



Contemporary Issues

Competence and competency-based nursing education: Finding our way through the issues

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SUMMARY

The language of *competence* is widely utilized in both the regulation of nursing practice and curricular design in nursing education. The notion of competence defines what it means to be a professional, although it is not the only way of describing nursing practice. Unfortunately, there is much confusion about the concepts of competence, competency, and competency-based education. As well, the notion of competence, despite its global popularity, has flaws. In this paper we will disentangle these terms and critique the use of competence frameworks in nursing education.

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Disentangling the Terms

Competence

The term *competence* refers to a quality or state of being. *Competence* is a holistic term that refers to a person's overall capacity or *ability* to do something successfully (ten Cate and Scheele, 2007). Whether one has successfully achieved competence is complicated—as views range from achieving minimum standards to independent practice (Carraccio et al., 2002). The view of competence as the “command of pertinent knowledge and/or skills” considers that the competent person “not only possesses the requisite competencies but is also able to use them” (Eraut, 1994) and make appropriate decisions and judgements according to the context. Epstein and Hundert (2002) suggest that competence “builds on a foundation of basic clinical skills, scientific knowledge, and moral development. It includes a cognitive function...; an integrative function...; a relational function...; and an affective/moral function. [...] Professional competence is developmental, impermanent, and context-dependent” (pp. 226–227). It is the integrative and context-dependent aspects that are at the heart of competence and distinguish the competence framework from previous conceptualizations that focused on the de-contextualized abstractions of knowledge, skills, and attitudes and a strictly behavioural approach (Epstein and Hundert, 2002; ten Cate and Scheele, 2007; ten Cate et al., 2010).

Competency

Competency represents the integration of knowledge, skills, values and attitudes (Carraccio et al., 2002; Eraut, 1994; Frank et al., 2010). Generic competencies are valid across different clinical contexts, whereas specific competencies are linked to specific areas of practice (Eraut, 1994). Definitions of competence vary by profession and country. For example, in the English language the terms *competence* and *competency* are often used interchangeably (Khan and Ramachandran, 2012). This mixed usage contributes to the growing lack of clarity. Khan and Ramachandran (2012) recommend that in medical education literature, “the term ‘competency’ should strictly be used for the ‘skill’ itself while competence is the ability to perform that skill and the attribute of the performer” (p. 922).

Competency-Based Education

Competency-based education is an “outcomes-based approach to the design, implementation, assessment, and evaluation of [...] education programs” (Frank et al., 2010, p. 641). Anema (2009) defines competency-based education as one in which “assessments ensure that graduates... have the essential knowledge, skills, and attitudes to enter the workforce” (p. 3). The essence, then, of competency-based education is that it focuses on learner performance and learning outcomes in reaching specific objectives and curricular goals.

Competence: Trouble in Paradise?

There are some problematic areas in the operationalization of competence. The areas that pose the most significant issues for nursing

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education are: assessment and measurement of clinical competence; general versus specific competence; and, divergent values among stakeholders.

Assessment and Measurement of Clinical Competence

Competence is difficult, perhaps impossible, to measure (National Education Framework, 2008; Yanhua and Watson, 2011). Reliability and validity issues plague clinical evaluation tools, as do competing tensions of sensitivity and specificity and the need to balance a tool's manageability with its exactness (Morris et al., 2012; Watson et al., 2002; Windsor et al., 2012). Few clinical evaluation tools are ever tested for their reliability or validity (Andrew et al., 2008; Watson, 2002). It is also problematic to determine at what level of performance a student should be deemed competent (Watson, 2002; Watson et al., 2002). Clinical failure on the grounds of clinical incompetence is quite rare (Heaslip and E, 2012; Hunt et al., 2012), which may indicate a problem of sensitivity of the instrument in use or system issues (Heaslip and E, 2012), not the competence of the student.

The holistic nature of competence, which "identifies broad clusters of general attributes which are considered essential for effective performance," means that competence is "more than the sum of individual competencies" (Garside and Nhemachena, 2013, p. 543). This definition resists the breaking down of competence into more manageable and measurable pieces, and objective assessment of competence suffers as a result. Procedural skills may appear to present opportunities for objective assessment of competence; however, *performance* stands in as the observable proxy for *competence*, and therefore assessment depends upon the perception and judgement of evidence about performance (Epstein and Hundert, 2002; Khan and Ramachandran, 2012; Watson et al., 2002). The determination of competence is often influenced by a student's level of comfort, confidence, and self-efficacy. As well, multiple observations are required to determine if a nursing student is competent, and observations must include a variety of contexts and consider more than one perspective (Epstein and Hundert, 2002). A common assessment strategy in nursing education is objective structured clinical examinations (OSCEs). At first glance these seem to offer hope in the determination of competence, although OSCEs cannot measure competence *per se* (National Education Framework, 2008). Not only are OSCEs resource-intensive for nursing schools (National Education Framework, 2008; Palese et al., 2012), the determination of scores from checklists and how to make pass/fail judgements about students remain problematic areas; overall scores may be unreliable and may not even predict the transferability of the skill to the clinical setting (Brannick et al., 2011; Morris et al., 2012; Richter Lagha et al., 2012).

General versus Specific Competencies in Nursing Education

Globally nursing education has moved to a competency-based curriculum as part of the shift from 'training' to 'education' that occurred in the 1980s and 1990s (Bradshaw and Merriman, 2008; Windsor et al., 2012). It seems that in this shift, clinical nursing skills began to take a back seat to other priorities. A set of general competencies tends to be so vague that it fails to demarcate nursing from other professions while also failing to define nursing practice (Cowan et al., 2007). While general competencies are often used to assess students, it may be of greater benefit (and challenge) for students to attain specific nursing competencies. If students lack exposure to basic nursing skills, they may gain insufficient experience for even minimal competence (Bradshaw and Merriman, 2008). Clearly, an important distinction must be made in nursing education between being in possession of certain general qualities and mastering particular nursing acts; the delineation of such distinctions may be the source of much fruitful discourse between stakeholders.

Divergent Values among Stakeholders

There is often a lack of shared assumptions between educational institutions, employers, patients, and regulatory bodies about what to expect from new nursing graduates (Bradshaw et al., 2012; Eraut, 1994; Tilley, 2008). Patients, for example, understand the foundation of competent nursing practice to be technical competence, which they assume to be present by virtue of the nurse's employment and registration (Calman, 2006). Conversely, in my (Pijl-Zieber) observation, nursing faculty often decry students' enamourment with technical skills, leading to confusion and value conflicts for students, who in general hold medically elite skills in high regard and who require confidence in the discharge of these skills in order to feel comfortable entering the clinical setting.

At the same time nurses and preceptors may be concerned that "students can pass their competencies and not be competent in fundamental nursing skills" (Butler et al., 2011, p. 301); it is theoretically possible for a student to "never be assessed on essential nursing skills" prior to employment as a registered nurse (Butler et al., 2011, p. 301). Nursing education seems to have unhitched nursing skills from nursing competence, and the relationship between the two is more unclear than ever. While the goal of hospital-based schools of nursing was to produce a "competent" bedside nurse (Watson et al., 2002), has this vision been lost in baccalaureate nursing education? Watson (2002) once described the search for competence as a "bottomless pit" (p. 428) and he argued that despite "several years of competence-based education in nursing, health service managers remain unsatisfied with what nurses are able to do" (p. 428). Is it possible that educators are focusing their efforts on general competencies such as critical thinking and problem solving at the expense of specialized nursing knowledge and skills? This bifurcation of values is perhaps a result of the lack of consensus on the definition of competence within nursing and health care (National Education Framework, 2008).

The Future of Competence

Competence will likely remain key in nursing practice and education for the foreseeable future. There is a need for collaboration among all stakeholders to develop a consistent approach to competence assessment in nursing education (National Education Framework, 2008). A competency-based curriculum, in consultation with stakeholders, should identify both critical nursing activities and general competencies (ten Cate and Scheele, 2007). Competency statements to describe performance should be described in more concrete terms to avoid confusion and ambiguity (National Education Framework, 2008). The role of procedural skills should be re-evaluated and have a stronger presence as part of competencies (National Education Framework, 2008), but not "at the expense of making visible and of compensating the strong intellectual [...] skills and practices that are integral to nursing work" (Windsor et al., 2012, p. 218).

Digital approaches to competence development are increasing and such tools may contribute to students' professional development through timely, frequent and specific feedback (National Education Framework, 2008; Ross et al., 2012). Database technologies also offer promising solutions to complex matrices that track levels of competence, achievement of competencies, skills practice, and reflection. Such technologies could be shared, at least to some degree, between nursing student and nursing instructor, much like clinical evaluation tools are shared on paper, to jointly track skills, knowledge, abilities, critical thinking, clinical reflection, and developing competence. Multiple modes of assessment should be incorporated (National Education Framework, 2008), including learning plans that are shared with the instructor, 360° feedback using QR codes, self-assessment, examinations, peer feedback, direct observation, and even links to learning aids, generating a unique 'competence fingerprint' for each student.

It seems that there is no approach to *competence*—regardless of definition or underpinning discourses—that is airtight in determining the degree to which students are competent. Leaders in nursing education, in consultation with stakeholders, need to arrive at a definition and a common set of values and competencies for acceptable nursing practice at the undergraduate level. Database technologies can perhaps help educators and students. While competence is a necessary goal of pre-registration nursing education, there is still much work that needs to be done to make it a workable reality.

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