

## Hospitalization anxiety in children: conceptual analysis

*Ansiedade da hospitalização em crianças: análise conceitual*

*Ansiedad de la hospitalización en niños: análisis conceptual*

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### ABSTRACT

**Objective:** to analyze the concept “hospitalization anxiety in children”, identifying its antecedents, attributes, and consequences, with the objective of clarifying its meaning. **Method:** we used a conceptual analysis model, whose objective is to clarify the meaning of terms. **Results:** we identified the concept antecedents and its attributes, classified as biological and psychological needs, which are essential characteristics of “hospitalization anxiety in children”. This process consequences have also been identified. We proceeded to the analysis of the characteristics with emphasis on the impacts of the hospitalization process on the child and on the family. **Conclusion:** based on the conceptual analysis of the phenomenon, it was possible to identify the antecedents, attributes, and consequences of Hospitalization Anxiety in children. We recommend the continuation of the study validating the essential characteristics presently identified as a way to join knowledge gathered and professional practice.

**Descriptors:** Hospitalization; Anxiety; Concept Building; Hospitalized Child; Nursing Diagnosis.

### RESUMO

**Objetivo:** analisar o conceito de “ansiedade da hospitalização em crianças”, identificando seus antecedentes, atributos e consequências, tendo em vista a clarificação do seu significado. **Método:** utilizou-se um modelo de análise conceitual cujo objetivo incide na perspectiva de favorecer o esclarecimento de significados dos termos. **Resultados:** identificaram-se os antecedentes do conceito bem como seus atributos, classificados em necessidades biológicas e psicológicas, os quais compõem as características essenciais da “ansiedade da hospitalização em crianças”, além das consequências deste processo. Procedeu-se à análise das referidas características com ênfase nos aspectos que permeiam os impactos do processo de hospitalização para a criança e família. **Conclusão:** tomando como base a análise conceitual do fenômeno, foi possível identificar os antecedentes, atributos e consequências do conceito Ansiedade da Hospitalização em crianças. Recomenda-se a continuidade do estudo com a validação das características essenciais ora identificadas como forma de conectar o conhecimento levantado com a prática profissional.

**Descritores:** Hospitalização; Ansiedade; Formação de Conceito; Criança Hospitalizada; Diagnóstico de Enfermagem.

### RESUMEN

**Objetivo:** analizar el concepto de “ansiedad de la hospitalización en niños”, identificando sus antecedentes, atributos y consecuencias, considerando el esclarecimiento de su significado. **Método:** se utilizó modelo de análisis conceptual, cuyo objetivo incide en la perspectiva de facilitar el esclarecimiento de significados de los términos. **Resultados:** se identificaron los antecedentes del concepto y sus atributos, clasificados en necesidades biológicas y psicológicas, que componen las características esenciales de la “ansiedad de la hospitalización en niños”, además de las consecuencias del proceso. Se procedió a analizar tales características, enfatizando los aspectos que impregnan los impactos del proceso de hospitalización para el niño y familia. **Conclusión:** tomando como base el análisis conceptual del fenómeno, pudieron identificarse los antecedentes, atributos y consecuencias del concepto Ansiedad de la Hospitalización en Niños. Se recomienda continuar el estudio con la validación de las características esenciales identificadas, como forma de conectar el conocimiento relevado con la práctica profesional.

**Descriptor:** Hospitalización; Ansiedad; Formación de Concepto; Niño; Niño Hospitalizado; Diagnóstico de Enfermería.

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## INTRODUCTION

Hospitalization is seen as an extremely disturbing situation in the life of a person, since it includes decline of health condition and removal from family and social contexts. This fact gains proportion when it happens to a child, for besides changing the family routine, it may cause changes in the child's development and lasting consequences, including anxiety.

By definition, anxiety consists of an emotional state with psychological, social, and physiological components that may affect individuals at any stage of their development. This condition would be considered pathological when exaggerated or disproportionate in relation to stimulus or qualitatively different from what would be expected in a particular age group<sup>(1)</sup>. Considering this, anxiety should be identified and treated as early as possible, especially when it is expressed by hospitalized children, a scenario rather favorable for its occurrence.

A study carried out aiming at building statements of diagnosis, results, and nursing interventions for hospitalized children at the hospital school Pediatric Clinic, identified nursing diagnosis of hospitalization anxiety in 88.5% of the sample, composed by children from 0 to 5 years old<sup>(2)</sup>. Given this fact and its high prevalence, we developed this study with the possibility of deepen knowledge on this subject, emphasizing concept analysis and thus allowing identification of its essential characteristics.

To build nursing knowledge, it is necessary to structure concepts that facilitate research development and, therefore, contribute to the development of theories. Considering particularly the analysis of the concept "hospitalization anxiety in children", it becomes relevant for making possible both its better understanding in this population and for enlightening its essential elements (attributes, antecedents, and consequences) for identification of other associated phenomena of interest to pediatric nursing. In addition this process opens the way to new reflections and updates on conceptual analysis methodologies<sup>(3)</sup>.

The appropriate analysis of the concept "hospitalization anxiety in children" contributes not only to the expansion of nursing knowledge and to new reflections and updates on conceptual analysis methodologies<sup>(3)</sup>, but also to the survey of its specific characteristics. These characteristics include attributes, antecedents, and consequences of the concept that, consequently, provide information for nursing diagnosis. In addition, it is worth mentioning that the analysis of the concept is valuable, because it solves problems with words and expressions used, particularly in nursing, which are essential to proper communication and may contribute to knowledge building<sup>(4)</sup>.

Nursing diagnosis concept of hospitalization anxiety structurally admits a number of other (related) concepts. As a result, the analysis of this concept helps nurses' clinical reasoning when identifying it as a nursing diagnosis, planning and conducting interventions, as well as the evaluation of results obtained by nursing care provided, which also justifies the importance of this research.

In view of the abovementioned, the objective of this study is to analyze the concept of "hospitalization anxiety in children", identifying its antecedents, attributes, and consequences to enlighten its meaning.

## METHODS

### Ethical aspects

To execute this study, we used only scientific literature as source for essential characteristics, antecedents, attributes, and consequences of "hospitalization anxiety in children". In this perspective, it is not a study involving human beings and therefore it was not submitted to the Research Ethics Committee.

### Theoretical-methodological framework

The method adopted was the concept analysis described by Walker and Avant<sup>(5)</sup>, which is based on the Wilson method, predecessor in the development of a concept analysis method and who proposes a systematic model for nurses that can be put into action through eight steps, namely: Select a concept; determine targets, aims, and purposes of analysis; identify all possible uses of the concept; determine the defining, critical, or essential attributes; build a model case; identify related cases; identify antecedents and consequences; and define empirical referents. In this study, to clarify the concept "hospitalization anxiety in children", we used five of these steps, as described below, according to Walker and Avant<sup>(5)</sup>.

### Type of study

This is methodological study, with a qualitative approach, which aimed at analyzing the concept "hospitalization anxiety in children" based on the concept analysis model of Walker and Avant<sup>(5)</sup>.

### Methodological procedures

#### Study background

To select the concept "hospitalization anxiety in children", we took into consideration its identification by the researcher in her clinical and research practice as a phenomenon with significant occurrence among hospitalized children and lacks further study on knowledge already produced. In fact, this selection should reflect the topic or area of greatest interest for the study or for the analyst, so it is recommended that the selection of a concept for analysis, within professional experience area, be of clinical practice, research, teaching or management; and that had called the researcher attention<sup>(6)</sup>. It is important to highlight that CIPE has in its 2015 version the atomic concept (focus) "Anxiety" and the atomic concept (Time) "Hospitalization"<sup>(7)</sup>. Hence, it is a molecular concept, which may be used as a nursing diagnosis and, given the dynamism of scientific knowledge, must be reviewed often to be properly put into practice.

Regarding determination of targets, aims, and purposes of conceptual analysis, this step aims at answering the question: Why am I doing this analysis? This purpose may target clarifying the meaning of the existing concept so as to develop a definition or to contribute to the existing concept. In the context of this study, the purpose of the analysis of the concept "hospitalization anxiety in children" was clarification of this phenomenon in nursing to increase its understanding. That, in turn, makes its identification easier by nurses in their professional practice and, therefore, benefits the implementation of nursing process for hospitalized children.

**Data collection and organization**

The identification of possible uses of the concept was made possible by available literature (books, dictionaries, and scientific papers), in which it is identified the widest range possible of its application. For the investigation of uses of the concept “hospitalization anxiety in children”, literature corpus was delimited, considering the knowledge produced on the subject in health care, particularly nursing, published in the sources mentioned below. Keywords anxiety and hospitalization and child allowed finding 19 scientific papers, 10 in LILACS database and 9 in MEDLINE, from 2006 to 2013, in addition to 17 theses and dissertations in the Theses Database of the Coordination for the Improvement of Higher Education Personnel (CAPES). With regard to non-indexed literature, a survey was carried out of definitions of terms “Anxiety” and “Hospitalization”, resulting in 5 books and 5 dictionaries. We used a previously structured tool for data collection with literature and specific data characterization, which allowed fixing its essential characteristics.

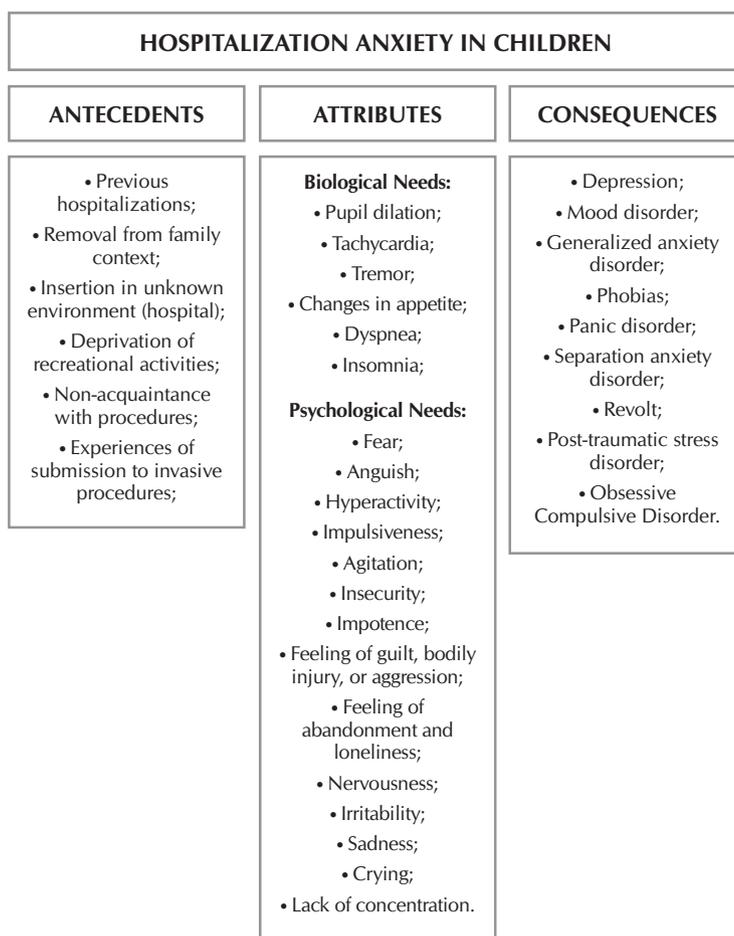
**Data analysis**

Regarding “determination of defining, critical, or essential attributes”, it comprises identification of defining characteristics or attributes that appear more often in the literature, to discern which will be most useful and provide greater assistance to achieve the objectives of this analysis<sup>(5)</sup>. To guide the identification of attributes, the following questions were proposed: How the authors define the concept? What are the characteristics/attributes they brought to notice? Which ideas concerning “hospitalization anxiety in children” the authors discuss? These questions have been answered after systematic reading of the selected material, which was divided in units of analysis corresponding to the concept more frequently cited essential characteristics.

The final step was “identify antecedents and consequences of the concept”. It is equivalent to identification of antecedents and consequences of the concept, in which the researcher must consider first the social context in which it is used. We sought events preceding the occurrence of the concept to identify antecedents. Whereas to identify consequences, it is necessary to look for events that are consequences of its occurrence, so that they be useful in determining ideas, variables or relationships that may guide new researches<sup>(5)</sup>. Antecedents and consequences of “hospitalization anxiety in children” were also identified through careful reading of the corpus for examination and subsequent data collection.

**RESULTS**

Data collected in the analysis of the concept “hospitalization anxiety in children” allowed identification of the following essential elements:



**Figure 1 -** Antecedents, attributes, and consequences of “hospitalization anxiety in children”, João Pessoa, Paraíba, Brazil, 2015

The synthesis of the concept elements is a guiding tool to measure “hospitalization anxiety in children” in the context of health care service. Data collected in the literature thus allowed theoretical analysis of the attributes, antecedents, and consequences that, in turn, make possible discussion of the phenomena regarding the concept under study.

Identification of antecedents was possible by answering the following question: Which events, situations, or phenomena are necessary to occur “hospitalization anxiety in children”? Therefore, aspects prior to the occurrence of “hospitalization anxiety in children” included: Previous hospitalizations; Removal from family context; Insertion in unknown environment (hospital); Deprivation of recreational activities; Non-acquaintance with procedures; and Experiences of submission to invasive procedures.

Whereas attributes identified have been organized and classified as Biological Needs, which include pupil dilation, tachycardia, tremor, changes in appetite, dyspnea, and insomnia; and Psychological Needs, expressed by fear, anxiety, hyperactivity, impulsivity, agitation, insecurity, impotence, feeling of guilt, bodily injury or assault, feeling of abandonment and loneliness, nervousness, irritability, sadness, crying, and lack of concentration.

With the attributes' survey, essential characteristics of the concept, it was possible to build the conceptual definition of "hospitalization anxiety in children" as a multidimensional phenomenon, characterized by biological and psychological aspects triggered by a stressful and threatening process of insertion in the hospital environment, where the child is deprived of family and social interactions, is forced to interact with strangers, and is subjected to invasive and painful procedures. Besides, the child has recreational activities partially interrupted.

The consequences of "hospitalization anxiety in children" were listed to make concept understanding easier and provide information to future researches. Identification of consequences led to reflection on aspects that occur after "hospitalization anxiety in children", making the identification of the following aspects possible: depression, mood disorder, generalized anxiety disorder, phobias, panic disorder, separation anxiety disorder, post-traumatic stress disorder, and obsessive compulsive disorder.

## DISCUSSION

### Antecedents of "hospitalization anxiety in children"

Facing hospitalization, the child may demonstrate different behaviors, among them behaviors prior to identification of hospitalization anxiety as a nursing diagnosis and that have not been observed in the family context before.

As a way of minimizing these aspects and preventing its occurrence, it is necessary to pay attention to the quality of information gathered at hospital admission, the kind of support received by family and health care team during previous hospital admission, and the child particularities, e.g., the need of affection and sensitivity<sup>(8)</sup>.

In the field of child and adolescent health, the development of tools for documenting professional practice provides support for child's hospital admission, however, stands out the lack of consensus on data that should be collected by nurses to provide information and help clinical decision making and describe nursing contributions<sup>(9)</sup>. Therefore, nursing professionals should take heed to the importance of gathered information they offer, providing quality assistance from the child's hospital admission to meet their physical, psychological, and social needs, including thus the family in the child's care.

Studies emphasize the development of coping strategies that help children deal with possible stress caused by hospitalization, e.g., talk, watch tv, pray, and play<sup>(10)</sup>. These strategies variability is confirmed by necessity of the health care team to acknowledge behaviors and child's coping strategies, for the child to participate in the process in a positive way<sup>(11)</sup>.

Antecedents of "hospitalization anxiety in children" affect its occurrence, since the child's inclusion in the hospital scenario is associated with it, a totally different reality, where often feelings are not expressed, where children can not express their emotions, and have their daily activities altered. They are mostly social aspects that interfere directly in children response to hospitalization peculiarities and may lead to consequences during the process.

### Attributes of "hospitalization anxiety in children"

Children taken ill become weepy and more dependent on their parents, surrounded by fears and anguishes, and more susceptible to anxiety. If hospitalization is required, their emotional state tends to worsen due to the possibility of being away from home and from their families, of changing their usual routine, and finding themselves in an unfamiliar environment as the hospital environment, where they will be subjected to invasive and painful procedures.

Taking into consideration the number of identified attributes and the frequency they appeared in the literature, we highlight appetite changes for biological needs and fear and sadness, as well as irritability and crying for psychological needs.

Regarding appetite changes, we point out changes in eating habits and the illness condition as triggering factors that compromise the child's nutritional status. Taking into consideration the hospitalization process and its negative consequences, monitoring the child's nutritional status is important because it will allow to offer adequate and early nutritional therapy, making a better approach to maintenance and/or recovery of nutritional status possible, besides improving prognosis<sup>(12)</sup>.

Many are the consequences triggered during hospitalization and after discharge. In this sense, anxiety caused by hospitalization in children may be identified by a series of physical and emotional reactions. When we analyze an abstract concept such as anxiety, there is also a high degree of abstraction in its essential characteristics, as becomes evident in the aspects listed in this study for Psychological Attributes.

A study aiming at understanding hospitalization from the child and adolescent perspective, their feelings and experiences, identified Fear and Sadness as relevant characteristics in the process of hospitalization<sup>(13)</sup>. Confirming this fact, Irritability and Crying may be related to the feeling of imprisonment caused by insertion in the hospital environment, also demonstrated by children and highlighted in the aforementioned study. These may be minimized by therapeutic toys, since playing is essential for the child's physical, emotional, and intellectual health and, when well applied, it will contribute in the future for the adult's efficiency and stability<sup>(14)</sup>.

### Consequences of "hospitalization anxiety in children"

Illness and hospitalization may change children's and their family routine, therefore, the experience is seen as a critical and delicate situation for the entire family, becoming a relevant source of suffering. The hospital is sometimes seen as a terrifying place, considering all the peculiarities that does not let children identify themselves with this environment<sup>(8)</sup>. So, children's suffering may be determined by the experience context and by the support or interactions they experience<sup>(15)</sup>, facts that directly affect their response to hospitalization and may reflect in consequences to their development.

Discuss aspects developed by children when hospitalized leads us to reflect on different consequences that may also affect their family. Data reveal that the hospital environment, children's fear of hospitalization, and changes in children

behavior may affect their parents. Therefore, it is necessary to help the family so they may provide necessary support to the child in the hospital and make hospitalization more human and less traumatic<sup>(16)</sup>.

Novice consequences that cause psychological suffering may be minimized through adequate techniques, e.g., therapeutic toys. A study carried out with health care professionals demonstrate that most professionals acknowledged the theme "toy/therapeutic toy" (27.9%), however 18.6% did not use them in the institution where they worked<sup>(17)</sup>.

Most consequences are psychological, which express psychological distress and need further discussion on a mental health basis. Consequently, it is up to the health care professional to execute strategies to aid children in this process, avoiding the emergence of "hospitalization anxiety in children", as well as their consequences, giving positive support to keep a dialogical relationship that includes them in the process of care and thus change the purely technical role of the health care team.

This study limitations are to measure "hospitalization anxiety in children" based on antecedents, attributes, and consequences identified. It is necessary an empirical testing of indicators for this to be an actual contribution to health care practice, as a way of validating essential traits of nursing diagnosis and provide thus information to make their identification in pediatric practice easier.

In terms of contributions to nursing, the study of the concept "hospitalization anxiety in children" makes feasible the analysis of usual phenomena on nursing care and the identification of its essential characteristics, antecedents, attributes, and consequences. Besides the continuous improvement of essential concepts for the development of the profession, it promotes the identification of "hospitalization anxiety in children" as a nursing diagnosis.

## FINAL CONSIDERATIONS

The accomplishment of this study allowed the survey of essential characteristics of the phenomenon aimed at broadening the meaning of "hospitalization anxiety in children". The theoretical analysis performed followed methodological precepts determined by the concept analysis model adopted, which highlights the necessity of constant study of concepts, taking into account the dynamic modification of ideas and words, but also the importance of contributing to the understanding of the phenomenon in its practical applicability.

Data collected allowed the discussion of various aspects involved in the process of hospitalization, from prior identification of the phenomenon to consequences of their occurrence. It also allowed the identification of attributes of the concept, which confirm biological and psychological aspects involved in this process, as well as give form to the operational definition of "hospitalization anxiety in children".

Data theoretical survey used as reference only the scientific literature and, as a result, we point out the importance of empirical data testing as a way to unite theoretical knowledge and empirical knowledge. Within this notion, the essential characteristics of the concept (antecedents, attributes, and consequences), final product of this study, may serve as a guiding tool in measuring "hospitalization anxiety in children" within health care service, with the possibility of using these terms in health care practice, identifying "hospitalization anxiety in children" as a nursing diagnosis.

Such fact may help nurses putting care plans into action and contribute to enhance health care assistance. In view of the abovementioned, it is necessary to add empirical data to this knowledge to actually corroborate the use of these concepts in formulating theories and use these theories as a basis to guide nursing practice, research, or teaching.

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