This is the second part of the final article in our series about dental nurse education and training. During October 2014, 600 readers of Dental Nursing participated in an anonymised online survey into the training and educational needs of dental nurses in the UK. Due to the huge amount of information collected, the first paper by Stuart (2014) looked at the results around you, your existing qualifications and employment.

Although we could not say that the results from the survey were truly representative of the dental nurse population as a whole, they did indicate that a significant proportion of dental nurses have gained further qualifications, with 40.3% \((n=171)\) holding a postregistration qualification in radiography; 39.6% \((n=168)\) hold a postregistration qualification in oral health education (OHE) and 29.4% \((n=123)\) hold a postregistration qualification in dental sedation (please note, respondents could have gained more than one of these qualifications).

More importantly, from an educationalist point of view, 46% \((n=254)\) of the respondents were planning to gain further qualifications. The most desired qualification was a postregistration qualification \(46.7\%\); \(n=141\)\) This demonstrates the potential demand from the dental nurse profession.

The results from the first part of the survey certainly indicate significant interest in further training and education. It also demonstrates considerable motivation among dental nurse professionals to seek out additional training, develop additional skills and progress along their chosen career pathway.

In this second part of the final article, we shall be identifying what you consider to be the future training and educational needs of your profession; whether barriers to training and education have changed; and commenting on the types of training courses we should develop and how they might be delivered in the future.

**Aims of the survey (part 2)**

- To perceive dental nurse opinion on format and time spent on training
- To identify future education and training needs
- To identify barriers to education and training for dental nurses.

**Results**

**Format and time spent**
The preferred medium for training was split across the available options with 37.7% \((n=203)\) preferring face-to-face learning; 32.3% \((n=174)\) blended learning and 27.7% \((n=149)\) online learning (see Table 1).

The free-text comments to this question generally commented that a mixture of all three was preferred, with opportunities for support and mentoring. The free-text commentary also highlighted the need for ‘in-practice’ training to facilitate paid employment with essential upskilling ‘on the job’.

Online learning and blended learning is being promoted as a cost-effective and efficient way of delivering education and training. There has been a substantial roll-out of broadband services within the UK. Ofcom (2014) states that 75% of adults access broadband internet services in the UK (fixed and mobile). Our survey suggested that 95.1\% \((n=509)\) of our respondents had access to broadband internet services at home.

Time spent on self-directed study was mainly one to three hours \(42.6\%\); \(n=224\); between four and six hours \(21.1\%\); \(n=111\); between six and ten hours \(9.9\%\); \(n=52\) and more than ten hours per month \(14.4\%\); \(n=76\). Only 12\% \((n=63)\) spent less than one hour per week on self-directed study.

A large majority \(80.2\%\); \(n=420\) of the respondents did not receive any study time from their employer as part of their working week. Having said that, 72% \((n=378)\) of respondents said their employer paid for some or all of their staff training.

**Future education and training needs**
In an attempt to look at future training needs we asked respondents to place a value on existing and future courses and qualifications (see Diagram 1).
When asked to rate the value of training and/or qualifications, infection control; OHE; training and assessment; and quality assurance were rated as the top four. While there may be postregistration qualifications available for OHE, the pathway for recognised and credited qualifications in infection control, training and assessment, and quality assurance is more generic rather than specific for the dental team.

Should training be specific for dental nurses or as part of a team approach? Overwhelmingly, 85.2% (n=449) of respondents felt that training should be delivered as both.

Respondents were asked if they would consider a higher dental nurse qualification, such as a degree; 68.1% (n=354) stated they would be interested in looking at such a qualification, if available, in terms of their future training.

### Barriers to dental nurse education and training

Barriers to training remain similar to previous research findings. Lack of time to train during work hours, lack of funding, expense, location and staff cover remain in the top five (see Table 2). When asked specifically if they received study time and time to train during normal working hours from their employer, 80.2% (n=420) of the respondents said they did not receive study time. When asked if their employer paid for training, 72% (n=378) said that their employer paid for some, or all, of their training. The employer's attitude to training was not a significant factor preventing dental nurses accessing education and training, with only 3.4% (n=18) describing their employer's attitude as 'unfavourable'.

A high percentage (80.5%; n=418) of respondents were part of an employer appraisal system which helped identify training needs.

The expense of training was highlighted as a barrier in Table 2. When asked how much respondents would be willing to pay per hour for CPD, the
The majority of 63.9% (n=325) would only be willing to pay between £5 and £10 per hour.

Over half of the respondents (56.8%) did not feel that there were career opportunities for them to progress within their existing employment.

Respondents were also asked if there were any other areas they would like to highlight with regards to dental nurse education and training in the form of a free-text response. A total of 108 comments were recorded. Whilst it is impossible to detail every response they can be sorted into 6 broad themes which I have ranked in Table 3.

**Discussion**

The response rate to the online questionnaire was exceptional, with 600 respondents. As stated in Part 1 of this article, we cannot conclude the sample to be wholly representative of dental nurses in the UK and should be aware of this when analysing the results.

Lectures are cost-efficient, acceptable and effective but their passive nature may hinder learning. Hands-on work is good for learning skills but can increase costs for both tutor and learner. Online
learning, which is interchangeable with distance-learning, e-learning and flexible learning (Reynolds et al, 2008), has potential and is becoming more common in blended-learning techniques. Indeed, some researchers (Colvin et al, 2014) suggest online learning is as equivalent to other methods of delivering training and education. Not surprisingly, access to the internet has improved markedly from previous studies. Only 77% of dental nurses questioned as part of the Mercer et al survey in 2007 had access to computer and internet facilities, while 95.1% of our sample indicated they had access. The internet is now a well-accepted source of information (Eaton and Reynolds, 2008) as it avoids the limitations incurred by time spent out of the practice or home travelling to or attending courses. Instead, it increases the opportunity of dental nurses located anywhere in the country, to learn in an interactive environment (Clark, 2003). This increased ability to search and research information via the internet overcomes one of the major limitations of traditional learning (Reynolds et al, 2008). Our respondents, however, suggest that they would prefer a blend of formats with plenty of opportunity for support and mentoring. Rounding this square as to which format or range of formats can most effectively deliver the learning objectives in a cost-effective and accessible way continues to be a challenge to those developing and delivering courses.

The value of future education needs seemed to fall into two camps. There is a need for immediate, operational awards or qualifications for infection control, quality assurance, training, management, topical fluoride and impression taking, alongside a desire for more substantial postregistration type of awards including OHE, sedation and special care. The first group, and we can include OHE here, are fairly universally needed in every type of dental practice environment. It should not, therefore, be a surprise that these rank highly. Sedation and special care are for more specialised types of dental practice. While there are recognised and accredited awards for the specialised courses, there does seem to be a need to develop recognised and accredited courses for the additional roles being asked of dental nurses, both now and in the future.

The survey again highlighted the perceived barriers to dental nurse education and training. The identified barriers have not changed. Previous studies (Ross and Ibbetson, 2006; Mercer et al, 2007; Turner et al, 2012) report similar issues presented in this study. These include lack of time, lack of funding, and cost. The study by Mercer et al (2007) for the Yorkshire deanery concluded ‘there is a need to promote an ethos of lifelong learning within the practice setting for the whole dental team’. Seven years later this recommendation seems equally relevant. Dental nurses are an indispensable part of any dental team, yet their status in the dental team has developed without appropriate remuneration and support. A significant number of dental nurses continue to pay for their own development, education and training to take on additional responsibilities but have not had recognition in terms of pay. Mandatory requirements for registration and legal requirement to undertake CPD have been forced upon dental nurses since 2008 and has not been reflected by increased salaries. Is this why 63.5% (n=325) of the respondents felt they would only be willing to pay the lowest figure of £5–£10 per hour for training?

There has been a disappointingly low increase in the percentage of dental nurses who receive protected time for study from 13% in 2007 (Mercer et al, 2007) to 20% in 2014. Dentists’/employers’ attitudes have improved slightly; in 2007, 18% had said their attitudes were not encouraging and only 3.4% (n=18) said the same in our survey. The number of respondents who had undertaken appraisals as part of their employment had also increased from 27% in 2007, to 80.5% in 2014.

In a comparison to results from the Turner et al (2012) paper, the number of respondents who did not feel that there were career opportunities for them to progress remained the same at 56% in both cohorts.

The free-text responses were interesting. While there were the expected comments on pay, access and quality of some courses, there was significant interest in developing a clear career pathway, gaining credits from existing courses and a desire to access higher education courses for dental nurses. Although there continue to be significant barriers to education and training, dental nurses are motivated to develop their skills and education and seem to want more.

Conclusion

The findings support NEBDN’s future directions in support of dental nurse education and training and we will continue to deliver relevant postregistration courses for dental nurses, which are delivered in a flexible, work-centred format. New postregistration courses will be introduced over the next few years and there is a need to develop smaller courses, which again need to be recognised and credited. They will take advantage of the increasing use of new technology, as well as maintaining support and supervision. In the future, all courses will be aligned within the Qualification Credit Framework with clear credit levels to facilitate recognition of prior learning and experience.

The increasing use of the internet—while not a panacea for delivering educational content—will facilitate access, delivery and assessment of courses in more remote areas at a time and place which is suitable for the student.

Although the majority of the results from our survey are similar to those reflected in previous studies, a significant number of dental nurses value
additional training and qualifications. However, for dental nurses to develop further as a profession, there is a need to ensure that opportunities for education, training and career development are not undermined from lack of recognition and poor pay. From an educational point of view, providers will need to ensure that future developments are fit for purpose, accessible, relevant, cost-effective and are part of a clearly outlined career pathway. NEBDN will be working hard to promote and support dental nurses to ensure a better future and greater opportunities for development and careers.


