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Thesis and Dissertation Abstract



## **Theoretical model of critical thinking in diagnostic processes in nursing**

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### **ABSTRACT**

The diagnostic process in nursing consists of collecting information, interpreting such information, grouping data, surveying diagnostic hypotheses and identifying the nursing diagnosis. Decision making regarding a nursing diagnosis involves cognitive skills and interpersonal and professional attitudes. Critical thinking is presented as an essential skill in the nursing diagnostic process. It is defined as a deliberate judgment that results in the interpretation, analysis, evaluation, inference and the explanation of evidence. It is argued that we must persist in improving critical thinking in order to ensure a greater degree of accuracy with regard to nursing diagnoses. Is necessary to encourage further development of critical thinking within nursing, for nurses are able to diagnose, evaluate and intervene in clinical situations by making appropriate decisions. Therefore, we have developed this study in order to understand the critical thinking skills related to the diagnostic process in nursing.

**Keywords:** Nursing. Thinking. Nursing processes. Nursing diagnosis.

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## **PROBLEM**

The diagnostic process in nursing consists of collecting information, interpreting such information, grouping data, surveying diagnostic hypotheses and identifying the nursing diagnosis<sup>(1)</sup>. Decision making regarding a nursing diagnosis involves cognitive skills and interpersonal and professional attitudes<sup>(2)</sup>. Critical thinking is presented as an essential skill in the nursing diagnostic process. It is defined as a deliberate judgment that results in the interpretation, analysis, evaluation, inference and the explanation of evidence<sup>(3)</sup>. It is argued that we must persist in improving critical thinking in order to ensure a greater degree of accuracy with regard to nursing diagnoses<sup>(4)</sup>. It is necessary to encourage further development of critical thinking within nursing, for nurses are able to diagnose, evaluate and intervene in clinical situations by making appropriate decisions<sup>(5)</sup>. Therefore, we have developed this study in order to understand the critical thinking skills related to the diagnostic process in nursing. This has been done in order to suggest the use of strategies aimed at developing cognitive skills which will allow nurses to think critically.

## **OBJECTIVE**

To propose a theoretical model of critical thinking within the nursing diagnostic process whose specific objectives are to identify the critical thinking skills which are part of this process; define these skills; relate them to the nursing diagnostic process and build a theoretical model of critical thinking associated with this process.

## **METHOD**

This is a descriptive exploratory study using a qualitative approach which was undertaken at the Federal University of Paraíba campus at João Pessoa. Seven students were selected to participate in the study through the signing of a free and informed consent form. These students were attending the 9th semester of the nursing graduate

theoretical-practice activities program at the University Hospital Lauro Wanderley. As part of this they performed a clinical case identification exercise in which they diagnosed the nursing priorities and used their critical thinking skills with justification. Descriptive analysis<sup>(6)</sup> was undertaken and the content of these data were used to identify themes that were used to guide three focus group sessions<sup>(7)</sup>. These sessions were audio recorded and the conversations were transcribed to allow content analysis. The research project was evaluated by the Committee of Ethics in Research of the University Hospital Lauro Wanderley and received a favorable opinion (CEP/HULW nº 211/10).

## RESULTS

The critical thinking skills identified in the nursing diagnostic process were *scientific* and *technical knowledge, analysis, logical reasoning, clinical experience, knowledge of the patient, discernment, applying patterns* and *contextual perspective*. These skills were defined as follows: analysis is the research and evaluation of biopsychosocial aspects for the understanding of a situation holistically; scientific-technical knowledge involves specific knowledge of nursing and the associated literature; logical reasoning refers to the immediate perception of a situation, grouping, and the relationship between data; clinical experience is the role of the nurse in similar clinical cases; knowledge of the patient is the knowledge of the physical, emotional, social and spiritual aspects of the patient; discernment is the judgment of data for decision-making purposes; application of standards is the identification, evaluation and data grouping based on information from the literature, while contextual perspective is the vision of a clinical situation as a whole. Thus, it is possible to build a theoretical model of critical thinking in terms of the nursing diagnostic process. In this model, *scientific-technical knowledge* is associated with *clinical experience* giving theoretical-practice to sustaining the nursing diagnostic process. *Data collection* requires *analysis, application of standards, knowledge of the patient* and a *contextual perspective*. Collection is followed by *interpretation* and *grouping data* in a continuous process of analysis and the application of standards

associated with *logical reasoning*. Health problems are known, generating *diagnostic hypotheses* to be judged using *logical reasoning* and *discernment*. At that time, the decision can be made with regard to nursing diagnosis priorities.

## CONCLUSIONS

The theoretical model shows the complexity of the nursing diagnostic process based on the critical thinking skills of nursing students when it comes to making clinical decisions. It is understood that, when using these abilities, there is the possibility of taking appropriate decisions and determining priorities. Based on this template, it is possible to determine the critical thinking strategies which may be applied, both in teaching and clinical practice, to facilitate the operationalization of the nursing diagnostic process.

**Keywords:** Nursing. Thinking. Nursing processes. Nursing diagnosis.

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