuesto por Walker y Avant.

Método: estudio de naturaleza descriptiva-reflexiva, desarrollado en el primer semestre de 2016. Utilizó las cinco primeras fases propuestas por el modelo de Walker y Avant: identificación de los orígenes de la teoría; examen del significado de la teoría; adecuación lógica; utilidad; el grado de generalización y la parsimonia de la teoría.

Resultados: el estudio permitió la reflexión acerca de la Teoría de los Síntomas Desagradables, considerando la multidimensionalidad de los síntomas y la potencial estimulación entre ellos. Se identificaron las relaciones entre los conceptos principales utilizados para la construcción de la teoría: factores fisiológicos, psicológicos y situacionales, seguidos de desempeño, sufrimiento, duración, calidad, intensidad y síntomas desagradables.

Conclusión: la Teoría de los Síntomas Desagradables presenta un marco teórico estructurado, presentando sentido lógico, por medio de conceptos y relaciones bien definidas, que posibilitan su utilización en la práctica, en la enseñanza y en la investigación de la Enfermería.

DESCRIPTORES: Enfermería. Teoría de enfermería. Filosofía en enfermería. Evaluación de los síntomas. Investigación en enfermería. Investigación metodológica en enfermería.

INTRODUCTION

The beginnings of nursing theories took place in the 1960s, with the purpose of establishing the bases of Nursing science, through the production of specific knowledge of the profession. Theories are formed by concepts and statements that aim to explain or characterize phenomena relevant to an area of knowledge. In nursing, theorists often use the concepts of their metaparadigm (nursing, person,

health, and environment) to demonstrate the care recipient, the purpose of care, the environment in which care takes effect and how it should be done.¹⁻²

Thus, nursing theories have the purpose of guiding clinical practice, in a rational and systematic way, conferring a more coordinated and less fragmented care, especially the medium-range theories. In this context, the importance of the use of these theories as regards the practical foundation is highlighted, since they address concrete and testable phenomena that allow the creation of new interventions and, consequently, result in a more effective care.

Among the medium-range theories, this study deals with the Theory of Unpleasant Symptoms, which was developed in 1995 and revised in 1997. This theory allows the nurses to know the different groups of symptoms, so that they can propose non-pharmacological interventions to manage them. In this context, the theory provides a framework capable of delineating the extent of the meaning of symptoms at a level of abstraction like that of nursing diagnoses and interventions.³

The Theory of Unpleasant Symptoms presents three main elements: the symptoms that the patient is experiencing; the factors that influence them, both in their nature and in their evolution; and the consequences of that experience. Experienced symptoms are the central focus of the model, conceived as indicators of change in the health status of the individual, which often occur multiple times and concomitantly, and although they are different from each other, present four common dimensions: intensity, time, suffering and quality. The Theory points to three influential categories of these dimensions which are the physiological, psychological and situational factors that relate to each other beyond their individual relationships with the symptoms. The final component of the Theory is the performance or consequence that reflects the functional and cognitive responses given the experience of the symptoms.⁴⁻⁵

It is important to emphasize the importance of performing a critical analysis of nursing theories, since this process certifies its validity, while it finds the gaps in its framework, providing pertinent information for its further development or theoretical refinement. It therefore provides a systematic and objective way of examining a theory that may lead to new ideas and formulations previously undiscovered, which adds to the body of nursing knowledge.⁶ Several models⁶⁻⁸ were developed to facilitate the analysis of nursing theories.

In this sense, the justification for the realization of this reflection focuses on the perspective of deepening the knowledge about nursing theories, especially those of medium range, such as the Theory of Unpleasant Symptoms, in view of the possibility of listing their dimensions and categories and contribute to their identification with the patient, due to their illness process. It is necessary to reflect on how the study of nursing theories can assist in the provision of care, in order to provide a broader perception on the aspects that are related to the patient's health status, whether physical, psychological and/or situation.

In view of the above, the objective was to analyze the Theory of Unpleasant Symptoms according to the model proposed by Walker and Avant.⁶ Emphasis was placed on the first five steps, in view of the need to deepen and discuss the testability of the theory under study, which will be carried out later.

METHOD

Study of a descriptive-reflexive nature, developed in the first semester of 2016, as an activity of the discipline Critical Analysis of Nursing Theories, of a Graduate Program in Nursing - PhD level, from a public university in the state of Paraíba. As mentioned, he used as basis the model,⁶ which advocates six stages for the analysis of theory: 1) identify the origins of the theory; 2) examine the meaning of the theory; 3) to analyze the logical adequacy of the theory; 4) determine the usefulness of the theory; 5) define the degree of generalization and the parsimony of theory; and 6) determine the test ability of the theory.⁵

The identification of the origins of the Theory is the first step to determine what motivated the development of Theory, because it refers to the understanding of the origin of the theory and the purpose by which it triggered its emergence.⁶ In order to do so, we proceeded with a thorough analysis of the Theory through the reading of the various publications of its authors, whose observations from the clinical practice allowed the construction of a model that would be used to provide care. This step allowed us to identify the main ideas or concepts used in the Theory of Unpleasant Symptoms and to delimit the relational statements, which served as a subsidy for the study of the meaning and logical adequacy, second and third stage of the model.

Another aspect to be considered in the origin of the Theory focuses on the perspective of the identification of the form by which it originated, whether inductive or deductive.⁶ In order to do so, we proceeded to analyze the pertinent literature regarding the origin of the Theory of Unpleasant Symptoms, with the objective of identifying what motivated its creation, whether the baseline emerged from data (inductive) or if it arose from a more which resulted in its (deductive) structuring.

The second step the examination of the meanings of Theory,⁶ consists of an extremely valuable step of the analysis, considering that it studies the semantics of the Theory. However, the language used was examined, observing its concepts and demonstrations through the following steps: identification of concepts, analysis of their definitions and uses, identification of statements and examination of relationships between concepts. For the identification of the concepts and their ideas, a reading and reflection on the Theory of Unpleasant Symptoms was carried out, which allowed to list the main concepts and related concepts, proceeding posteriori with the definition of these concepts, including theoretical definitions, operational and descriptive. The relational statements were also identified by the researchers, which allowed the establishment of relations between the concepts.

The logical adequacy, third step of this method, should allow independent predictions of the content, so that the concepts can be labeled, allowing the construction of a diagram. In addition, he points out the agreement among scientists, emphasizing that there must be a consensus on the representation of theory, and on the meaning of theory, so that it must provide *insights* or understanding of the phenomenon.⁶ In the analysis of the Theory of Unpleasant Symptoms it was possible to structure a Diagram of the explicit, implicit and unknown relations, allowing to list the interactions between the main concepts and related with emphasis on the influence and type of relation that one exerted on the other.

The fourth step of said method includes the study of the utility of Theory, which determines how useful the theory is as it provides *insights*, explains the phenomenon in a different way and allows to make better predictions about the concepts that make up the theory. To do so, one must consider some questions, namely: how many searches has the theory generated? For which clinical problem is the theory relevant? Does theory have the potential to influence nursing practice, teaching, administration, or research?⁶ In order to answer these questions, the analysis of the usefulness of the Theory of Unpleasant Symptoms considered to identify, through its reading and reflection, the content of the Theory, as well as if its matter was already of scientific domain and shed a new light on the phenomenon of the symptoms unpleasant, providing information that allows them to broaden their knowledge and understanding.

The definition of the degree of generalization and parsimony of theory, the last step of the model⁶ contemplated in this study, determines the examination of the limits and the simplicity of the theory. The generalization reflects the limits of the theory through the scope that is reached with its concepts and objectives, determining how much this theory can be experienced in different contexts. Parsimony, however, expresses the degree of simplicity of the theory, even as it is expressed by complex contents.⁶ Through the theoretical survey carried out, it was possible to identify the extent

of the Theory of Unpleasant Symptoms and, therefore, its generalization, but also to identify how simple this theory is, representing its parsimony.

DISCUSSION

The process of theoretical development of the Theory of Unpleasant Symptoms occurred in the year 1995 from clinical observations and empirical research developed by a group of researchers with extensive scientific and clinical experience. Individual studies supported the construction of this medium-range theory, which is intended for application and use by clinical nurses, researchers, and managers.⁴

Initially, researchers Linda Pugh and Audrey Gift investigated the relationship between the concepts of dyspnea and fatigue. They have identified the following similarities: both are defined as subjective sensations, they can be characterized as acute or chronic, they are exacerbated when related to psychological factors and frequently appear concomitant in a clinical population. At the same time, Renee Milligan and Linda Pugh delineated an investigation of fatigue during the delivery phases, in which they highlighted the causes, manifestations and effects of fatigue during the stages of birth.⁴⁻⁵

Faced with such findings, the researchers realized that physical, psychological and situational factors could influence the symptoms experienced by the women investigated. They soon developed a theoretical model emphasizing the interactions between the multiple symptoms, the factors that influence it and the multiplicative nature of these. Researchers Elizabeth Lenz and Frederick Suppe studied this model and outlined the development of the medium range theory from the methodological framework proposed by Walker and Avant,⁶ making it more abstract and sufficiently delimited. With the evolution of Nursing science the need arose to refine the Theory of Unpleasant Symptoms in order to make it more practical and dynamic. Then, in the year 1997, the authors perfected the relationships between the systems and their factors.⁵

The Theory of Unpleasant Symptoms portrays the multidimensionality of symptoms, the relationships, and the potential stimulation between them. According to the theory, the development of a symptom is preceded by the interaction between the antecedent factors that can be physiological, psychological and situational.⁴⁻⁵ In addition, each symptom or group of symptoms may present dimensions, which are characteristics related to intensity, time, suffering and quality of symptoms, as shown in Figure 1.

It is emphasized that the occurrence of symptoms can affect both the functional and cognitive performance as well as other possible symptoms that the patient presents. When analyzing the model proposed by the authors, the interaction and reciprocity between the antecedent factors, the symptoms and the performance, as well as the influence among the components, is verified. However, the relationships between the dimensions of symptoms are not adequately demonstrated, since such dimensions are represented in isolation in the Model. However, in the theoretical construct, the authors emphasize that these dimensions can interact with each other.

Through critical analysis it was identified that the main concepts that were used for the construction of the theory comprise: physiological, psychological and situational factors. Although the authors did not mention whether there was a concept analysis, they were found to have well-defined theoretical and operational definitions, as shown in Table 1. However, when researching the related concepts such as performance, suffering, duration, quality, intensity and unpleasant symptoms, it was evidenced that these have established theoretical and descriptive definitions, however, the operational definitions are not explicit.⁴⁻⁵

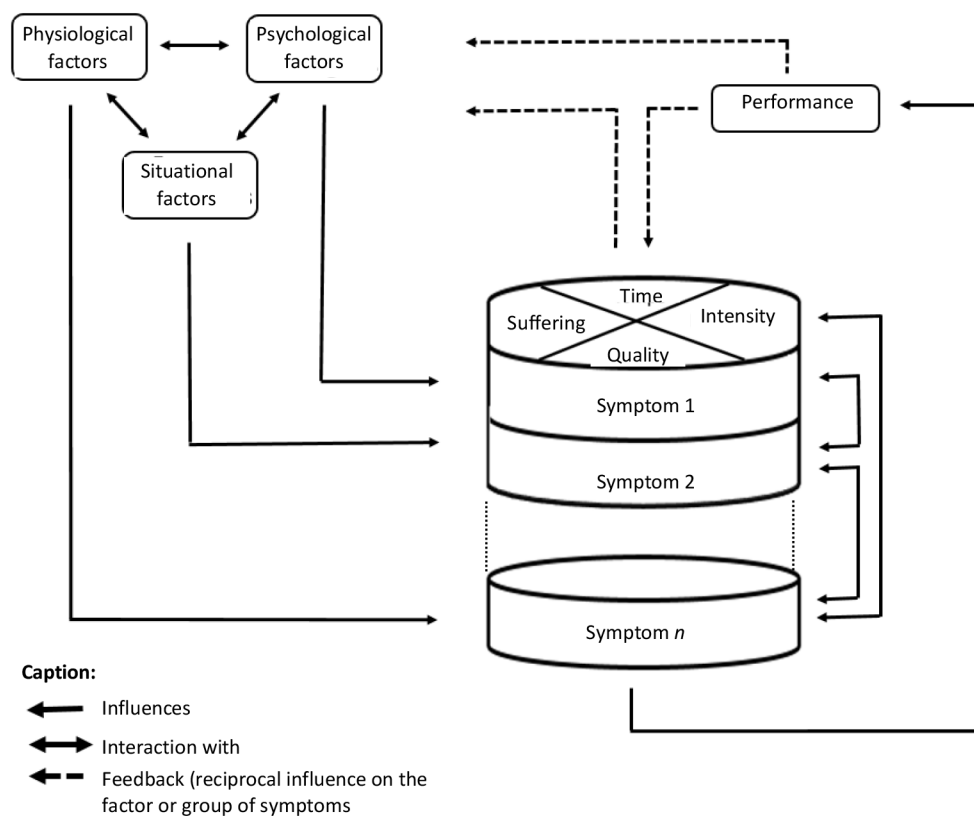


Figure 1 - Theoretical model of the Theory of Unpleasant Symptoms⁵

Table 1 - Main and related concepts used in the construction of the Theory of Unpleasant Symptoms. João Pessoa-PB, Brazil, 2016.

Main Concepts	Definitions
Physiological factors	They represent the symptoms that are reflected and influence the identification of the diagnosis. There is a relation between the physiological factors and the experience of the symptoms.
Psychological factors	It includes the individual's mental state or mood, affective reaction to illness, as well as knowledge about symptoms and their meaning.
Situational factors	They include social aspects and the physical environment that can affect the experience and reporting of symptoms by the individual.
Performance	Consists of the consequence or effect of the experience of the symptoms. Includes functional and cognitive aspects.
Suffering	Refers to the degree of discomfort of the individual in relation to the symptom or group of symptoms.
Duration	Includes the frequency and duration of a symptom. Such characteristics may be presented in isolation or in combination.
Quality	It represents the variation of symptoms or the way they are manifested. It can be used to distinguish pathologies or indicate the severity of the problem.
Intensity	Related to the strength or severity of a symptom. Relatively quantifiable, intensity is the most discussed dimension in clinical assessment and research.
Unpleasant symptoms	Subjective indicators of health threats. It points out perceived changes by clients in the expected functioning of the human body, generally experienced as unpleasant.

In analyzing the Theory of Unpleasant Symptoms it was verified that the concepts are used in a consistent way and present relations among themselves. As an example, the following statements of positive associative character are mentioned: 1) a symptom or group of symptoms may affect the experience of other symptoms; 2) physiological, psychological and situational factors relate to each other as well as to symptoms; 3) the more related factors, the greater will be the influence on the unpleasant symptoms; 4) performance has a reciprocal influence on the factors; 5) the dimensions of the symptoms are influenced by each other. In addition, a negative associative statement was identified (the performance has reciprocal relations with the symptoms) and a causal relation (the unpleasant symptoms influence the physiological, psychological and situational factors).⁵

Although there is no empirical study produced by the authors of the theory, the relations cited are valid since they have been tested through empirical research developed by other scholars.⁹⁻¹⁰ Therefore, there is a theoretical and philosophical basis that justifies the relations between concepts.

In order to determine the logical coherence of the Theory, a logical matrix was constructed in which it is possible to observe the relations explicit, implicit and the not known. For that, the main concepts were labeled and later the relationships were diagrammed. The explicitly identified relationships were described with the positive and negative sign, the implied ones were also described with these signals, but using the parentheses and the unknown relations were demonstrated with an interrogation signal. As shown in Table 2, most of relationships can be identified implicitly, demonstrating the logical meaning of TSD.

Table 2 - Diagram of the explicit, implicit and unknown relations of the Theory of Unpleasant Symptoms. João Pessoa, Brazil, 2016

	D	DS	FP	FF	FS	SD
D	?	(-)	+	+	+	-
DS	(-)	+	(+)	(+)	(+)	?
FP	+	(+)	+	+	+	+
FF	+	(+)	+	+	+	+
FS	+	(+)	+	+	+	+
SD	-	?	+	+	+	+

Caption: D – Performance; DS – Dimensions of symptoms (time, quality, suffering, intensity); FP – Psychological factors; FF – Physiological factors; FS – Situational factors; SD – Unpleasant symptoms.

Although it is a medium-range theory, it reaches a relatively high level of comprehensiveness, since it can be used to explain any symptom or set of symptoms in different populations and specialties in the health area. In view of its logical sense, the Theory of Unpleasant Symptoms theoretically supported the development of models involving experience of the symptoms and their relationship with time.⁹⁻¹⁰

When discussing the usefulness of a theory, it is convenient to investigate whether it provides new insights and helps the scientist to explain the phenomenon studied more clearly.⁶ The Theory of Unpleasant Symptoms achieves these goals, since the authors can demonstrate the various nuances related to the symptoms. Besides being used to recognize symptoms, it is also intended to identify preventive interventions in order to modify some of the factors that produce the unpleasant symptoms.

Because it is a medium-range theory, it has a significant potential to guide nursing practice, since it was constructed from gaps identified through clinical observations. In addition, it is also important for teaching and research, because the theory provides the identification of the dimensions of the symptoms and their relationships, which can be used as a starting point for the development

of clinical instruments and research, since it is sufficiently precise in its theoretical framework, which makes it possible for scientists to agree on its usefulness.

Based theoretically by other research, the Theory of Unpleasant Symptoms is considered generalizable in view that any individual can experience the symptoms in different contexts. By explaining the phenomenon briefly and simply, without sacrificing content, structure or plenitude, the theory is considered parsimonious. Clear formulations, as well as precise relational statements, are expressed that express the essence of the main and related concepts.

CONCLUSION

The present study provided a critical reflection on the Theory of Unpleasant Symptoms under the model of analysis of Walker and Avant,⁶ (physiological, psychological and situational factors) and related (performance, suffering, duration, quality, intensity and unpleasant symptoms), which in turn allows the analysis of its symptoms through the identification of the origins of the theory allowed the analysis of the logical adequacy, usefulness and degree of generalization and parsimony of the theory.

The construction of Nursing knowledge is permeated by the development of theories, which may present gaps in clinical practice and seek theoretical foundations that support planning in the different dimensions of care, such as care, teaching, service administration and research. Therefore, it is worth noting the need for studies that analyze theories since they allow the expansion of knowledge of Nursing, recognizing its principles and applicability.

Considering the relevance of studies in this perspective, it is worth highlighting the possibility of using the acquired knowledge with the analysis of the Theory of Unpleasant Symptoms in clinical practice, which allow identification of the aspects that surround the symptom experienced by the patient, their physical, psychological and the dimensions that influence this symptom and the entire process of illness in the care delivery. It is believed that the reflection made possible by this study should assist nurses in the practice of care, allowing the use of the principles of this theory in the implementation of the Nursing Process and assistance in improving the quality of care that has been implemented.

However, it is necessary to carry out new studies with a view to analyzing the testability of the Theory of Unpleasant Symptoms, the sixth step of the method of analysis proposed by Walker and Avant,⁶ to measure their use in nursing research and to provide the knowledge through deepening and discussion of this theme.

In addition, it is intended to use the Theory of Unpleasant Symptoms as a theoretical support in the structuring of the doctoral thesis of researchers of this study, assuming that the theoretical framework presented by the authors reflects the importance of the nurses to know the dimensions of the symptoms as well as their relationships, interactions and precipitating factors that support the construction of effective non-pharmacological interventions and, thus, favor the quality of nursing care.

REFERENCES

1. Dourado SBPB, Bezerra CF, Anjos CCN. Conhecimentos e aplicabilidade das teorias de enfermagem pelos acadêmicos. *Rev Enferm UFSM* [Internet]. 2014 [cited 2016 Nov 11]; 4(2):284-91. Available from: <https://dx.doi.org/10.5902/217976929931>
2. Aguiar LALP, Freitag PLM, Moreira LCMVL. Fases da teoria humanística: análise da aplicabilidade em pesquisa. *Texto Contexto Enferm*. 2014 [cited 2016 Nov 10]; 23(4):1113-22. Available from: <http://dx.doi.org/10.1590/0104-07072014002140013>
3. Lopes-Júnior LC, Bomfim EO, Nascimento LC, Pereira GS, Lima RAG. Theory of unpleasant symptoms: support for the management of symptoms in children and adolescents with cancer. *Rev. Gaúcha Enferm* [Internet]. 2015 [cited 2016 nov 11]; 36(3):109-12. Available from: <http://dx.doi.org/10.1590/1983-1447.2015.03.51465>
4. Lenz ER, Gift A, Pugh L, Milligan RA. Theory of unpleasant symptoms. In: Peternon SJ, Bredow TS, eds. *Middlerange theories: application to nursing research*. New York: Wolters Kluwer; 2013:68-81.
5. Lenz ER, Suppe F, Gift A, Pugh L, Milligan RA. The Middle-Range Theory of Unpleasant Symptoms: An Update. *Adv in Nurs Sci* [Internet]. 1997 [cited 2016 Nov 11]; 19(3):14-27. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/9055027>
6. Walker LO, Avant KC. *Strategies for Theory construction in nursing*. Upper Saddle River, New Jersey: Pearson/Prentice Hall; 2010.
7. Ramalho Neto JM, Marques DKA, Fernandes MGM, Nobrega MML. Meleis' Nursing Theories Evaluation: integrative review. *Rev Bras. Enferm* [Internet]. 2016 [cited 2016 Nov 11]; 69:174-81. Available from: <http://dx.doi.org/10.1590/0034-7167.2016690123i>
8. Felix LG, Nóbrega MML, Fontes WD, Soares MJGO. Analysis from theory of the Orem self care according to fawcett criteria. *Rev Enferm UFPE on line* [Internet]. 2009 [cited 2016 Nov 11];3(2):392-8. Available from: <http://dx.doi.org/10.5205/reuol.202-1995-3-CE.0302200926>
9. Armstrong TS. Symptoms experience: Aconcept analysis. *Oncol Nurs Forum* [Internet]. 2003 [cited 2016 Nov 11];30(4):601-6. Available from: <http://dx.doi.org/10.1188/03.ONF.601-606>
10. Henly SJ, Kallas KD, Klatt CM, Swenson, KK. The notion of time in symptom experiences. *Nurs Res* [Internet]. 2003 [cited 2016 Nov 11];52(6):410-7. Available from: <https://doi.org/10.1097/00006199-200311000-00009>

NOTES

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CONFLICT OF INTEREST

No any conflict of interest.

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