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Setting up a professional licensure examination in nursing (Plen) in a university teaching hospital in Karachi, Pakistan

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Abstract

Curriculums have to be evaluated. Examinations are measurable outcomes for students, faculty, and community and service providers. Putting value and effort in outcome measurement is vital for a school of nursing’s reputation and accreditation (Clifton & Schriner, 2010). Nurse education in the country in Pakistan will be highlighted. The development and structure for setting up of Professional Licensure Examination will be discussed. A process for developing a test back will also be highlighted. This paper will describe the challenges, hurdles and lessons learnt along the way from conceptualization to operationalization and delivery of a professional licensure examination for a four year nursing baccalaureate curriculum. The challenges and issues will be highlighted as they have presented over the last eighteen months. The experiences and lessons learnt will go a long way in assisting other schools of nursing in the country and the region in implementation licensure examinations.

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1. Introduction

The history of nursing education in Pakistan parallels the country’s independence (Carbonu & Soares, 1997). At the time of independence in 1947, the nursing situation was especially serious and demanded immediate attention (Soares, 2000). In 1947 there was only one school of nursing and today it has expanded to 109 schools of nursing (76 in public and 33 in private sector), 141 schools of midwifery, 26 public health schools and college of nursing (Akram & Khan, 2007; National Health Policy, 2009).

Like many other countries, the government is responsible for ensuring the quality of service delivery, monitoring and surveillance, continuous professional development of health care work force, and revision of curriculum. Quality of health care providers can be assessed through a valid and reliable system of credentials and certification. In Pakistan, the system of credentialing is questionable. For health care professionals, the license for practice is issued upon qualification and it’s valid for life time with a minimal fee. It does not require any further certification examination or an accumulation of continuing education credits for maintenance of licensure. A local newspaper reported a survey conducted by United Nations International Children’s Emergency Fund (UNICEF) that 90% of nurses qualify for their exams without having theoretical knowledge and hands on practice resulting in unsafe patient care (The News, 2010). Another distressing situation of our education system is the lack of expert teachers,
which eventually results in ineffective curriculum at schools, high schools, nursing schools, and medical universities. However, for the first time in 2006, Pakistan Nursing Council (PNC) in collaboration with the Higher Education Commission (HEC) has established a new national generic curriculum, referred as HEC /PNC curriculum, (Dias, Ajani & Mithani, 2010).

According to PNC regulations each university offering BScN would prepare and conduct its own licensure examination at the end of the second and fourth year of the academic program. The successful completion of both examinations results in issuance of license by PNC. Therefore, a private teaching university in Karachi Pakistan at their School of Nursing set up a professional licensure examination for its undergraduate nursing program. It was given the acronym PLEN (Professional Licensure Examination in Nursing). Professional Licensure Examination in Nursing (PLEN) ensures credibility for the baccalaureate nursing curriculum. The PLEN examination has MCQs and a viva/oral examination administered at the end of Year two and Year four.

2. Literature Review

Putting value and effort in outcome measurement and certification is vital for a school of nursing’s reputation and accreditation (Clifton & Schriner, 2010) as they determine graduates’ competence and protect public from unsafe practice. There is enormous amount of literature available in nursing education that reveals the implementation of educational strategies to improve the quality and success of licensure exams. One of the most common and an effective strategy is the implementation of comprehensive testing system (Jones & Bremner, 2008).

The health science discipline relies heavily on multiple choice questions as a method of student assessment when there is a large content to be assessed (Tarrant, Knierim, Hayes & Ware, 2006). The format of objective multiple choice questions (MCQs) exam, appear to be uncomplicated; however it requires lots of efforts to ensure its validity as it is prone to have the formation errors (Brady, 2005; Holsgrove & Elzubeir, 1998). Nursing educators must be careful and committed in constructing objective questions, as poorly formatted questions cannot evaluate the students’ competency (Brady, 2005). The threat connected with MCQ is the misalignment of tests with the content as many times it lacks lack critical thinking and application (Mortan, 2006). Tarrant, Knierim, Hayes, and Ware (2006) concluded that among 2770 MCQs reviewed in one nursing school contained 90% questions with low cognitive level and had writing errors. The key components for ensuring success in licensure exams are an effective curriculum delivery (Davenport, 2007) and objective testing using application level questioning (Haleem, Evanina, Gallagher, et al, 2010).

Along with MCQs examination, literature also acknowledges oral/viva exams as an effective indicator to measure the clinical judgment of professionals (Rushton & Eggett, 2003). This mode of assessment has been well associated with students’ competency and performance (Sidhu, Mellory, & Regehr, 2005). Therefore, the penultimate obligation of nurse educator is to understand the philosophy of curriculum, internalize educational objectives, ensure the validity of assessment tools, review questions and take feedback (Azer, 2003).

3. The PLEN Process

3.1 Formation of the PLEN committee

The major highlight of the PLEN process was to setup an MCQ bank for nursing both at the university level and in the long run to become a resource for the national nursing baccalaureate examination. This was a mammoth activity and underwent elaborate deliberations in the BScN meetings. A five member committee was formed which included the coordinators of all four years along with a science representative. This committee was headed by the Director of the BScN program.
3.2 Faculty preparation

Hayes & McCrorie (2010) maintain that faculty preparation for the assessment includes understanding curriculum outcomes, constructing valid and reliable assessment tools, types of exams, and testing time. In preparation for this exercise, an item writing workshop had been conducted by Department of Education Development (DED) in the preceding summer for all faculty members who would be developing MCQ’s for the PLEN examination. Moreover, all new faculty members had to undergo a one week mandatory Introductory Short course in Teaching & Learning in which MCQ development was part of the course outline. In this way, the faculty had been exposed to item writing guidelines and commonly encountered item writing flaws.

3.3 Validity of MCQs

Validity consists of numerous elements including content validity, face validity and construct validity (Hopkins, 1998). The validity of each of these elements must be determined to establish overall validity.

3.3.1 Content validity

Content validity by content experts takes into account both curricular contents as well as the ability of expected students within the program. (Hopkins, 1998). This will determine whether MCQs are relevant, appropriate, and representative of the construct being examined and or the cognitive process they are expected to measure. The process began by the collection of questions from the respective course coordinators. The course content covered nursing, basic sciences and humanities. The questions were then subjected to review by content experts in a multidisciplinary team including a representative from DED. To ensure the validity of MCQs, they were reviewed against the Table of Specification (TOS) of individual courses. The questions were then classified using Bloom's taxonomy (as cited in Brady, 2005) as C1 (Recall)/ C2 (Comprehension)/ C3 (Application). The approved questions were accepted for banking, whereas the remaining MCQs were sent back to the course faculty for further review and modifications.

3.3.2 Face validity

Face validity of MCQs is established by acceptable readability, clarity of content and writing, consistency of style and identification of errors in spelling, grammar and punctuation (Halaydna, 1999). The multidisciplinary team acknowledged face validity of the MCQs by reviewing the questions for ambiguity, significance, stems structure, distracters, and relevancy.

3.4 Viva / Oral examination

The other part of the PLEN was the viva/oral examination. Quality was maintained by using stringent criteria for internal and external examiners. This strategy was implemented to avoid systemic bias for assessing knowledge and skills. The viva exam included the nursing and basic sciences courses.

4. Limitations

Numerous hurdles were encountered from conceptualization to execution of the process. The factors which restrained the process included readiness of faculty members, lack of expertise in constructing questions, time limitations, and prevailing geo-political conditions of the country.
5. Conclusion

The journey of structuring and setting up the PLEN examination was indeed one of the most learning experiences in our academic endeavours. This review of MCQs and setting up of MCQs bank in nursing is a clear reflection of the pioneering work done by the PLEN committee. The process required plenty of efforts and commitment from the faculty. The operationalization of the PLEN mandated physical, technical and human resources. The outcome of this activity brought a ripple effect and faculty began to develop quality MCQs for other courses in other nursing programs as well.

The experience of setting up MCQ banking will be the guiding principle in establishing a system of MCQ banking at the national level in collaboration with PNC. To strengthen the overall system of examination in the baccalaureate nursing curriculum, it is highly recommended to initiate dialogue with other schools of nursing for capacity building. The question remains open for debate and discourse among nurse educators in Pakistan if the country wishes to move forward to set up a high stakes examination for its baccalaureate nurses to improve the quality nursing education.

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References


