Perceived barriers and facilitators in integrating critical thinking as a teaching method among teaching faculty

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Abstract
Critical thinking have been identified as an essential skill for practicing professional nurses. As a concept, critical thinking has been expressed in several ways. The rapidly changing nature of the health care system presents nurses with varied complex practice issues with no clear solutions. These health care problems require nursing students and nurses to have Critical Thinking skills. In this scenario a descriptive survey was carried out among selected nursing college faculty to assess the perceived barriers and facilitators in integrating critical thinking as a teaching methodology with the following objectives:

1. To assess the perceived barriers and facilitators in integrating critical thinking as a teaching methodology among nursing faculty.
2. To find out the association between perceived barriers & facilitators in integrating critical thinking as a teaching methodology and selected socio demographic variables.

A modified barrier scale was used to collect data from 20 faculty selected using convenience sampling. On analysis of the collected data it was found that insufficient on the job time to implement new ideas (barrier scale item no.12) was rated as a barrier to a great extent by majority (75%) of the nursing faculty. The facilitators for integrating critical thinking were assessed using an open ended question. On analysis the responses from the participants, it was found that majority (45%) of the faculty expressed need for proper training in integrating critical thinking & changes in educational system including curriculum & examination system as important perceived facilitators. Teaching effective critical thinking and clinical judgment skills to students remains a priority.

Keywords: Perceived barriers, facilitators, critical thinking, teaching methodology

1. Introduction
Leaders create context. A part of creating context in the clinical environment is the generation of a spirit of critical thinking." (Tim Porter-O’Grady, 2005)

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. In today's fast paced, technologically advanced world, the challenge for nursing faculty is to teach students critical thinking (CT) skills and the ability to practice competently in a variety of situations. The rapidly changing nature of the health care system presents nurses with varied complex practice issues with no clear solutions. These health care problems require nursing students and nurses to have CT skills (Bambini, Washburn, & Perkins, 2009). Often critical thinking exercises and questions follow an instructional method, but students are not actually taught how to use critical thinking and clinical judgment in a healthcare situation. These teaching strategies often do not assist the student in understanding and applying the clinical reasoning process or students struggle to transfer the learning to new situations. In this context an investigation was carried out to assess the perceived barriers and facilitators in integrating critical thinking as a teaching methodology among nursing college faculty in a selected college of nursing in Kerala, India.
1.1 Objectives
- To assess the perceived barriers and facilitators in integrating critical thinking as a teaching methodology among nursing faculty.
- To find out the association between perceived barriers & facilitators in integrating critical thinking as a teaching methodology and selected socio demographic variables.

1.2 Theoretical Framework
Tanner’s Clinical Judgment Model (2006) and provided a framework for this investigation. Tanner used the terms critical thinking and clinical judgment interchangeably. Tanner viewed clinical judgment as four phases that are not linear in nature. Providing instruction in critical thinking and clinical judgment that follows this model may provide additional structure that aids nursing students’ development of these skills. It is recommended that in future, integrate this process of critical thinking among nursing students as a teaching methodology the following steps needs to be followed.

1.3 Steps in integrating Critical Thinking as a teaching methodology

2. Methodology
In this quantitative research study, non-experimental descriptive design was used to accomplish research objectives. The sample size consists of 20 nursing faculty working with selected nursing colleges in Trivandrum, Kerala by non-probability convenient sampling technique. There were two instruments used to collect the data that includes a demographic proforma which consists of age, sex, designation, qualifications, and years of experience and another tool was a Modified barrier rating scale for assessing perceived barriers and facilitators in teaching critical thinking.

3. Results and Discussion
The data collected were analyzed based on the objectives of the study.
On analyzing the socio demographic profile of the nursing faculty it was found that majority (69%) of the sample belonged to the age group of 26-30 years & 65% of them were post graduate teachers. Half (50%) of the sample had...
clinical experience of 1-3 years and majority (65%) had a
teaching experience of 1-3 years On analysis of the findings
of the barrier rating scale , insufficient on the job time to
implement new ideas (barrier scale item no.12) was rated as
a barrier to a great extent by majority(75%) of the nursing
faculty, followed by unwillingness to change/ try new ideas,
examination system not supportive of critical thinking and
faculty's inadequate authority to change routine teaching
methodology(45%). Only very few(0.05%) identified
critical thinking as more theoretical not of much practical
value and the faculty also expressed their evident perception
that benefits of changing existing methodology will be
minimal as the least perceived barrier.
The facilitators for integrating critical thinking were
assessed using an open ended question. On analysis the
responses from the participants, it was found that majority
(45%) of the faculty expressed need for proper training in
integrating critical thinking &changes in educational
system including curriculum & examination system as
important perceived facilitators, followed by adequate on
the job time for faculty for class preparation, (30%), support
from the organization, more opportunities for students to
express their ideas (20%), more access to EBP & Increased
clinical exposure for faculty (15%).

4. Implications

4.1 Nursing Practice: Critical thinking and clinical
judgment are vital to successful nursing practice. The goal
of nursing education is to prepare the graduate nurse for the
role of a professional nurse. It is recommended that further
research include studies that evaluate the development of
these skills. In addition, how do professional nurses perceive
their courses in nursing school prepared them to utilize
critical thinking and clinical judgment in their daily practice

4.2 Nursing Education: Nursing programs are challenged
to provide learning experiences that are evidence-based. It is
imperative that quantitative and qualitative research guide
nursing faculty in program planning and curriculum
development to determine best practices in promoting
development of critical thinking and clinical judgment. The
goal of nursing education is to prepare the graduate nurse
for the role of a professional nurse. In this study, grand
rounds showed potential as a possible educational strategy
that could be implemented in a variety of settings. It is
recommended that future research involve replicating this
teaching strategy in other populations

5. Conclusion
Critical thinking and clinical judgment are vital to
successful nursing practice. The goal of nursing education is
to prepare the graduate nurse for the role of a professional
nurse. It is recommended that further research include
studies that evaluate the development of these skills.
Nursing programs are challenged to provide learning
experiences that are evidence-based. It is imperative that
quantitative and qualitative research guide nursing faculty in
program planning and curriculum development to determine
best practices in promoting development of critical thinking
and clinical judgment. The goal of nursing education is to
prepare the graduate nurse for the role of a professional

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