IN BRIEF

- This paper reports on a wealth of descriptive information gathered from the first national survey in Scotland of primary care dentists declared preferences for appropriate CPD.
- For those involved in the planning and provision of CPD this will enable more targeted delivery of education provision and more focussed studies on effective educational methods for dentists.
- The reader has the opportunity to look at trends in preferences based mainly on age and gender, and there are many interesting differences.
- Career pathways for primary care dentists are uninspiring at present. Suggestions for linking CPD with long term career development are explored.

Attitudes and trends of primary care dentists to continuing professional development: a report from the Scottish dental practitioners survey 2000

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Objectives To describe the current and intended continuing professional development activity of dentists in general and community practice.

Design A cross-sectional survey by postal questionnaire.

Methods A semi-structured questionnaire was sent to all general practice and community dentists identified from the dental practices division as being in practice in Scotland. The issues addressed included personal demographics, current working patterns and job satisfaction, training and professional development and finally career and working intentions.

Results Of the 1,917 questionnaires sent to general dental practitioners (GDPs), 1,357 were returned useable (70% response rate); 212 of the 283 questionnaires to community dental practitioners (CDPs) were returned giving a 75% response rate. Of the responders, 89% of GDPs (1,188) and 95% of CDPs (178) reported participating in some form of CPD in the preceding year. One sixth of GDPs (211) and one third of CDPs (62) had a further qualification. Short courses such as Section 63 were very popular with over 90% of GDPs, but more than half the respondents did not think that further qualifications would enhance their career prospects. The most commonly identified barriers to further qualifications were heavy clinical commitments (78%), with 73% citing the substantial cost with no additional benefit. Over a third of GDPs under the age of 30 indicated they intended to sit a postgraduate qualification, but this fell to 12% for those aged over 30. The number of dentists identified on a career break was low (18).

Conclusion Two years before implementation of the General Dental Council's mandatory revalidation scheme, over 90% of Scottish primary care dentists reported active participation in continuing professional development. Future initiatives must be sufficiently sophisticated to fulfil the educational needs of different age groups, and to focus on part-time

and career break dentists as well as full-time practitioners. It is important to establish career pathways in dental primary care. Part-time modular courses such as Masters degrees in primary care based dentistry may be one solution. An increased number of part-time posts for primary care dentists in secondary dental care may increase the skill base and also increase service provision in secondary care establishments. These pathways should create an opportunity to adequately reward those who continue to develop the knowledge and skills necessary for a technically demanding healthcare profession.

What do Scottish primary care dentists think and do about continuing professional development? With the imminent implementation of mandatory CPD, continuing professional development issues were examined as part of the Scottish Survey of Dental Practitioners undertaken in February 2000.¹ We sought answers to two questions. Is individual uptake of CPD opportunities currently at a level recommended by the General Dental Council? And are the currently available options what dentists want? The study's aims included:

1. To describe the current participation in verifiable and non-verifiable continuing professional development (CPD).
2. To describe the preferred styles of learning opportunities for short courses.
3. To identify the number of dentists who have a registerable postgraduate qualification, and the numbers who are intending to study for one.
4. To describe the perceived benefits and barriers to obtaining further qualifications.
5. To describe the benefits and drawbacks in being a vocational trainer.
6. To identify educational needs of dentists on a career break.
7. To describe dentists' attitudes to CPD for professionals complementary to dentistry.

MATERIALS AND METHODS

As detailed elsewhere^{1,2} a postal self-completion semi-structured questionnaire was sent to all general dental practitioners (GDPs) and community dental practitioners (CDPs) identified from the dental practice division as being in practice in Scotland. Methods used to encourage response included advance publicity in the dental press, a

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Refereed paper

Received 24.01.02; Accepted 27.06.02

© British Dental Journal 2002; 193: 465–469

personally signed communication from the lead researcher (ER) and stamped addressed envelopes with the first mailing and the second and third mailings to initial non-responders. Because the survey was totally confidential, it was not possible to collate information on the profile of non-responders, without breaching this code.

Analysis of the completed questionnaires was undertaken on SPSS version 10.0. Most responses were analysed by age and sex for significant differences, using Pearson's chi-square tests of significance. All differences quoted in the text are significant at least at the 5% level. The free text or open-ended responses were coded by categories to create relatively homogeneous summary descriptors, usually of reasons for particular opinions or actions.

Respondents were asked to indicate their postgraduate activities in the previous year; their past, current and future involvement with postgraduate qualifications and their preferred learning methods for a variety of core knowledge topics including resuscitation, health and safety, radiography, cross infection control, medical knowledge for dentistry and effective prescribing. Preferences for learning formats for clinical, practice management, IT skills, primary care research and clinical audit were also sought.

Only a selection of the findings is presented here. The full report was published by the Scottish Council for Postgraduate Medical and Dental Education (SCPMDE) in March 2001.¹

RESULTS

Sample size

GDPs returned 1,357 of 1,917 questionnaires sent (70% response rate). Of these, 22 were not used because they were duplicates or largely incomplete, leaving 1,335 responses for analysis. Of the 212 respondents to the community dentist's questionnaire (75% response rate), 187 were working mainly in the community dental service and form the sample for this analysis

Current participation in CPD

Despite the fact that at the time of the survey mandatory revalidation had not yet been introduced, 72% of the 1,335 GDPs and 85% of the 187 CDPs had spent at least four sessions (14.5 hours or more) on verifiable continuing professional development (CPD) in the past year (Fig. 1).

A quarter of GDPs and a third of CDPs recorded a total of 11 sessions (39 hours or more) of all types of postgraduate education in the last year. Whilst 11% of the total number of GDPs had spent no sessions on postgraduate education in the past year, this figure fell to less than 6% for those aged over 30 years. Only 5% of all CDPs report spending no sessions on CPD.

Of GDPs under 30, 45% reported having done five or more sessions in the previous year, compared with 68% of those aged 30 to 50 years (Fig. 2).

Figure 1 Number of sessions spent on CPD in the past year
Base: All CDPs and GDPs n=1518

Preferred styles of learning opportunities for short courses

Most respondents indicated an interest in using several different learning methods. As might be expected, a preference for 'hands on' was strongly expressed for clinical procedures, although even for practical topics many respondents favoured using a wide variety of learning methods. There was little obvious difference between the preferences of GDPs and CDPs. Perhaps surprising to some, lectures were still favoured as one of several useful formats, with small group tutorials, books and journals also popular with the majority. Videos were also valued by over half of respondents as a useful tool for many different learning scenarios. Table 1 shows that only 5% of dentists indicated no interest in any CPD formats; this was 6% for male and 2% for female dentists. Women favoured small group tutorials more than did men (88% compared with 80%). Books and journals were also more popular with women but computer aided learning less so.

Table 1 Gender differences in preferred learning formats for all CDPs and GDPs

Preferred learning formats by gender and by all CDPs and GDPs	Total (%) n=1518	Male (%) n=946	Female (%) n=572	All CDPs (%) n=187	All GDPs (%) n=1331
Lectures	90	89	90	94	90
Hands on	94	93	97	97	94
Small group tutorials	84	80	88	93	83
Problem based learning	49	42	58	57	48
Computer aided learning	42	43	32	41	42
Videos	55	56	52	58	55
Books and journals	71	68	75	79	71
Clinical audit	36	35	35	49	35
Of no interest	5	6	2	5	5

Does this picture change for practitioners in different age groups? It appears that the over 50s favoured larger gatherings for CPD more than did other age groups, while younger dentists had more interest in computer aided learning (53% of under 30s, with the figure falling to less than a quarter for the 50 plus age group). Dentists who declared no interest in any learning methods increased with age from 3% to 6% (Table 2).

Table 2 Preferred learning formats by age band

Preferred learning formats for core knowledge subjects by age band	All (%) n=1518	<30 (%) n=29	30-39 (%) n=496	40-49 (%) n=424	50+ (%) n=29
Lectures	90	87	92	88	91
Hands on	94	97	96	93	91
Small group tutorials	84	94	85	83	72
Problem based learning	49	67	51	45	33
Computer aided learning	42	52	48	42	24
Videos	55	51	56	57	55
Books and journals	71	70	77	67	69
Clinical audit	36	43	35	37	30
Of no interest	5	3	4	6	6

Figure 2 Number of CPD sessions in past year by age band
Base: All CDPs and GDPs n=1518

Providers of continuing professional development

In Scotland, the SCPMDE Section 63 courses were the most popular by a large margin. Ninety per cent of GDPs favoured these, with BDA courses coming next in popularity at 49%. Private enterprises and other professional dental societies were each selected by a third of respondents. Community dental practitioners also most frequently liked Section 63 courses (85%), but these were then followed by the SCPMDE Courses for the CDS (72%) and the BDA (52%).

Acquiring postgraduate qualifications

Two hundred and eleven GDPs (16%) had a postgraduate qualification; 224 (17%) had plans to sit one, and a further 407 (31%) might consider it. Of those who had definite intentions (answered 'yes') to sit further qualifications the most popular choices were the DGDGP/MFDGP 61% (136), MGDS 25% (56), FDS/MFDS 16% (35), and MSc 15% (33) qualifications. Only two dentists had definite plans to sit the Diploma in Dental Sedation. More male dentists 31% (71 of the 224) reported that they may decide to sit the MGDS qualification compared with female dentists 22% (33).

Lack of enthusiasm for sitting further qualifications was influenced by age, most commonly in GDPs aged over 30 (Table 3). Because of the small numbers of CDPs, age band analysis is reported only for GDPs in Tables 3-5.

Sixty-two CDPs (34% of the sample) had a postgraduate qualification, of which the most common was MSc (12%) and MPH (9%). A fifth of the respondents (37) intended to acquire a further qualification of which the most common intention was an MSc (30%) followed by FDS/MFDS (24%).

Perceived benefits and barriers to obtaining further qualifications

Amongst the 211 GDPs who had a further registerable qualification, most perceived the main benefit to be skill enhancement, although the majority of those aged under 30 in this group (15 dentists) did state career prospects as a benefit. (Table 4).

Most commonly identified barriers to further qualification were heavy clinical commitments (78%) and the substantial cost with no additional benefit (73%). Half the respondents did not think that further qualifications would enhance their career prospects and agreed that lack of flexible training was a barrier. This percentage among GDPs rose to 60% for the 40-49 age group.

In the CDS the overriding barrier to a higher degree was seen to be lack of funding (73%), with lack of career structure not far behind (68%). CDPs who had a further qualification reported that it conferred enhanced career prospects (77%) and skills (67%). However, both agreed that lack of funding was the single most important barrier, and both emphasised the importance of flexibility of CPD opportunities and the special needs of rural practitioners.

Table 3 Intentions to sit further qualifications

	GDPs		GDPs details by age band				CDPs
Do you intend to sit any further qualifications?	All GDPs (%) n=1335	GDPs <30 (%) n=279	GDPs 30-39 (%) n=443	GDPs 40-49 (%) n=360	GDPs 50+ (%) n=238		All CDPs (%) n=187
Yes	17	38	18	9	3		20
No	51	15	42	65	89		47
Maybe	31	46	39	25	6		32
Not answered	2	1	1	1	2		2

Table 4 Perceived benefits of postgraduate qualifications

	GDPs		GDPs details by age band				CDPs
What do you feel were the benefits of your postgraduate degree, diploma or certificate?	All GDPs (%) n=211	GDPs <30 (%) n=24	GDPs 30-39 (%) n=80	GDPs 40-49 (%) n=103	GDPs 50+ (%) n=70		All CDPs (%) n=64
None	8	4	4	7	7		3
Skill enhancement	65	42	61	44	49		64
Career prospects	46	63	45	25	27		27
Opportunity to teach at university	20	21	25	9	13		13
Personal satisfaction	9	8	13	2	7		7
Not answered	15	4	8	13	5		5

Table 5a Barriers to gaining additional professional qualifications

	GDPs		GDPs details by age band				CDPs
Barriers to undertaking additional professional qualifications by age band (agree)	All GDPs (%) n=1335	GDPs <30 (%) n=279	GDPs 30-39 (%) n=443	GDPs 40-49 (%) n=360	GDPs 50+ (%) n=238		All CDPs (%) n=187
Heavy costs/no financial benefits at end	72	69	72	77	69		55
Heavy clinical commitments	78	74	81	84	73		62
Lack of career structure	48	49	50	50	41		68
No flexible training (ie distance learning, evening classes, internet access)	53	55	63	51	40		59

Table 5b Will additional qualifications improve career prospects?

	GDPs		GDPs details by age band				CDPs
Do not feel additional qualifications will improve career prospects (%)	All GDPs n=1335	GDPs <30 n=279	GDPs 30-39 n=443	GDPs 40-49 n=360	GDPs 50+ n=238		All CDPs n=187
Agree	51	37	51	60	56		41
Disagree	27	44	29	18	17		35

Benefits and drawbacks in being a vocational trainer

Perceived barriers to becoming a trainer were most frequently related to the time that was needed and the space and facilities in the practice. The 264 trainers (including ex-trainers) reported professional development as the main reason for being a trainer (96%), followed by helping graduates (88%).

Educational needs and problems of dentists on a career break

Despite considerable efforts and rigorous searching of the GDC and Scottish Office ISD databases, only 18 dentists were identified as being on a career break, of whom only 10 planned to return to work. Anecdotal evidence suggests that it is difficult to identify all dentists on a career break. A recent survey of women dentists⁴ found 326 women in England who might be encouraged to return to dentistry. The Scottish dental workforce is approximately one tenth of the size of that in England and Wales. Part of the reason that career break dentists cannot be identified may be that costs for GDC registration and subscriptions to dental defence unions are significant for those with low or no income, and there are currently few obvious benefits or incentives to maintain these whilst on a career break. A third of the 18 had cancelled their GDC registration in the three months after the GDC data was extracted.

Dentists' attitudes to CPD for professionals complementary to dentistry

The vast majority of both groups of dentists (84% of GDPs and 87% of CDPs) felt that they would benefit if the professionals complementary to dentistry were also to take part in CPD; this figure was 95% in the youngest group of GDPs.

DISCUSSION

Fulfilling CPD obligations

Before this study was conducted there was no overall data on current continuing professional development activity in Scottish primary care dental practitioners. Although there are many other variables, in this report we have highlighted preferences mainly based on gender and age. The self reported activities recorded, indicate that CPD in convenient forms is undertaken by almost 95% of dentists over the age of 30. Although there are many other variables, in this report we have highlighted preferences mainly based on gender and age. Further research on the CPD needs of the 6% who do not participate at all may yield important information on ways of making CPD worthwhile and relevant for this group, and may benefit the entire dental community.

The Scottish figure of 72% of GDPs stating they attend more than four PG sessions per year compares favourably with the Liverpool study of dentists in NW England and N Wales⁵ where 53% of practitioners reported attending four sessions or more. The popularity of Section 63 courses is higher in Scotland too with 90% of practitioners indicating this method as their first choice compared with 79% in the Liverpool study.

The under thirties

Although 11% of GDPs under 30 reported doing no CPD, the vast majority of this age group will have participated in the well resourced vocational training year, when they receive at least 180 verifiable hours of CPD plus numerous other hours of CPD such as weekly tutorials with the trainer. Any recent participant in a vocational training scheme who has successfully completed the year will have no trouble in demonstrating participation in much more CPD activity than the 75 hours of verifiable and 175 hours of non verifiable CPD in the first five years after qualification. However, it is crucial that their commitment to CPD is encouraged as their careers progress. Given the very high percentage of them who are women the questions of career breaks and flexible training also must be addressed.

Career break dentists

Those on career breaks are currently officially ineligible to attend Section 63 courses as they do not attain the required threshold of NHS income to allow free access to courses. With all registered dentists now required to fulfil the same number of hours of mandatory CPD regardless of income or hours worked, the current system does not encourage career break or low-earning dentists to attend the courses they may require. Access to Section 63 courses should be available to career break dentists and all those part-timers who demonstrate a commitment to the NHS.

Lack of flexible opportunities

Dentists on career breaks identify the lack of flexible and part time work to allow them to maintain their clinical skills and to continue to treat patients. This was flagged up as much more of an issue than was their continuing professional development.

Although a nominal Dentists Retainer Scheme does exist it is not, in its present form, widely perceived as a useful tool. It may be more effective to implement a scheme similar to the Doctors' Retainer Scheme, which allows an individual to work up to four sessions per week, funded at BMA rates per session. Participants in general medical practice have a mentor within the practice who oversees effective use of the available time, and the participating practice can reclaim most of the payment from the health board making it relatively well supported by general practice principals.

Preferred formats for learning

There is already a demonstrable high demand for and usage of verifiable CPD activities, particularly short courses. It was outside the scope of this survey to determine reasons for particular preferences for learning formats, course providers or postgraduate qualifications. Further research into the most useful and effective ways of providing these is desirable, but it is obvious from the broad spectrum of favoured learning methods that dentists are willing to use several different formats for CPD. Cynics might say that lectures are a cheap and simple way of getting 'bums on seats'. However the clearly indicated popularity of lectures as a preferred learning method indicates that this is still acknowledged by the vast majority as being a useful method for accessing the expertise of an acknowledged expert and at the same time having a chance to meet up with colleagues.

A new future for short courses?

Short courses are becoming increasingly popular, with huge increases in application for courses being processed by the postgraduate education providers in Scotland (personal communications). Current NHS Education for Scotland courses are routinely evaluated for the effectiveness of the educational event in producing (or strengthening) good practice and to monitor the benefits to the team, the organisation and ultimately the profession and the population.⁶

This study indicates that further qualifications are not so highly sought as previously reported in a 1998 survey of trainees,⁷ although the pattern of intended qualifications was similar in the two surveys. The percentages are also lower than reported in the study of GDPs in NW England and N Wales in 1998.⁵ Unless further qualifications are given rather more importance in future career development than is currently perceived, the percentage may not rise significantly.

With this in mind it might be worth exploring the feasibility of credits for attendance at short courses which could be built into a modular postgraduate qualification. As often happens, the medical profession has been exploring these possibilities creatively for some time now, for example as described by Wai-Ching Leung.⁷ In Scotland a modular MSc in Management of Clinical Dental Anxiety has recently been developed through which Scottish Higher Education Masters level (SHE-M) modular credits are obtainable.⁹

Participants who complete courses could gain an additional recognisable postgraduate qualification and it would be appropriate to recognise the additional knowledge and skills in the dentists' remuneration scales. Also, to allow both younger and established practitioners to take part now, it would be helpful to accredit past CPD participation in certain courses as contributing to the accumulated modules that might comprise a Masters qualification. Certainly what are needed are recognised pathways through the wide range of courses that are currently available, so that continuing and cumulative commitment to high quality dentistry can be rewarded.

CONCLUSION

Scottish primary care dentists reported a strong commitment to CPD even before the launch of the mandatory revalidation scheme by the GDC in April 2000. Given the dramatic increase in women in that group it is important that their access to CPD of all forms encourages them to stay in the workforce. This would be helped by creating a more relevant retainer scheme for those on career breaks and by lifting barriers restricting access to Section 63 courses for part-time dentists.

Although short courses were very popular, further qualifications were not seen as particularly desirable by the majority of respondents. Appropriate recognition should be considered to reward all those dentists who demonstrate a commitment to relevant continuing professional development and do this throughout their professional careers. Modular qualifications which recognise both commitment to CPD and length of time since qualification may help to rationalise the current, ever-increasing, hotch potch of available CPD opportunities from different education providers. Whilst a for-

mal career pathway may be the way forward for the younger group it may not be taken up by older practitioners. CPD may need to be targeted separately for the two groups in the transition phase. These would also allow development of inclusive rather than exclusive CPD opportunities of particular interest to specific age groups, and would acknowledge the commitment shown by most dentists in the provision of effective care pathways for their patients.

The data collection and main analyses for this project were carried out by Tracy Harrold, without whom the study would not have been completed. We are also very grateful to all the dentists in primary care in Scotland who completed the lengthy questionnaire and volunteered so many additional comments. The study was funded by the then Scottish Council for Postgraduate Medical and Dental Education, to whom we express our thanks.

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