UNIVERSITY OF BIRMINGHAM

DENTAL THERAPISTS IN THE WEST MIDLANDS:

A STUDY OF EDUCATIONAL NEEDS AND TEAMWORK ISSUES IN PRIMARY CARE DENTISTRY

EXECUTIVE SUMMARY

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Vickie Firmstone
with
Alison Bullock
John Frame

Centre for Research in Medical and Dental Education (CRMDE)
School of Education, University of Birmingham
Birmingham
B15 2TT

For further information: www.education.bham.ac.uk/research/crmde/index.shtml

Authors

Dr Vickie Firmstone is a Research Fellow in the Centre for Research in Medical and Dental Education (CRMDE), in the School of Education, University of Birmingham. Vickie conducted the fieldwork and analysis for this study.

Professor Alison Bullock was formerly a Reader in Medical and Dental Education, in the Centre for Research in Medical and Dental Education and was the Project Manager for this work. In December 2008, Alison left the University of Birmingham and is now Director of the Cardiff Unit for Research and Evaluation in Medical and Dental Education (CUREMeDE), Cardiff University, School of Social Sciences.

Emeritus Professor John Frame was formerly the Postgraduate Dental Dean for the West Midlands Workforce Deanery and co-Director of CRMDE. He was the Project Director for this work, provided clinical expertise, and forged links between the Birmingham Dental Hospital, the NHS West Midlands Workforce Deanery and CRMDE.

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EXECUTIVE SUMMARY

Introduction

This Executive Summary sets out the main findings from an empirical study conducted between January 2007 and September 2008 focussed on dental therapists in the West Midlands. It was undertaken by the Centre for Research in Medical and Dental Education (CRMDE) based at the University of Birmingham and funded by the NHS West Midlands Workforce Deanery.

Qualified dental therapists are able to carry out certain types of dental treatment, under the prescription of a dentist. Specifically, in addition to the duties of a dental hygienist, dental therapists can restore primary and secondary teeth, carry out pulpotomies on primary teeth, extract primary teeth, place pre-formed crowns on primary teeth, and plan the delivery of a patient's care. Following legislative changes in July 2002, a range of extended duties were introduced for dental therapists and they were also permitted to work in any sector of dentistry – including the general dental service, which had been previously prohibited. These changes fitted with the Government's policy agenda to extend the skill-mix in NHS dentistry. In 2003, Birmingham Dental Hospital launched a new three-year full-time BSc course in dental hygiene/therapy; consequently the first cohort of qualified dental hygiene/therapists graduated from Birmingham in 2006. More recently, from August 2008, dental therapists are expected to undertake a mandatory number of CPD hours each year as part of being a registered professional with the GDC.

With the heightened profile of the dental therapy role, this study sought to investigate the educational needs and teamwork issues of employing dental therapists in primary care dentistry. Fieldwork was conducted in four main phases (March - July 2007), drawing on the views and experiences of early career dental hygiene/therapists, those of more experienced dental therapists, and also dentists working alongside dental therapists. Reporting was completed after each of the four main phases, and short reports produced (April 2007- September 2008). In this full and final report, all the data are synthesised so that the aims and objectives of the study can be distilled into one substantive document.

This Executive Summary provides a digest of the main findings into four sections or themes:

- key characteristics of respondents;
- education and support needs, distinguishing between induction and continuing education;
- role and teamwork issues; and
- overall views

In the results section, each of the study's four phases has its own distinct section (Section Three, Parts One to Four). These provide detailed results from each phase, and include summaries of main findings. Those wishing to ground their understanding in a fuller explanation and discussion of the results are referred to these four distinct parts of the results, and the associated appendices.

At the end of the report (Section Four), the Conclusions and Key Messages are provided.

Project Aims

The broad aims of this study were:

i To explore the transition of newly-qualified dental hygiene/therapists (from the School of Dental Hygiene and Therapy, Birmingham Dental Hospital) into work, focussing specifically on their induction needs in this early phase of their career; and

ii To understand the educational needs and teamwork implications of dental therapists working in primary care NHS dental teams in the West Midlands.

The Data

There were four main phases of data collection:

i In March 2007, a questionnaire was distributed to all the final year undergraduate dental hygiene/therapy students studying at the School of Dental Hygiene and Therapy, Birmingham Dental Hospital. The response rate was 94% (15/16).

ii In March 2007, an on-line questionnaire was distributed to all 2006 dental hygiene/therapy graduates from the School of Dental Hygiene and Therapy, Birmingham Dental Hospital. This group of 'newly-qualified' dental hygiene/therapy graduates was targeted during the second half of their first year in work. The response rate was 100% (11/11). Structured telephone interviews were also conducted with a small sample of dentists (n=5) working with one of these newly-qualified dental hygienist/therapists.

iii In June 2007, a questionnaire was distributed to all registered dental therapists in the West Midlands (n=59). The response rate was 64% (38/59).

iv Also in June 2007, a questionnaire was distributed to lead dentists working with dental therapists in the West Midlands. Sampling was nested within the approach used for the West Midlands dental therapists i.e. dental therapists were asked to pass the questionnaire to the main dentist with whom they worked. Twenty-seven dental therapists confirmed they had passed the questionnaire to their dentist, and 20 completed dentist questionnaires were received – a response rate of 74% (20/27).

Main Findings

Key characteristics of respondents

- Amongst the final year hygiene/therapy undergraduates, most (80%) planned to work full-time, would prefer a mix of NHS/private work (92%), and would like a combination of hygiene and therapy work (87%).
- Within their first year of qualification, Birmingham Dental Hospital dental hygiene/therapy graduates worked in a range of deaneries in the UK; West Midlands (27%), and its neighbouring local deaneries (36%) were most common. All worked full-time and most achieved this by securing employment on two or three contracts. All worked in the GDS for at least some of their time.
- Most registered dental therapists in the West Midlands had qualified either in the last eight years (since 2000) or more than twenty-five years ago (before 1980). Over half had had a career break at some stage since qualification; these varied in length from less than five years through to more than 16 years.

- Most dental therapists in the West Midlands worked as a dental therapist (82%), were employed on a part-time basis (74%), and on only one contract (65%). These dental therapists were employed in all bar two of the Primary Care Trusts (PCTs) in the West Midlands, most frequently those within the former Birmingham and Black Country SHA area. There was a fairly even spread of respondents from the salaried service and the general dental service (GDS), and most were employed in large multi-surgery settings.

- Dentists' feedback about working with a dental therapist reflected a range of different experiences. About two-thirds (68%) worked in salaried dental services, the majority of which (85%) had an NHS contract. All those from the GDS setting (32%) had appointed a dental therapist since 2003, and again, most of these also had an NHS contract. There was a good cross-section of dental respondents from across the West Midlands.

Education and support needs

Early work experiences

- Newly-qualified dental hygiene/therapists' perception about starting work was mixed. Main challenges were associated with the day-to-day environment of working in a clinic/practice (getting used to the faster speed, the environment, dentist prescriptions and achieving the balance of hygiene/therapy). Fewer noted *clinical* challenges; those mentioned were principally restorative in nature and this was identified as one of the priority areas for an induction (foundation) programme.
- Final year undergraduates predicted the challenges of starting work to include pressured appointment times; but many also mentioned lack of awareness amongst dentists about their role, lack of confidence about a specific clinical skill, and the challenge of adopting appropriate patient management techniques.

Induction

- All final year undergraduates were aware of aspects of their professional practice they needed to improve, and similarly, for newly-qualified hygiene/therapists in their first year in work, most (64%) agreed they had become more aware of further learning needs since starting work.
- Although most newly-qualified dental hygiene/therapists had received good support from their dentist colleagues, many had no clear plan for their continuing education and reported finding it hard to find time for continuing education.
- There was strong support for an induction (foundation) programme for graduates in their first year of work. Nearly all of the final year undergraduates (93%), the majority of the newly-qualified graduates (73%), and most of the West Midlands dental therapists (59%) *strongly/agreed* there was a need for such a programme to support dental therapists' transition into work. Nearly all of the undergraduates (93%) made positive comments about the availability of such a programme, and for nearly two-thirds, it would encourage them to seek work in the West Midlands.

Topic priorities for an induction (foundation) programme

- Overall, there was consensus amongst early career dental hygiene/therapists (including both undergraduates and newly-qualified) that an induction (foundation) programme should include: restorative dentistry, paediatric dentistry, medical emergencies, preventive dentistry, teamworking, legislation and extractions. Other topics favoured (though less so) included cross infection and dental pathology. Many final year undergraduates also highlighted the value of prioritising: communication with patients, pharmacology, radiography and record keeping. In contrast, most of the undergraduates reported feeling *very confident* in dental health education, scale and polish, application of new materials and local analgesia.

Continuing education and support needs

- For the West Midlands dental therapist workforce, increased provision of continuing education would be well-received. This sentiment was mirrored by the early career dental therapists too.
- The main challenges in working as a dental therapist were associated with others' acceptance or understanding of the role (principally the dentists'), getting sufficient referrals, team issues, difficulties with particular patients and employment concerns (getting a job, appropriate pay etc).
- The extent to which dentists provided one-to-one support for their dental therapist varied. Just under two-thirds of dentists in the salaried services (62%) had regular one-to-one meetings with the dental therapist, and only half of the GDS dentists did.
- Most dentists who responded (83%) considered that they knew about the permitted range of duties for therapists, with salaried dentists significantly more likely to indicate that they did, compared with GDS dentists (chi square $p<0.05$). This finding starkly contrasts with the views of all groups of dental therapists surveyed: the majority of dental therapists in the West Midlands (86%) felt that dentists did not know about the permitted range of duties of a dental therapist.
- The dentists recognised the value of educational provision for them about the role of dental therapists. About half (54%) of the salaried dentists, and most of the GDS dentists (83%) felt it would have been helpful to have had some training on how best to support the dental therapist. Many of the dentists commented about the educational implications of appointing a dental therapist, for example, in terms of the dentist being fully prepared and informed about the new role, and the value of joint training with the therapist.

Topic priorities for continuing education

- The topic priorities identified by the West Midlands dental therapy workforce were mainly associated with restorative dentistry, medical emergencies, cross infection, preventive dentistry, communication with patients and radiography. Many were also generally keen to do more relevant CPD, keep up-to-date with new developments and learn more about working with particular patient groups (e.g. those with special needs).
- Dentists identified the main educational needs for dental therapists were: restorative dentistry (both permanent and deciduous teeth); and undertaking deciduous pulpotomy.

- The main tips offered by dental respondents for other dentists working with a dental therapist were about 1) clinical activities (i.e. knowing about the range of dental therapy duties, using them fully and recognising their skills with particular patient groups), 2) being clear about referral procedures and the interface with the dentist, 3) ensuring good communication channels, and 4) recognising that there are advantages for dentists and for the cost effectiveness of the practice.

Role and teamwork issues

Career aspirations

- For final year undergraduates, the majority (73%) had strong intention to find work as a dental therapist; the GDS was the most popular choice followed by the CDS, and then the PDS. Most (80%) planned to work full-time, would prefer a mix of NHS/private work (92%), would like a combination of hygiene and therapy work (87%), and to treat a mix of children and adults (93%). Most (63%) envisaged they would treat a few special needs and a few anxious patients, and would prefer to work with a mixed socio-economic patient group.
- West Midlands dental therapists' career aspirations were most frequently about adjusting the hygiene/therapy balance in favour of more therapy work or a good mix of hygiene and therapy. Also highlighted was a desire for a greater mix of adults and children and some wanted to get more involved in the diagnostic aspects of dental care or specific clinical areas.

Profile of work

- Dental therapists (newly-qualified and West Midlands wide) were asked about the profile of their day-to-day work in up to two of their employment contracts. In main contracts, newly-qualified hygiene/therapists were most likely to undertake *mainly hygiene* work (55%); only about a third undertook *mainly therapy* work (36%). From the West Midlands-wide survey of dental therapists, the picture was slightly more positive: just over half (55%) undertook *mixed hygiene/therapy* work. Reports about second main contracts indicated that all newly-qualified dental therapists undertook *mainly hygiene* and over half (55%) of the West Midlands-wide dental therapists undertook *mainly hygiene* work too; most of the rest of the West Midlands therapists did *mixed hygiene/therapy* (36%).

- The majority of these newly-qualified dental hygiene/therapists were not undertaking much therapy work on a day-to-day basis. Moreover, about a quarter of dental therapists in the West Midlands were also predominantly engaged in hygiene activity. These findings suggest a significant loss in the use of their particular skills and to the NHS more generally, since those engaged in *mainly therapy* work were more likely to work with both adults and children, work with special needs and anxious patients, and undertake *mainly NHS* work or a mix of NHS/private. Those who were *mainly hygienists mainly* worked privately. Such data also contrast sharply with the expectations of final year undergraduates, most of whom want to work in a mixed hygiene/therapy role (87%).

- Core activities frequently undertaken by all newly-qualified dental hygiene/therapists were: dental health education, scale and polish, application of materials, restorations (permanent and deciduous) and administering of local analgesia. More advanced therapy-type duties were only frequently undertaken by those who worked as *mainly therapists* or in a *mixed hygiene/therapy* role. These other duties included: deciduous polpotomy, extracting deciduous teeth, taking radiographs, taking impressions and placing rubber dam.

Teamwork issues

- Most dental therapists were happy with the amount of hygiene-type duties undertaken (e.g. scale and polish), but would like to get more involved in some of the therapy duties (e.g. supporting conscious sedation, taking impressions). There was enthusiasm from dental therapists to use the full range of duties, and most felt they had been well prepared for the extended role.

- Most dentists (over 70%) were happy with the amount of activities undertaken by the dental therapist, and nearly all (95%) felt that they encouraged the dental therapist to use the *'full range of his/her duties'*. A minority identified wanting more input from the dental therapist on: undertaking deciduous pulpotomy, taking radiographs, taking impressions, dental health education and placing rubber dam.

- Positive aspects highlighted by dental therapists about their work included patient care, the range of work undertaken, the value of appreciative and supportive dentists, and working within a team. Those *less* satisfied were more likely to be working mainly as hygienists, report difficulties finding a suitable job, receiving insufficient referrals and struggling to achieve an appropriate mix of hygiene and therapy work.

- Dentists' main motives for appointing a dental therapist had been to provide an improved skill-mix for the practice service – particularly the GDS dentists. GDS dentists had also been attracted by a dental therapist as being a cost-effective way of undertaking routine dental work. For about two-thirds of the salaried respondents, the dental therapist had already been appointed when they had started working in the service, so they were unable to comment on the initial motives for the appointment.
- Most dentists' comments about the '*best thing*' in working with a dental therapist referred to the team/skill mix benefits i.e. allocating routine dental work to enable the dentist to complete complex treatments. Approaching half identified the dental therapist's particular talent for managing specific patient groups (e.g. children, anxious and special needs patients). The main challenges reported were about finding time to communicate about treatment plans and encouraging other dentists to make referrals.

Overall views

- Job satisfaction was high amongst working dental therapists. Most West Midlands dental therapists (66%), and only half (50%) of the newly-qualified dental hygiene/therapists, indicated high levels of job satisfaction. Final year undergraduates also had positive impressions about their forthcoming role as a dental therapist; they emphasised the value of patient care, variety of work and job satisfaction.

- For dentists, there was unanimous agreement that the appointment of a dental therapist had '*worked out well*', and most (95%) were committed to maintaining a dental therapist in the practice/service. About two-thirds of dentists thought the new dental contract did not support the employment of dental therapists – particularly GDS dentists, where 80% of them felt this was the case. Most (76%) reported that the dental therapist role is cost effective in the NHS.

- Throughout the dentist responses, there were many endorsements about the employment of a dental therapist. Most comments were either generally positive, complimentary about

their skills with particular patient groups, or expressed enthusiasm about the benefits for the dentist and the skill mix of the dental team. Illustrative examples include:

> I feel therapists are much more proficient than dentists when working on very small children who require extensive restoration treatment. Our therapist offers so much in terms of her knowledge and expertise in dental health education and working with special needs adults and children.
>
> A dental therapist is a great asset to the dental team.

Conclusions and Key Messages

The views of a range of dental therapists and a sample of dentists working with dental therapists suggest there is a good deal of enthusiasm for the dental therapy role. High levels of job satisfaction amongst dental therapists signal that much is going well in dental teams across the West Midlands. However, with increasing number of new dental hygiene/therapy graduates, great interest in joining the general dental services, working in the NHS, and the introduction of mandatory CPD, there are several challenges ahead.

One of these challenges is to encourage and develop NHS dentists to employ dental therapists to work on the full range of permitted dental therapy duties. The provision of induction education and support, particularly for new dental therapists during their initial transition into work, could contribute towards meeting this challenge.

A second challenge is to strengthen continuing education for dental therapists by providing an increased range of appropriate continuing education for dental therapists coupled with support in planning CPD. Educational support for those returning from career breaks is especially important, given that more than half of dental therapists have had a break from practice since initial qualification. This study has signalled some key priorities for continuing education provision, but also highlighted that dental therapists' need support to make increased participation in education become a reality. Dentists have an important role here, and this work suggests many dentists would welcome the idea of educational support to help *them* work with dental therapists more effectively. Bringing the educational needs of dental therapists into sharper priority within dental teams will make it much more likely that dental therapists will implement any new learning acquired into their day-to-day clinical practice.

Key messages which can be synthesised from this work include:

- There is enthusiasm amongst new therapy graduates for starting work, especially in the general dental service; high levels of job satisfaction amongst practising dental therapists were also indicated.
- The dental therapist role can work well in dental teams, especially when dental therapists use the full range of their skills.
- There is widespread support for an induction (foundation) programme for newly-qualified dental therapists, which could support transition into work.
- Many dental therapists lack a clear plan for their continuing education. Barriers of time and appropriate courses were identified. Restorative dentistry is a priority learning needs.
- There is value in providing educational support for dental teams new to the role of a dental therapist.