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Concept-Based Curriculum Development in Graduate Nursing Education Programs: A Systematic Review

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Purpose: Within nursing education, the use of concept-based curriculum (CBC) in graduate programs is somewhat unexplored, with most of CBC implementation found in undergraduate nursing education. Advantages of CBC are that this is a teaching method that enhances learning by eliminating information overload and memorization allowing students to think critically by linking knowledge gained in the didactic setting or from previous experiences to apply to clinical practice. The content-laden, systems-based curriculum in graduate nursing education programs has created an environment where faculty are challenged to address current practice competency content while students struggle to gain and retain information. Often students resort to memorization of nursing knowledge and skills rather than attempt to understand the scientific processes or evidence-based rationale behind the learning, a practice that does not equip advanced practice nurses to be skillful in applying the constantly expanding scientific evidence to their clinical practice. The role of the Doctor of Nursing Practice (DNP) is also evolving to meet the demand for leadership in population and global health, informatics, and genetics, to name a few. It is predicted that an information explosion will yield a doubling of knowledge every 12 hours by 2020, which mandates educators to take note and prepare accordingly. CBC may offer educators a strategy to better address future graduate nursing student needs to address healthcare challenges. The primary purpose of this project was to determine the state of the science related to development, implementation, and evaluation of concept-based curriculum in graduate nursing education programs.

Background: CBC is a teaching methodology that enhances learning by assisting students to think critically; students link knowledge gained in the didactic settings or from previous patient-care experiences to apply to the current situation or to clinical practice. Motivated by rapid changes in technology and a shift to population and global health, chronic disease management, and health promotion there is a need to reexamine graduate nursing education curricula. CBC is currently implemented in some nursing programs across the United States, particularly in undergraduate programs. The strengths, weaknesses, opportunities, and threats (SWOT) of undergraduate CBC offer sound evidence for curriculum change. Graduate curricular mapping to national standards and guidelines will also be addressed.

Methods: A systematic search of the literature was conducted to determine the state of the science of concept-based curriculum's implementation in graduate nursing education programs. The databases of Academic Search Complete, ProQuest Nursing, CINAHL, ERIC, and PubMed were searched using the search terms: nursing, education, concept(s), concept-based, graduate nursing education, MSN education, DNP education, and PhD nursing education. Inclusion criteria was limited to English, peer-reviewed journals, texts, and articles; academic and research publications for the years 1990-2018. Additionally, the search was expanded to include

interdisciplinary health professions, such as medicine, dentistry, and pharmacy that might offer insight for development, implementation and evaluation of CBC.

Results: Sadly, very few articles were retrieved regarding CBC use in graduate nursing education in the United States. The few articles that met eligibility are included in the qualitative synthesis of the strengths, weaknesses, opportunities, and threats (SWOT) to CBC. The SWOT analysis is categorized by CBC development, implementation into the curriculum, and evaluation of the implementation. Suggested curriculum mapping to national graduate standards and guidelines is included.

Conclusion: Concept-based curricular approaches were found to promote higher levels of thinking, such as evaluating, analyzing, and processing; and to improve critical thinking and clinical judgment as students apply new knowledge within the frame of the concept and analyze information. More research is needed on this topic. Programmatic implementation strategies are described and outcome metrics are identified that may serve as benchmarks for programs and regulators.

Title:

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Abstract Summary:

The use of concept-based curriculum (CBC) in graduate programs is somewhat unexplored, although it is found in undergraduate nursing education programs. CBC eliminates information overload and memorization; allowing students to think critically by linking knowledge gained in the didactic setting or from previous experiences to apply to clinical practice.

Content Outline:

- Introduction
- Need for paradigm shift in graduate nursing education
- o Concept-based curriculum (CBC) in model graduate courses (MSN, NP, DNP, PhD)
- Advantages of Concept-based curriculum
- o Strengths and Weaknesses of CBC in graduate programs in the United States
- o Development
- Implementation
- Evaluation
- Opportunities and Threats of CBC in graduate programs in the United States
- Teaching strategies
- o Interactive methods in didactic and practicum Learner participation
- Demonstrations, presentations
- Engaging experiences- debriefing
- Class discussions and activities
- peer teaching, compare and contrast client care scenarios
- Relate content to previous learning- recall and application
- Benefits of CBC
- o Focus is on learning and applying new knowledge rather than on volume of content.
- Concepts build on the increasing complexity of clinical situations.
- o Students are better prepared for critical reasoning and able to transfer learning to new situations.
- CBC prepares the graduates for the ever-changing world where knowledge and evidenced-based practice are constantly changing.
- o Faculty are innovators and front-runners with the evolutionary changes in nursing education proposed in The Future of Nursing (IOM, 2011).
- Faculty barriers
- Faculty must change to adapt to CBC in graduate-level courses.
- Faculty must locate or create materials to support new approaches.
- Conclusion
- Templates for MSN CBC courses
- Matrices
- Questions and Answers

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Author Summary: Dr. Lee has incorporated concept-based methodology in teaching in nursing programs for many years. In 2011, Dr. Lee participated in the development of concept-based curriculum (CBC) for use in ADN, BSN, RN-to-BSN, and MSN programs in Texas. As an Education Consultant at the Texas Board of Nursing, Dr. Lee evaluated the success of programs, and made recommendations for transitioning from traditional systems-based curriculum, for identifying areas for improvement, and for overcoming barriers.

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