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PROFESSIONAL PAPER

Critical Thinking: The Development of an Essential Skill for Nursing Students

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ABSTRACT

Critical thinking is defined as the mental process of actively and skillfully perception, analysis, synthesis and evaluation of collected information through observation, experience and communication that leads to a decision for action. In nursing education there is frequent reference to critical thinking and to the significance that it has in daily clinical nursing practice. Nursing clinical instructors know that students face difficulties in making decisions related to clinical practice. The main critical thinking skills in which nursing students should be exercised during their studies are critical analysis, introductory and concluding justification, valid conclusion, distinguish of facts and opinions, evaluation the credibility of information sources, clarification of concepts and recognition of conditions. Specific behaviors are essentials for enhancing critical thinking. Nursing students in order to learn and apply critical thinking should develop independence of thought, fairness, perspicacity in personal and social level, humility, spiritual courage, integrity, perseverance, self-confidence, interest for research and curiosity. Critical thinking is an essential process for the safe, efficient and skillful nursing practice. The nursing education programs should adopt attitudes that promote critical thinking and mobilize the skills of critical reasoning.

Key Words: critical thinking, nursing education, clinical nurse education, clinical nursing practice

1. INTRODUCTION

Critical thinking is applied by nurses in the process of solving problems of patients and decision-making process with creativity to enhance the effect. It is an essential process for a safe, efficient and skillful nursing intervention. Critical thinking according to Scriven and Paul is the mental active process and subtle perception, analysis, synthesis and evaluation of information collected or derived from observation, experience, reflection, reasoning or the communication leading to conviction for action (1).

So, nurses must adopt positions that promote critical thinking and refine skills of critical reasoning in order a meaningful assessment of both the previous and the new information and decisions taken daily on hospitalization and use of limited resources, forces you to think and act in cases where there are neither clear answers nor specific procedures and where opposing forces transform decision making in a complex process (2).

Critical thinking applies to nurses as they have diverse multifaceted knowledge to handle the various situations encountered during their shifts still face constant changes in an environment with constant stress of changing conditions and make important decisions using critical thinking to collect and interpret information that are necessary for making a decision (3).

Critical thinking, combined with creativity, refine the result as nurses can find specific solutions to specific problems with creativity taking place where traditional interventions are not effective. Even with creativity, nurses generate new ideas quickly, get flexible and natural, create original solutions to problems, act independently and with confidence, even under pressure, and demonstrate originality (4).

The aim of the study is to present the basic skills of critical thinking, to highlight critical thinking as a essential skill for nursing education and a fundamental skill for decision making in nursing practice. Moreover to indicate the positive effect and relation that critical thinking has on professional outcomes.

2. CRITICAL THINKING SKILLS

Nurses in their efforts to implement critical thinking should develop some methods as well as cognitive skills required in analysis, problem solving and decision making (5). These skills include critical analysis, introductory and concluding justification, valid conclusion, distinguishing facts and opinions to assess the credibility of sources of information, clarification of concepts, and recognition conditions (6, 7).

Critical analysis is applied to a set of questions that relate to the event or concept for the determination of

important information and ideas and discarding the unnecessary ones. It is, thus, a set of criteria to rationalize an idea where one must know all the questions but to use the appropriate one in this case (8).

The Socratic Method, where the question and the answer are sought, is a technique in which one can investigate below the surface, recognize and examine the condition, look for the consequences, investigate the multiple data views and distinguish between what one knows and what he simply believes. This method should be implemented by nurses at the end of their shifts, when reviewing patient history and progress, planning the nursing plan or discussing the treatment of a patient with colleagues (9).

The Inference and Concluding justification are two other critical thinking skills, where the justification for inductive generalizations formed from a set of data and observations, which when considered together, specific pieces of information constitute a special interpretation (10). In contrast, the justification is deduced from the general to the specific. According to this, nurse starts from a conceptual framework—for example, the prioritization of needs by Maslow or a context-evident and gives descriptive interpretation of the patient's condition with respect to this framework. So, the nurse who uses drawing needs categorizes information and defines the problem of the patient based on eradication, nutrition or need protection.

In critical thinking, the nurses still distinguish claims based on facts, conclusions, judgments and opinions. The assessment of the reliability of information is an important stage of critical thinking, where the nurse needs to confirm the accuracy of this information by checking other evidence and informants (10).

The concepts are ideas and opinions that represent objects in the real world and the importance of them. Each person has developed its own concepts, where they are nested by others, either based on personal experience or study or other activities. For a clear understanding of the situation of the patient, the nurse and the patient should be in agreement with the importance of concepts.

People also live under certain assumptions. Many believe that people generally have a generous nature, while others believe that it is a human tendency to act in its own interest. The nurse must believe that life should be considered as invaluable regardless of the condition of the patient, with the patient often believing that quality of life is more important than duration. Nurse and patient, realizing that they can make choices based on these assumptions, can work together for a common acceptable nursing plan (11).

3. CRITICAL THINKING ENHANCEMENT BEHAVIORS

The person applying critical thinking works to develop the following attitudes and characteristics independence of thought, fairness, insight into the per-

sonal and public level, humble intellect and postpone the crisis, spiritual courage, integrity, perseverance, self-confidence, research interest considerations not only behind the feelings and emotions but also behind the thoughts and curiosity (12).

Independence of Thought

Individuals who apply critical thinking as they mature acquire knowledge and experiences and examine their beliefs under new evidence. The nurses do not remain to what they were taught in school, but are "open-minded" in terms of different intervention methods technical skills.

Impartiality

Those who apply critical thinking are independent in different ways, based on evidence and not panic or personal and group biases. The nurse takes into account the views of both the younger and older family members.

Perspicacity into Personal and Social Factors

Those who are using critical thinking and accept the possibility that their personal prejudices, social pressures and habits could affect their judgment greatly. So, they try to actively interpret their prejudices whenever they think and decide.

Humble Cerebration and Deferral Crisis

Humble intellect means to have someone aware of the limits of his own knowledge. So, those who apply critical thinking are willing to admit they do not know something and believe that what we all consider rectum cannot always be true, because new evidence may emerge.

Spiritual Courage

The values and beliefs are not always obtained by rationality, meaning opinions that have been researched and proven that are supported by reasons and information. The courage should be true to their new ground in situations where social penalties for incompatibility are strict. In many cases the nurses who supported an attitude according to which if investigations are proved wrong, they are canceled.

Integrity

Use of critical thinking to mentally intact individuals question their knowledge and beliefs quickly and thoroughly and cause the knowledge of others so that they are willing to admit and appreciate inconsistencies of both their own beliefs and the beliefs of the others.

Perseverance

The perseverance shown by nurses in exploring effective solutions for patient problems and nursing each determination helps to clarify concepts and to distinguish related issues despite the difficulties and failures. Using critical thinking they resist the temptation to find a quick and simple answer to avoid uncomfortable situations such as confusion and frustration.

Confidence in the Justification

According to critical thinking through well motivated reasoning leads to reliable conclusions. Using critical thinking nurses develop both the induc-

tive and the deductive reasoning. The nurse gaining more experience of mental process and improvement, does not hesitate to disagree and be troubled thereby acting as a role model to colleagues, inspiring them to develop critical thinking.

Interesting Thoughts and Feelings for Research

Nurses need to recognize, examine and inspect or modify the emotions involved with critical thinking. So, if they feel anger, guilt and frustration for some event in their work, they should follow some steps: To restrict the operations for a while to avoid hasty conclusions and impulsive decisions, discuss negative feelings with a trusted, consume some of the energy produced by emotion, for example, doing calisthenics or walking, ponder over the situation and determine whether the emotional response is appropriate. After intense feelings abate, the nurse will be able to proceed objectively to necessary conclusions and to take the necessary decisions.

Curiosity

The internal debate, that has constantly in mind that the use of critical thinking is full of questions. So, a research nurse calculates traditions but does not hesitate to challenge them if you do not confirm their validity and reliability.

4. IMPLEMENTATION OF CRITICAL THINKING IN NURSING PRACTICE

In their shifts nurses act effectively without using critical thinking as many decisions are mainly based on habit and have a minimum reflection. Thus, higher critical thinking skills are put into operation, when some new ideas or needs are displayed to take a decision beyond routine. The nursing process is a systematic, rational method of planning and providing specialized nursing (13). The steps of the nursing process are assessment, diagnosis, planning, implementation, evaluation. The health care is setting the priorities of the day to apply critical thinking (14). Each nurse seeks awareness of reasoning as he/she applies the criteria and considerations and as thinking evolves (15).

Problem Solving

Problem solving helps to acquire knowledge as nurse obtains information explaining the nature of the problem and recommends possible solutions which evaluate and select the application of the best without rejecting them in a possible appeal of the original. Also, it approaches issues when solving problems that are often used is the empirical method, intuition, research process and the scientific method modified (16).

Experiential Method

This method is mainly used in home care nursing interventions where they cannot function properly because of the tools and equipment that are incomplete (17).

Intuition

Intuition is the perception and understanding of concepts without the conscious use of reasoning. As a problem solving approach, as it is considered by many,

is a form of guessing and therefore is characterized as an inappropriate basis for nursing decisions. But others see it as important and legitimate aspect of the crisis gained through knowledge and experience. The clinical experience allows the practitioner to recognize items and standards and approach the right conclusions. Many nurses are sensing the evolution of the patient's condition which helps them to act sooner although the limited information. Despite the fact that the intuitive method of solving problems is recognized as part of nursing practice, it is not recommended for beginners or students because the cognitive level and the clinical experience is incomplete and does not allow a valid decision (16).

Research Process / Scientifically Modified Method

The research method is a worded, rational and systematic approach to problem solving. Health professionals working in uncontrolled situations need to implement a modified approach of the scientific method of problem solving. With critical thinking being important in all processes of problem solving, the nurse considers all possible solutions and decides on the choice of the most appropriate solution for each case (18).

The Decision

The decision is the selection of appropriate actions to fulfill the desired objective through critical thinking. Decisions should be taken when several exclusive options are available or when there is a choice of action or not. The nurse when facing multiple needs of patients, should set priorities and decide the order in which they help their patients. They should therefore: a) examine the advantages and disadvantages of each option, b) implement prioritization needs by Maslow, c) assess what actions can be delegated to others, and d) use any framework implementation priorities. Even nurses make decisions about their personal and professional lives. The successive stages of decision making are the Recognition of Objective or Purpose, Definition of criteria, Calculation Criteria, Exploration of Alternative Solutions, Consideration of Alternative Solutions, Design, Implementation, Evaluation result (16).

The contribution of critical thinking in decision making

Acquiring critical thinking and opinion is a question of practice. Critical thinking is not a phenomenon and we should all try to achieve some level of critical thinking to solve problems and make decisions successfully (19 -21).

It is vital that the alteration of growing research or application of the Socratic Method or other technique since nurses revise the evaluation criteria of thinking and apply their own reasoning. So when they have knowledge of their own reasoning-as they apply critical thinking-they can detect syllogistic errors (22-26).

5. CONCLUSION

In responsible positions nurses should be especially aware of the climate of thought that is implemented and actively create an environment that stimulates

and encourages diversity of opinion and research ideas (27). The nurses will also be applied to investigate the views of people from different cultures, religions, social and economic levels, family structures and different ages. Managing nurses should encourage colleagues to scrutinize the data prior to draw conclusions and to avoid “group thinking” which tends to vary without thinking of the will of the group. Critical thinking is an essential process for the safe, efficient and skillful nursing practice. The nursing education programs should adopt attitudes that promote critical thinking and mobilize the skills of critical reasoning.

CONFLICT OF INTEREST: NONE DECLARED

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