Exploring the career experiences of Australian oral health therapists in different practice settings

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Objective: To examine the reasons behind Australian oral health therapists (OHTs) pursuing different career pathways. Basic research design: Qualitative study with thematic analysis within an inductive realist approach. Methods: A convenience sample of OHTs completed semi-structured interviews on Zoom. Participants discussed their experiences working as OHTs and commented on the future directions for the profession in Australia. Results: Participants (n=21) chose clinical practice due to excellent job availability, good remuneration, and the opportunity to use their knowledge. Many indicated that non-clinical careers helped relieve the stress and fatigue of clinical practice. Some also enjoyed the variety that non-clinical jobs brought and viewed them as a means to advance their career. Participants indicated the need to better communicate the professional role and scope of practice of the OHT profession to other healthcare providers such as dentists and the general public. Some viewed independent practice as a way to serve the community. Others did not feel that they had the knowledge and skills to do so. Conclusion: These findings may help individual OHTs in career decision-making. OHTs could assume a major role in addressing oral healthcare inequality in Australia.

Keywords: Dental hygiene, oral health therapy, dental therapy, dental career, career experience, career satisfaction

Introduction

Australians from low socioeconomic backgrounds continue to face oral health inequalities and lack adequate access to dental care, experiencing greater burdens of disease (Australian Institute of Health and Welfare, 2021). To improve access to care, the dental therapy (DT) and dental hygiene (DH) professions were established to complement primary dentists (Satur and Moffat, 2010). The oral health therapy (OHT) profession eventually emerged, combining the scope of practice of both DT and DH to become a preventionfocused oral health generalist (Satur and Moffat, 2010). Today, all three professions collaborate to improve the oral health of Australians through disease prevention, health promotion, and education. Australian OHTs may now work with greater independence as the regulatory requirement that limited their practise within a structured relationship with a dentist was revised in July 2020 (Dental Board of Australia, 2021). However, OHTs in clinical practice may be restricted to treating patients who are under a certain age if their education did not include adult restorative therapies (Dental Board of Australia, 2021). These limitations may be overcome via continued professional development (CPD) or further university education.

In 2019, 98% of Australian OHTs identified their principal role as a clinician working in private and public practice (Australian Government Department of Health, 2019). However, OHTs frequently face restrictions in fully utilizing their scope of practice (Godson *et al.*, 2009; Williams *et al.*, 2009; Csikar *et al.*, 2009; Pang *et al.*, 2012; Nash *et al.*, 2012; Nash *et al.*, 2014). In the United Kingdom (UK), dental hygienist-therapists

(DH-Ts) reported being restricted by their employing dentists to providing only dental hygiene care (Godson et al., 2009; Williams et al., 2009; Csikar et al., 2009). Similarly, OHTs in New Zealand reported restrictions to practice as either DH or DT due to limited employment opportunities (Pang et al., 2012). Consequently, many OHTs lacked confidence in their restorative skills and were concerned about maintaining their full scope of practice (Godson et al., 2009; Williams et al., 2009; Csikar et al., 2009; Pang et al., 2012). As indicated by many OHTs, employing dentists may restrict their use due to being uninformed of their full scope of practice and lacking confidence in their competencies (Godson et al., 2009; Williams et al., 2009; Csikar et al., 2009; Pang et al., 2012). However, one Australian study has shown that OHTs do not have narrowed utilisation but have the opportunity to practice across their full scope (Teusner et al., 2016). In addition to clinical practice, OHTs are well prepared to improve the oral health of society on a socio-political level through research and policy change in non-clinical careers in academia, education, and public health (Satur and Moffat, 2010). Employment in these areas can also advance the profession through advocacy and gaining more recognition (ADHA, 2016; ADHA, 2005; CDHA, 2015). Nonetheless, most Australian OHTs remain in clinical practice (Australian Government Department of Health, 2019).

Existing research on OHT careers has largely relied on surveys to examine areas such as practice setting distributions, tasks performed in clinical practice, and patient demographics. Qualitative studies are needed to explore in-depth the reasons behind OHTs favouring clinical careers. Hence, this study was conducted to explore the career experiences of Australian OHTs. Its purpose was to examine the reasons behind Australian OHTs pursuing different career pathways, in particular, the reasons behind choosing clinical careers over non-clinical careers.

Methods

Ethics approval was granted by the University of Sydney Human Research Ethics Committee (Project No. 2020/726). A convenience sample of practising and formerly registered professionals with dual qualifications in dental therapy-hygiene (oral health therapy) in Australia were recruited on social media. A recruitment letter was posted on the Facebook page of the Dental Hygienists Association of Australia (around 4,800 followers) with permission. The same letter was also posted in the Dental Product Review Facebook group, which is composed of Australian dental professionals and students (around 17,000 members). The recruitment letter was shared by members of the research team on their social media accounts. In addition, an email was sent to students enrolled on the Doctor of Dental Medicine program at the University of Sydney School of Dentistry, inviting those with qualifications in OHT to participate. This recruitment strategy purposefully reached OHTs from different backgrounds practising in different settings and locations. Participant recruitment ceased when data saturation was reached as determined by recruitment, data collection and analysis occurring simultaneously (Saunders et al., 2018).

Potential participants emailed the research team to express their interest and schedule their interview. An information statement was provided to all participants. Verbal consent was obtained at the start of the interview. Semi-structured interviews were conducted on a video conferencing platform (Zoom) by a single researcher (DC). Guided by open-ended questions, participants shared their personal experience of practising as an OHT in various settings and commented on the future trajectory of the Australian OHT profession. The questions were developed from a scoping review (Chen *et al.*, 2021).

All interviews were recorded and transcribed verbatim. The length of each interview was solely determined by the individual participant. Thematic analysis (Braun and Clarke, 2006) was conducted using NVivo (v1.5). Using an inductive realist approach, interview transcripts were read and manually coded without any analytic preconceptions or theoretical frameworks. Codes were collated to identify themes. The emerging themes were refined by examining their internal homogeneity and external heterogeneity. After refinement, themes were named, described, and analysed in relation to the original data to address the study objectives. All members of the research team participated in the analysis and interpretation of the qualitative data.

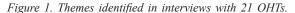
Results

Twenty-one Australian OHTs consented to participate and completed the interview. Interviews ranged from 25 minutes to over an hour. All participants dedicated a significant portion of their OHT career to clinical practice, working in either private or public clinics. Participants chose clinical practice due to excellent job availability, good remuneration, and the opportunity to use their knowledge (Figure 1). As participants progressed through their careers, many started to explore non-clinical aspects of the OHT career. Participants considered non-clinical jobs as a way to relieve the stress and fatigue they experienced in clinical practice. Some also enjoyed the variety that non-clinical practice brought and viewed it as a means to further advance their OHT career.

Demographics

All participants were registered and practising (ranging from 2 to 30 years), except for one who was formerly an OHT and but was now a dentist. Nineteen held bachelor's degrees in oral health therapy. Participants had diverse educational backgrounds with many pursuing additional certificates/diplomas, dentistry, and graduate degrees. Twelve had added adult scope to their OHT registration.







Life in Private Practice

Participants elected to work in private clinics (mostly owned by individual dentists or dental corporations) due to great job availability (Table 1). This allowed ready employment. Private jobs often had a flexible schedule that allowed participants to work full- or part-time. This was especially suitable for participants undertaking additional studies or with parental responsibilities:

"With my current workplace they know that I'm studying and hence they have provided quite a great deal of flexibility regarding choosing the days that I want to work." [OHT3]

Another reason to work in private practice was satisfaction with remuneration, which enabled greater financial freedom:

"The job availability [of private practice] is better and with time I've come to learn that remuneration is a lot better as well... it's a lot more suitable for people who have families and responsibilities." [OHT7]

However, several participants in private practice described facing significant restrictions in their scope of practice. They were often obliged to give up their restorative scope to practice only dental hygiene. Although the scope largely depended on the specific dental clinic, restrictive clinics were all privately-owned in affluent suburbs of metropolitan areas. Participants in these clinics were employed as dental hygienists, not as OHTs, to perform mainly periodontal debridement, along with limited preventive procedures such as fissure sealants and fluoride varnish applications. Patients at these private clinics often had low caries risk and were already seeing a dentist regularly for routine examinations and restorative care, and therefore OHTs only saw them for routine periodontal examinations and care. The OHT's daily schedule was overwhelmed by the high demand for periodontal care. Consequently, the opportunities for performing any restorative procedures were greatly limited:

"They didn't really want to employ anyone else to meet the needs of the hygiene of patients coming in, and so it was sort of like a lot of pressure in that I

Table 1. Characteristics of 21 OHT Participants.

	n
Female	15
Male	6
Currently practising	20
Formerly registered	1
Private Practice	14
Public Practice	7
Bachelor's degree	19
Diploma/Certificate	2
Additional qualification at bachelor's level or below	9
Considered pursuing graduate education (non-	6
dentistry)	9
Considered pursuing dentistry	
With adult restorative scope	12
Without adult restorative scope	9
1-5 years of experience	9
6-10 years of experience	7
More than 10 years of experience	5

had to do all of the hygiene stuff, and then try work out when I could do like children's dental therapy and adult dental therapy as well." [OHT10]

Nonetheless, some participants did manage to perform restorative procedures, but only under selective circumstances. Due to these restrictions, some participants were concerned about maintaining competence across their full scope of practice.

Another factor contributing to restriction was the clinic's practice model. General dentists in private clinics sometimes preferred referring children to paediatric dentists, thus further preventing the OHT from performing paediatric restorative procedures. This especially limited participants without adult scope who could only perform restorative procedures on children. Also, some general dentists were simply unwilling to let OHTs undertake restorative procedures:

"Most practices prefer not to engage in dental therapy... they are just very dental hygiene focussed... Even after completing that adult scope training I was informed by a previous employer that... 'This isn't that kind of practice for you to do restorative, I don't want you doing restorative on my patients'." [OHT7]

Additionally, four participants reported that they were not provided with a dental assistant, but were expected to practise primarily dental hygiene unassisted. Restorative procedures were often challenging, and sometimes unsafe if unassisted, especially on uncooperative children. These participants did not want to place inferior quality restorations and hence decided against performing restorative procedures:

"Because they know that the oral health therapist... can do cleans without an assistant. So, they don't provide an assistant. And there's a whole other income that they don't have to worry about. And if there is already another dentist there to provide the work, then they prefer to just get the patients to be referred to the dentist and that way they save on staff costs." [OHT2]

However, some participants in private practice did manage to use their full scope. This was done in non-traditional ways via locum work at multiple clinics, at overseas outreach clinics, or working at an OHT owned practice.

Life in Public and Rural Practice

By contrast, OHTs in public and rural clinics were employed primarily for restorative rather than dental hygiene procedures. Many pointed out that public and rural clinics often had wider patient pools with complex treatment needs that provided unparalleled clinical exposure, as compared to most private practices in metropolitan settings. Participants who worked in public and rural clinics utilised their full scope of practice and undertook more complex procedures such as multi-surface restorations, pulpotomies, stainless steel crown placements, and primary tooth extractions, which were not readily available in metropolitan private clinics. Some participants knowingly pursued jobs in public and rural settings specifically to maintain and enhance their clinical competence. After working in public and rural settings, many participants could consolidate their theoretical knowledge, improve their clinical decision-making, and elevate their skills in restorative dentistry. Several suggested that working in public and rural clinics built a strong foundation for their OHT career:

"I used to try and get employment in quite challenging [rural] areas because... that's where you really consolidate your really important skills, like your restorative skills and your clinical decision-making skills... working as a health practitioner in regional rural areas and areas of high need. It gives you a different perspective on how healthcare should be delivered and how to maximise training opportunities" [OHT19]

Furthermore, participants viewed working in public and rural settings as a way to help address healthcare inequality in rural Australia:

"I would have done a good thing for my state, so I would have helped out people that probably wouldn't have had much opportunity to get dentistry otherwise" [OHT10]

Additionally, some were attracted to the benefits package associated with public positions. Nonetheless, participants who had experience applying and working in public clinics suggested that the public jobs were less readily available and sometimes required relocation. The application process could be lengthy and competitive as compared to private, which was a disincentive:

"I actually really wanted to work in public for some time but the main concern... is how difficult it is to proceed to an interview when a position is quite rarely made available... even for entry level positions I have been rejected and told that I need more experience... I just found it quite difficult to get my foot in the door in public" [OHT7]

Moreover, some participants expressed frustration over the heavy workload and poor remuneration for some public positions.

Perspectives on Non-clinical Practice

Many participants enjoyed working as clinicians and being involved in direct patient care. Some felt reluctant to pursue non-clinical careers, already having stable careers in clinical practice with good remuneration. Pursuing non-clinical careers often required major pay cuts and significant lifestyle changes that they did not think worthwhile:

"I don't want to sit and be an academic... I was already working long hours at my private practice. I just don't have time to pursue other things... The financial side of things as well is that they don't pay as much" [OHT3]

Also, some participants suggested that non-clinical careers often required additional education and training, which did not align with their career plans. Participants in rural and regional Australia could not pursue non-clinical careers as most positions in sectors such as academia and public health were available in metropolitan areas:

"I am sad to give up the academic side of things...
just because of the location that I live in. But I do
hope that one day they might decide to bring some
kind of dental school to a regional, rural area that
I dive myself straight into" [OHT12]

Furthermore, several participants were discouraged by the politics associated with non-clinical careers:

"Working for non-clinical areas usually you have to deal with politics and in Melbourne, in particular, the politics is very toxic. If I work as a clinical educator, like you have to meet certain requirements and I feel like there's no areas to move around as much unless you're in the right political circle" [OHT3]

Nonetheless, 11 participants managed to incorporate some non-clinical components into their clinical careers or transitioned entirely. Many were clinical educators or became mentors to new graduates and students in practice. Some were administrators for professional associations or businesses. In addition, many participants who identified as clinicians also shouldered the responsibility to plan and implement community outreach programs. Many acknowledged the benefits of working in non-clinical areas. Participants who spent most their careers in practice viewed non-clinical careers as a viable alternative to alleviate the stress and burnout of clinical practice. Clinical practice could be monotonous at times, and lacked career pathways. Hence, non-clinical careers could bring variety and help advance their OHT career. Many participants wanted to be in an environment that was intellectually intriguing, engaging, and stimulating:

"You can only learn so much about doing a tooth surface filling on a primary deciduous tooth. It's [nonclinical careers] just a bit more room for growth, and I guess that keeps you interested and keeps you engaged in professional work" [OHT8]

Participants who undertook mentoring and teaching viewed these opportunities as a gratifying way to share their knowledge and educate the next generation of the profession. These participants enjoyed forming meaningful connections with students and helping them grow. Moreover, teaching helped to reinforce participants' theoretical and clinical knowledge, which made them feel motivated and dedicated to their careers:

"You're able to give [students] what they need to be a better clinician and that feels fundamentally right. It feels like you're shaping a person for their whole career... That's really rewarding" [OHT14]

For participants with young children, non-clinical careers provided extra flexibility and time for childcare. Interestingly, almost all participants who undertook positions in education and academia did so through the recruitment of others.

Future Directions of the OHT Profession

When discussing the future directions of the OHT profession, many expressed the need to improve undergraduate OHT education and CPD programs in ergonomics due to the musculoskeletal issues they were experiencing from everyday clinical practice:

"[Ergonomics is] not discussed enough... they should be getting professionals in... showing you even exercises that you can be doing to... reverse or counteract the motions that you're doing day-to-day at work... Maybe even make it an elective, or a summer semester subject where you actually learn exercises and have physios assess you, and look at the way you work on a mannequin" [OHT8] To address the limitation and boredom felt by some OHTs, participants suggested that OHTs should be informed of career pathways beyond clinical settings in areas such as academia, policy change, business, and oral health promotion. It was important to make these non-clinical pathways known so that OHTs knew that the profession was not just about clinical practice:

"More CPD events ... to let oral health therapists know that they don't have to be on the tools all the time... there are other avenues that they can take, whether one be research or into the academic world or being a rep. Whatever it might be to be able to help promote our degree, our life... [we need more] support for those oral health therapists that may want to work in academia or research to give them avenues to be able to get there" [OHT12]

Moreover, participants expressed the need for additional OHT-oriented CPD in areas such as restorative dentistry and independent practice. With the revision of the structured relationship requirement, more CPD could equip OHTs with the necessary knowledge for independent practice.

Almost all participants expressed the need to promote the OHT profession to other healthcare professions and the general public. At an interpersonal level, participants recommended that OHTs should introduce themselves and explain their role when meeting a new patient. On a broader level, several participants suggested that OHT professional associations should devise promotional campaigns using media to reach a wider audience, instead of heavily focusing on social media:

"There have been campaigns run by professional associations to try and raise awareness [about the OHT profession] but I've only seen them on the [association's] websites or Facebook pages or Instagram or Twitter... the general public would not like... or know that page... I believe that [associations] need to make it a little bit more widespread... [use] the Daily Telegraph or something... where you've got that exposure to a wider audience" [OHT12]

Several participants shared their experience of meeting dentists who were uninformed of their professional role and scope of practice. Hence, they recommended having dental and OHT students interacting and collaborating while in school to give dental students a better understanding of the OHT profession.

Participants had mixed opinions about the revision of the regulatory requirement on structured relationships with dentists. More progressive views regarded greater independence as enabling OHTs to do more for underserved communities. Some participants believed that the revision would allow the OHT profession to be viewed more equally and respectfully to help the profession to grow in the long term. For others, the revision was merely a formality as they already had great autonomy in their clinical practice. Several participants suggested that the revision was the first step to allow OHTs in obtaining their own provider number to allow them to bill for procedures that are covered by publicly-funded schemes and private healthcare insurance directly. Without a provider number, OHTs are dependent on a dentist to claim from these funding sources. By achieving that, OHTs would no longer have to work under dentists, and the profession could be truly independent:

"OHT's are actually really well trained to do what they're allowed to do... There's no real reason... to have that structured, have to be under a dentist to do certain things. I think it just gives OHTs more of an equal standing with the dentist, rather than just being someone who takes all the hard cleans... Actually, being viewed as a dental professional" [OHT11]

However, a more conservative perspective viewed this change and the push for independent practice with caution. Multiple participants felt that the profession was already perfectly situated: being a prevention-focused generalist responsible for increasing access to care. Therefore, the push for an expanded role in clinical practice may be unnecessary and detrimental to the public. Several participants suggested that OHTs who felt limited should pursue dentistry rather than pressure for more independence:

"I think we should be stopped with our clinical scope of practice now... if that doesn't satisfy you and you're a registered OHT and you have a full scope... you should go and be a dentist... We're situated in the middle of the market ... There was a gap there. There wasn't enough dentists. We're filling that gap there... I think we make a good team with the scope as it is currently" [OHT14]

Many participants preferred to maintain their collaborative relationship with dentists, regardless of the regulatory changes. This view acknowledged OHTs' limitations in knowledge and clinical skills, appreciated dentists as supportive team members and enjoyed working with them. These participants also wanted to avoid the stress and responsibilities that came with independence:

"Me, personally, I think there should still be that structured relationship between an OHT and a dentist... at the end of the day, we're not as well trained as a dentist. We don't know about root canals, extractions, but if you had that structured relationship, you can easily refer patients and maintain someone's treatment plan between the two of you, and I think that would work really well' [OHT19]

Furthermore, some participants were concerned about private clinics using regulation changes to further exploit OHTs for profit, rather than as respected practitioners in their own right.

Discussion

In 2019, 98% of Australian OHTs identified their primary role as clinicians (Australian Government Department of Health, 2019). For those principally in clinical practice, 73% worked in private and 28% in public practice. DTs and DHs primarily work in clinical settings (Abu Bakar et al., 2014; Kruger et al., 2006; Ayers et al., 2007; Jevack et al., 2000; Johns et al., 2001; Gibbons et al., 2001; Faust, 1999; Hopcraft et al., 2008; Rowe et al., 2004; Rowe et al., 2008). Likewise, the participants in this study spent most of their OHT career in clinical practice in private and public settings. Our findings highlight the reasons behind OHTs clinical careers, explaining the existing quantitative data. OHTs pursue clinical careers due to job availability and remuneration. Participants reported buoyant employment opportunities for OHTs in private practice. The flexibility enabled female OHTs to re-enter the workforce promptly after maternity leave. However, many who worked in private clinics in affluent areas could not practise restorative dentistry, often due to patient demographics and practice models. This phenomenon resembles the situation in the UK and New Zealand where OHTs (DH-Ts) could not utilise their full scope of practice and were restricted to dental hygiene (Godson *et al.*, 2009; Turner *et al.*, 2011; Pang *et al.*, 2012).

OHTs worked in public and rural clinics to use their full scope of practice, consolidate their knowledge, and serve communities lacking regular access to care. Rural and public clinics were viewed as good places to jumpstart careers. OHTs' desire to fully utilise their scope of practice and serve the community could be important in redressing low access to care in public dental services. In Australia, individuals with low socioeconomic status, individuals in rural areas, Indigenous Australians, and those with special needs often rely heavily upon public dental services for their oral healthcare needs. However, waiting times can range from 300 to over 500 days, depending on the state and territory (Australian Institute of Health and Welfare, 2021). Policies and sufficient incentives could attract more OHTs to careers in public clinical practice where they face fewer restrictions in their scope of practice than in private practice. OHTs could assume the role of the primary oral healthcare provider and independently deliver routine care such as direct restorative treatment, periodontal therapies and oral health education. This would relieve dentists in the public services for complex procedures and patients with more complicated needs (Nguyen et al., 2019). Dentists have argued that non-dentist providers are not more costeffective, due to the need for a supervising dentist (Nash et al., 2012; Nash et al., 2014). However, the removal of the structured relationship requirement in July 2020 enables OHTs to practise more independently (Dental Board of Australia, 2021). As a result, a new workforce model with OHTs as the primary care provider in public dental services could reduce public dental care expenditure and improve access to care.

In 2019, 2% and 13% of Australian oral health therapists held non-clinical roles in their primary and secondary practice settings respectively (Australian Government Department of Health, 2019). Our findings reveal OHTs' perspectives on non-clinical careers and explain their scarcity in non-clinical settings. Non-clinical jobs brought diversity, advanced careers, and alleviated the physical and psychological stress of clinical practice. However, some OHTs did not want to give up their clinical job and its high remuneration. Non-clinical careers in academia and public health often required education at the Master or Doctoral level (Boyd et al., 2011; Jevack et al., 2000; Smith et al., 2016) that might require major changes to their lifestyle that did not align with their life plans. Many DHs do not pursue graduate education, but remain in clinical practice due to the lack of perceived practical and financial benefits (Boyd et al., 2011; Jevack et al., 2000; Smith et al., 2016). For OHTs in rural Australia, there was simply no opportunity to transition from clinical practice as non-clinical jobs were heavily concentrated in metropolitan areas. This study revealed that OHTs want to transition beyond clinical practice

with sufficient support and incentives. This would allow them to contribute more to improving societal oral health. For example, having more OHT researchers could facilitate more dental public health research and develop new knowledge. OHTs who become educators are in a crucial position to educate and nurture the next generation of OHTs. Furthermore, those involved in policymaking can advocate for underserved communities and promote policy changes to improve access to care.

Dentists have distrusted non-dentist providers undertaking restorative procedures and independent practice, citing concerns about patient safety. Dentists have viewed them as inadequately trained and less competent, hence needing direct supervision. Nonetheless, there have been no documented issues of safety and harm because of care delivered by non-dentists (Nash *et al.*, 2012; 2014).

We found that OHTs have diverse views on the changes to the scope of practice, especially related to independent practice (Dental Board of Australia, 2021). Some OHTs were against greater independence. While some OHTs advocated for more independence to better fulfil their professional mandates, others recognized their professional roles and wished to continue working with dentists.

Additional qualitative research could confirm these findings and further explore the barriers preventing OHTs from pursuing non-clinical careers, including the value of existing links with academics and other strategies to help create OHT career pathways.

The qualitative nature of this study means the findings are not statistically generalizable to the entire OHT profession. Nevertheless, they provide insights into the experiences of OHTs that have not previously been understood. Although an inductive realist approach was used (Braun and Clarke, 2006), the analytical process was inevitably influenced by the researchers' cultural, social, political, and professional identities (Kanji, 2012). Therefore, the findings should be interpreted in a cultural, geographical, and temporal context in which other researchers may derive other perspectives from the data.

Conclusion

Australian OHTs have the potential to assume a greater role in addressing the oral healthcare inequalities faced by many Australians. The revised structured relationship requirement affords them greater independence to become the primary provider in public dental services. This could reduce waiting times, improve access to care, and reduce healthcare expenditure. Non-clinical OHTs could advocate for underserved communities, facilitating public health policy change, and educating the next generation of the profession.

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