

An investigation into General Dental Practitioners' Perceptions of the Influence of Postgraduate Dental Education on General Dental Practice.

This study aims to investigate General Dental Practitioners' (GDPs) perceptions of the influence of their postgraduate education on general practice. As the pace of change increases healthcare practitioners are required to meet the expectations of patients and professional regulators. In the case of the dental profession the introduction of mandatory continuing professional development (CPD) has resulted in an increase in the provision of postgraduate education. However little is known about the long term influence of postgraduate education on general dental practice.

It is hoped that this study will add to the limited amount of research that is currently available on the long term influence of postgraduate dental education and the effectiveness of a particular learning/teaching experience. By considering the educational research that is available and relating it to the educational experience of the two cohorts of GDPs that form the foundation of this study, it is anticipated that an educational/learning theory will be developed specifically for postgraduate GDPs but also to the benefit of other disciplines, particularly allied medical professionals. In addition the curriculum for the programme can be adapted to reflect the GDPs' desires.

It is also anticipated that the role and effect of CPD will be called into question; in other words by making CPD mandatory is there a predictable increase in the quality of patient care and the overall dental health of the population? Is the current format for dental CPD merely a box ticking exercise? Where appropriate other professions will be highlighted to compare the relative merits of different forms of CPD.

The longitudinal nature of the study will result in a more robust examination of the perceptions that the two cohorts of GDPs in the study, have about their CPD. Examples of previous short term studies (Best and Messer, 2003, Bullock et al., 1999a, Young and Newell, 2008); have looked at the benefits of CPD by using short, isolated CPD activities. This current longitudinal study continues to follow two cohorts of GDPs during a five year, part time Masters in Restorative Dental Practice (RDP) programme. Restorative dentistry is concerned with the repair and replacement of damaged and missing teeth.

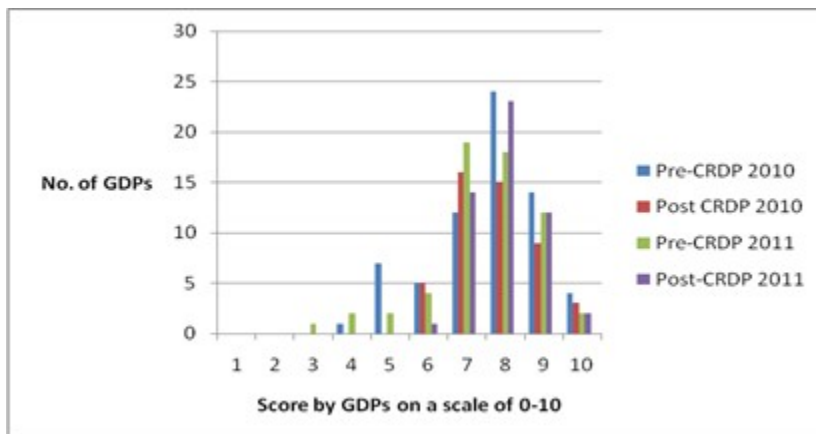
The consideration of the format of CPD can be profession specific and varies enormously from profession to profession (Peck et al., 2000, John and Parashos, 2007, Freer, 2010, Christensen, 2004, Pogrel, 2000). In all professions the fundamental principles of CPD are to: i) improve the knowledge and/or skill of the individual professional, ii) to improve the overall standard of the profession, and iii) to ultimately benefit the consumer. The format of CPD needs to address profession specific requirements as stated by the governing body of the profession. CPD also needs to reflect the learning needs of individuals and allow for a degree of flexibility and personal aspirations.

In addition to demands on the time, resources and expertise of GDPs, there are statutory requirements that GDPs need to fulfil with respect to their CPD. However there remains an individual desire amongst GDPs in the UK to keep up to date and be aware of commitments to patients, fellow professionals and the future of the profession. Prior to the introduction of mandatory CPD, those dental practitioners interested enough to further their own development, would attend courses,

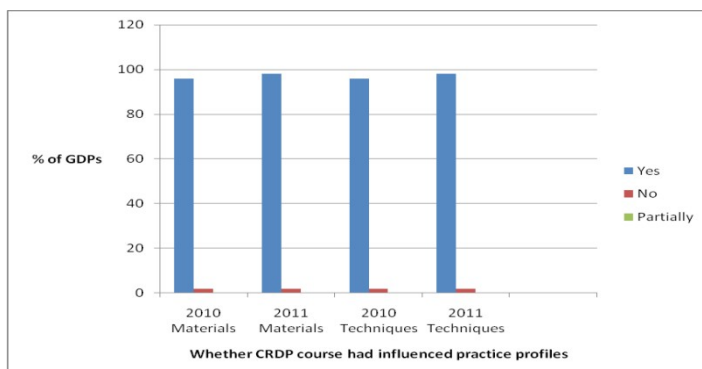
primarily on subjects that they were interested in, and on which they felt would benefit the development of their practice,(Ireland et al., 1999, Leggate and Russell, 2000, Bullock et al., 1999b).

Results:

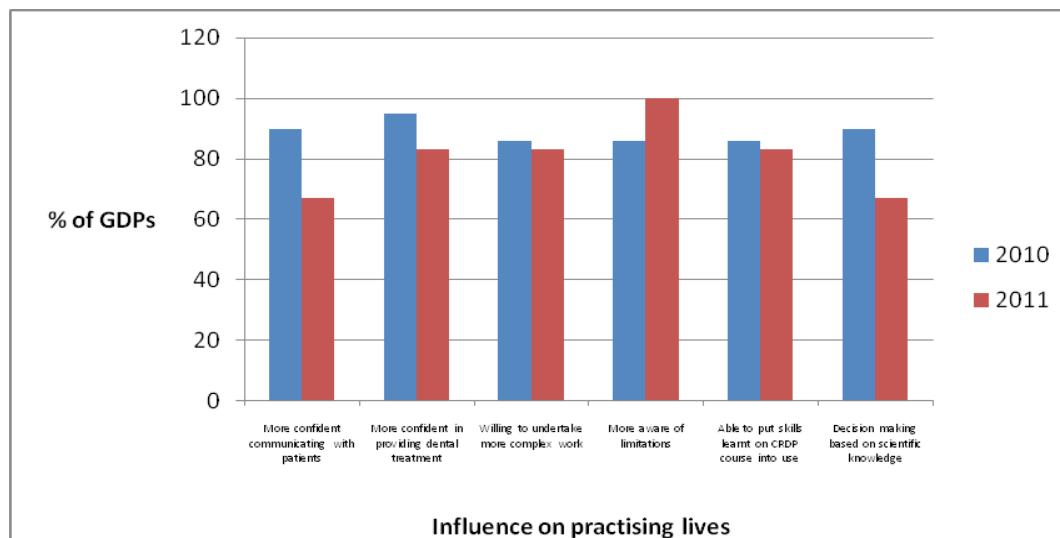
The importance of communication cannot be overstated. Therefore it is important to measure the level of confidence that the GDPs reported in their communication skills and ability to treat patients. In order to ascertain a potential change in confidence as a result of completing the CRDP course, the GDPs were asked in their pre-course questionnaire to estimate their level of confidence on a scale of 0-10, where 0= no confidence and 10= total confidence. Firstly their level of confidence in communicating with their patients and secondly their confidence in their ability to treat their patients were measured. These results show that there was a range from 3-10 on our scale. There was only one GDP who scored themselves 3 in 2011, but 4 scored themselves 10 in 2010. The majority scored 7, 8 or 9 in both cohorts.



Graft to show: The level of confidence of the GDPs in communicating with their patients, before and after the CRDP course for 2010/2011



Graph: To illustrate % of GDPs that changed their practice profile following the CRDP course.



Graph: To show the influence the diploma course had on practice in 2010 & 2011.

Discussion:

There does not seem to be any influence from the demographic data; age, gender and number of years qualified on the preliminary results of this study. This is in contrast to previous studies, which report clear gender influences on their results, (Buck and Newton, 2002, Mouatt et al., 1991). The results may be slightly biased as Mouatt's (1991) study was carried out at a time when the proportion of females in the profession was much lower than it is today. The exception in this study is to the influence of gender on confidence, which appeared to have only a small significance (p value 0.061). Perhaps there is also an influence here due to age. Of the females attending the CRDP course 92% were under 35 years of age at the start of the programme. This is in contrast to the suggestion in previous studies that age has no influence on course attendance, (Ireland et al., 1999, Leggate and Russell, 2000).

The teaching approach adopted on the RDP programme involves both didactic teaching and hands on practical exercises; this seems to be popular with the GDPs. A study by Bullock et al (1999) indicated that GDPs felt that 'courses most likely to impact on practice were those which offered updates on common clinical topics and were hands-on in nature, (Bullock et al., 1999) On site attendance for teaching at the institute is seen by the GDPs to be an advantage as is the small group teaching that dominates the pedagogy. This may well be due to a number of factors. Firstly general dental practice can be a fairly isolated existence and so an opportunity to join colleagues in a social, learning environment is attractive. Secondly, the opportunity to discuss one's own cases with colleagues is viewed to be very helpful. The peer review element of the learning process can be seen to be professionally stimulating, (Maidment, 2006). Thirdly the ratio of teachers to students, particularly during the practical exercises is deemed to be most valuable. Fourthly, there appears to be an important social aspect of small group teaching.

Over the first 3-4 years of this study, it has become apparent that some of the GDPs have considered changing their circumstances by either moving practice, buying their own practice or accepting promotion within their current practice. In many cases this has resulted directly from the demands of the course and the realisation from the GDPs that in order put into practice what they have learnt on

the programme, a change in their circumstances is crucial. There have also been examples of the GDPs funding the patients' treatment themselves, in order to expedite the completion of their case studies.

Prior to the introduction of mandatory CPD for the dental profession (GDC, 2002) studies showed that the majority of GDPs attended postgraduate teaching, (Leggate & Russell; (2000);, Bullock, (1999); Ireland, (1999). The courses attended were chosen by the individual because they were interested in furthering their knowledge/skill levels. There does not appear to be any evidence that the introduction of mandatory CPD has resulted in an increase in knowledge, skill or improvement in patient care amongst GDPs, (Eaton et al., 2011). There would appear to be anecdotal evidence that for many GDPs mandatory CPD has become a 'tick box' exercise and that the actual perceived change in clinical behaviour is minimal. This study would appear to show that there was an increase in knowledge and skill and a perceived increase in patient care from the two cohorts of GDPs perhaps due to the longitudinal nature of the programme. The problems may lie in the current very prescriptive format that mandatory CPD adopts in dentistry. It may be appropriate to consider a more reflective approach to CPD as for example employed by pharmacists. General medical practitioners (GPs) now see CPD as a part of revalidation, which emphasises a more reflective, considered approach to ongoing professional development.

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