EDUCATION case-based postgraduate programmes

A survey of general dental practitioners' postgraduate education activity and demand for extended modular postgraduate programmes.

R. S. Ireland,¹ N. O. Palmer,² and S. R. Bickley³

The aim of this paper is to assess the level of involvement of general dental practitioners in postgraduate education and training, identify their speciality interests, preferred format of course presentation and assess the potential demand for modular postgraduate programmes.

A questionnaire analysis of a one in three random sample of general dental practitioners on Health Authority lists in the North West of England and North Wales was designed and carried out.

Out of a random sample of 799, 552 GDPs completed an anonymous questionnaire in 1998 which investigated their current postgraduate activity, the areas of specialist interest and their interest in extended modular postgraduate education courses with associated summative assessment.

Fifty three percent of respondents attended more than four postgraduate sessions per year of whom the majority (59%) were in the 35-44 year old age group. 79% identified Section 63 courses as their first preference and 63% preferred mixed didactic and 'hands on' courses. Seventy five percent of respondents expressed an interest in attending modular programmes which might lead to a postgraduate qualification.

In conclusion, an enthusiasm to attend existing postgraduate courses was identified but a demand was also perceived for courses of longer duration possibly leading to additional postgraduate qualifications.

In the present climate of change in the organisation and delivery of primary dental care in a general dental practice setting, general dental practitioners (GDPs) have to face a number of challenges. GDPs must make treatment choices and deci-

Received 08.03.99; accepted 25.06.99

© British Dental Journal 1999; **187:** 502–506

sions which are influenced by developments in National Health Service (NHS) policy, the changing needs and demands of patients and advancements in dental science and related technologies. Essential to meeting these challenges is the need for the practitioner to maintain and update professional knowledge and skills through a process of postgraduate education and continuing professional development. A dentist at graduation is only at the start of the educational process. Within the NHS there is a requirement for practitioners to accept responsibility for maintaining and developing standards monitored by a system of clinical governance.¹

Lifelong learning is the key to improving the quality of patient care and will be of crucial importance to clinical governance. Continuing postgraduate education and professional development will be essential if dentists are to perform to the highest standards throughout their working lives and deliver quality care to their patients.^{2,3} This is supported by the Recertification Review Group of the General Dental Council which proposed that there should be an arrangement whereby dentists re-register every five years and are able to do so only if they can establish that they have participated in a specified amount of postgraduate activity.4

Enthusiasm for this proposal was supported by 84% of respondents in a recent BDA survey of young dentists. Whilst a survey of English GDPs in 1991 showed that 93% felt their postgraduate training needs were met to an acceptable level and 52% rated their needs very well met or well met,⁵ the introduction of recertification is likely to drive forward the demand for postgraduate education in the future. It has been suggested that it will be important to find ways to encourage a wider acceptance of continuing professional development,⁶ and it may be that the suggestion of mandation, whilst not being the ideal motivator, will provide the catalyst for GDPs to invest more time in postgraduate education.

Before developing further postgraduate educational programmes, it is important to identify the target audience needs.⁷ Over recent years there has been a trend for postgraduate education to move away from didactic lectures and courses

¹Unit of Dental Public Health and Primary Dental Care, University of Liverpool, Pembroke Place, Liverpool. L3 5PS

 ² A Dowhills Road, Blundellsands, Liverpool. L23 8SN
³Lower Burnt Knowles, The Hollands, Biddulph Moor.

Stoke-on-Trent. ST8 7LE

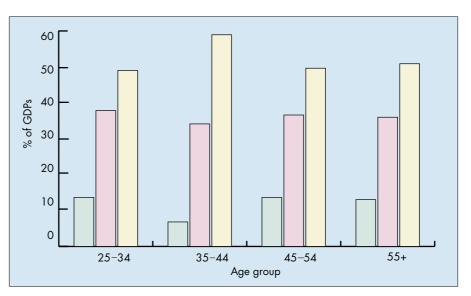
REFEREED PAPER

Fig.1 Percentage of GDPs attending annual postgraduate sessions in each age group. Green, < 2 sessions; Red, 2–4 sessions; Yellow, > 4 sessions

towards small group learning and 'hands on' activity, possibly advanced by developments such as the BDA Masterclass programme. The evidence for the demand for these 'restricted attendance' courses is however limited and is largely based on the number of applications received at postgraduate offices. Additionally, it has been suggested that there is a demand by GDPs for postgraduate courses which address specific issues in greater depth than is currently the case with existing courses such as NHS funded Section 63 courses.

It has been shown however, that postgraduate course attendance, either Section 63 or private, had been a major catalyst in causing GDPs in the Yorkshire Region to modify the way they practised dentistry,⁶ although the level of participation has decreased in comparison to a previous study carried out in 1989.8 Demand for longer and more intensive courses is evidenced by the success of the Bristol University Open Learning for Dentists (BUOLD) initiative provided by Bristol University, which offers both a distance learning component and summative assessment leading to a registerable qualification.

Conversely, a study of vocational dental practitioners (VDPs) in the Thames Region showed that the majority of VDPs were not in favour of a summative assessment on completion of a 2-year general professional training period



although they considered that postgraduate education for dentists should be compulsory⁹.

In the light of this rather conflicting information, acquiring up to date evidence of the changing educational demands and aspirations of GDPs is essential. This is particularly so if institutes of postgraduate education are to modify the format of existing courses or are to initiate new courses which are anticipated to appropriately meet the needs and challenges extending into the new millennium.

The aim of this study was to assess the current level of involvement in postgraduate education of a sample of GDPs in the North West of England and North Wales. It also aimed to identify the preferred course presentation method and content and assess the potential demand for modular programmes leading to a university postgraduate certificate, diploma or degree.

Table 1	Years since qualification of respondents (Year of study: 1998)		
Qualification period		Number of respondents	
1988 -1997		140 (27%)	
1978 - 1987		174 (34%)	
1968 - 1977		141 (28%)	
1958 - 1967		51 (10%)	
Pre 1958		2 (0.3%)	
Year not stated		6 (1%)	

Method

The geographical location of the study area was defined as 12 health authorities in the North West of England and North Wales. Following statistical advice on sample size, a one in three sample of GDPs from these health authorities was randomly selected using a random number table, giving a total number for the survey of 799 GDPs from a total of 2400 covering a population of 2.27 million.

A questionnaire was designed to gain information from GDPs in the areas of current annual postgraduate education attendance (a session was defined as a half day), preferred type of presentation (e.g. lectures, hands-on etc.), interest in modular programmes, area of study interest, interest in undertaking a postgraduate qualification, and the influence of travel and cost on postgraduate attendance.

The questionnaire was initially evaluated using a small pilot group of GDPs following which a number of minor revisions were incorporated. The questionnaire was anonymous, although at the end of the questionnaire respondents were invited to provide their contact details if they wished to receive more information about future university modular programmes.

Postal questionnaires were distributed in May 1998 to 799 GDPs with an addressed reply envelope. After the initial response, a follow-up mailing was sent out in September 1998 to all GDPs in the sample who had not responded with their names and addresses. Included in the second mailing, was a stamped addressed return envelope and a proforma which allowed those recipients who did not wish

EDUCATION case-based postgraduate programmes

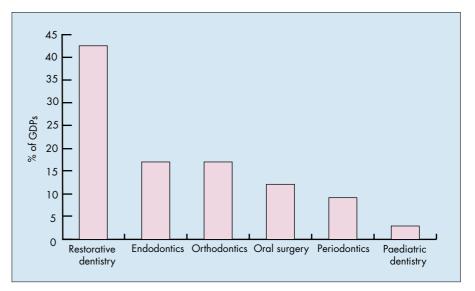
Fig.2 Percentage first choice of subject for modular study programme (n=381) Some respondents ranked subjects equal first choice) Green, < 2 sessions; Red, 2-4 sessions; Yellow, > 4 sessions

to complete the questionnaire, to acknowledge receipt of the correspondence and, if they wished, give a reason for non-completion.

Results

A total of 552 GDPs (69%) responded, 38 of whom returned acknowledgement proformas without completing the questionnaire.

Of the questionnaires returned for analysis (n = 514), 147 (29%) were in the age-group 25-34; 187 (36%) age group 35–44; 119 (23%) age group 45–54, and 54 (11%) were aged 55 and over. Seven respondents did not state their age. One hundred and forty respondents (61%) had qualified within the last twenty years, with just under half of these qualifying in the last ten years (Table 1).



no particular preference and ranked the choices equally as first choice. Overall, Section 63 courses were the first choice of respondents with 79% identifying this type of course. Highest ranked second choice was 'other half-day courses' (58%) and highest ranked third choice was 'other full-day courses' (49%).

Table 2	Interest in a postgraduate qualification (<i>n</i> = 381)		
			Response
Module only		12 sessions	265 (52%)
Certificate		4 modules	239 (46%)
Diploma		8 modules	245 (48%)
Degree		8 modules + research component	154 (30%)

Postgraduate education

Over all age groups 53% attended more than 4 postgraduate sessions per year, 36% attended between two and four sessions and 11% attended up to two sessions annually. A similar pattern was shown within all the age groups with between 49–59% attending more than 4 postgraduate sessions annually. (Fig.1)

Preferred type of postgraduate course

Four-hundred and ninety-nine respondents completed this section and were asked to rank in order of preference the type of postgraduate course they preferred to attend from a choice of Section 63 courses, other half-day courses and other full-day courses.

Seventeen respondents (3%) indicated

Preferred format of course presentation GDPs were asked to indicate their preferred format for postgraduate courses from a choice of lectures, 'hands-on' courses and mixed lectures and 'hands-on' courses. Four-hundred and ninety-three (96%) responded. Eleven respondents gave equal rating to all formats, but the first choice for the majority of respondents (63%) was a format of part lecture and part 'hands-on'. Highest ranked second preferred format was 'hands-on' courses (36.5%), and the third choice was closely divided between 'hands-on' (45%) and lectures (43%).

Interest in achieving a postgraduate qualification

Three hundred and eighty-eight respondents (75%) indicated that they would be

interested in undertaking an extended modular postgraduate course leading to a postgraduate qualification. As can be seen from Table 2, there was a similar interest registered in studying for individual modules (52%), a postgraduate certificate consisting of 4 modules (46%) and a postgraduate diploma of 8 modules (48%). There was less but significant interest (30%) in studying for a degree which incorporated a research element.

Statistical analyses showed that there was a greater interest in modules, certificate (4 modules), diploma (8 modules) and degree (8 modules plus research) by those GDPs under 45 years of age compared with those over 45 years of age (p < 0.05). The under 35 year age group showed the most interest in gaining a postgraduate qualification (p < 0.05).

Subject speciality interest

The questionnaire asked those respondents who had indicated an interest in undertaking a modular programme to rank in order of interest the area that would be of most interest to them. They were also invited to identify other areas of interest which were not listed.

Three hundred and eighty-one of the 388 respondents who indicated that they were interested in undertaking a modular programme, completed this section. The detail of ranking is presented in Fig.2 which shows that the most popular first choice was for restorative dentistry (46%) followed by endodontics and orthodontics (18%), oral surgery (13%) and periodontology (10%). Additional subjects of interest were identified such as practice management, dental

implants, prosthetics, sedation and oral medicine.

Preferred time of the week to attend postgraduate education

Four hundred and ninety seven respondents (90%) provided information on their preferred time of the week to attend postgraduate courses. Some respondents gave equal preference to more than one option. Three hundred and seventy three (75%) preferred weekdays of which Wednesdays (45%) and Thursdays and Fridays (30%) were the most popular. Two hundred and sixty two (53%) preferred evenings and 158 (32%) had a preference for Saturdays.

Travel and Cost

Respondents were asked two questions relating to the distance they were willing to travel to attend postgraduate education. Firstly they were asked how far they would be willing to travel (distance from home to postgraduate centre) to attend a postgraduate half day course (session), and secondly they were asked how far they would be prepared to travel to attend a module of approximately 12 sessions.

One hundred and ten (22%) were willing to travel up to 30 miles and 133 (27%) were willing to travel more than 30 miles.

Four hundred and sixty-one GDPs (90%) completed the second part of the question which showed that practitioners were less willing to travel the longer distances when committed to a course involving twelve sessions. Eighty (17%) were prepared to travel 21–30 miles, and 89 (19%) over 30 miles.

Respondents were asked how much they would be prepared to pay for a postgraduate module of 12 sessions. Four hundred and twenty three (82%) respondents indicated their willingness to pay. Of these 259 (61%) would be prepared to pay up to £500 for a module, 126 (30%) between £500–700; and 39 (9%) indicated that they would be willing to pay between £700–1,000.

Discussion

The geographical area of study selected was located in an area of the North West of

England in close proximity to two dental schools (Liverpool and Manchester) which could be potential providers of postgraduate dental education. Although the sample was not stratified for time since qualification, there was a relatively even distribution of respondents graduating over the last 30 years. The response rate was 69%. At the follow up mailing, an attempt was made to identify reasons for non-completion of the questionnaire by the inclusion of a simple proforma which recipients were invited to return (in a post-paid envelope) stating their reason for non-completion. Thirty eight forms were returned, 24 of which gave no reason, but where reasons were given these included impending retirement, or indicated that the practitioner to whom the survey was addressed was no longer at the practice. It could be argued that the level of non-respondents suggests that there is a lack of interest in this group in extended modular programmes and it may well be that these practitioners attend few or no postgraduate courses. Recent research in general medical practice has suggested that the primary reason for non-response to postal surveys was that questionnaires get lost in other paperwork, that practitioners are too busy or that questionnaires are routinely binned.10

Ninety nine per cent of respondents stated that they had attended a postgraduate session within the last 12 months of which 89% had attended two or more sessions and 53% had attended more than four sessions. Although this question included all postgraduate education courses and not just Section 63, this appears to compare favourably with a study carried out among GDPs in Yorkshire.⁶ Earlier studies in 1991 and 1993 also indicated a low uptake of Section 63 courses by GDPs both from a self-reporting questionnaire,¹¹ and from Family Health Service Authority (FHSA) data.¹²

The results from this present study suggest an increased commitment to postgraduate education, however, it was impossible to validate the GDPs sessional attendance at postgraduate courses due to the anonymous nature of the survey. GDPs have access to postgraduate courses not only within the geographical area of the study but throughout the country, making validation difficult. The implications of this are important in view of the GDC's proposals for reaccreditation and recertification. Within this study, in order to meet the verifiable level of 15 hours CPE proposed by the GDC for re-accreditation, there would be a need for the majority of this group to increase their level of activity still further. The General Dental Service Committee (GDSC) has for some time accepted the importance of postgraduate education in maintaining standards and has repeatedly sought to convince the Department of Health of the need to increase the funding to six sessions per year.

It is of note that within this study there was no significant relationship between the age of the dentists and the number of postgraduate sessions attended, and that the majority of dentists (79%) attended Section 63 courses. (As far as dentistry is concerned, what is still currently referred to as Section 63 funding, should in future be referred to as the element of the Medical and Dental Educational Levy (MADEL) allocated to the continuing professional education of the General Dental Service (GDS), the Community Dental Service (CDS) and the Personal Dental Service (PDS) dentists and the educational costs of vocational training in the GDS, CDS and PDS.).

The popularity of Section 63 funded courses may be because dentists are funded with a postgraduate education allowance to attend up to two courses per year, although some private courses can be eligible for a postgraduate educational allowance if the postgraduate dean considers them to be of an appropriate academic standard. It is also one of the NHS requirements of dentists who wish to claim seniority payments at 55 years of age that they have attended at least ten Section 63 sessions, or other approved courses, in the five years prior to attaining age 55.

It is evident that many practitioners prefer to attend courses which provide a

mix of 'hands on' and didactic teaching. Postgraduate deans are being encouraged to provide hands-on courses however, to meet local requirements and needs and the per capita allocation for 1999/2000 has been increased to £130.

Approximately 75% of respondents were interested in undertaking more extensive study in areas of specialist interest in the form of extended modular training units, of whom 36% were interested in obtaining a subsequent postgraduate qualification. Statistical analysis confirmed that those dentists under 45 years of age are more likely to follow a modular programme leading to a certificate (4 modules), or a diploma (8 modules) but that the younger a dentist is, the more likely he or she is to want to undertake a postgraduate degree (8 modules plus research component). This suggests that the professional development needs of this group might currently not be fully met. The reduced demand for degree courses may reflect the financial implications, interruptions to practice, and consideration for their patients that GDPs have to balance when scheduling their postgraduate education, particularly when it involves longer-term commitments.

Realistically it is impossible for GDPs, unlike general medical practitioners, to obtain a locum to cover any long-term educational commitment away from the practice. Additionally, lost income cannot be recouped in the NHS sector by receiving higher fee per item income as a result of the increased knowledge and skills acquired. The motivation to obtain postgraduate qualifications may currently be driven by the opportunity to attract more patients from the private sector. This may be reflected by the higher demand for courses centred on restorative dentistry.

It is interesting to note that almost half of the respondents (48%) favoured midweek courses with about 40% preferring Thursdays or Fridays. 53% preferred to attend evening courses and surprisingly, 32% preferred Saturdays which again probably reflects the financial pressures on the practice.

Travelling up to 20 miles did not appear

to inhibit the desire to attend courses but distances up to 30 miles were acceptable to 27% of respondents if it were for one course, but to only 19% if the course extended over as many as 12 sessions. This might suggest that there is potential for developing longer-term courses that limit travelling by the inclusion of a distance learning component such as that offered by the Faculty of General Dental Practitioners in association with the Eastman Dental Institute. Opportunities also exist for the incorporation of new technology in the form of video-conferencing or the use of the internet as an educational resource. The relevance of these new educational initiatives for the GDP merits further investigation.

Funding for postgraduate courses appeared to be less of an issue although many respondents commented that the quality of the education offered was more important than the cost. Enthusiasm diminished however, when the cost exceeded $\pm 500-700$ per course ($\pm 40-60$ per session). This raises some funding issues in view of the fact that the estimated cost per head for dentists attending Section 63 funded hands-on courses in 1997/8 is high at ± 70 per session.

Conclusions

This study suggests that there is a demand for existing postgraduate courses, but that there is also a desire to participate in more structured educational programmes. It also shows that within this group many GDPs would fall short of the required level of verifiable continuing postgraduate education outlined in the proposals of the GDC for reaccredidation and re-certification. This might present some formidable challenges for providers of postgraduate education in meeting potential future demand.

Acknowledgement

The authors would like to acknowledge the financial support provided for this study by the Mersey Division of the Faculty of General Dental Practitioners and advice on sampling provided by Dr Helen Worthington. Department of Health. London 1997. CM 3807.

- 2 Delivering Change 1995-2000. General Dental Council, London. 1998
- 3 *Pathways in Practice.* 1997. Faculty of General Dental Practitioners, The Royal College of Surgeons of England:
- 4 Recertification Review Group Report. General Dental Council, London. May 1997.
- 5 Mouatt R B, Veale B, Archer K. Continuing education in the GDS. An England survey. Br Dent J 1991;170:76-79
- 6 Mercer P E, Long A F, Ralph J P, Bailey H. Audit activity and uptake of postgraduate dental education among general dental practitioners in Yorkshire. *Br Dent J* 1998; **184**: 138-142
- 7 Davis M H, Pitts N B. Topics for general dental practitioner continuing education: survey of Scottish views. *Eur J Prosthodont Restor Dent* 1994; 3: 23-5
- 8 MacGregor A J, Long A F, Mercer P E. The continuing professional development of general dental practitioners in the Yorkshire Region. The Yorkshire Regional Dental Postgraduate Office, Leeds Dental Institute 1990.
- 9 D'Cruz L. A survey of the views of vocational dental practitioners on continuing professional education. *Prim Dent Care* 1998; 5: 121-4
- 10 Kaner E F, Haighton C A, McAvoy B R. A telephone survey of general practitioners' reasons for not participating in postal questionnaire surveys. *Br J Gen Pract* 1998; 48: 1067-1069
- 11 Long A F, MacGregor A J, Mercer P E. Updating practices among Yorkshire general dental practitioners. *Br Dent J* 1991; 170: 73-75
- 12 Broadway E S, Whitehead L J. Is half the profession apathetic to further learning. Br Dent J 1993; 174: 379-380

¹ The New NHS, Modern and Dependable.