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Author

Xu, X, Wu, X, Wang, J, Davey, AK

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COUNTRY REPORT

Pharmacy Education Quality Assurance in China: Moving Towards a National Accreditation System?

XIAOYUAN XU¹, XIAMING WU¹, JIPING WANG², ANDREW K DAVEY²

¹Office of Educational Administration, China Pharmaceutical University, Nanjing, 210009, China

²School of Pharmacy and Medical Sciences, University of South Australia, GPO Box 2471, Adelaide, SA 5001, Australia

Abstract

Pharmacy programs in the UK, USA and Australasia have long been subject to assessment, initially by professional accreditation bodies and more recently by national university quality assurance agencies. This has had positive effects in terms of quality despite concerns around increased costs, workload, and stifling of innovation in curricula. The process of assessment of pharmacy courses is relatively new to China. This has come by way of reform and implementation of assessment across the entire higher education sector which has led to positive outcomes across the board. However, pharmacy-specific assessment processes are yet to be implemented. This paper details recent developments in assessment of pharmacy programs in China and compares the current status and future direction with Western counterparts.

Keywords: *Education Assessment, Quality Assurance, China, Pharmacy*

Context

Assessment of educational institutions and courses in China is a relatively recent development. In common with many Western countries (Hartwig, 2003), the main driver for educational assessment is the popularisation of mass education alongside which there has been an increase in expectations regarding quality. The basic task of education assessment in China is to systematically collect information on educational institutions to assess the educational goals and standards, to evaluate the institutional proficiency and educational quality, to provide evidence for further improvement, educational reform and to improve administrative processes. The main reason for this is to strengthen the ability of the higher education institutions to adjust to social needs, to implement robust monitoring systems, and to improve the institutional proficiency and education quality. However, as education assessment in China is in its infancy, there is still uncertainty regarding its implementation and future direction. As formal education assessment in China develops, it is timely to compare the systems being implemented in China with those of the West, particularly with regard to pharmacy and pharmaceutical education.

Assessment of Pharmacy Courses in the West

Quality assurance in undergraduate education occurs on many levels. Individual academics receive feedback from student evaluations and peer review, and are able to reflect on teaching and learning outcomes following observation of student performance in assessment tasks, an important determinant of whether the learning objectives intended by the academic actually translated into the desired outcomes. Furthermore, the academic more often than not forms part of a teaching team within a course that will review teaching and assessment, sometimes with the help of external examiners. Course teaching and grades are then routinely scrutinised at a discipline level, which is itself subject to School, Divisional, and University review.

The drivers for the internal assessment practices listed above are various. Clearly an interest in ensuring the best possible learning outcomes for students is a primary motivator. However, universities themselves are increasingly being assessed by external national agencies such as the Quality Assurance Agency (QAA, established 1997) in UK, the Australian Universities Quality Agency (AUQA, established

*Correspondence: Dr Andrew K Davey, School of Pharmacy and Medical Sciences, University of South Australia, GPO Box 2471, Adelaide SA 5001. Tel: +61 883021127 Email: andrew.davey@unisa.edu.au

2000) in Australia, and The Council of the Higher Education Assessment (CHEA, established 1996) in the USA. In addition, the appearance of university rankings or national/international 'league tables' based on factors such as student/graduate questionnaires, graduate employment and undergraduate attrition rates, can have serious implications for a university's reputation and hence its competitiveness for attracting students, high calibre academics and, ultimately, funding. To ensure continued viability, universities must ensure that they score highly in those areas likely to impact on their national standing. While these assessment processes are becoming the norm, they are subject to criticism for various reasons (Florence, 2002). One danger is that achieving the right 'score' becomes more important than learning outcomes. Experienced academics understand that poor quality teaching can lead to poor student evaluations, but this is not always the case and there are ways of 'improving' scores in student evaluations of teaching that are detrimental to learning outcomes (e.g. spoonfeeding, dumbing-down). Thus, understanding the context of the teaching along with appropriate interpretation of student scores and accompanying comments can help ensure quality teaching and learning. Unfortunately, when such data is used and published to compare university performance the context is not always obvious and in a climate of competition this creates a downstream pressure to improve 'scores' under the assumption that this reflects learning outcomes.

As national accreditation bodies become more widespread, one finding is that pharmacy courses appear to score very well in comparison to other courses within a university (Marshall, 2002). One possible reason for this is that national accreditation of universities is a relatively recent phenomenon in many countries, which most university departments are still coming to terms with. Within this context, professional programs such as pharmacy have a history of being subject to scrutiny for the purposes of professional registration of their graduates. For instance, the American Accreditation Council for Pharmacy Education and the Royal Pharmaceutical Society of Great Britain have been responsible for accrediting pharmacy degrees since 1932 and 1954 respectively. Whether the professional accreditation process has resulted in the good performance of established pharmacy courses within a university due to increasing the quality of teaching and learning over many decades, or whether pharmacy schools are simply more experienced at dealing with auditors is a matter for debate. In reality it is probably a combination of the two.

The reasons that pharmacy schools in countries such as the US, UK, Australia and NZ are subject to accreditation by professional bodies as well as normal university QA systems is primarily to protect public safety by ensuring that pharmacists are competent. In addition, having a standardised accreditation criteria and procedures allows registering authorities from other jurisdictions (whether states or other countries) to assess the quality of pharmacy education, which is particularly important where mutual recognition agreements are in place (Australian Pharmacy Council 2007).

Accreditation involves assessment of program content, structure and assessment against a set of required skills, knowledge and attitudes. It may also involve the assessment

of the human and physical resources and scholarly environment. Clearly the requirements determined by accreditation bodies, and indeed the make-up of the accreditation committees will, over time, shape the way in which pharmacy students are taught, as pharmacy courses evolve along with the aims of the committee. For instance, the key philosophy within the indicative curriculum of the accreditation criteria that guides the New Zealand and Australian Pharmacy Schools Accreditation Committee (derived largely from the RPSGB indicative curriculum) is that "the patient is the main focus of everything in the degree course" (Australian Pharmacy Council, 2005). The membership of the committee comprises representatives from pharmacy councils, academia, hospital pharmacists and the Guild. Notably absent are representatives of the pharmaceutical industry, and this is also reflected in the requirement for placements where students are expected to undertake time in hospital and community settings, with often no requirement or credit being given for time in industry settings. This is clearly in line with the aims of the various registration bodies but is seen to contribute towards a growing skills shortage within the pharmaceutical industry (Serajuddin, 1998).

Pharmacy course accreditation processes, along with institutional and national assessment of teaching and learning quality can be criticised due to its workload implications and stifling innovation and diversity within and between pharmacy curriculum (Florence, 2002; Marshall, 2002). However, by ensuring standardisation of curricula on a national or even international level these quality assurance mechanisms ensure that graduates meet registration requirements and have skills that are recognised in other states or countries.

Pharmacy Education Assessment in China

In 1985, the document *Decision on Education Structure Reform* issued by the Central Committee of the Communist Party clearly stated that China should improve the monitoring and administration of higher education, the Ministry of Education should organise experts and employers to assess institutional proficiency regularly, and give honour and material support to the excellent universities, and reorganise or even stop those unqualified universities.

In 1990, the Ministry of Education issued No.14 Document *the Temporary Regulation for the Average Higher Institutions Assessment*, which was the first legal document regarding higher education assessment and represents an important milestone in the standardisation of assessment. It confirms the purpose, task, organisation and procedure of assessment. Therefore in the 1990s the quality of higher education in China first became subject to scrutiny.

The timing of this move for national assessment of higher education is comparable with the establishment of quality assurance agencies in many Western countries. However, whereas in the West the organisations that conduct educational assessment are either autonomous or linked to

professional registration bodies, in China they are usually an arm of government. There are three leading assessment teams: National, Ministry, Province (Autonomous Region, Municipal City), and some assessment committees under their supervision (e.g. the Higher Education Assessment Committee, the Specialized Educational Assessment Committee). There are a few non-governmental assessment organisations emerging, however they are still not popular.

Since 2003 the Ministry of Education has enforced its *Teaching Evaluation for Undergraduates* in all colleges and universities, which has helped the promotion of pharmaceutical education in China to a higher level. The evaluation criteria are based around 7 first-class indices:

1. educational guidelines
2. teaching staff
3. teaching facilities and their application
4. construction of special programs & teaching reform
5. management of teaching affairs
6. students' commitment
7. teaching achievements & special characteristics.

Under these seven indices are 19 important second-class indices, which provide an overview of the quality of teaching activities within a university. The evaluation criteria clearly prescribe the teacher to student ratio, the teaching budget to tuition ratio, and the requirement for basic teaching facilities. Through the evaluation, undergraduate education has been given more priority, particularly with greater investment of teachers and laboratories for the undergraduates: a vital force in the assurance and promotion of quality for pharmaceutical education in China.

However, due to the wide variety of programs (science, engineering, economics, management, literature, etc.) in each university, the *Teaching Evaluation for Undergraduates* tends to assess an institution in an overall manner and thus cannot reflect the specific circumstances around individual programs of the university. Hence, there is still a need for pharmacy-specific accreditation.

The National Pharmacy Education Committee is the only national pharmacy education organisation, and is responsible for the implementation of pharmaceutical education assessment. In 2001, they were charged with the responsibility of developing a key document: *Fundamental Requirement of Institution Proficiency*. Its goal is to standardise institutional behaviour, strengthen the administration of the higher pharmacy education, implement monitoring and ensure a professional level of pharmaceutical skills. After three years of development, this document was issued in 2004. However, the Ministry of Education has not yet disseminated it as a regulatory document for official

implementation.

Summary

The accreditation and assessment of pharmacy programs in many Western countries is a well established process that in many cases preceded the implementation of assessment of other university courses. Hence pharmacy courses in those countries are well recognised in terms of having standardised curricula and high quality teaching and learning. Despite the positive outcomes, the experience in the West is that multiple assessment processes can prove burdensome and may even stifle innovation. Similarly, in China the implementation of university assessment is a highly bureaucratic process. However, structural reform and implementation of assessment across the entire higher education sector is well underway and this has had a positive impact on the quality of pharmacy education, alongside higher education generally. It is still recognised that there is a need to undertake pharmacy specific assessment processes and the Ministry of Education has moved some way towards developing these, although they have yet to be implemented. Nevertheless quality assurance of pharmacy courses has improved dramatically in recent times and will continue to improve once national requirements for Pharmaceutical Institution Proficiency are implemented.

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