

Reflections on a training course reorienting dental teams towards prevention

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IN BRIEF

- Members of the dental team often lack up to date knowledge and skills to deliver effective preventive care
- Discusses an innovative training programme designed to promote a holistic skill mix approach to prevention in NHS dental practices
- Describes the development, delivery and initial feedback of the programme.

Prevention is a core element of routine dental practice. However, members of the dental team often lack the required knowledge and skills to deliver effective evidence-based advice and support to patients. This paper describes the development and delivery of an innovative course designed to develop the preventive capacity of dental teams working in dental foundation training practices across London. The course contents were based upon national guidelines on evidence-based preventive care delivered in primary dental care settings (*Delivering better oral health*). An experienced team of trainers from diverse backgrounds successfully designed and delivered the courses and the initial feedback from participants indicate strong support for the approach developed.

BACKGROUND

Although overall levels of oral health in the UK have improved dramatically in recent decades, oral diseases still remain highly prevalent across the population and have a major impact on both the individuals affected and the wider society.¹ High quality treatment services are essential for pain and symptom relief, improving oral function and maintaining good oral health status. However, dental treatment alone will never eradicate oral diseases. Effective evidence-based prevention is needed in both clinical and community settings to tackle this major public health problem. Oral diseases are largely preventable and indeed increasing proportions of the younger cohorts in the population have good oral health. There is an urgent need to adopt and implement effective preventive approaches to promote oral health and reduce oral health inequalities across the UK population.

The dental profession has had a long-standing interest in clinical prevention. For many decades pioneering dental researchers have highlighted the importance of plaque

control for preventing periodontal diseases, the key role of fluorides in caries prevention and the importance of reducing sugar consumption, again to prevent and control caries. More recently the importance of tobacco and alcohol to oral health have also been recognised. Despite the widespread recognition of its importance in dentistry, prevention has, however, been somewhat neglected. A diverse range of barriers and obstacles have limited the adoption of prevention within clinical dental settings. Key barriers include lack of knowledge and skills among dental professionals, concerns over the effectiveness of prevention, time pressures, lack of supporting resources and materials, and insufficient financial incentives.²⁻⁵

Increasing emphasis is now being placed on the importance of prevention as a core element of primary dental care. The Steele Review highlighted the rationale and need to reorient dental services to include a greater emphasis on evidence-based prevention.⁶ Prevention as part of a care pathway is a core element in the current dental pilots running across England and it is highly likely that the reformed dental contract will include a major focus on delivering preventive care within general dental practice. *Delivering better oral health: an evidence based toolkit* has been widely disseminated among dental practitioners and a revised and expanded third edition has been published in June 2014.⁷ In Scotland the multifaceted *ChildSmile* programme includes the further development of a preventive approach in primary dental care teams,⁸ and in Wales the *Designed to Smile* programme also aims

to expand preventive capacity in general dental services.⁹

The General Dental Council recognises the importance of prevention delivered through effective teamwork and the need to develop appropriate roles and responsibilities across the dental team.¹⁰ With prevention, adopting a team approach is absolutely essential and provides an ideal opportunity to develop and enhance the skills and expertise of the wider workforce. Various training courses have been developed to enhance the dental team's preventive knowledge and skills. For example, University of Central Lancashire has a course for dental nurses and Primary Care Commissioning (PCC) has also developed a training course for dental practitioners. However, neither of these courses fully incorporates a holistic skill mix approach to prevention in an applied manner.

In 2012 London Dental Education and Training (formerly the London Dental Deanery) recognised the need to train and support dental teams in the knowledge and skills required to deliver effective prevention within primary dental care settings. This paper aims to describe the process of setting up and delivering the 'Prevention in Practice' (PiP) course for dental teams working within the London area. It is hoped that the experiences and insights gained from developing this course will be of interest and value to colleagues in other areas.

OVERVIEW OF TRAINING PROGRAMME

The overall aim of the PiP programme was to train all London dental foundation trainers

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and trainees, and one of their dental nurses in the knowledge and core skills required in implementing evidence-based prevention within primary dental care settings.

The overall objectives of the course were:

- To update the awareness and knowledge of dental foundation trainers in core aspects of clinical prevention, and to develop their role as mentor and trainer of both their dental foundation trainee and dental nurse
- To develop the dental foundation trainees' leadership and training skills in supporting the dental nurse in developing their preventive role
- To develop the knowledge, skills and confidence of the dental nurse in implementing prevention within the practice setting.

The decision to target all 134 dental foundation training practices in London was based on the recognition that these practices were involved in training newly qualified dental practitioners and should be more amenable to adopting a preventive agenda. The practices also had a training ethos of supporting and developing teams with embedded teaching skills. Due to the limited resources available, it was not possible to deliver the training to all dental practices in London. However, at a later stage it is hoped that the course will be offered to a wider range of dental teams across the London area.

The ethos of the programme was to deliver an applied and very practical course designed to empower and develop the self-confidence and skills of the participants. Particular emphasis was placed on reviewing the up-to-date scientific evidence base for prevention largely from *Delivering better oral health*.⁷ In addition, the opportunity to develop and enhance a team approach in prevention was highlighted throughout the course.

The nurses selected by the practices to participate on the course had to be registered with the GDC and for the purposes of indemnity had to be directly employed by the practice. There was no cost to the practice or dental nurse for this training programme.

The course was delivered and assessed by a range of experienced trainers from general dental practice, academic, commercial and dental public health backgrounds. The complementary and diverse nature of the trainers helped to reinforce the relevance and importance of the topic to NHS dentistry, and provided the relevant theoretical and scientific background.

The course comprised of two didactic elements, an introductory full day for dental

foundation trainers, trainees and nurses, followed by a half-day practical skills session specifically for the dental nurses.

Introductory day

The aim of the introductory day was to review and update the knowledge and skills required for the dental team to implement effective preventive approaches in a general dental practice setting. Based around *Delivering better oral health*,⁷ parallel sessions for dental foundation trainers and trainees, and nurses covered the core scientific preventive messages and techniques (Table 1). Particular emphasis was also placed on understanding the processes and barriers to behaviour change to enable participants to provide appropriate support to their patients. An overview on teaching methods was also given to the dentists to ensure that they were able to guide and support their nurse in developing their preventive role. In the final session of the day, trainers, trainees and nurses were all brought together to discuss and develop personal development plans and training plans for the nurse. This was felt to be particularly important to enable the teams to discuss, plan and monitor the logistics of providing appropriate training in the workplace.

Practical skills development session

Approximately four weeks after the introductory day, dental nurses attended a practical half-day session at one of London's bespoke Dental Education Centres. At this session the nurses were trained in how to apply topical fluorides in a simulated clinical environment. Particular emphasis was placed on the skills and techniques required to apply fluorides and oral hygiene advice. The training also covered personal protection, safe practice (eg finger rests), decontamination and cross infection control, safe posture, and plaque scoring. The importance of consent and good record keeping was also covered, as was the range of different types of cases they might come in contact with. The session also provided the opportunity for course organisers to check that the nurses had completed their personal development plans and training plans, and that they had started to book preventive patient appointments.

PRACTICE-BASED LEARNING

The vast majority of the training of the nurses was undertaken within the practice environment under the supervision of the dental foundation trainer and dental foundation trainee. Each nurse was given a variety of supporting resources to facilitate and reinforce their learning in a structured manner. Individual action plans were developed

Table 1 Introductory day course outline

Welcome and introduction
Setting the scene – importance of prevention
Course aims and overarching principles
Changing behaviours
Horizon scanning
Medico-legal aspects including record keeping and consent
Insights from dental pilots
Core knowledge training for dental nurses
Prevention of caries
Fluoride varnish application
Prevention of periodontal disease
Plaque scoring
Oral hygiene instruction
Teaching methods for delivering better oral health
Knowledge tests for participants
Developing personal development and training plans

for each nurse through discussion with their trainer and were reviewed and updated before the final assessment. Over the training period nurses were required to see a wide spectrum of patients with diverse preventive needs and characteristics. Prior to the assessment the nurses should have gained practical experience delivering a range of preventive advice and support including:

- application of fluoride varnish
- plaque scoring and toothbrushing instruction
- healthy eating advice
- stop smoking advice
- advice on prevention of erosion.

ASSESSMENT AND MONITORING

To ensure quality and to assess competency, a formal assessment was conducted approximately 14 weeks after the start of the course. The independent assessment was undertaken by two consultants in dental public health who had not been involved in the previous training sessions. The assessment framework consisted of three key elements:

1. A log book was assessed which comprised at least ten completed cases where fluoride varnish applications had been applied and deemed satisfactory by the trainer. It was a requirement that the cases presented in the log book included a range of different types of patients including both children and adults
2. Detailed case analysis of five patients. This involved a discussion with the assessor to reflect on the cases presented and in particular the

Table 2 Examples of scenarios used in assessment**Oral healthcare log: Scenario example 1**

From your clinical record complete an oral healthcare Log that demonstrates an intervention to:

An older child/teenager who has dental caries who is accompanied by a parent/carer.

The assessor will be looking for evidence that you can:

- Obtain a diet history through verbal questioning; this should show you consider the all dietary intake including all meals, supper, drinks and snacks
- Explain the cause, progression and prevention of dental caries
- Give nutritional advice based on Department of Health guidance and explain the Eatwell Plate principles to the patient and parent
- Advise on optimising fluoride appropriate to age
- Using questioning skills to check for your learning outcomes
- Advise on any future appointment for follow-up or further application of fluoride varnish

Oral healthcare log: Scenario example 2

From your clinical record complete an oral healthcare log that demonstrates an intervention to:

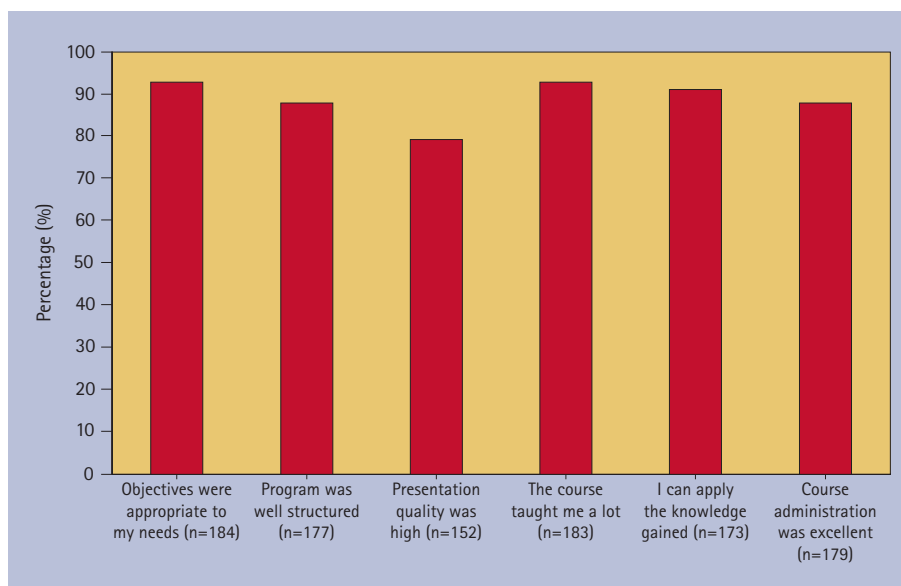
An adult who is experiencing Xerostomia (dry mouth).

The assessor will be looking for evidence that you can:

- Discuss and establish a cause/s of the Xerostomia
- Discuss the effects/risks to the patients oral health
- Obtain a diet history through verbal questioning, this should show you consider all the dietary intakes including all meals, supper, drinks and snacks
- Explain signs, cause, progression and prevention of dental caries
- Give nutritional advice based on Department of Health guidance and explain the Eatwell Plate principles to the patient
- Advise on the patients plaque control regime and risk to periodontal dental health
- Discuss ways to minimise discomfort/manage the condition
- Advise on optimising fluoride appropriate to age
- Using questioning skills to check for your learning outcomes
- Advise on any future appointment for follow-up or further application of fluoride varnish

patients treatment needs and specific requirements for preventive care and support

3. A simulated assessment of the nurse applying topical fluoride. The nurses were initially given 10 minutes to read a scenario and then were assessed for 20 minutes on all aspects of the encounter including consent, safe practice, communication skills, after

**Fig. 1** Participant feedback on introductory day of course

care and record keeping. Examples of some scenarios used are presented in Table 2.

FORMATION OF PEER SUPPORT GROUP

To ensure that the nurses' skills, knowledge and confidence acquired from this course are sustained and further enhanced in their work environments, it is essential that on-going support and guidance are provided. A peer support group has therefore been formed to facilitate on-going learning and professional development for participants. This group will be facilitated by an experienced dental care professional tutor who will be responsible for supporting and further developing the trained nurses.

SUMMARY OF COURSE FEEDBACK AND ASSESSMENT

Over an 18-month period six cohorts of participants were trained, representing over 90% of the dental foundation training practices across London. In total 90 dental nurses successfully passed the training programme assessment.

Very encouraging feedback was received by those attending the introductory day (Fig. 1). Overall, 92% agreed or fully agreed that the course objectives were appropriate, 88% that the programme was well structured, 79% that the quality of the presentations was high and 89% that the administration was excellent. Ninety-two percent of participants agreed or fully agreed that the course had taught them a lot and 90% that they had gained knowledge applicable to their work environment. A more detailed and comprehensive evaluation of the longer-term impact of the training programme is currently underway and will be reported in due course.

REFLECTIONS ON PROGRESS TO DATE

What has been learnt from establishing and implementing this training programme? Certainly the attendance and feedback from participants would indicate that the programme has stimulated considerable enthusiasm and interest. Courses on prevention often get mixed evaluation and are frequently considered rather dry, dull and not relevant to general dental practice. This programme appears to have successfully engaged with dental foundation trainers, trainees and dental nurses perhaps to a greater extent than existing training programmes. With the growing recognition that prevention is a core responsibility of the wider dental team and likely to be a central element of any reformed dental contract, interest in this part of clinical practice is growing. Involving the dental foundation trainees in supervising and supporting the dental nurses will hopefully facilitate the development of their leadership skills and their awareness of skill mix early in their clinical careers. The course was delivered by a diverse range of trainers including general dental practitioners with experience of implementing prevention within their practice environments, as well as direct experience of the NHS pilots. Ensuring an applied and practical approach is covered in the training appears to be essential. A comprehensive and independent evaluation of the training programme has certainly helped to demonstrate if the participants have developed the necessary knowledge and skills required to deliver evidence-based prevention. Finally, without the partnership established with Colgate (Oral Health Network) it would not have been possible to resource and run the courses as professionally and efficiently.

It is important to also recognise the challenges faced in running this programme. To deliver a high quality training programme requires considerable expertise and sufficient resources. Participants need to be highly motivated to commit the necessary time to undertake the training and assessments. In particular, it is essential that the practice principal supports and endorses the value of the training for the wider dental team. Discussions are currently underway on the best ways of disseminating the learning to other members of the dental teams in the participating practices and then more widely to NHS dental practices across London. One option being considered is the development of a 'training the trainers' model in which those who have completed the course and developed and refined their skills and knowledge, disseminate this to their colleagues. Lastly, in addition to training and skills development, other policy and organisational initiatives need to facilitate and support a reorientation to prevention.

CONCLUSION

There is increasing recognition that prevention is a core element of dental practice and

provides an ideal opportunity for the further development of a team approach in primary dental care. However, members of the dental team often lack the necessary knowledge and skills to deliver evidence based preventive advice to their patients. London Dental Education and Training (formerly the London Dental Deanery), in collaboration with Colgate, have developed an innovative training programme aimed at enhancing the preventive role of dental teams, and in particular dental nurses. The feedback on the course has been very encouraging and future evaluation will assess the longer-term impact of the training on the provision of preventive advice and effective team working.

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