

The knowledge of dental nurses at one institution of the scope of practice of the dental team members

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Objective

To explore the knowledge of dental nurses at one institution of the scope of practice of dental nurses and the other dental team members

Method

All dental nurses employed within a dental hospital and its two outreach centres were invited to complete an anonymous questionnaire on their knowledge of the scope of practice of the dental team members. Responses were entered onto SPSS v20 for analysis.

Results

Ninety-nine per cent (n=77) of the available dental nurses completed a questionnaire. One hundred

per cent (n=77) of the respondents were female. The modal age range was 25-34 years (n=25). Ninety-three per cent (n=69) identified themselves as British. Eighty per cent (n=56) of respondents stated that they knew what 'Scope of Practice' meant. Ninety-nine per cent (n=76) stated that they were fully aware of the role of the dental nurse. Fifty-seven per cent (n=44) of respondents had had the roles of the dental team members explained to them and 87% (n=67) felt that having the roles explained to them would help them in their current role.

Conclusion

The results indicate that dental nurses' knowledge of the Scope of Practice for the dental team members is greatly influenced by the workforce and service provision of their employing institution.

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Introduction

The Scope of Practice published by the General Dental Council (GDC) sets out the skills and abilities each registrant group should have.¹ There are seven registrant groups: dental nurses, orthodontic therapists, dental hygienists, dental therapists, dental technicians, clinical dental technicians and dentists, while the title 'dental care professional' (DCP) encompasses registrants in all groups except dentists.² The scope of practice of each registrant is likely to change over the course of their career; it may be expanded through the development of new skills, or narrowed by the deepening of knowledge in a particular area¹.

It has been demonstrated that there is variation between registrant groups in their appreciation of the roles of other members of the dental team.³ Research has demonstrated that false preconceptions among healthcare teams can be responsible for team dysfunction⁴ while one of the prevalent causes of unsuccessful collaborations within health teams has been found to be members' lack of awareness of practice components of each other.

At undergraduate level, DCP students have been shown to have a better idea of the role of the dentist than dental students themselves;³ dental and DCP students have expressed positive attitudes to inter-professional education, as a means of improving teamwork and communication skills⁵, in spite of the differing perceptions between these groups about the roles of the other⁶ and how these can evolve during professional years. Registrants could improve their knowledge of the roles of the dental team through Continuing Professional Development (CPD). CPD for dentists in the UK has been set by the GDC at a minimum of 250 hours per 5-year cycle, of which 75 hours must be verifiable;⁷ for DCPs the minimum is 150 hours, of which 50 must be verifiable.⁷ Registrants could expand their scope of practice by undertaking CPD to facilitate this, given the freedom each registrant has to choose CPD relevant to their role. However, where a registrant's knowledge of the scope of practice is limited, the potential for them to expand their own scope of practice is likewise.

The benefits of expanding one's scope of practice can only be maximised where registrants are fully aware of their potential scope of practice and that of the wider dental team. A limited knowledge of the scope of practice could possibly lead to CPD opportunities being chosen which are less relevant to the role of a registrant within their own dental team, as opposed to another choice better suited and with better potential. This study was conducted to assess the

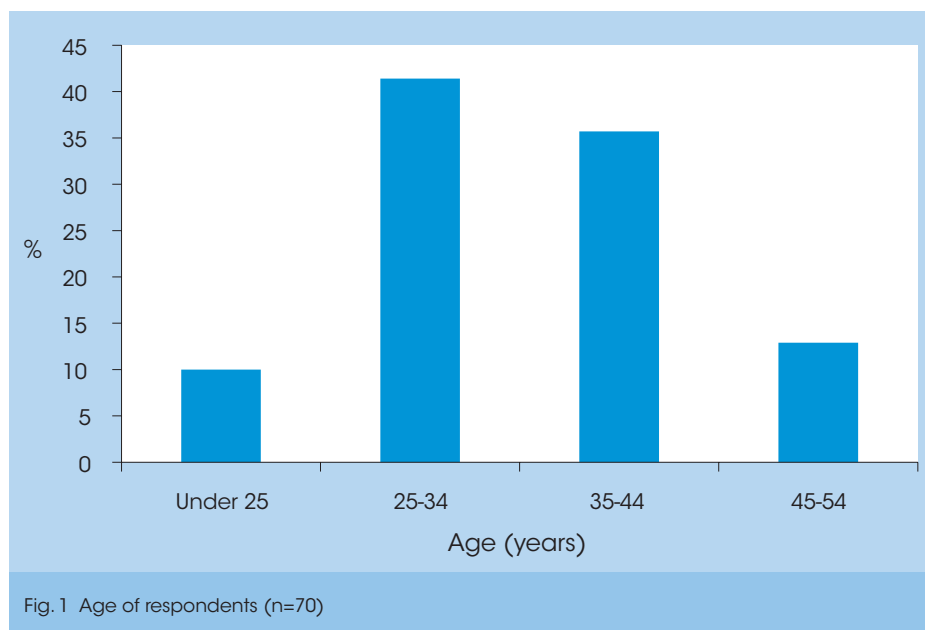


Fig. 1 Age of respondents (n=70)

knowledge of dental nurses of the scope of practice and thus their awareness of potential avenues for development open to them and to the other dental team members.

Method

The study took place at Cardiff Dental Hospital and its two outreach centres. A questionnaire covering the roles of the dental team members, duration of career and demographic questions was registered with the audit committee in the dental hospital and approved for distribution to the dental nursing workforce. The questionnaire was devised using statements from the GDC's Scope of Practice and participants were asked to indicate their awareness of them: two skills were chosen from the Scope of Practice for each registrant group, except dental nurses as this group was addressed in detail later in the questionnaire. A pilot was employed as a means of testing the questions and dental nurses unable to complete the final questionnaire were issued with copies. The questions in the pilot were deemed viable and copies of the final questionnaire were subsequently distributed to each department in the dental hospital and concurrently to its two outreach centres. This was done at the beginning of the working day and the questionnaires were collected several hours later. The questionnaire was anonymous and envelopes were provided to maintain this anonymity. The responses were entered into SPSS v20 and analysed descriptively.

Results

The questionnaire was completed by 77 of the 78 available dental nurses, yielding a response rate of 99%. The total number of

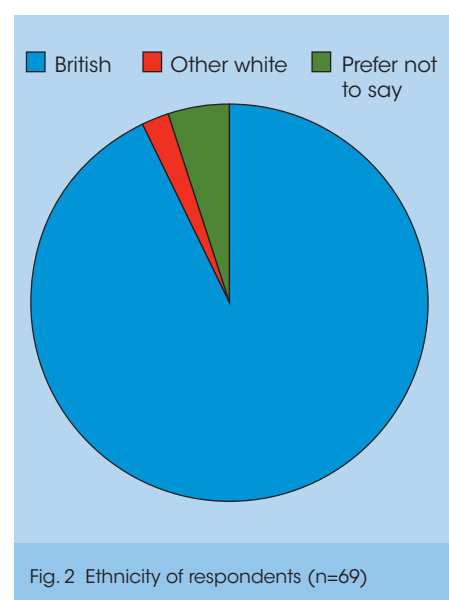


Fig. 2 Ethnicity of respondents (n=69)

dental nurses employed at Cardiff Dental Hospital and its two outreach centres on the day of the questionnaire was 101, 78 of whom were working. One hundred per cent (n=77) of the respondents were female. The age ranges of the respondents (n=70) are displayed in Figure 1, with the modal age range being 25-34 years (n=25). Figure 2 shows the ethnicity of the surveyed workforce, with 93% (n=69) identifying themselves as British within the Office of National Statistics classification. Seventy-two dental nurses stated the number of years they had been practising as a dental nurse, including their training period; their responses ranged from 2 to 32 years, with a mean of 14 years and a median of 13 years.

Eighty per cent (n=56) of respondents stated that they knew what 'Scope of Practice' meant, however the respondents' level of

Table 1 Level of Awareness of Roles

Dental Team Member	I am fully aware of the role of this dental team member		I am partially aware of the role of this dental team member		I am not aware of the role of this dental team member	
	Frequency	%	Frequency	%	Frequency	%
Dental nurse	76	99	1	1	0	0
Orthodontic therapist	16	22	49	65	10	13
Dental hygienist	66	88	9	12	0	0
Dental therapist	58	77	17	22	0	0
Dental technician	52	69	23	31	0	0
Clinical dental technician	11	15	38	51	25	34
Dentist	67	89	8	11	0	0

Table 2 Awareness of Skills from Scope of Practice of Registrant Groups

Skill	Aware of skill	
	Frequency	%
An orthodontic therapist can remove fixed appliances, orthodontic adhesives and cement	40	52
An orthodontic therapist can place brackets and bands	39	51
A dental hygienist can apply topical treatments and fissure sealants	63	82
A dental hygienist can place temporary dressings and recement crowns with temporary cement	34	44
A dental therapist can extract primary teeth	66	86
A dental therapist can place pre-formed crowns on primary teeth	46	60
A dental technician can repair and modify dental devices	67	87
A dental technician can carry out shade taking	65	84
A clinical dental technician can take detailed dental history and relevant medical history	5	7
A clinical dental technician can take and process radiographs and other images related to providing removable dental appliances	4	5
A dentist can diagnose disease	66	86
A dentist can carry out oral surgery	72	94

awareness of the roles of the dental team members varied considerably (Table 1). Awareness was highest of the role of the dental nurse with 99% (n=76) stating that they were fully aware of this. Eighty-nine per cent (n=67) were fully aware of the role of the dentist and 88% (n=66) were fully aware of the role of the dental hygienist. Awareness was lowest of the role of the clinical dental technician with 15% (n=11) of respondents fully aware, 51% (n=38) partially aware and 34% (n=25) not aware of this.

Two skills were chosen from the Scope of Practice for each registrant group (except dental nurses which were addressed in detail later in the questionnaire) and the respondents stated whether they were aware these skills could be undertaken by registrants in the relevant groups; again, awareness

varied considerably (Table 2). Ninety-four per cent (n=72) of respondents were aware that a dentist could carry out oral surgery, the highest level of awareness of the chosen skills. Five per cent (n=4) were aware that a clinical dental technician could take and process radiographs and other images related to providing removable dental appliances, the lowest level of awareness of the chosen skills.

The respondents' awareness of the skills all dental nurses should have, is presented in Figure 3. Awareness exceeded 90% for all skills except 'Keep full and accurate patient records' and 'Make referrals to other health professionals' which were 75% (n=58) and 23% (n=18) respectively. Figure 4 shows the respondents' awareness of the skills dental nurses could develop in the course of their careers. All respondents (n=77) knew dental

nurses could develop skills in oral health education and promotion, while just 8% (n=6) knew dental nurses could develop skills in removable appliance repair, the lowest level of awareness of the 18 additional skills.

Fifty-seven per cent (n=44) of respondents had had the roles of the dental team members explained to them and 87% (n=67) felt that having the roles explained to them would help them in their current role. Ninety-one per cent (n=70) wished to attend a CPD session on the roles of the dental team members.

Discussion

The experience of the surveyed workforce throughout their careers is likely to account for the responses given to the questions. While just 80% (n=56) stated that they knew what 'Scope of Practice' meant, more of the workforce were clearly aware of at least some of its content as 99% (n=76) were fully aware of the role of the dental nurse. This would indicate that the title of the document, rather than the entirety of its content, was what some of the respondents were unsure of.

The majority of respondents were familiar with the roles of the dentist and dental hygienist, probably because they had previous experience of working with them at least in their current place of employment. Fewer were aware of the role of the dental therapist, perhaps because dental therapists were not employed at Cardiff Dental Hospital or at its outreach centres. However, dental therapy students are trained at the hospital and this may have served to convey some knowledge of the Scope of Practice of a dental therapist. Although dental technicians are employed at the hospital and at one of the outreach centres, their interaction with the nursing workforce is more limited than that of the predominantly clinical dental professionals, a likely reason for the lesser awareness of this profession. The roles of the orthodontic therapist and clinical dental technician were likely to be least recognised as neither profession were employed, or trained, at the hospital or at either of its outreach centres.

The respondents' level of awareness of the skills of the dental team members represented their awareness of the roles of the team members: awareness was greatest of the skills of a dentist, and least of the skills of a clinical dental technician. The reasons for this are likely to be the same as for the varying level of awareness of the roles. Were the questionnaire to be completed by the dental nursing workforce at a different institution, the level of awareness of both the roles and skills of the dental team members

could be likely to represent the broader dental workforce at that location.

Where the skills of the dental nurses were concerned, awareness was greatest of skills that the dental nurses surveyed used, or were trained in. At Cardiff Dental Hospital many of the dental nurses were trained in oral health education and promotion, an additional skill that all respondents were conscious of. However, none were trained in removable appliance repair, the additional skill which least were aware of. Awareness of laboratory skills that could be developed by dental nurses was limited, perhaps due to an onsite dental laboratory at the hospital and at one of the outreach centres providing a service that negated the need for them to be developed by the dental nurses.

The level of interest in learning about the roles of the dental team members was considerable, with 91% (n=70) wishing to attend a CPD session on the topic. An interest in career development options or learning more about roles which some of the respondents may have considered training in could be the reason for this. Another possible reason could be a willingness to recognise the limitations of each dental team member such that practice beyond their Scope of Practice could be more readily identified.

Conclusion

Dental nurses' knowledge of the Scope of Practice for the dental team members is greatly influenced by the workforce and service provision of their employing institution. Their knowledge of options for professional development is thus as vast, or as limited, as their experience. As CPD uptake and its benefits are related to the scope of practice, greater awareness on the latter among the dental nursing workforce is suggested.

The authors wish to thank all of the dental nurses who participated by completing and returning a questionnaire.

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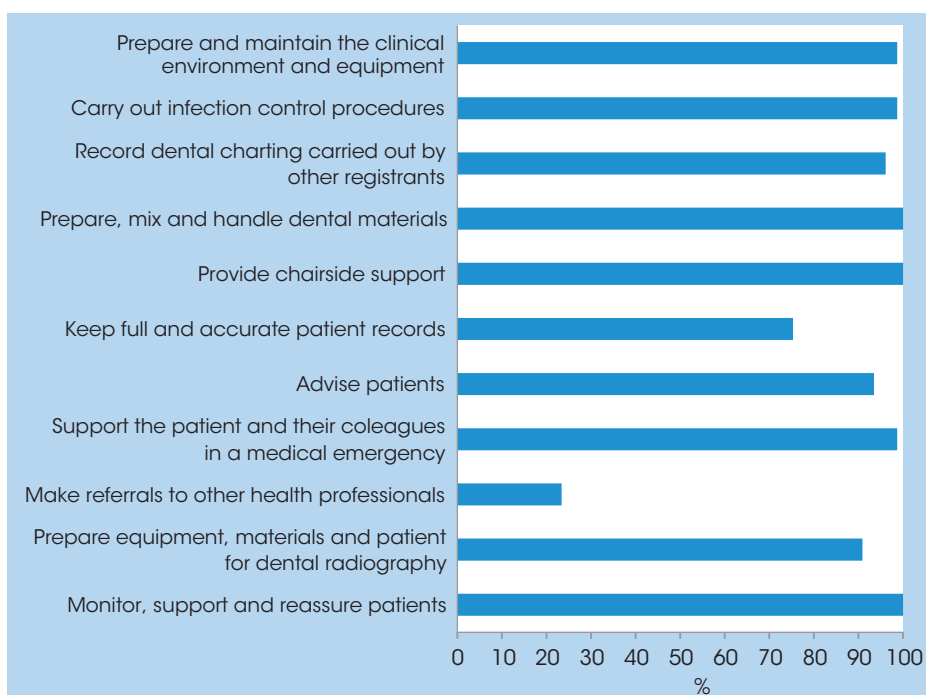


Fig. 3 Awareness of skills dental nurses should have

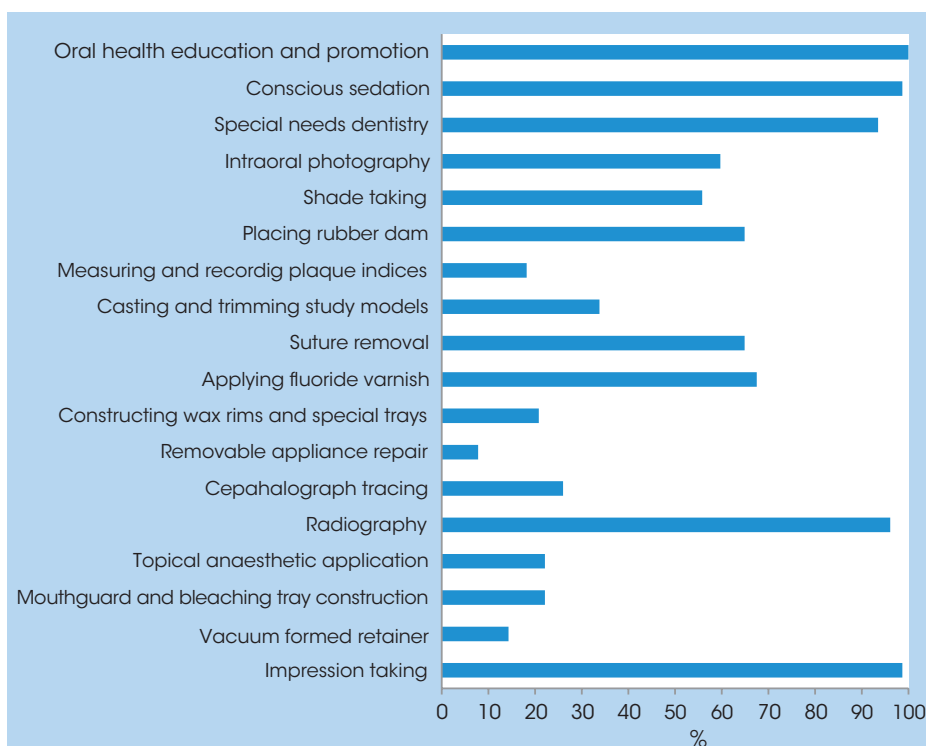


Fig. 4 Awareness of skills dental nurses could develop in the course of their careers

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