

Dental nurse led teaching - From Plymouth to Antarctica

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Introduction

In May 2013, the General Dental Council (GDC) clarified the scope of practice (SoP)¹ for members of the dental team including dental nurses. This guidance is a way of describing what individual team members

are trained and competent to do in practising their profession. It describes the knowledge, skills, and experience team members can utilise to practise safely and effectively in the best interests of patients. This is currently under review by the GDC with the hope that this will further increase utility of dental nurses, particularly in primary care.

The dental nurse scope of practice describes additional skills dental nurses could develop including further skills in oral health education and oral health promotion.

Additionally, dental nurses can apply fluoride varnish either on prescription from a dentist or directly as part of a structured dental health programme.

Peninsula Dental Social Enterprise based in the South West of England employs dental nurses in a wide range of roles, and utilises the full scope of dental nurses in order to optimise outcomes for patients. Peninsula Dental Social Enterprise (PDSE) was created in 2013 and provides a 'corporate' structure for the management and development of the fabric of the dental learning clinical

environment, the structure for a consistent and sustainable community engagement programme, and a vehicle to manage clinical and professional governance.

PDSE works closely as the clinical delivery arm of Peninsula Dental School, University of Plymouth. There are four large Dental Education Facilities (DEFs) in Plymouth (Devonport and Derriford), Truro and Exeter under one umbrella where students from the University treat NHS patients under supervision, alongside providing dental treatment and outreach services to local communities. PDSE is a Social Enterprise Community Interest Company (CIC) and it is the only model of its type supporting a university dental school in the UK.^{2,3} As a CIC, everything it does is guided by its community purpose to which its assets and profits are dedicated.

Nurses within the organisation contribute to direct support of clinicians, act as clinic team leaders, support student clinics, radiography, clinical governance management, support postgraduate teaching

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Fig. 1 Dental nurse educator – delivering oral health education to BASMU doctors

and clinical delivery, coordinate clinical research, and lead on Outreach teaching and support of the British Antarctic Survey Medical Unit.

In this paper we describe a variety of roles in which PDSE utilises dental nurses to full scope, which adds not only to the variety of this crucial role, but supports the mission of PDSE and the Dental School to impact on oral health locally, nationally, and through our work with the British Antarctic Survey, internationally.

Prevention

Prevention is the cornerstone to everything that we do within dentistry. All members of the dental team are trained in this, and all registrant groups should be familiar with the standards detailed in *Delivering better oral health: An evidence-based toolkit for prevention*.⁴ Preventative advice should be patient specific, include written information and followed up at subsequent appointments. Patient records should include: details of disclosing, plaque and bleeding, risk assessment and reinforcement of specific oral hygiene instruction. Much of this falls within the dental nurse's scope when further training has been provided.

Below we provide some specific examples of dental nurse led preventative education programmes at Peninsula Dental Social Enterprise, where the dental nurse is educating in a range of different circumstances ranging from school children to Emergency Department doctors deploying to the Antarctic.

Dental nurse led oral health clinics

Dental nurse led oral health education and fluoride application clinics run once a week, where patients are referred via a PDSE primary care general dental practitioner.



Fig. 2 Dental nurse demonstrating set up of Portable Dental Unit – used on deployment

Training is provided to school teachers and class room assistants to ensure they are confident to deliver these fundamental oral health instructions. The training covers a wide overview of oral health, including: causes of tooth decay, prevention, brushing techniques, the importance of fluoride and free sugar within the diet. Furthermore, the training also includes how to provide these sessions to the children, which includes: organisation/set up, cross contamination, quality assurance and consent.

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During these 45 minute appointments the dental nurse works with the patient to deliver a bespoke oral health care plan.

The oral health clinics cover: home oral health routine, diet, tooth brushing techniques, interdental aids, fluoride application (as prescribed) and plaque indices.

Moreover, these clinics also involve trainee dental nurses, who assist the lead qualified nurse. The oral health clinics are now responsible for providing teaching support to six dental nurse students, across three Peninsula Dental School sites in the South West.

Furthermore, the oral health clinics provide a targeted patient centred approach for PDSE clinicians to utilise, with the aim to optimise patient support in making important oral health changes. These clinics also provide paediatric preventative care and looked after children who require fluoride applications.

Dental nurse led teaching in local schools

The Supervised Tooth Brushing Programme is a National Health Service England & Improvement South West funded programme. Early Years teaching providers are invited to join this programme to facilitate and encourage children brushing their own teeth in school and pre-school.

The aim of this programme is to provide a sustainable method of oral health delivery, enabling teaching staff to reinforce important oral health messages to the pupils and have the confidence to have conversations with the parents.

Over the last three years over 1,000 primary school and pre-school staff have been trained.

Dental nurse led training for health care professionals

The dental nurse oral health educators within the PDSE Dental Outreach Team deliver a range of oral health workshops for healthcare professionals and organisations. These organisations include school nurses, health visitors, speech and language therapists, dietitians, acute mental health units, as well as children and vulnerable adult services. The training provides insight into dental health promotion and key oral health messages.

The workshops take a sustainable educational approach by delivering oral health information to the staff rather than their target patient group. This is due the high turnover of service users at the organisations. Each training workshop can be tailor made to fit with the organisations requirements, and the oral health messages can then be adapted to meet the specific patient need.

Dental nurse led oral health education – British Antarctic Survey Medical Unit

The British Antarctic Survey Medical Unit (BASMU) is based at University Hospitals Plymouth (UHP) and is contracted to the British Antarctic Survey to provide healthcare for those serving in the Antarctic. There are three parts to this function:

- Preparation and screening
- Routine healthcare during deployment
- Managing emergencies including dental emergencies.

Dental emergencies have been analysed in a recent paper which shows a pattern of dental emergencies⁵ similar to other deployments to in remote locations.^{6,7,8} As personnel can be deploying for up to 18 months it is essential that the doctors are in a position to advise on



Fig. 3 BASMU dental handbook – materials use

‘The dental nurses involved (lead authors of this article) are key contributors to curriculum design, planning and delivery of this module which is bespoke to doctors who will be deploying to the Antarctic.’

oral health. A crucial element of the pre-deployment training is provided by dental nurses with key messages as follows.

- Planning and facilitating the four-day course
- Delivering a presentation on PPE and cross infection and control to include donning and doffing
- Oral health promotion to include process and causes of tooth decay and gum disease
- Tooth brushing techniques including interdental brushing
- Importance of fluoride toothpaste and the correct dosage
- Fluoride varnish application
- Support and assist throughout all practical sessions such as materials and mixing.

The dental nurses involved (lead authors of this article) are key contributors to curriculum design, planning and delivery of this module which is bespoke to doctors who

will be deploying to the Antarctic (Fig. 1 and Fig. 2). The doctors will be delivering a wide range of healthcare interventions including dental, where they have previously had very limited dental knowledge prior to starting the course. The recent paper *Dentistry where there is no dentist*⁶ highlights the unique circumstances where the doctors will operate and the medico legal parameters under which the doctors will work.

Additionally, the dental nurse team advise on dental equipment and specific cross infection issues and PPE as well as tips on training assistants in theatre.

In addition to supporting curriculum design and delivery the nurses are responsible for replenishment of dental equipment at a variety of sites in the Antarctic. To assist the doctors and medical staff the dental nursing team involved have designed a helpful dental clinical handbook, excerpts of which can be seen in Figure 3.

Conclusion

Peninsula Dental Social Enterprise is a unique and innovative module of clinical delivery and clinical education. Every staff member is encouraged to optimise scope to not only promote an interesting and varied work pattern, but to optimise outcomes for patients. In this paper we hope to have demonstrated the key role of dental nurses as educators and the impact they can have on oral health promotion in this case as far afield as the Antarctic.

Acknowledgements

The authors would like to thank all PDSE Staff for their contribution to the delivery of PDSE Projects. Also to Well Connected who manage the Supervised Tooth Brushing Programme. Special thanks to Professor Robert Witton as Chief Executive of PDSE & Director of Community Based Dentistry, Peninsula Dental School.

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<https://doi.org/10.1038/s41407-022-1607-2>