## ВОПРОСЫ ОБРАЗОВАТЕЛЬНЫХ ПРОГРАММ MATTERS OF EDUCATIONAL PROGRAMMES

УДК 378.147

## CURRENT EDUCATION STRATEGES AND APPROACHES TO DEVELOP POSITIVE LEARNING ENVIRONMENT FOR CONTINUING NURSING EDUCATION: A REVIEW

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The review article highlights a variety of modern educational technologies, included in the problem-based learning paradigm. A clear distinction between technologies according to their objectives, methods and principles of teaching has been performed. The effective educational technology that may be integrated in the continuing education framework has been determined. The key components for developing positive learning environment in clinical settings has been identified and described.

Key words: educational technologies, continuing nursing education, problem-based education, positive learning environment.

Improved patient care quality and safety are of major concern in modern healthcare system. According to a recent study performed by the Center for Studying Health Care Change (HSC), the role and influence of nurses is increasing in a wide range of quality improvement activities implemented in a great number of hospitals [43]. Since nurses are pivotal in the process of care delivery, they should be prepared to function as safe, competent, intuitive and innovative clinicians in an environment where new information and clinical situations are constantly changing according to the demands of advanced clinical practice and recent shift to patients centered care [44]. Yildrim B. and Ozkahraman S. define this environment as "multiple, complex, and fast-moving", where nurses are challenged to "think on their feet" [47]. Nursing process is perceived as a problem-solving activity in which a plan of care represents the foundation for professional practice [33]. There are five key stages, namely assessment, planning, nursing diagnosis, intervention, and evaluation, which are included in this linear process and should be paid particular attention with a focus on looking for similarities between the patient and the expected benchmark for today.

The complexity of the nurse's role in advanced healthcare system creates challenges for the provision of care directed at illness prevention, health promotion, improved patient care outcomes [29] and requires the effective educational preparation of nurses. It is obvious that education needs to provide a learning environment that is conductive to critical thinking, giving nurse practitioners and novice staff opportunities for flexibility, creativity, and support for

change [47]. New educational practices that will lead to the optimal development of clinical skills, knowledge, and practice acumen are needed to help meet the goals suggested by national nursing organizations such as those outlined in the "Future of nursing" report published in 2011 [42]. In particular, consideration needs to be given to creating clinical contexts where novice staff learns to integrate their theoretical knowledge with practice, and nurse practitioners are assisted to keep abreast of health care knowledge [1].

One of the main problems of pre-licensed education that continuing education strives to overcome in clinical settings is a gap between the theory and practice of nursing. Studies indicate that theory as taught in the classroom setting was not always sufficiently related to practice [2, 27, 28, 37, 38]. Melia K. concluded in her study that nurse education provided students with an idealised theoretical view of nursing which failed to prepare them for the demand and realities of the clinical environment where the emphasis is and has been on getting the work done [28]. This gap may result in inequitable, poor quality or even dangerous nursing care [8]. To address these demands an emphasis should be placed on the development of effective continuing education programs based on seven core competences and later validated by Baldwin (2009): 1) direct care, 2) consultation, 3) system leadership, 4) collaboration, 5) coaching, 6) research, 7) ethical decision-making [16]. As E. LeCuyer and colleagues asserted in 2009, the integration of core competencies with educational strategies aims to encourage the simultaneous development of learning activities in the clinical setting [19].

The main point of competency based programs is that it seeks to have the student demonstrate that they "can do" and "can teach" rather than only achieve the theroretical knowledge. Competency requires truly integrative application of knowledge, and human and technical skills in order to achieve a specific goal. G. H. Rassool and C. S. Clark proposed the use of a problem-based learning paradigm that can be effectively integrated within a competency-based framework, and encourage the development of increased learner competence, confidence, and compassion [5, 36]. Integrated learning, patient centered learning, pathway models or learning paths, case-based learning and problem-based learning are commonly included in the problem-based learning paradigm. A clear distinction should be made among these educational fusions in order to identify those strategies that can be effectively integrated in the continuing learning framework for nursing education in clinical

Problem-based learning as an alternative to traditional education of health care professionals was introduced in the Faculty of Medicine at McMaster University in Canada in the late 1960s [32]. The problem-based learning approach is andarogogical, posing contextualized questions that are based upon "real life" problems that may be clinical or non-clinical [39]. Common features of problembased learning can be determined by comparing it with case-based learning education. B. Williams described the fundamental difference between problem-based learning, which necessitates no prior experience or understanding in the subject matter, and case-based learning, which requires students to have prior knowledge [45]. Both these educational strategies share common goals, one of which is the development of critical thinking that will help nurses to ground learning in relevant clinical experiences [4, 22]. C. F. Raines asserted that nurses must be able to think critically in order to process complex data and make sound clinical judgments in the planning, managing and evaluation of the health care of their patients [35]. Moreover, Garvey T. et al (2000) found that problem-based learning and casebased learning possess unique instructional designs. In problem-based learning, the problem drives the learning, whereas in case-based learning, nurses need to recall previously covered material to solve clinical cases based on clinical practice [20].

Standing apart of problem-based learning and case-based learning, integrated learning and patient-centered learning are synonyms as they employ similar educational methods. It is not important for

the students to come up with the correct diagnosis; rather, they focus on the clinical problem and acquire the knowledge to meet the learning objectives. Moreover, the tutorial is an example of integrated learning which involves several subjects, with individual subjects being secondary to the main goal of training [21].

Pathway model or learning path differs in the whole problem-based learning paradigm, as it mainly employs the sequence method of intermediate steps from preconception to target model, providing both a theory of instruction and a guideline for teachers and curriculum developers [6]. The learning paths methodology has been developed for employee training [46]. J. Williams and S. Rosenbaum (2004) suggested using a performance improvement approach to learning and defining a Learning Path is the ideal sequence of learning activities that drives employees to reach proficiency in their job in the shortest possible time. According to the present definition this education strategy is appropriate for the training of new personnel, but it has several limitations, as it focuses on the acceleration of the level of proficiency in order to raise competence for a new position. P. Alvarado (2006) defines it not just as a training course, rather a sequence of learning events, including time in the classroom and opportunities to observe an employee and practice the task while being observed by a mentor or coach [30]. However, continuing education is a lifelong process. Society's views of health and disease, changes in the organization, financing, and delivery of health care all impact expectations of nurses in achieving the main learning objectives. These include improved quality of care, early recognition and treatment of disease, prevention of disease, cost effective practice, etc. [24]. Therefore, employment of the pathway model for continuing education will not meet the initial requirements, or the strategy for life-long education.

Consequently, it is obvious that case-based learning seems to be a more efficient education strategy, as it bases learning practices on previous knowledge. This strategy provides support for continuous improvement and learning to help nurses address gaps in their professional practice. It also creates a unique learning environment to foster the full scope of practice by personnel to provide safe and high quality care delivery.

Thus, it reasonable to discuss the means by which case-based learning education ensures the development of positive learning environment, suitable for implementing continuing learning education. First of all, clinical settings should encourage staff to learn through applying and reflecting on their knowledge. Moreover, this environment should assist experienced nurses to question and explore their own practices [11]. Novice staff and nurse practitioners also learn through observation of behaviours and practices. The practices of nursing staff are important in role-modelling attitudes and behaviours [3, 14, 15, 34]. The community of nurses with which novice staff engage in the clinical setting directly influences how novices perform their practice, make sense of their knowledge and contribute to safe and contemporary care [17]. Professional practice model depicts nursing values and defines the structures and processes that support nurses to control their practice and the care environment [25].

One key component that is pivotal for creating positive learning environments is leadershiP. Leadership is important in reconfiguring practices and activities in environments to encourage new ways of practice and ultimately, new learning [9]. Nurse leaders are influential in developing the desired attributes of their staff to create learning environments, where staff openly verbalise situations and feel that they can trust each other [31]. It is important that leaders rolemodel desired behaviors as they directly influence the norms that are established in their work units [12]. The norms and practices within clinical environments affect how nurses interact with each other and how they approach their nursing care. Nurse leaders need to understand the characteristics of quality learning environments so that they can encourage the behaviors commensurate with environments where staff embrace opportunities to teach and learn.

Nursing contexts that encourage staff to learn are characterised by a range of behaviors. These include demonstration of professional expert knowledge and evidence of proficiency in providing care [16], assisting staff to integrate with the team with whom they are working and rewarding them appropriately for their efforts [23]; and creating situations where staff feel comfortable sharing their ideas, thoughts and reflections [18]. Nurse leaders have a responsibility to promote nurses' comfort with their team to share ideas, assist with their inclusion in ward based activities, and seek assistance in developing mastery of nursing practices [40]. These behaviors rely on open communication, trust and self respect between the team members [12].

In practice, leadership and management are intertwined [26]. The leadership team needs to acknowledge and demonstrate those practices that value learning. The actions of the management team are pivotal in embedding the practices that leaders value. The manner in which nurses interact with others while they attend to their workload is instrumental in establishing interactions and behaviors that facilitate learning in the clinical context. The management team needs to support successful behaviors and interactions of the clinicians who deliver direct patient care to ensure learning is occurring at the bedside [13]. Staff needs to be supported within the clinical setting so that they are adequately prepared to interact with others. The nursing team with whom they work directly influences their ability to engage with learner [17].

The everyday or routine situations, where staff interacts with each other is largely where learning occurs in clinical settings. Novices learn through observation of and participation with good role-models, conversations with staff willing to share their knowledge and experiences, and feedback from the team with whom they work closely [41]. The practices inherent in clinical contexts ideally foster learning through ensuring that staff are knowledgeable about how to teach and facilitate learning regardless of whether the learner is a student or novice. Preparation of staff is most commonly achieved through workshops, however organisational structures need to be in place for staff to utilise the knowledge acquired in the workshops. Subsequent to workshops staff need opportunities to practice teaching others during the provision of care, and the team needs to encourage and provide feedback in these situations [18]. Asking questions can encourage novices to think about situations and reflect on the patient care that they are observing or assisting without excessive demands on nurses' time [7]. So, it is obvious that teaching practice introduced in the clinical practice stimulates the development of positive learning environment in clinical settings.

To conclude, clinical settings and positive learning environment are closely connected with each other as they both encourage and stimulate learning activity. Nurse leaders and nurse mentors create and sustain quality learning environments and ensure the delivery of contemporary and safe health care. Clinical settings where staff routinely partner with each other to demonstrate and role-model, encourage conversations about nursing practice, and provide constructive feedback to their peers contribute to the professional development and clinical learning of the nursing team. The introduction of case-based education aimed at the development of critical thinking skills allow eliminating the gaps in the knowledge and clinical practice of novice and experienced nurses.