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Non-working dental therapists: opportunities to ameliorate workforce shortages

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Abstract

Background: Workforce development is a critical factor allowing delivery on government health priorities. Against a backdrop of increasing demand for dental therapists being significantly higher than the levels of recruitment, it is widely acknowledged that rural and remote areas (having greater recruitment and retention issues) will face a significant shortfall in therapist numbers as the workforce shortages take hold in dentistry. This study analysed the reasons for dental therapists leaving the profession, and factors that would promote the recruitment and retention of dental therapists, especially in rural and remote areas.

Methods: A postal survey was undertaken amongst all registered dental therapists in Western Australia between the years 1999–2003.

Results: Of all respondents, 28 per cent indicated that they do not work as dental therapists anymore. A number of reasons for leaving the profession were highlighted, including family reasons, career change, poor salaries, relocation, illness and injury, and stress. To increase retention and recruitment of dental therapists to rural areas, a number of opportunities were highlighted by respondents, including increased salaries, living support, travel assistance, access to continuing education, recruitment of more rural students and more flexibility (including job sharing).

Conclusion: This survey has highlighted various opportunities to recruit and retain dental therapists in their profession and to increase the numbers of rural dental therapists. A broad integrated rural retention strategy is necessary to address these issues among the dental therapy workforce.

Key words: Dental therapy, workforce, rural, recruitment and retention.

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INTRODUCTION

In Western Australia, most dental care for school aged children is provided by dental therapists under supervision of dentists through the School Dental Service. A strong School Dental Service programme has coincided with significantly improved oral health of children in WA.[1] In 2000, Western Australia had the highest number of dental therapists per 100 000 residents (17.6).[2] However, 40 per cent of these therapists were registered to work in the private sector in keeping with the wider legislative framework that operates in WA.[3] This compares with the national practising rate of 6.6 dental therapists per 100 000 people, with an estimated total of 1260 therapists in Australia. In order to maintain this overall rate in 2015, it is estimated that an average national recruitment of 110 dental therapists per year is required.[4] However, the annual rate of decline in practising numbers is projected to increase as the workforce is ageing.[4] The 2004 intake for dental therapy in Western Australia was eight students and the 2005 intake was 10 students.[5]

Workforce development is a critical factor allowing delivery on government health priorities.[6] Against this backdrop of increasing demand for dental therapists being significantly higher than the levels of recruitment, it is widely acknowledged that rural and remote areas (having greater recruitment and retention issues) will face a significant shortfall in therapist numbers as the workforce shortages take hold in dentistry.[6] One opportunity for reducing the decline in the dental therapy workforce is identifying the issues leading to the attrition of the profession. This study analysed the reasons for dental therapists leaving the profession, and factors that would promote the recruitment and retention of dental therapists in rural and remote areas.

MATERIALS AND METHODS

In 2002, the Centre for Rural and Remote Oral Health undertook an oral health workforce survey in rural and remote Western Australia, and the results of this survey indicated that a high number of dental therapists, although registered, are not actively participating in the oral health workforce.[5] In 2004, a

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Table 1. Demographic characteristics of working and non-working dental therapists

	Non-working (N)	Working (N)	Total (N)
Total number	71	182	253
Male	1 (1.4%)	2 (1.1%)	3 (1.2%)
Female	70(98.6 %)	180 (98.9%)	250 (98.8%)
Mean age (SD)	39.2(6.9%)	41.2(7.5%)	40.6(7.4)
Worked > 6 years	60 (84.5%)	171(94.0%)	231 (91.3%)
Worked 3-5 years	5 (7.0%)	3 (1.6%)	8 (3.1%)
Worked < 2 years	6 (8.5%)	8 (4.4%)	14 (5.6%)
Rural	26 (36.6%)*	42 (23.0%)*	68 (26.9%)
Urban	45 (63.4%)*	140 (77.0%)*	185 (73.1%)

*p<0.05 (chi-square).

postal questionnaire survey was undertaken. Ethics approval for this study was obtained from the Ethics Committee of the University of Western Australia.

Lists of all registered dental therapists for 1999, 2000, 2001, 2002 and 2003 were obtained from the Dental Board of Western Australia. A standardized anonymous questionnaire was sent to every person who currently is or was registered since 1999. The questionnaires were sent out in July 2004, and reminder postcards were sent out in August 2004.

Questionnaire

The questionnaire had four sections: demographics; a section for non-working therapists; a section for working dental therapists; and a section for all dental therapists about attitudes to the profession, and recruitment and retention to rural areas. Both open-ended and closed questions were used. Respondents had to indicate on the questionnaire whether they currently work in the Perth metropolitan area, or in a rural location. The urban/rural split was based on their responses to this question. All questions regarding perceptions, reasons for not working as a therapist anymore, and proposed retention and recruitment strategies to rural areas were open-ended. The questionnaire was piloted on a sample of dental therapists and refined before use. The data were analysed using SPSS version 11.5.

RESULTS

A total of 493 questionnaires were sent, and 293 responses were received. A total of 38 questionnaires were returned due to change of address. With these out-of-scope, only 455 remained in the survey frame. A further two therapists did not want to be involved. Valid responses were obtained from 253, resulting in a response rate of 55 per cent. Most respondents (n=250, 98.8 per cent) were female and three (1.2 per cent) were male. The mean age of respondents was 40.6 years (sd 7.4) (Table 1), with the youngest 20 years and the oldest 55 years.

Non-working dental therapists

Of the 253 respondents, 71 (28.1 per cent) indicated they no longer worked as dental therapists, with 25 (9.8 per cent) of them no longer registered. This group was classified as the non-working subgroup. All but one of this subgroup was female (n=70; 98.6 per cent) (Table 1). The mean age of the sub-group was 39.2 years (sd=6.9) compared with 41.2 years (sd=7.5) of the working sub-group, with the youngest non-working dental therapist being 23 years and the oldest 55 years (Table 1). Most of the non-working sub-group (n=60; 84.5 per cent) worked for longer than six years (Table 1). A significantly higher percentage of non-working dental therapists (n=26; 36.6 per cent) lived in rural areas compared with working therapists (n=42; 23.0 per cent) (Table 1).

Table 2. Reasons for dental therapists leaving the profession

Reason	N	%
Family commitments	24	33.8
New career/change	23	32.4
Poor pay	10	14.1
Relocation	10	14.1
Illness/injury	9	12.7
Stress	7	9.9
Other	25	35.2

Of the 71 no longer working, 69 per cent (n=49) worked in the School Dental Service for an average of 6.6 years (sd=6.5). Non-working dental therapists worked in the city for an average of 7.9 years (sd=7.2) and rural areas for 2.9 years (sd=3.2). Twenty-one therapists (29.6 per cent) worked only in the city areas and nine therapists (12.7 per cent) worked only in rural areas. The other 57 per cent (n=41) of dental therapists worked throughout both rural and metropolitan Western Australia. The average number of years since working was 4.9 years (sd=4.4) with length of time ranging from less than one year to 23 years.

Even though these dental therapists were no longer working within the profession, 57.7 per cent (n=41) would consider going back to work as a dental therapist, 23 (35.2 per cent) would not return to work while 7 per cent (n=5) were undecided.

There were a variety of different reasons for leaving the profession (Table 2). The majority were no longer working due to family commitments and new careers. Just over 50 per cent (n=36) of the non-working dental therapists had completed other studies. With the introduction of the dental hygienists training programme, many therapists had trained to work in private practice. From our survey, 19 therapists (7.5 per cent) were also registered as dental hygienists. Of these, six were no longer working as dental therapists, but as dental hygienists.

Recruitment and retention of rural therapists

The analyses of these factors included the responses from both the non-working and the working sub-groups (Table 3). The majority of the dental therapists (n= 182, 71.9 per cent) suggested increased salary as an incentive to recruit and retain therapists in rural areas. Many respondents indicated that increased pay would help due to the higher expectations of duties in rural

Table 3. Recruitment and retention incentives to rural areas

Rural incentives to recruit and retain	N	%
Increased salary	182	71.9
Financial assistance	80	31.6
Increased support	70	27.7
Travel assistance	68	26.9
Increased access to training	51	20.1
More flexibility	34	13.4
Regular contact with other dental therapists	11	4.3
Increase technology available in School Dental Service	8	3.2
Improve equipment	8	3.2
Positive promotion of being a dental therapist in the country	8	3.2
Short positions especially in very remote/rural areas	7	2.8
Vehicle provided	7	2.8
Higher profile of what a dental therapist can do for the community	5	2.0
Better conditions, e.g. patient load too high, hot/cold mobile vans	6	2.4
Guaranteed transfer back to city after x years	4	1.6
Job share positions	4	1.6
Incentives to advance	4	1.6
Consideration of spouse	4	1.6
Recruit from rural areas like in medicine	4	1.6

areas and the higher costs of living. Many also reported that salary increases would compensate for the loss of the "city way of life". Other opportunities suggested included support for travelling, housing, air-conditioning and general improved living arrangements. Dental therapists also suggested more access to training courses including appropriate travel time and/or bringing the training to rural areas (Table 3).

DISCUSSION

Nearly one-fifth (18.2 per cent) of dental therapists who completed the survey were registered but were not working as dental therapists. As the workforce ages, more therapists retire and the numbers of active practising dental therapists is projected to decrease.[4]

Australia's National Oral Health Plan has workforce development as one of its action areas and proposes outcomes which include "an appropriate aggregate number and mix of oral health practitioners, and involvement of other oral health professionals in all aspects of oral health promotion, disease prevention and identification and management of oral health concerns".[6]

The barriers to improving recruitment and retention of the workforce need to be assessed before strategies to address the issue can be developed. Respondents in this survey highlighted a number of reasons for leaving the profession, including family reasons, career change, poor salaries, relocation, illness and injury, and stress. Some of these problems can be difficult to address, including family issues and relocation.

The need for increased remuneration was a significant theme emerging from the survey. This aspect was not only mentioned as a reason for leaving by 14 per cent of those dental therapists not working anymore, but was also mentioned as a factor possibly influencing recruitment of dental therapists in both rural and urban areas. This theme is in line with other studies of Australian and international dental therapists satisfaction levels.[7]

Retention problems in allied health have been associated with organizational commitment and management in previous Australian work.[8] This includes lack of career structure, input in decision-making, job autonomy, time management, organizational and professional support, and poor job satisfaction. According to Schoo *et al.*[8] allied health professionals and their managers can be trained to enhance team management skills such as respecting and negotiating. Based on themes identified in the literature, an interactive model is also being developed that addresses recruitment and retention factors in rural areas in three domains: personal or individual; organization; and community.[8]

Opportunities exist to increase incentives and reduce barriers for dental therapists to return to their careers, especially for those who take time off for family reasons. Re-registration procedures were mentioned by a number of respondents as a deterrent to return to the workforce. This is especially a problem for rural dental therapists as re-registration requires a six-month programme only offered in the city. This should be made more accessible, and courses via the internet should be an option. Regulatory models that differ across jurisdictions also restrict utilization of dental therapists. Because registration requirements differ between jurisdictions, therapists moving from one area to another might have to undergo additional courses and/or training in order to register.

The workforce shortage is specifically acute in rural and remote areas. To increase retention and recruitment of dental therapists to rural areas, a number of opportunities were highlighted by respondents, including: increased salaries, living support, travel assistance, access to continuing education, recruitment of more rural students and more flexibility (including job sharing). Greater flexibility when negotiating for leave/holiday, pay and working conditions (especially in the public sector) were also suggested by some respondents as another incentive to stay in the profession.

A total of 28 per cent of the therapists suggested increased support for the rural dental therapists, many of whom felt isolated and under-experienced when sent to rural and remote areas in their first two years. Other suggestions included sending two graduates to each location to increase support, or sending a new graduate to a centre with a more experienced graduate for the first six months. This concern confirms previous work that indicates new allied health graduates may feel a lack of competence through lack of experience, contacts and/or knowledge.[8-11] Consequently, they may feel less confident in their positions, particularly when they are required to work as sole practitioners. The shock after starting a career in rural practice can have

a profound impact on the individual professional[8,9,12,13] and their intention to stay. Providing required information and support (e.g., education, professional network, and management) is likely to assist retention of allied health practitioners in rural settings.[8,14] A study on the retention of allied health workers in Victoria found significant relationships between intention to stay and age, clear job descriptions, orientation, recommending work position and type of work. This study recommends professional support, workplace orientation, lifestyle, family support and a career path as basic needs to retain the allied health workforce in a rural area.[15] Many of the key issues identified in this and previous work clearly act as both recruitment and retention factors, and cannot always be distinguished.

In other health professions, such as medicine, it has been well documented that students with a rural background are more likely to return to a rural area after graduation.[16] As there is a shortage of dental therapists in rural and remote areas of Western Australia, recruiting rural students to the profession should encourage their return to a rural area after graduation. There is also evidence that rural rotations during undergraduate study have a positive influence on attracting people to work in rural and remote locations.[17-19] The National Oral Health Plan also indicates the potential for universities to explore the establishment of oral health programmes under rural clinical school models.[6]

CONCLUSION

The ability of the dental workforce to meet demand for dental services in both the public and private dental sector is deteriorating. This survey highlighted various opportunities to recruit and retain dental therapists in their profession and to increase the numbers of rural dental therapists. A broad integrated rural retention strategy is necessary to address these issues among the dental therapy workforce.

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