Special care dentistry trainee views on the medical and oral medicine elements of the specialist training Curriculum

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Abstract:

Introduction

Specialty training curricula are subject to periodic update, and trainee views are an important element in identifying which areas need particular focus. In this study, we wished to examine specialty trainee opinions on two areas of a curriculum for special care dentistry, in particular oral medicine, and the component elements of oral and related systemic disease, namely pathology, pharmacology and therapeutics, and human systemic disease.

Materials and methods

Following ethical approval, we identified 35 specialty registrars in special care dentistry in the UK and Ireland who were invited to use an online survey tool to gather demographic data, and then to ask their views on the delivery of training in oral medicine and oral and related systemic disease. Respondents were also asked whether sufficient importance was placed on these topics and if they could be accessed and delivered appropriately.

Results

The 23 registrars surveyed comprised a representative group from all parts of the UK and Ireland and were at different stages of specialty training. The majority thought oral medicine and oral and related systemic diseases were key elements of the curriculum and could be given more prominence, especially in the context of an increasingly ageing population with associated oral manifestations of chronic disease, multiple drugs and disabilities.

Discussion & conclusion

The registrars surveyed felt that oral medicine and oral and related systemic disease were integral to training and that emphasis and opportunities for training in these areas could be improved, especially for those trainees based outside of a dental hospital setting.

Introduction

The United Kingdom (UK) General Dental Council (GDC) curriculum for training in Special Care Dentistry (SCD)[1] begins with a definition of the scope of the specialty, which includes the statement:

Special Care Dentistry provides preventive and treatment oral care services for people who are unable to accept routine dental care because of some physical, intellectual, medical, emotional, sensory, mental or social impairment, or a combination of these factors. Special Care Dentistry is concerned with the improvement of oral health of individuals and groups in society who fall within these categories.

A thorough grounding in the broader medical or general health aspects of patients attending SCD clinics is important. Disease, disability and the drug management of these disorders will affect the oral health of the patient. To give just one example, many prescribed medications result in reduced saliva flow, and the dry mouth will suffer more with caries and periodontal disease and dental treatment needs are increased. Patients' drugs and underlying disorders may also make patient management and treatment planning more complex. In addition, many systemic diseases have signs and symptoms that present in the oral cavity – diagnosis and management of the oral manifestations of systemic disease is a core element of the oral medicine elements of StR training, as well as those conditions that primarily present in the oral cavity (e.g. chronic facial pain, recurrent oral ulceration and infections such as candida and herpes simplex/zoster). In this context SCD specialist training in the broader medical, and oral medicine curriculum components are key to the wider practice of SCD.

The purpose of this study was to determine the views of specialty training registrars (StRs) in SCD concerning these two areas of their specialist training curriculum: oral medicine, and those aspects of patient management related to underlying systemic disease and the therapies used for their management.

Materials and Methods.

The GDC SCD curriculum has a section called 'Biological Sciences of Relevance to Special Care Dentistry', and within it, Section 6 is entitled 'Oral and Related Systemic Diseases', with subdivisions of 6a 'General Pathology', 6b 'Oral Medicine', 6c 'Pharmacology and Therapeutics' and, 6d 'Human Systemic Disease'. For the purposes of this StR survey, we wished to divide this section into two areas: (6b) oral medicine (OM) and combine the others (6a, 6c and 6d) into a second group under the umbrella term, Related Systemic Disease and Therapies (RSDT).

It was expected the analysis of the results of the survey would help to get a feel for the current StRs views on the OM and RSDT elements of the SCD curriculum, and also inform any future development in this area. The GDC has indicated that there is a planned programme for revision of the dental specialty curricula in its published document of 2016[2] and will likely include revisions of the current GDC curriculum for SCD.

The survey participants, StRs in SCD, were identified via the Specialty Advisory Committee (SAC) for SCD and contacted via email. At the time of the survey there were 35 StRs in training in the UK and Ireland. Data was collected through an online survey tool[3] and the study was formally approved by the Cardiff University, School of Dentistry Research Ethics Committee. The anonymous online survey had four sections. The first collected basic demographic data on the StRs such as where they were in their training programme, whether they were full-time or less-than-full-time (LTFT), what was their first year of dental registration and what year they had begun specialist training. The second section asked questions in relation to the OM components of the StR curriculum and the third section asked questions related to the RSDT elements of the curriculum (those areas typically covered within the human disease/clinical medical sciences areas of a dental undergraduate curriculum). The final section of the survey asked about the training and education methods for both OM and RSDT in their specialty training. The online survey questions had yes/no options, as well as Likert-style options[4] for opinions on a statement. Some questions were adapted from a previously published survey of medical specialty trainee attitudes to elements of their StR curriculum, in order to use previously validated questions and answer options[5]. In each section, most questions had an 'other' option and there were text boxes where StRs could clarify or expand upon their responses.

The web URL link to the online questionnaire was emailed to the thirty-five SCD StRs identified via the SAC in July 2018 with the survey open for four weeks. A reminder was sent to all StRs two weeks before the close of the survey. Online surveys have been shown to produce a good response and the first reminder will prompt further responses, with additional reminders producing increasingly diminishing returns[6].

Results

1. Respondent demographics

Twenty-three of the 35 StRs responded to the invitation, giving a response rate of 66% .Trainees began their specialist training at a mean of 5.7 years after graduation (range 3-9 years). The majority of the responders to the survey (n=22, 96%) graduated from a UK or Ireland dental school, with just one respondent graduating from another European country. Dental schools from all constituent countries of the UK, and Ireland were represented, including long-established dental schools and more newly-established schools with graduate-entry programmes. Of the trainees, 35% (n=8) were in their first year, 17% (n=4) were in their second year and 39% (n=9) were in their third year. Two StRs were in LTFT training and two had been awarded their certificate of completion of specialist training (CCST). 35% (n=8) of StRs were mainly NHS dental hospital based, 56.5% (n=13) were based in the NHS community dental service, and the remainder (n=2) were working in both areas equally. The large majority of StRs were in an NHS funded training post (83%, n=19) and the remainder were in academic training posts. Of the respondents 17% (n=4) had passed the tri-collegiate membership diploma examination.

2. Oral medicine elements of the SCD StR Curriculum

The StRs were asked about their knowledge and awareness of OM elements of the SCD curriculum and the majority were aware of the OM guidance contained within (83%, n=19), the teaching and learning methods described (57%, n=13) and the workplace-based assessments (WBAs) used to demonstrate OM knowledge and learning in the training programme (83%, n=19). Only 39% (n=9) had

completed any of the oral medicine WBAs at the stage of training they had reached. The majority of StRs (83%, n=15) anticipated completing the OM WBAs in the second and third years of their programmes. 61% (n=14) had the opportunity to attend OM outpatient clinics as part of their training, but less than half (48%, n=11) had specific teaching outside of these clinics for OM topics. In the free-text section of the questionnaire, two StRs made the following comments: *"Option for attending OM clinics would be there, but not without a reasonable amount of planning and travel due to being in a Community post.",* and *"I only attended 2 clinics at my request and organised by myself".*

The StRs were further asked about their knowledge and learning in OM and its importance during training (Table 1).

In relation to knowledge in OM gained from undergraduate and foundation training being sufficient for SCD specialist practice, 74% (n=17) strongly disagree/disagree, with only 17% (n=4) agreeing with the statement. In relation to OM in the SCD curriculum being a good use of time, 70% (n=16) strongly agree/agree, with just 17% (n=4) disagreeing. In relation to an expressed belief that OM is increasingly important and needs more attention in the SCD curriculum, 65% (n=15) strongly agree/agreed with this statement, and just 26% (n=6) disagreeing.

Free text comments regarding OM teaching and learning included the following statement, *"I certainly don't feel that OM teaching at UG level is sufficient … I have also felt any study days I have attended aimed at StRs have not had a strong OM element".*

3. Related systemic disease and therapies elements of the SCD StR curriculum

The StRs were asked about their knowledge and awareness of RSDT elements of the SCD curriculum and the majority were aware of the RSDT guidance contained within (96%, n=22), the teaching and learning methods described (74%, n=17) and the workplace-based assessments (WBAs) used to demonstrate RSDT knowledge and learning in the training programme (78%, n=18). 61% (n=14) had completed one or more of the RSDT WBAs at the stage of training they had reached. The majority of StRs (86%, n=12) anticipated completing the RSDT WBAs in the second and third years of their programmes. The majority (70%, n=16) had received specific teaching directed at RSDT topics at their

stage of StR training. In free-text comments relating to RSDT, StRs said, *"I feel this topic is often included more readily than OM within conferences, lecture series etc. but again most of my teaching has been on an informal basis with the specialists/consultants I work alongside."* And *"This seems more relevant to our daily practice".*

The StRs were further asked about their knowledge and learning in RSDT and its importance during training (Table 2). In relation to knowledge in RSDT gained from undergraduate and foundation training being sufficient for SCD specialist practice, 74% (n=17) strongly disagree/disagree, with only 17% (n=4) agreeing/strongly agreeing with the statement. In relation to RSDT in the SCD curriculum being a good use of time, 96% (n=16) strongly agree/agree, with no StRs disagreeing. In relation to an expressed belief that RSDT is increasingly important and needs more attention in the SCD curriculum, 87% (n=17) strongly agree/agreed with this statement, with no StRs disagreeing. 13% (n=3) expressed no opinion either way.

4. Training/education methods for oral medicine and related systemic disease and therapies

The SCD StRs were asked how the OM and RSDT elements of the curriculum were integrated into their training. Specific clinical attachments or blocks of teaching outside of SCD training clinics were used to gain clinical experience for 34% (n=10). 59% (n=17) felt the OM and RSDT elements were integrated into the special care clinics undertaken during training. SCD StRs were also asked what specific teaching methods had been used to gain knowledge in OM and RSDT. There was a relatively even spread across seminar teaching (22%, n=10), conferences (24%, n=11) and lectures (28%, n=13). Other methods, such as self-directed learning (SDL), journal clubs and tutorials made up 22% (n=10). Just 2 StRs (4%) had gained knowledge from a previous formal academic qualification (MSc in SCD).

The final question in the survey asked if the StRs in SCD had any comments or concerns about the teaching or experience they had in OM and RSDT in their training so far. The large majority (70%, n=16) had no concerns, and the remainder (30%, n=7) had some concerns. The free-text comments of those with concerns included the following:

- *"I am concerned that I have not gained enough clinical experience in oral medicine in my dental core training in order to meet the criteria of the curriculum and pass the tricollegiate exam."*
- *"More specific guidance on oral medicine / systemic disease curriculum would be useful"*
- *"Teaching only organised by trainees - no formal teaching timetable on topics"*
- *"Although difficult I feel as an StR not linked with a dental school it is more challenging to get formal shadowing/training"*
- *"Different community services are commissioned differently. Depending what local provisions are available in your managed clinical network and dependent on your trainers, which may be little. Oral medicine in maxfax is different from in hospital"*
- *"Very limited teaching during my StR training programme - most of my oral med knowledge comes from an SHO position done in (…) which was excellent"*
- *"Not specifically incorporated into our training, have to organise the teaching ourselves, which can be difficult to incorporate into an already busy timetable"*

Discussion

Curriculum review is an important an ongoing process, and the GDC is engaged in this process[2]. Two extremely pertinent statements from the literature relating to curriculum revision are: "A well designed curriculum with appropriate goals and clearly articulated … objectives is vital to the success of any learning experience"[7], and "a curriculum that is static gradually declines and dies. A successful curriculum is continually developing. It must respond to evaluation results and feedback."[8] The feedback from this study may allow contributions from trainees to influence updates in the GDC curriculum, via the SAC for SCD.

The three key stakeholders for a specialty training curriculum are the trainees who follow the curriculum, the trainers/experts who devise and design the curriculum such that it is fit for purpose, and ultimately the patients who are the beneficiaries of treatment by dentists with specialist knowledge and experience. We know from analysis of demographic changes that "… an increasing number of people with long-term disability, chronic conditions and multiple health conditions will increase the need for care and change the nature of the demand…"[9]. This survey is aimed at helping

StRs in SCD give feedback on key elements of the specialty training curriculum such that they can be evaluated and improved for future trainees, trainers and therefore benefit patients.

The first part of the survey established that the group of StRs who took part in the research are a likely representative group for the larger group of SCD StRs in the UK and Ireland.

In the second part of the survey, the majority of the StRs felt that there was insufficient knowledge of OM from undergraduate and early postgraduate training to bring with them into the SCD StR curriculum, and that there ought to be a greater focus on training and development in this area. This was felt especially acutely by those SCD StRs who were based in community dentistry clinics and away from dental hospitals and schools where access to OM clinics and consultants was more easily obtained. At least one trainee felt there was not enough focus on OM topics in study days aimed at SCD StRs. Around two-thirds of StRs felt that teaching/training in OM was a good use of their time and that OM topics were increasingly important and needed more attention in the SCD curriculum.

In the third part of the survey, looking at RSDT, the StRs felt much more comfortable with its place in the StR curriculum. The majority had received teaching in these areas and felt these topics were much more readily included in conferences, lecture series etc. The two main society meetings offered for those with an interest in SCD in the UK and Ireland are from the British Society for Disability and Oral Health, and the British Society of Gerontology. The society names alone give a good idea of the context and content of these meetings.

The StRs felt that their undergraduate teaching in RSDT was insufficient for StR level knowledge. Research has shown that in the general dentistry setting, undergraduate students recognise the usefulness of teaching in human disease/clinical medical science for dentistry (HD/CMSD) which contains the key elements of RSDT, as a preparation for managing occasional patients with special dental care needs.[10] Furthermore, newly-qualified dentists feel that their dental undergraduate teaching in HD/CMSD prepares them for early independent practice, and to be able to manage those patients with special needs for dental provision[11]. SCD StRs clearly want more teaching in RSDT (HD/CMSD) topics at a specialist level and that it is key to safe SCD practice.

The final part of the survey showed that the majority of StRs (70%) had no concerns overall in relation to their teaching and training in OM and RSDT as part of their SCD training, but the free-text comments of the 30% who did have concerns were very interesting and may give guidance to future updates in the GDC curriculum for SCD in relation to OM content in particular, and especially formal teaching opportunities. Echoing the findings of the second part of the survey, the comments indicated some StRs felt that there ought to be a greater emphasis in OM teaching, training and experience, and it is likely that those SCD StRs based in the community and distant from dental hospitals and schools with ready access to OM consultants and clinics felt the most disadvantaged.

Conclusions

This survey of UK and Ireland StRs in SCD has confirmed that OM, and RSDT are important and integral elements of the GDC specialist training curriculum, and that OM in particular needs a greater emphasis in the curriculum. It is to be hoped that these findings are taken into account in any future updates of the SCD curriculum, which the GDC have indicated may be imminent.

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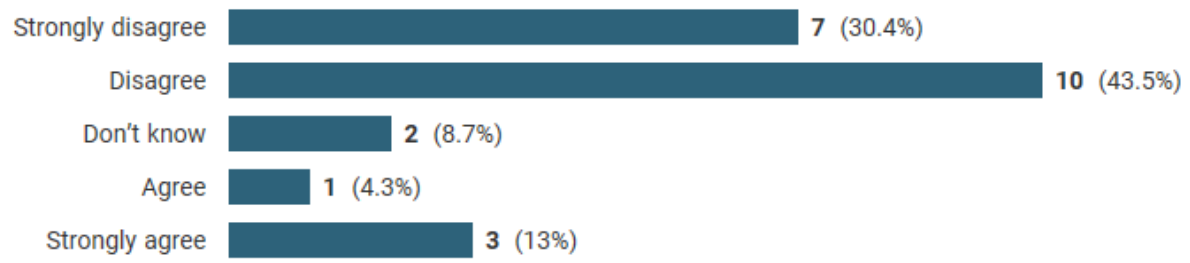
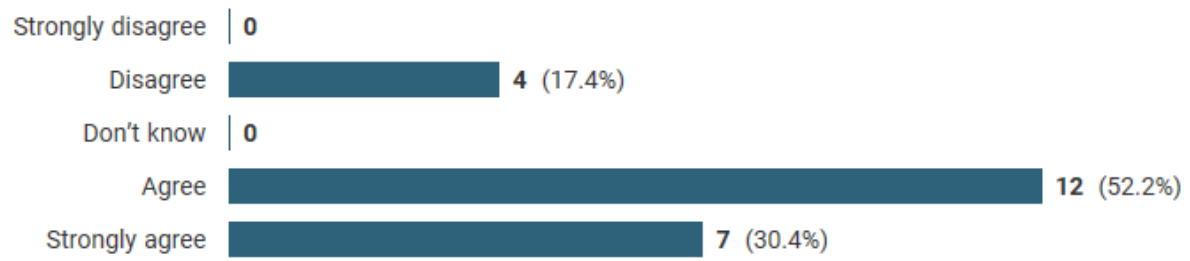
Table 1. SCD StRs views on OM knowledge & learning and its importance in training.

1. I believe I know all I need to know about oral medicine from undergraduate and foundation training



2. I believe learning about oral medicine in the SCD StR programme is a good use of my time



3. I believe that oral medicine is increasingly important and should be given more attention during my training

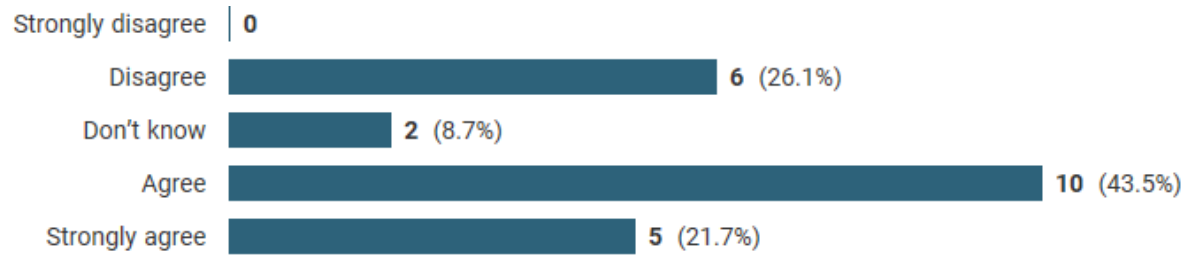
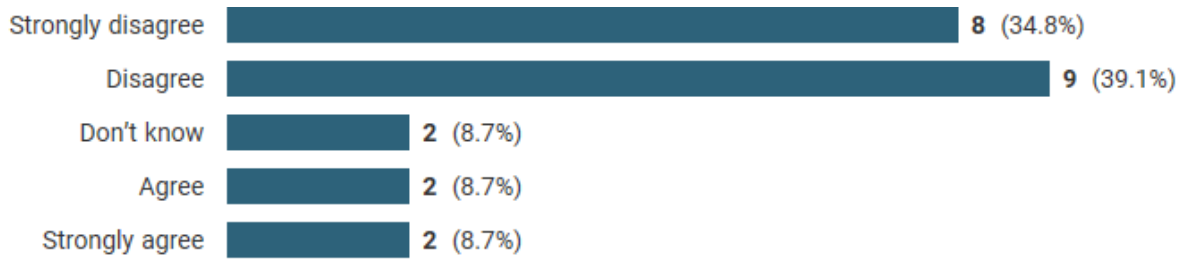


Table 2. SCD StRs views on RSDT knowledge & learning and its importance in training.

1. I believe I know all I need to know about RSDT from undergraduate and foundation training



2. I believe learning about RSDT in the SCD StR programme is a good use of my time

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