



Competency-based education: The essential basis of pre-service education for the professional midwifery workforce



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ABSTRACT

Background: many articles published in the decade since promulgation of the Millennium Development Goals have acknowledged the distinct advantages to maternal and newborn health outcomes that can be achieved as a result of expanding access to skilled birth attendant (including midwifery) services. However, these advantages are often predicated on the assumption that the midwifery workforce shares a common definition and identity. Regrettably, a clear delineation of midwifery competencies is rarely addressed. A core set of midwifery competencies is essential to providing the high quality services that lead to the desirable health outcomes described in that body of research. Attribution of improved outcomes to access to midwifery cannot be made without a common understanding of a defined set of services provided to standard by the midwifery workforce across the inter-conceptional and childbearing time frame. The International Confederation of Midwives (ICM) has developed a clear list of competencies that delineate the domains of practice for the fully qualified, professional midwife. These domains frame the educational outcomes that must be conveyed within competency-based education programmes.

Purpose: this article explores the concept of competency-based education for midwives; first exploring the concept of competency itself, then providing examples of what is already known about competency-based approaches to curriculum design, teacher preparation, teacher support and assessment of student learning. These concepts are linked to the ICM competencies as the unifying construct for education of individuals who share a common definition and identity as midwives.

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Introduction

According to Ban Ki-moon, secretary general of the United Nations, 'of the eight millennium development goals, the two specifically concerned with improving the health of women and children are the furthest from being achieved (United Nations Population Fund (UNFPA), 2011).' In spite of significant global efforts to reduce maternal and infant mortality, millions of marginalised women and children die each year, many from preventable causes.

Access to a qualified competent midwife during pregnancy and the day of birth would prevent many of the 350,000 maternal deaths each year from pregnancy related complications and the high burden of newborn morbidity and mortality (World Health

Organization (WHO), 2011, 2012). Regrettably, there are profound shortages of fully qualified midwives (International Confederation of Midwives (ICM), 2010a) where they are needed most. In Ethiopia, for example the government projects a need for almost 10,000 midwives to care for its population of 91 million (World Health Organization (WHO), 2010). As of 2012, Ethiopia had fewer than 3000 midwives; and many of these individuals are not fully qualified according to the ICM definition (personal correspondence, Tegbar Yigzaw, 2012).

A body of research details the distinct advantages to maternal and newborn health outcomes that can be achieved as a result of expanding access to skilled birth attendant (including midwifery) services (Högberg, 2010; Liljestrand and Sambath, 2012). However, these advantages are often predicated on the assumption that the midwifery workforce shares a common definition and identity. Regrettably, a clear delineation of midwifery competencies is rarely addressed (Viera et al., 2012; Rosskam et al., 2013). A core set of midwifery competencies is essential to providing the high

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quality services that lead to the desirable health outcomes described in those articles.

The International Confederation of Midwives (ICM) developed its first list of midwifery competencies in 2002, with evidence-based updates in 2010 and 2013 (International Confederation of Midwives (ICM), 2010a, 2013a). The competency list defines the basic content of a pre-service midwifery education programme for the fully qualified midwife. Graduates of these programmes would be prepared to meet the expected scope of midwifery practice as defined by the International Confederation of Midwives (2011a). We now know what midwives need to be able to do upon entry into the profession. However, other organisations or governments have crafted their own, often competing, and often more limited, delineations of midwifery competencies and scope of practice. Attribution of improved outcomes to access to midwifery services cannot be made without a common understanding of a common set of services provided by the midwifery workforce across the inter-conceptual and childbearing time frame.

The identified need for midwives has resulted in recent efforts in both developed (e.g., Canada, Japan, Australia, New Zealand) and developing nations to increase the supply of midwives entering their workforce. Unfortunately, these efforts have at times resulted in a focus on quantity over quality. This has led, in some instances, to the scaling up of various cadres of multipurpose workers who typically lack the full range of midwifery competencies needed to provide essential services and may have limited authority (Fauveau et al., 2008; Adegoke et al., 2012), a phenomenon that is particularly notable in low resource countries. In addition, the global focus on providing a skilled birth attendant for the time of labour, birth and immediately post partum to attend to potential life-threatening complications during this time frame negates the importance of having the midwifery competencies needed prior to and during pregnancy that can prevent many complications from occurring.

A fully qualified midwife (International Confederation of Midwives (ICM), 2011a, 2013a) is the vital link between all levels of care needed by women during the reproductive years and the childbearing cycle. Among the most important attributes of the fully qualified midwife is the ability to promote health and prevent complications before they occur, referring those women needing medical attention early enough to prevent adverse outcomes for the woman or her newborn.

There are currently many pathways to midwifery (Fig. 1) (United Nations Population Fund (UNFPA), 2011). Midwifery education can be a stand-alone direct entry curriculum, post-registration (nursing), or threaded within a nursing curriculum. Programmes that combine nursing and midwifery education are

not supported by ICM as they necessarily limit the focus on the entire set of competencies needed for either profession.

Length of programmes can also vary widely. Midwifery content may be taught at a variety of levels ranging from hospital or Ministry of Health programmes to university undergraduate or graduate study. The International Confederation of Midwives takes no stance on degree requirements for midwives but has set a consensus standard duration of education of 18 months (post-registration) to three years (direct entry) depending on programme pathway (International Confederation of Midwives (ICM), 2010b, 2013b). The World Health Organization (WHO) has recommended a minimum of a baccalaureate degree (World Health Organization (WHO), 2009). The ICM essential competencies are the same regardless of programme level or duration.

Midwifery education in many countries currently follows a didactic curricular model where students learn through classroom lecture with little opportunity for skills practice, simulation and role play needed to develop critical thinking, values and the clinical decision making abilities needed for effective practice. Many midwifery students graduate having attended a limited number of women in labour (Fullerton et al., 2010) and some with minimal clinical experience in antepartum, family planning or newborn care. In addition, the assessment of student progress and readiness for practice may not be linked to the intended outcomes of learning and targeted clinical competencies (Lurie, 2012).

Frenk et al. (2010) and the Lancet Commission have proposed what they term a 'third generation' of educational reform, in which health professions education is linked to the specific context of the health system in any global setting. Competencies are proposed as the objective criterion for the classification of health professionals; underpinned by a common set of attitudes, values and behaviours that define every health worker as an accountable practitioner (i.e., competency-based education). The purpose of this article is to explore the concept of competency-based education for midwives; first exploring the concept of competency itself, then providing examples of what is already known about competency-based approaches to curriculum design, teacher preparation, teacher support, and assessment of student learning.

The core constructs of competence and competency

A very complex body of literature has generated a certain consensus about the components of both competence and competency; but no common definition of either construct has been uniformly favored (Fernandez et al., 2012). In general, competence is discussed in relationship to behavioural tasks, and competency in relationship to the personal characteristics that underpin the performance of those tasks (Fullerton et al., 2011; International Confederation of Midwives, 2011b).

Competence is sometimes defined through a description of actions that can be demonstrated or observed and assessed (the *behavioural or performance approach*). Successful performance is only possible in this approach when the necessary and underlying knowledge and understanding are present. A second perspective (the *generic approach*) defines competence as broad clusters of abilities such as knowledge or capacity for critical thinking that act together to promote expert performance. This approach ignores the context, assuming that these abilities will serve as well in a variety of circumstances. These two frameworks are sometimes interwoven (the *holistic approach*) by combining the general underlying attributes of the practitioner with the context in which they are applied, and allows the incorporation of ethics and values as elements in competent performance (McMullan et al., 2003). The intertwined set of specific task statements, and the explicit

Types of Pathways	Countries with Pathways	Number of Schools	
Direct Entry	40 (18 with private) (only pathway for 19)	545	Public
		609	Private
Combined with Nursing	25 (15 with private) (only pathway for 7)	310 (plus 451 in India)	Public
		322 (plus 3820 in India)	Private
Post-Nursing	26 (9 with private) (only pathway for 6)	360	Public
		40	Private

Note: Based on all 58 countries with the exception of number of schools, which includes data from 57 countries.

Fig. 1. Pathways to midwifery. Reproduced by kind permission of the UNFPA from www.stateoftheworldsmidwifery.com.

context of ‘professionalism’ in which they are enacted, have been referred to as ‘entrustable professional activities’ (ten Cate et al., 2010).

Competency, in its turn, has been variously described as a multidimensional construct that involves a complex interaction of cognitive concepts related to the gathering of information, and the processing of that information for translation into action. Competency, viewed as an integrated concept, implies that three intellectual and cognitive actions take place concurrently, i.e., a consideration of the relevant intellectual content, the enactment of activities conducted at a specified level of performance, and the situations in which those activities are to be performed. Thus competency is a complex *know-how* that is based on combining and mobilising knowledge, skills and abilities and external resources and then applying them appropriately to specific types of situations. It considers the context in which a task needs to be performed, thus allowing one to deal with different situations by drawing on concepts, knowledge, information, procedures and methods (Goudreau et al., 2009).

Competency-based education

The outcomes-based framework for the education of health professionals (midwives, in this discussion) requires essential transformation in the process of education, as reflected in the approaches to teaching, learning and student assessment. Remarkably, although competency-based education has received a good deal of attention and support within the health professions, the concept itself has not been consistently defined (Albanese et al., 2008; Frank et al., 2010b; Gruppen et al., 2012). Some authors define it as a product (e.g., ‘outcome-based education’) (Mukhopadhyay and Smith, 2010). Others define it by the processes selected for its enactment (e.g., ‘problem-based’ or ‘organ-system-based’) (Savery, 2006; Polyzois et al., 2010; Mkony et al., 2012). Frank et al. (2010a) offer the following definition, based on a systematic review of published definitions:

Competency-based education is an approach to preparing ... [health care providers]... for practice that is fundamentally oriented to graduate outcome abilities and organized around competencies derived from an analysis of societal and patient needs. It de-emphasizes time-based training and promises greater accountability, flexibility and learner centredness.

The specific definition of CBE for the discipline of midwifery is a curriculum or programme of study that has as its primary learning outcome the acquisition and demonstration of all of the International Confederation of Midwives (ICM) Essential Competencies for Basic Midwifery Practice (International Confederation of Midwives, 2012). Competency-based education in midwifery uses the seven evidence-based ICM competency domains and their associated knowledge, skills and professional behaviours as the direct link between curriculum content and the expected outcome of learning – the preparation of a fully qualified midwife ready for practice.

Elements or characteristics of CBE

Although there is no common definition of CBE, the literature on CBE offers a number of elements or characteristics that are reported in common, when CBE is the topic of discussion. These elements are depicted in Fig. 2 (Frank et al., 2010a; Jhpiego/Maternal Child Health Integrated Program (MCHIP), 2011). CBE places the emphasis on teaching and learning strategies that engage the learner as an active participant in all aspects of the process of acquiring the knowledge, skills and professional abilities needed to demonstrate competent practice in a specific

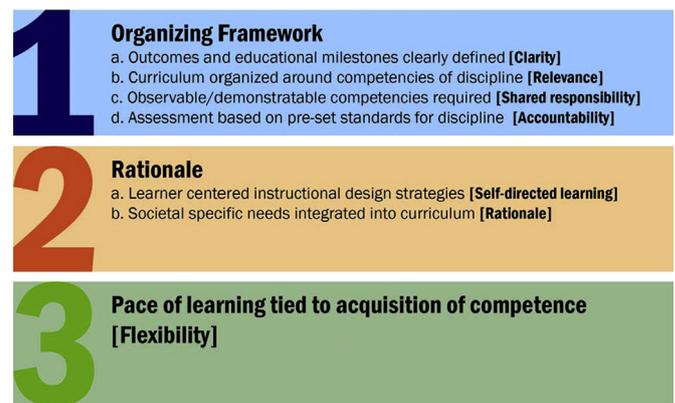


Fig. 2. Common themes/elements of competency-based education.

discipline (Morcke et al., 2012). The intended outcomes of learning for performance of the professional role (the specific competencies) are made transparent to all stakeholders (du Toit et al., 2010).

The building blocks of competency-based education

The building blocks of competency-based education are content, context, critical thinking, and reasoned decision-making that create a logical sequence of courses. Competency-based education can be pursued through various approaches to curricular or instructional design. However, whatever the design, all curricula need to be evidence-based and outcome-focused. All teaching and learning strategies need to be matched to their learning domain (psychomotor, cognitive, affective). Active learner participation and accountability must be encouraged.

The term ‘curriculum’ itself refers to a series of discrete activities, carried out in a logical sequence, with back and forth reflection for congruency, that culminates in a clear description of what learners are expected to know (theory) and to demonstrate (skills and behaviours/attitudes in practice) at the time of completion of a programme of study (International Confederation of Midwives (ICM), 2012).

A curriculum is a dynamic process that must reflect the changing realities of professional practice in an ever-changing complex multicultural context. Instructional or curriculum design in a CBE programme begins with agreement on the competencies to be demonstrated at the end of a programme of study (exit outcomes). Therefore, curricula for programmes of midwifery studies should reflect the competencies promulgated by the ICM, as they represent global consensus of ICM member countries about current evidence-based standards and practices. The ICM *Essential Competencies* represent the minimal standard for the instructional outcomes and content of any midwifery programme (International Confederation of Midwives (ICM), 2010a, 2013a).

Development of the curriculum of midwifery studies is based on clear statements of mission, philosophy and programme outcomes. ICM core documents can inform this process (International Confederation of Midwives (ICM), 2008a, 2008b, 2010b, 2012, 2013a, 2013b). The curriculum itself reflects the assignment of content (specific items of knowledge or skill or professional behaviour) into instructional units or courses; each part building to the whole. Each individual unit must reflect the important relationship between intended learning outcomes, the content relevant to those outcomes, the way in which the content will be presented (the teaching/learning design), required learning resources and the student assessment methods. This process is commonly called ‘content mapping’.

Reasoned, deliberate decisions must be made on placement of the content within the framework of the full programme of

studies; including planning for directly supervised clinical practice in appropriate venues. Learning should move from the simple to the complex, from the known to the unknown. Each unit should provide a foundation for the units that follow, with increasing complexity and performance milestones that define progress toward the goal of the fully qualified practitioner.

Teaching and learning strategies that support competency development within each unit of study and domain of learning are then selected (MacLean and Scott, 2011). The strategies should be learner-centered, and encourage active learner participation and accountability for individual learning and performance. Practice disciplines such as midwifery require placement of students with clinical teachers in appropriate clinical sites that can offer multiple opportunities for learning, under direct supervision with a qualified clinical teacher.

The final step in curriculum development is the selection of evidence-based assessment strategies (discussed below). Teacher, course and programme evaluation are important in determining the overall effectiveness of the CBE curriculum. The ICM *Global Standards for Midwifery Education and Companion Guidelines* (International Confederation of Midwives (ICM), 2010b, 2013b) offer a framework for evaluating any midwifery programme based on quality indicators.

Competency-based teaching and learning

Competency-based education requires competency-based teaching (Thompson et al., 2001; Srinivasan et al., 2011). Midwifery teachers need to be themselves competent in the practice of midwifery; with a commitment to self-reflection and life-long learning. They need to be committed to the principles of CBE in the context of adult and other contemporary learning theories, which includes flexibility in the time needed for learners to acquire and repeatedly perform or demonstrate the expected competencies, within a supportive and enabling environment for learning. They need to encourage student self-direction in the learning process (Murad et al., 2010), and the development of new ways of thinking about what they are learning (critical thinking and reflection) and their application to practice (clinical reasoning). The defining attributes of competency-based teaching, gleaned from a wide variety of sources in the published literature, are presented in Fig. 3. The inter-relationships among the various attributes are based on (a) adult learning theories, (b) strategies to engage, support, and encourage active learner participation in their own

learning, (c) knowledge of the domains of learning and how they require different teaching strategies to be successful, and (d) a logical sequencing of expected outcomes from known to unknown, from simple to complex. The most important attribute for success in learning is the respectful partnership between teacher and learner.

Competency-based learning is defined by a set of attributes of the student-learner, that complement the principles or attributes of competency-based teaching. Learners should become aware of their preferred learning style (Vaughn and Baker, 2008; Holtbrugge and Mohr, 2010), be clear in their understanding of what is expected (intended learning outcomes), and take responsibility for their own learning. Self-motivation, goal orientation, critical thinking, and a commitment to life-long learning and ethical practice contribute to success.

Student assessment

Formative assessment: new measures and strategies

Competency-based teaching requires a parallel shift from a primary focus of learning outcomes concentrated on student acquisition of knowledge of the subjects taught to a primary focus on performance, i. e., on competencies acquired (student demonstration of critical thinking and essential skills) (Meyer-Adams et al., 2011). This shift does not negate the need to provide the formative and summative assessments that are essential to documenting a students' progress across the term of a course or of a curriculum of studies (Kirschner et al., 2006). Knowledge does matter! However, competency-based assessment places its emphasis on the manner in which the learner can demonstrate translation of knowledge into practice, given circumstances of time and place.

Formative assessments conducted by both student and teacher throughout the period of learning offer the opportunity to identify the pace of progress of individual students; enabling early intervention for those in particular need, and allowing acceleration for others. Achievement, not time, is the driver. Many students will progress satisfactorily through the programme and will be able to take advantage of its inherent flexibility, which allows them to study areas of interest in greater depth. Students who have difficulty in a particular area will be directed by themselves or their advisors to undertake learning and assessment activities that will help them improve and ultimately attain competence in those areas. This form of remediation not only addresses weaknesses,

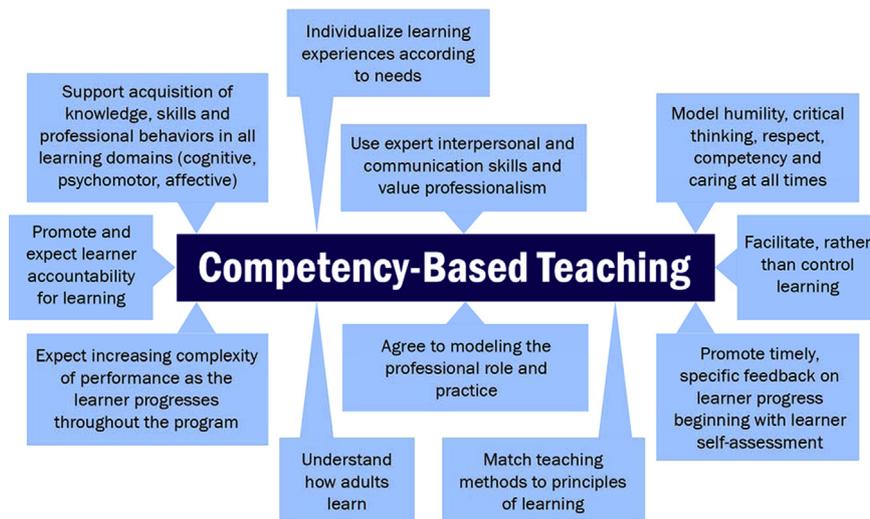


Fig. 3. Attributes of competency-based teaching. Adapted from Knowles et al. (2005), Thompson et al. (2001), Brookfield and Holst (2011).

but helps the student to develop the capacity for self-reflection and lifelong learning (Henderson et al., 2005).

Students who are able to move forward at a faster pace create clinical opportunities and clinical space to be opened to others who require more opportunity to acquire the necessary competency in any particular skill (Holmboe et al., 2010). Thus assessment needs to be more continuous and frequent, and must be based on specific external criteria that define the intended outcome of learning. These are sometimes referred to as 'benchmarks of learning,' and are represented by statements of expected levels of performance by students who have progressed to a certain point in the education programme.

Formative assessments in CBE also require a more intensive level of faculty (including clinical teachers and clinical preceptors) direct interaction with and observation of student learners. Standardised tests of knowledge can help to determine progress along the cognitive domain of required knowledge. Standardised skills assessments can be used to measure the ongoing development of psychomotor, decision making and communications skills. Direct interaction and observation are also, of course, essential to measurement of skills acquisition in the psychomotor domain of practice. In addition, direct interaction and observation are necessary to determine demonstration of certain competencies in the affective domain that define the concept of 'professionalism' (Aguilar et al., 2011), such as, abilities related to inter-professional collaboration, and respectful behaviour toward clients and other providers.

Consequently, the CBE movement has been challenged to identify new approaches to measurement of these outcomes. Of equal importance is the documentation that these approaches are valid and reliable measures, i.e., that they are capable of measuring the intended outcome of learning (Fromme et al., 2009; Andreatta et al., 2011), and can be expected to generate similar data from time-to-time and across various observers. Lurie et al. (2011) also urge vigilance to be certain that the competency that is being measured by any valid and reliable tool is itself an issue (an item of knowledge or skill, or a particular individual attribute) that is important for professional development, i.e., truly related to the context of the actual scope of practice of the health occupation or profession.

It is acknowledged that a variety of assessment tasks are required to yield the type of data that will allow a determination of whether the entire set of expected outcomes of learning have been addressed. The literature is rich in its report of a variety of new measures, particularly those that are advantaged by rapid expansion of computer-enabled or assisted technology (Amin et al., 2011) and assessment of their validity in the context of CBE. These include, but are not limited to, simulations of clinical situations (Cook et al., 2011; Zigmont et al., 2011; Lewis et al., 2012), the use of standardised patients (Hingle et al., 2011; Smithburger et al., 2012; Weaver and Erby, 2012), objective structured clinical examinations (Jahan et al., 2011; Smith et al., 2012) and computer-based games that promote development of critical thinking (Sullivan, 2012) and decision-making skills (Rice, 2007; Green, 2012).

Even those techniques and tools that have been documented to be effective measurement strategies must continue to be assessed, as the nature of health care changes over time (ten Cate et al., 2010). Individual competency varies as the environment changes (Sportman, 2010). Faculty share responsibility for defining expected levels of performance across the continuum of learning. These benchmarks may vary, depending on the opportunities and challenges to acquisition of competencies that are inherent in, and perhaps unique to, the specific learning environment.

Summative assessments of learning

Summative assessments of learning within CBE must necessarily be linked to demonstration of the overall intended outcomes

of learning. Portfolios have emerged as a verifiable, criterion-linked, documentation of such achievement (McMullan et al., 2003; Sowter et al., 2011; O'Sullivan et al., 2012).

Portfolios typically contain bodies of documentation related to the quantity and type of clinical encounters experienced by the student, and correlated documentation of assessments of student learning in these contexts (Dannefer et al., 2012). Portfolios can be enriched by inclusion of items such as clinical journals that emphasise reflective thinking about the learning process, with particular inclusion of reflections on the ethical and legal considerations encountered in the context of that learning. An emerging innovation is the inclusion of reasoned thinking within these portfolios, in which the student learner documents a sort of 'point/counterpoint' debate with self, about alternative approaches that might have been taken, and the predictable advantages or consequences of each choice (Saltman et al., 2012).

Assessment at a distance

Emerging approaches to design of midwifery education programmes have highlighted the need for valid and reliable measures of the assessment of learning, when students are learning in settings at a distance from the sponsoring educational institution. The first challenge occurs when the majority of teaching and learning occurs primarily via use of computer-mediated technology. The need for direct interaction with and observation of student learners, previously described as an essential element in competency-based assessment, needs to be accommodated via proxy approaches. High-resource countries might be able to utilise video-streaming for assessment purposes, such as evaluation of performance of certain clinical skills. Similarly the opportunity for peer-interaction and peer-critique (social networking) is accommodated within the software that underpins the distribution of computer-mediated education programmes.

The second challenge occurs when education programmes need to rely on the services of clinical teachers or preceptors to supervise students in community-based settings to perform these observations on behalf of programme faculty. The use of standardised tools, such as checklists, is a common approach. Advances in mobile phone and SMS technology have improved the ease and reliability of teacher/student/preceptor communication and feedback.

Faculty development for competency based assessments

The validity and reliability of any measurement approach within CBE is necessarily linked to the ability of the assessors to use those new tools in ways that are both valid and reliable. Teachers must themselves acquire new competencies in using the emerging assessment modalities to evaluate the traditional outcomes of knowledge, skills and professionalism (attitudes and behaviours) (Molenaar et al., 2009; Dath and Iobs, 2010; Holmboe et al., 2011). Clinical preceptors must receive the support that they require in order to apply tools and approaches in a way that is consistent across all community-based settings in which students are placed for learning (Wilkes, 2011).

A further challenge has emerged for teachers to acquire competency to assess student learning within the context of the evolving health care system. This includes assessment of student performance within inter-professional teams, quality improvement, and the application of principles of evidence-based practice.

Discussion

The competency-based education approach to teaching and learning has generated many benefits to midwifery education on a

global scale. The primary benefit is, of course, that CBE creates an overarching linkage connecting the theoretical and clinical components of education prior to graduation and deployment into the workforce (Harris et al., 2010). The appreciation for CBE developed during their formative years of pre-service education will promote the graduates' continued use of this important approach as they strive to maintain and adopt new competencies needed throughout their professional career.

CBE as an educational movement has its own challenges, the first of which is to generate the evidence that the approach actually works in the effort to promote student learning. Jayasekara et al. (2006) offer a systematic review of comparative studies that attempt to distinguish between the effectiveness of various approaches to curriculum design in nursing. These authors note the paucity of studies that address overall effectiveness of any approach. Glasgow et al. (2008) conducted a similar systematic review focused on primary health care service delivery. They concluded that any evaluation of effectiveness of CBE had first to ensure that there was congruence between the outcome competencies cited for the particular health profession and the country burden of disease and workforce-related outcomes of interest.

Competency based education requires explicit definition of intended learning outcomes and their application to clinical practice. Nevertheless, the definition of outcome competencies for the various health practitioners does not in and of itself guarantee quality of education, nor subsequent ethical and socially accountable practice.

Further, these competencies cannot be achieved without effective educational techniques, and competent educators armed with the appropriate resources needed to support their development, particularly in the context of the complex realities of health systems in various global settings (Holmboe et al., 2011). This includes implementing a flexible time frame to achieve competencies, given the pace of individual learners, variation in the opportunities available for clinical learning in these same global settings, and the ever-pressured burden of countries to produce the volume of personnel needed to meet human resource requirements. There is little evidence at present that competency-based education will shorten the period of learning and thus help to relieve workforce shortages by accelerating entry into practice (Taber et al., 2010). Both accelerated and prolonged periods of learning must be accommodated for learners. Scheduling exposure to a variety of clients for each student can become a logistical nightmare unless teachers and students understand that the hours scheduled may not be needed by some and more may be needed by others. Using hours not needed for a given student means that there can be additional practice opportunities available for the student needing more clinical experiences. In addition, there are often breaks, holidays, and other down time for programmes that can be used for the student who needs more exposure to clinical practice. Programmes must also have a sophisticated understanding of the health system in which students are learning. For example, limited numbers of births may drive the need for student experience after normal classroom hours.

It is important to note that midwifery programmes often have a set minimum number of practical experiences mandated by the regulatory authority in the country in order to graduate from/complete the educational programme. However, completing this minimum number of experiences is not a guarantee of competent practice. What limits can or should be set in both of those circumstances? Can we truly promote CBE without developing regulatory frameworks that appreciate its key principles? In addition, new assessment tools and approaches will need to be developed for 'new' competencies such as teamwork, systems, and quality improvement, among others, to fully realise the promise of competency-based education (Hingle et al., 2011).

Conclusion

The 2011 *State of the World's Midwifery* report (United Nations Population Fund (UNFPA), 2011) noted that although there were promising education developments in some countries to produce fully qualified midwives, 'optimal standards are unmet' (Executive Summary, iv). The report called for strengthening midwifery curricula, teachers, resources, and directly supervised clinical practice for every midwifery student.

Competency cannot be achieved without properly prepared teachers working within an enabling environment. All countries must take the necessary steps to ensure that midwifery teachers and clinical preceptors have access to continuing professional development opportunities that prepare them not only with required educational competencies and clinical knowledge and skills updates, but also with the ability to role model the values and ethical principles needed for competent midwifery practice and optimal development of the profession. Midwifery educators must also be able to procure and maintain access to essential resources such as ample work and teaching space, libraries, computers, simple anatomic models/simulators and clinical equipment and supplies.

In summary, CBE is a dynamic, complex approach to learning a professional role, tailored to the health and illness needs of a given society. The advantages of this approach to education far outweigh the disadvantages of the more traditional approaches to health professions' education that rely more on knowledge and skills acquired than on whether that knowledge and those skills can be appropriately and reliably applied in the ever-changing complex clinical situations that graduates will face (Saucier et al., 2012). Preparing health professionals for future practice requires a commitment to the reality of the contemporary health care environment, and the specific needs of those seeking such services.

Those involved in leading global, regional and national efforts to expand access to midwifery through the preparation of the next generation of midwives must be engaged in developing policies and regulations guiding midwifery education within their countries. There must be a focus on a clearly articulated consensus definition of midwifery competency and best practices for its development.

Conflict of interest

All authors provide consultant services in the fields of education and assessment. They have no conflicts of interest related to the preparation of this particular article.

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