

Evidence-based Dentistry – A Challenge for Dental Education

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In the UK, one of the roles of the General Dental Council (GDC) is to assure the quality of dental education. To that end, they published a report earlier this year on the 2003–2005 visitation programme assessing the UK's undergraduate degree programmes syllabus and final examinations¹. Their conclusion is that all 13 UK schools' courses are "sufficient" under the terms of the Dentists' Act. The report makes 35 recommendations to a wide range of groups associated with the delivery of undergraduate education, namely the universities, dental schools, National Health Service (NHS) organisations, the Departments of Health and the GDC themselves. The recommendations are in the main linked to resources; whether these be staff or facilities the bottom line is finance, and changes in the way funding is delivered to dental schools from both universities and the NHS present challenges. Three recommendations relate specifically to staffing:

- There is an urgent need to support and develop clinical academic posts.
- All NHS consultants and other relevant staff in dental teaching hospitals should have a contractual commitment to undergraduate teaching.
- Sufficient biomedical science teachers need to be involved in the dental school in order to achieve a relevant, coherent and integrated BDS programme.

Problems with attracting academic staff are not restricted to the UK and, although I have a great interest in dental education both at an undergraduate and postgraduate level, it is the potential impact of these resourcing issues for the future of evidence-based practice that I am going to dwell on here.

The GDC's document, *The First Five Years*², sets out their requirements for the content and delivery of the undergraduate dental degree programme. Evidence-based

approaches to treatment are mentioned a number of times. I believe that it is in their introduction to clinical governance where its relevance and importance is best stated. "Students should develop an understanding of audit and clinical governance, and their roles in ensuring a commitment by organisations and individuals in promoting the continuous development of quality in the delivery of patient care, including primary dental care and routine clinical practice. Students should be involved in the audit cycle and should understand the importance of evidence-based dentistry and how this relates to clinical practice. They should be able to evaluate the evidence and critically assess its relevance to treatment planning, advice and treatment provision".

Imparting the key skills required to practise in an evidence-based manner to undergraduates is key to increasing the uptake of evidence-based treatments and practices in dentistry. Nevertheless, imparting these key skills was seen as a barrier to implementation during a symposium in 1999 held at the School of Oriental and African Studies, London, UK (a summary is available for download at www.cebd.org/?o=1051) because of the limited amount of teaching within undergraduate and postgraduate dental programmes. The recent Cochrane Oral Health Group meeting in Manchester (see page 60 in this issue) also highlighted undergraduate teaching as both a barrier and a potential facilitator to the dissemination and implementation of evidence-based practice.

The key skills are question formulation, critical appraisal — for which a basic understanding of statistics is needed — and literature searching. Based on my own personal experience of teaching these skills at undergraduate and postgraduate levels for the past

10 years I believe that there has been some improvement in question formulation and searching but little in critical appraisal skills. Whether you are or are not a fan of the evidence-based approach I believe that these core skills are necessary within the information rich–quality poor environment we now find ourselves. Therefore, we need a step change in the teaching of these key skills at undergraduate level: the limited availability of staff in dental schools to teach these skills presents a challenge.

Another challenge is the lack of integration of evidence-based practice across the curriculum. In the schools where it is taught, it tends to be within individual specialities where there is one committed individual, or as part of dental public health or community dentistry courses where basic epidemiology and statistics are encountered. The challenge to extend the approach across the already crowded dental curriculum with limited staff is a difficult one, but it needs to be grasped as it can bring benefits for the future.

1. General Dental Council, *Visitation 2003-2005, General Report of the Visitors to the Undergraduate Dental Degree Programmes and Final Examinations in the United Kingdom*, March 2003, GDC, London. www.gdc-uk.org/News+publications+and+events/Publications/Reports/General+Visitation+of+UK+Dental+Schools+2003-2005.htm
2. General Dental Council, *The First Five Years - A Framework for Undergraduate Dental Education*, August 2002, GDC, London. <http://www.gdc-uk.org/News+publications+and+events/Publications/Guidance+documents/The+First+Five+Years.htm>