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COMPETENCY-BASED NURSING EDUCATION: EVOLUTION, GLOBAL TRENDS, AND FUTURE DIRECTIONS

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ABSTRACT

Nursing education system needs a transition from traditional content-based system to competency-based nursing education (CBNE) system due to transformation and increased complexity of healthcare systems and enhanced global emphasis on patient safety. The focus of CBNE is on the competencies that are measurable and achievable and produce nurses who are capable of integrating knowledge, skills, attitudes, and clinical judgment into practice. The purpose of this narrative review is to explore the evolution of competency-based nursing education, analyze the global competency frameworks, discuss suitable teaching and learning methodologies, evaluation approaches, advantages, obstacles, and future directions for the implementation of CBNE. Literature is reviewed from international peer-reviewed journals, reports from various global nursing organizations, and policy documents. Researches reveal that clinical competence and judgment, workforce readiness and accountability increase with the implementation of CBNE; however, there are lots of challenges that hinder the implementation of CBNE, some of which are faculty readiness and proper training, reliability of assessment tools or approaches, scarcity of resources, especially in developing countries. Implementation can be achieved successfully with faculty preparedness and development, organizational support at national levels, and with adaptation of context-sensitivity. Contemporary healthcare demands can meet by preparing competent nurses using the strategy of CBNE worldwide.

Keywords: *Competency-based education, Nursing education, Clinical competence, Curriculum reform, Faculty development*

1. INTRODUCTION

Healthcare system is changing rapidly worldwide due to advancements in technology, dynamic disease patterns, increased expectations for patient safety, and quality of care. These transitions in healthcare system require healthcare professionals, particularly nurses, who are not only knowledgeable but also competent enough to integrate the knowledge into skills, clinical practice, communication, reasoning, critical thinking, problem solving, and decision making in complex clinical environment (1). Traditional education models and systems have been

discouraged due to their primary focus on content coverage of a fixed curricula, time-bound progression, and inadequately preparing nurses for real-world practice (2).

These challenges resulted in the emergence of Competency-Based Nursing Education, with a shift of focus from content coverage to clinical competence, what is being taught and what students are able to perform, from retaining knowledge to practically applying it into real-world scenarios, upon completion of their education (3). CBNE implementation is required to ensure a safe, efficient, and responsive nursing workforce as also advocated by World Health Organization (WHO) and the International Council of Nurses (ICN) (4–6). The aim of this narrative review is to explore the concept, evolution, global frameworks, implementation, advantages, barriers, and futuristic approaches of competency-based nursing education.

2. Concept and Definition of Competency-Based Nursing Education

Competency-based education is entirely focused on the outcomes, and for professional practice it requires achievement of predetermined competencies (7). It is important to know what competency is in terms of Nursing Education and Clinical Practice. Competency, in nursing, is usually defined as integration of knowledge, skills, attitudes, and professional values into job responsibilities in a safe and effective manners (8). Distinctly defined learning outcomes, learner-focused teaching strategies, flexible learning frameworks and pathways, and performance-based evaluations are major characteristics of competency-based nursing education (9). Learners can progress based on demonstrated competencies through CBNE rather than spending a lot of time in training as in traditional education models; fixed curricula and time-bound progression (10).

3. Evolution of Competency-Based Education in Nursing

The concept of competency-based education was originated by teacher education system in the 1960s and 1970s and later was incorporated in medical and health professional education (11). In nursing, the developmental nature of clinical competence was clearly understood and widely accepted with Patricia Benner's "Novice to Expert" model presentation and it was considered as foundation for competence evaluation (12).

With emergence of variability in graduate competence and workforce accountability, patient safety became a priority and resulted in momentum of outcome-based and competency-based frameworks in the late 20th and 21st centuries (13). Reports like Health Professionals for a New Century highlighted the necessity for transformative education that integrates professional competencies with the requirements of health systems (1).

As a result, regulatory authorities and accreditation organizations globally commenced the incorporation of competency standards into nursing curriculum.

4. Global Competency Frameworks in Nursing

Numerous national and international models and frameworks provide road-map and directions for implementation of CBNE. The world health organization emphasizes on universal health coverage focusing patient-centered care, communication, professionalism, and collaborative practice, to achieve these objectives WHO established Global Competency Frameworks (4). Core skills for ethical practice, leadership, professional growth, and high-quality treatment in a variety of healthcare contexts are outlined by the International Council of Nurses (6). In the United States, six core competencies are identified by Quality and Safety Education for Nurses (QSEN) (14):

1. Patient-centered care
2. Teamwork and Collaboration
3. Evidence-Based Practice
4. Quality improvement
5. Safety
6. Informatics

Likewise, some other countries also have developed and framed national competency standards in lieu of their regulations and workforce requirements, such as United Kingdom, Australia, and Canada (15). Focusing on local healthcare priorities, these frameworks

and models furnish structure guidance with contextual flexibility and adaptability.

5. Teaching–Learning Strategies in Competency-Based Nursing Education

Innovative teaching-learning strategies are required for implementation of CBNE that can engage the nursing students' actively in skill development and clinical reasoning. Providing safe and controlled clinical practice environment to the learners and simulation-based learning proves to be a cornerstone of CBNE (16). Students' confidence, critical-thinking, and decision-making are positively influenced by CBNE.

Evidences show that competency development can be achieved by problem-based learning, case-based discussions, and hands-on practice in real life experience in clinical settings (17). Integration of theory into practice and professional socialization are facilitated by clinical mentorship and preceptorship models (18). Additionally, numerous self-directed learning, digital, and e-learning platforms are available that are flexible and aligned with CBNE principles (19).

6. Assessment and Evaluation of Competence

Assessment is a crucial element of CBNE, as it helps in determining the achievement of required competencies and levels of students' learning. Objective structured Practical Examination (OSPE) and Objective Structured Clinical Examinations (OSCE) are used to evaluate psychomotor skills, communication, and clinical judgement (20). Assessments in clinical areas on real patients, including direct observations and mini-clinical examinations are authentic and useful tools providing outcomes in real clinical context (21,22).

Other assessment tools include reflective portfolios, self-assessment checklists, and log-books which are widely used to evaluate professional attitudes and long-term learning competencies among graduates (23). Though these assessment tools are very beneficial for students' evaluation of learning, skill standardization, assessor biasness, and resource limitations are some of the reported challenges for fair evaluation (24).

7. Benefits of Competency-Based Nursing Education

Research studies reveal that CBNE improves confidence, clinical competence, and readiness for practice among undergraduate nurses (25). Patient safety and quality of care can be improved by aligning education with health care system needs, a major contribution of CBNE implementation (26). Greater satisfaction is reported by the employers of multiple organizations regarding performance and effectiveness of graduates in complex clinical environments, trained under competency-based frameworks (27).

Additionally, CBNE incorporates accountability and transparency among graduates, bridges education with regulation and practice, and strengthens the professional identity of nurses (28).

8. Challenges in Implementing Competency-Based Nursing Education

Alongside advantages, there are several challenges of CBNE implementation. Commonly reported obstacles are lack of trained faculty, resistance from faculty and students, poor understanding of CBNE principles, time constraints, scarcity of resources, and insufficient training (21). Significant time, expertise, and resources are required for constructing reliable and valid assessment tools (18).

In developing countries, additional challenges include inadequate infrastructure, low faculty-student ratio, and limited clinical placement opportunities for hands-on practice (4). Strong policy and institutional support are required for effective CBNE implementation, without this support implementation process shall remain fragmented and inconsistent.

9. Future Directions and Implications

Regulatory bodies and institutions should take some necessary steps for the CBNE implementation and sustainability:

1. Comprehensive and consistent faculty development and training programs to improve understanding (29)
2. Collaboration of regulatory bodies with educational institutions focusing alignment of competency frameworks with curricula and licensure requirements.
3. In resource limited settings extensive intervention research is required to assess long-term impact of CBNE on patient care and health system outcomes and performance (10).
4. Integration of technology and context-specific adaptations should be incorporated in nursing education to improve sustainability of CBNE.

10. Conclusion

To prepare knowledgeable and skillful nurses who are competent enough and capable of meeting contemporary healthcare challenges, competency-based nursing education represents to be a transformative approach. CBNE implementation increases clinical competence, workforce readiness, and patient safety, through emphasis on reliable assessment tools, learner focused approach, and measurable outcomes. CBNE potential can be maximized by faculty development, organizational support, and policy alignment. With evolving healthcare systems, nursing education and global health outcomes can be improved and strengthen through implementation of CBNE.

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