

## Critical Thinking In Nursing: Unraveling The Layers Of Decision-Making

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### Summary:

Searching for, acquiring, assessing, analyzing, synthesizing, and conceptualizing information in order to enhance one's thinking with self-awareness and the capacity to use this knowledge by being creative and taking chances is the process of critical thinking. For a very long time, the nursing process has been crucial to nursing practice. In order to consider a plan of care as the cornerstone of professional practice in routine nursing practice, the nursing process has been utilized as a problem-solving exercise. A nursing care plan that offers students an educational opportunity to hone their critical thinking and decision-making abilities may be described by the nursing process. In nursing, the nursing process is viewed as a decision- making methodology that fosters critical thinking. The five stages of this procedure are diagnosis, planning, execution, assessment, and evaluation.

**Key words:** Nursing Process, Critical Thinking, Decision-Making ,Problem-Solving.

### Introduction:

Although there isn't a single, widely recognized definition of critical thinking, the American Philosophical Association's Delphi report provided a generic definition that didn't depend on a particular topic and instead described it in terms of cognitive abilities and emotional dispositions. As a result, critical thinking was defined as "an interactive, reflective, reasoning process; the process of purposeful, self-regulatory judgment" (Facione 1990). The ideal critical thinker, according to the Delphi report, is someone who is reliably informed, fair-

minded in evaluation, open-minded, flexible, honest in confronting personal biases, cautious in making decisions, willing to reevaluate, clear about issues, orderly in complex matters, diligent in seeking relevant information, reasonable in the selection of criteria, focused in inquiry, and persistent in seeking results that are as precise as the subject and circumstances of inquiry permit.

The definition provided by Kataoka-Yahiro and Saylor (1994) as "the critical thinking process is reflective and reasonable thinking about nursing problems without a single solution and is focused on deciding what to believe and do" is supported and aligned with the Delphi definitions of critical thinking in the nursing profession. According to this definition, critical thinking in nursing encompasses more than just thinking critically and seeing that there are multiple approaches to solving an issue. The nursing process is a methodical approach to scientific problem solving that involves planning patient care via the stages of assessment, nursing diagnosis, problem identification, planning, execution, and evaluation. The nursing process, which limits critical thinking to a fairly linear, constrained, single-right solution, problem-solving approach, has long been associated with critical thinking in the nursing field.

Open-mindedness, curiosity, and creative thinking are all components of critical thinking, which is unrestricted by predetermined goals and criteria. Critical thinking is not a single way of thinking, but rather a complex, multidimensional cognitive process dependent on reflective thought and tolerance for ambiguity—two qualities necessary for decision making in nursing practice (Jones, Brown 1991). Critical thinking does include knowledge, skills, and attitudes, and it definitely incorporates the important component of the nursing process and problem-solving approach. However, it goes beyond to higher-order thinking and is not a synonymous term with "nursing process." It is difficult for nurses to "think on their feet" in the many, complicated, and hectic settings of modern nursing practice. The body of research consistently emphasizes that critical thinking skills are necessary for nurses to evaluate complicated data and make clinical decisions when organizing, supervising, and assessing patients' medical care (Raines 1996).

**According to Miller and Malcolm (1990), nursing practice**

**necessitates "creative, personalized solutions to unpredictable client wise circumstances."**

While the nursing process requires linear thinking to solve problems, critical thinking abilities compel nurses to challenge assumptions, question the context, look for new ways of doing and thinking, and consider, sift, and evaluate ideas or solutions for their worth and practicality (Bumard 1989). As stated by Facione and Facione (1996), nursing practice demands fairness to new evidence and a willingness to reconsider clinical judgments. It values a focused and diligent approach to ill-structured patient problems, and requires tolerance of multiple perspectives and interpretations when such perspectives and interpretations can be supported by reasons and evidence. Kataoka-Yahiro and Saylor (1994) feel that to make good nursing judgments, critical thinking must be used. They have identified five components of critical thinking: (1) specific nursing-based knowledge, (2) practical experience, (3) critical thinking competencies, (4) attitude or Paul's "traits of the mind," and (5) standards (intellectual and professional). Component number 3, critical thinking competencies, is divided into three cognitive types: general, specific in clinical situations, and specific in nursing. General critical thinking competencies are not unique to nursing but include scientific process, hypothesis generation, problem solving, and decision making.

**Exploring Critical Thinking in Nursing: Competencies and Levels**

The specific critical thinking competencies in clinical situations, including diagnostic reasoning, clinical inferences, and clinical decision making, are used in nursing and other clinical disciplines. Finally, the specific critical thinking competency in nursing is the nursing process but it is only one of the competencies and not all-encompassing. The attitude component is considered a central aspect of a critical thinker and includes confidence, independence, integrity, risk taking, creativity, and fairness.

The fifth component, standards, includes universal intellectual standards such as clarity, specificity, accuracy, relevancy, and significance as well as professional standards such as ethical criteria for nursing judgments and criteria for evaluation and professional responsibility. The authors also feel there are levels of critical thinking in nursing and have identified them as basic, complex, and commitment. The basic level is an early

step and looks for right or wrong or one right answer to complex problems. Realizing that there are alternative solutions moves the nurse to the complex level, and choosing an action or belief based on an alternative puts the nurse at the highest level of commitment. Education needs to provide a learning environment that is conducive to critical thinking, giving the students opportunity for flexibility, creativity, support for change, and risk taking. According to Yıldırım (2011), critical thinking is “the process of searching, obtaining, evaluating, analyzing, synthesizing and conceptualizing information as a guide for developing one’s thinking with self-awareness, and the ability to use this information by adding creativity and taking risks”.

### **Essential thought in the nursing procedure**

One technique for understanding a concept with an unclear definition in nursing is to review the literature for examples. When looking for examples of critical thinking, descriptions of nursing process were found. This is incongruent with the treatment in the nursing literature of critical thinking as an outcome. Nursing process, while it has been given many different meanings is generally described as a linear process using the four steps of assessment, planning, intervention, and evaluation (Yıldırım 2010b). Nursing process is a problem-oriented model that breaks down symptoms into nursing problems utilizing nursing diagnosis. The format is logistic with a series of discrete components in unvaried sequence and inflexible. Nursing process is congruent with the perspective of measuring outcomes by benchmarking and prototyping and is useful because it encourages uniformity in practice. The focus is on looking for similarities between the patient and the expected benchmark for that day. Stevens-Barnum (1994) notes that when comparing nursing process to holistic methods, they are at opposite ends of the spectrum with regard to principle, method, and interpretation. This is a concern for those with a holistic perspective. With her typology of twenty-one nursing problems, Abdallah (1969) is credited with founding the essence of the nursing process. Her objective was to create a solid foundation of knowledge for nurses and to foster autonomy. The typology was intended to serve as a manual for recognizing and resolving patient problems, with the definition of a problem being any condition that the patient and family faced and that the nurse could assist with through her professional functions. The

typology was consistent even in its initial attempt because Abdellah (1969) labeled the problems as nursing problems rather than patient problems. Abdellah (1969) asserted that patients cannot receive adequate care without first addressing patient care with a focus on "problem."

### **Critical Thinking and the Nursing Process: Bridging Practice and Education**

The nursing process, a crucial aspect of nursing practice, has been identified as a weakness by Abdellah and Levine. Benner's Novice to Expert model revealed that novice nurses used the nursing process better than expert nurses. The nursing process is divided into three stages: problem and process (1950-1970), diagnosis and reasoning (1970-1990), and outcome specification and testing (1990-present).

Pesut and Herman (1998) argue that the nursing process should connect to nursing practice, and nurse educators need to enhance students' thinking strategies. Critical and reflective thinking skills can improve contemporary nursing practice. The nursing process has been used as a problem-solving activity to develop professional practice plans in everyday nursing practice. Pardue (1987) emphasized the mental processes required for successful implementation, which are similar to critical thinking.

Sedlak and Ludwick (1996) stated that the nursing process and critical thinking should not be seen as separate from each other. Students' cognitive development can be facilitated using critical thinking in the nursing process. Tucker and Flannery (1996) described a nursing care plan that provides students with a learning experience that helps them practice critical thinking and decision-making skills.

Marshall's (1995) study supported the use of problem-solving methods for teaching critical thinking in connection with the nursing process. It suggested that faculty need to examine their own perceptions about the nursing process, define educational objectives in relation to critical thinking, and identify the best strategies for promoting critical thinking in view of changing methods in clinical practice. Nurse educators must focus on how to use critical thinking in the nursing process in clinical

settings to promote students' critical thinking.

Various instructional strategies have been examined for developing critical thinking abilities in 75 freshman nursing students using the California Critical Thinking Skills Test. These strategies include case studies, large group discussion, small group interaction, role playing, and questioning.

Critical thinking includes elements of reasoning, abilities of reasoning, and traits of reasoning. The nursing process, consisting of five steps—assessment, diagnosis, planning, implementation, and evaluation—provides the foundation for critical thinking skills in nursing. Traditional use of the nursing process as a routine activity may have limitations regarding the development of critical thinking skills. Yarbrough, S. (1997)

**Strategies for educators:**

In the assessment phase, the instructor's role is to review the data with the student through categorization, analysis, and interpretation to determine its completeness (Conger, Mezza 1996). In addition, educators must make reliable observations and distinguish relevant from irrelevant and important from unimportant data (Wilkinson 1996). For example, instructors can ask students to explain why certain data are significant while others are not. The next step is to identify nursing diagnoses. The instructor urges the student to justify and clarify her/his assumptions. Through this dialogue, the instructor provides an environment that helps the student achieve a higher level of data analysis and arrive at a more explicit hypothesis. For example, the instructor may ask the student which data support the diagnosis. Development of a plan of action is the next step. It is important to foster an awareness of multiple solutions to address the nursing diagnoses (Conger, Mezza 1996). Implementation, the fourth step in the nursing process, involves carrying out the plan of care. Finally, the effectiveness of interventions is evaluated. The student is guided to assess outcomes and revise her/his plan to account for unsolved problems. Educators must encourage students to rethink and carry out the nursing process. Through this process, students can improve their thinking skills and enhance their problem solving abilities.

Beginning nursing students often have difficulties with the data collection, the organization, and the analysis as part of the

nursing process. Without help, students cannot apply the process effectively. Chubinski, S. (1996).

Nurse educators are responsible for teaching the thinking process to students. Role modeling of this thinking process by the faculty is essential. According to Koehler (1995), the educator's role in the nursing process is to have the student develop critical thinking skills, that is, assess the patient, gather information from the literature, select relevant points, relate all of this information to the care of the patient, and illustrate the information graphically. This helps the student establish priorities, seek relationships among information, and build on previous knowledge. The nursing process provides a systematic guide or method to assist students and novices in developing a style of thinking that leads to appropriate clinical judgments (Christensen, Kenney 1995). Jeffrey (1993) offered a Guided Visual Metaphor for teaching nursing diagnosis.

#### **Strategies and outcomes:**

Problems are then translated into nursing diagnoses in step four. Prioritization, in step five, encourages students to review and weigh selected nursing diagnoses. Discussion is the sixth and final step of the Guided Visual Metaphor process. Another method, described by Iyer et al., (1995) offers a guide to logical thinking which includes seven questions.

The following queries are asked in order:

- What's the problem?
- What data is required, and how can I obtain it?
- Is my data accurate?
- In light of the facts, what do the data mean?
- How should I proceed?
- Are there any other queries I ought to pose?
- Is this the most effective way to handle the situation?

The nursing process is generally viewed as a tool for planning and providing patient care. Nurse educators teach how to use critical thinking skills in the nursing process to students, which facilitates the development of nursing students' thinking abilities. It is the responsibility of nurse educators to ensure that nursing graduates have developed the critical thinking abilities necessary to practice professional nursing. Yıldırım (2010a).skill based critical thinking education program were conducted 14 week (two credit), 11 units, every unit theoretical knowledge, scenario studies, exercises and homework in the

content of the elective course. Topics covered were committed to the nursing process. Skill based critical thinking education program were conducted firstly. There was not statically significant difference between students' pretest California Critical Thinking Disposition Inventory scores ( $p>0.05$ ) and there was statically significant difference between posttest California Critical Thinking Disposition Inventory scores ( $p<0.05$ ); it is seen that the discussing group had moderate level and control group had lower level scores. This difference originated from discussing group that had higher academic success scores from control group. It is observed that discussing group students had explicit increase on final grade success through the first unit to last unit in the course period.

### **Nursing Procedure:**

The nursing process is a term used interchangeably within the nursing discipline to describe the organized, systematic approach that nurses use to meet the unique health care needs of their patients. According to Alfaro-LeFevre (1999), the nursing process is a systematic method of providing humanistic care that focuses on achieving desired outcomes in a cost-effective fashion. It is systematic because it consists of five steps, and it is humanistic because it is based on the idea that as we plan and deliver care, we must consider the unique interests, ideals, and desires of the health care consumer (person, family, community). The term is used by nurses worldwide to describe the delivery of nursing care. Its origins can be traced back to 1955, when nursing theorist Hall. Chubinski, S. (1996).

### **Unraveling the dynamic nursing process:**

The nursing process is a dynamic and cyclic approach that is the cornerstone of professional nursing practice. It is characterized by its client-centered nature, planning, goal-directed approach, universal applicability, problem-oriented nature, and cognitive process. Oermann, M.H. (1997). The process is comprised of five phases: assessment, diagnosis, planning, implementation, and evaluation.

Assessment involves gathering and reviewing data about a client's health status to identify potential health issues or risk factors. Diagnosis is the identification of strengths and problems that serve as the foundation for the treatment plan. Planning involves establishing problems that require



immediate treatment, those that can wait, those that nursing will concentrate on, those that need to be assigned or referred to another person, and those that call for a multidisciplinary approach.

Planning involves setting goals, choosing interventions, documenting or customizing the care plan, and implementing the strategy carefully. Before taking any action, it is crucial to assess the individual's current state and make necessary adjustments. Recording and reporting are essential steps in the nursing process Chubinski, S. (1996).

Assessment is the final step, where the nursing process evaluates the desired outcomes, interventions, and changes needed. This includes comparing the patient's health status with the expected outcomes, determining new care priorities, and assessing the effectiveness of the plan. Oermann, M.H. (1997).

The nursing process is seen as a decision-making approach that promotes critical thinking in nursing and is compared to the scientific method of solving problems. However, the scientist identifies the problem first and collects the data. Wilkinson (1996) equated the cognitive skills needed by nurses to the intellectual skills used in the nursing process, such as problem-solving, creativity, and critical thinking. Critical thinking concepts can be paralleled with the nursing process steps, which include identifying the problem, gathering relevant data, challenging assumptions, beliefs, ideas, and issues, and imaginatively exploring alternatives. Yarbrough, S. (1997)

### **Conclusion:**

Critical thinking, with its emphasis on analysis and creative problem-solving, complements the structured approach of the nursing process. While the nursing process offers a framework, critical thinking allows nurses to delve deeper, consider alternative solutions, and question assumptions. By integrating critical thinking into education and practice, nurses can provide more individualized care and navigate the complexities of modern healthcare.

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