

Abstract

Background: Literatures reveals multiple areas where nursing students could be more efficient in developing Critical Thinking Student Nurses.

Methods: A systematic search of databases, including PubMed, ERIC CINAHL, the Texas Woman's University Library, and Google Scholar. The inclusion criteria were articles published on Critical Thinking Skills between 2011 to 2021.

Results: A total of 35 articles were identified from 17,800 articles.

Conclusion: In synthesizing critical thinking is important in student nurses during the academic period using education methods Critical Thinking model and the tool used to measure it.

Critical thinking (CT) Definition

CT is defined by multiple researchers

Papathanasiou et al. (2014) the mental process of active and skillful perception, analysis, synthesis, and evaluation of information through observation, experience, analysis, synthesis, and evaluation of information through observation, experience, and communication that leads to a decision making.

Implication for Nursing Education

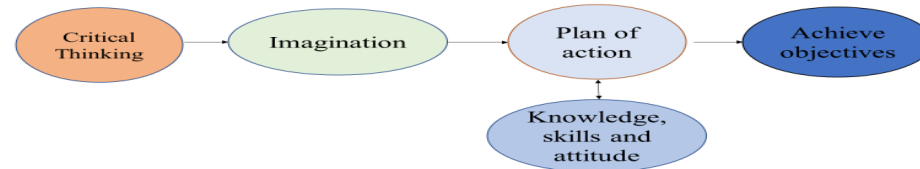
- CT model, concepts, and strategies identified in the review may be used by the educators and the institutions for better outcomes. This can also lead to developing new strategies to make the student nurses as effective critical thinkers as future nurses. Consulting other associated programs nationally and internationally, mentorship programs, and a cup of tea/coffee with the educators and leaders can build a stronger student and educator relationship.
- Making competitive nursing programs within the organization and developing interpersonal relationships with the hospitals to get good preceptors and mentors may meet the expectation of the collaborative scholarship.

Definition Cont..

Papp et al. (2014) "the ability to apply higher-order cognitive skills and the disposition to be deliberate about open minded thinking leading to appropriate and logical action.

Andreou et al.(2014) CT enhances the student nurses to express high levels of meta-cognitive skills in clinical reasoning, judgment, decision-making, and problem solving.

Innovative Learning



Critical Thinking Model

Several critical thinking models were identified which includes problem-based learning model, project-based model, case-based learning model, evidence-based model, lifelong learning model, innovative learning model, and Jigsaw model.

Concept of Critical Thinking

Concept of CT in nursing education is the turning point in the professionalization. Knowledge and application are the key elements of CT and will increase the student nurses' decision-making abilities. Nurses should be able to identify and prioritize being independent reflective thinkers and decision makers before entering the workforce (Sullivan, 2012).

Tools to Measure CT

1. Cases Scenarios
2. Multiple Choice Questions
3. A Modified Delphi Method (MDM)

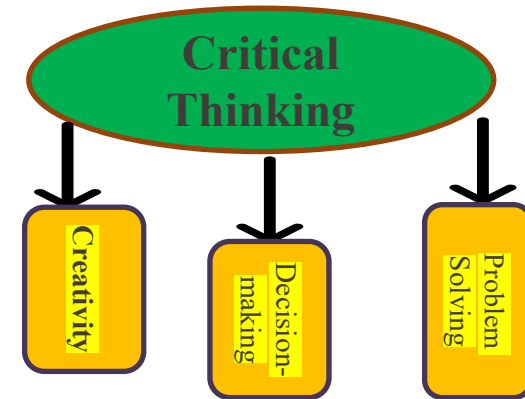
In Modified Delphi Methods - the panelist maintains anonymity, decreases influence from dominant participants and can provide input from anywhere, irrespective of the geographic area. Here the questionnaire are through electronic media, and the participant can take their time to respond to the questionnaire (Haji et al.,2015). Using subject matter experts enables identifying critical content and clarifies the tool to meet the expected level of CT. CTS is based on quantitative measurement. It always has been a concept valued by nursing education, but there needs to be more evidence in the literature that this concept has been seen in students. The instruments reviewed are Watson- Glaser Critical Thinking Appraisal (WGCTA).

Critical thinking → Good Clinical Judgement and Decision making → Good patient nursing management

Discussion

The reviewed literature were suggestive of the outcome measures and formal evaluation of CT need to be more consistent. The reasons for the student nurses struggling with CT may be due the limited education faculties, efficient preceptors, clinical exposure and inadequate mentors and evidence-based guidance.

The review indicates various models that can facilitate the teaching and learning of CT in nurses. The application of the model and strategies can vary based on the administrative authorities, funding, and students' motivation.



Critical Thinking Model

Conclusion

Given the significant resources on nursing CT further research might be needed to aim to focus on student nurses during their nursing education. Future research should also focus on the detailed description of CT models for our student nurses. The students should be provided education, considering Boyers model of scholarship. This should include exploring definitions and taxonomies of the Scholarship of Teaching and Learning. Critical thinking skills development and mentoring programs will have some upfront and continuing costs, but they can also generate revenue for the education facilities and schools and hospitals with nurse residency programs.