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Title page

Perceived barriers encountered by oral health professionals in the Australian public dental system providing dental treatment to individuals with special needs

Short running title: Barriers treating patients with special needs

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Perceived barriers encountered by oral health professionals in the Australian public dental system providing dental treatment to individuals with special needs

Abstract

Aims: To investigate barriers experienced by clinicians treating individuals with special needs in the Australian public dental system.

Methods and Results: Oral health professionals working at primary care clinics in the public dental system were invited to participate in semi-structured interviews or focus groups to discuss the challenges they faced in managing patients with special needs. Qualitative methods, employing inductive thematic analysis, revealed

two primary barriers: (1) clinicians lacked confidence in their ability to treat patients with special needs because of insufficient training and experience, and difficulties obtaining information about their patients, and (2) barriers within the public dental system, including inadequate funding, equipment and facilities, and productivity pressures prevented clinicians from being able to provide the care patients required. The priority and understanding of the oral health for these individuals within the public dental system and wider disability sector was also raised.

Conclusion: A perceived lack of training and experience in managing individuals with special needs was a barrier to treating patients with special needs. Other significant barriers were under-resourcing of the public dental system and a lack of priority and understanding regarding oral health amongst carers of individuals with special needs and other health professionals.

Key words: General Practice, Dental; Medically Underserved Area; Disabled Persons; Health Care Utilization

Introduction

In Australia, Special needs dentistry is a recognized dental specialty that "supports the oral health care needs of people with an intellectual disability, medical, physical or psychiatric conditions that require special methods or techniques to prevent or treat oral health problems, or where such conditions necessitate special dental treatment plans" (1). Unfortunately, despite the recognition and growth of this specialty over almost two decades,

individuals with special needs are known to have poorer oral health and greater unmet treatment needs than the rest of the population with less regular dental attendance and difficulties with finding oral health professionals willing to treat them reported as potential contributing factors (2, 3).

A survey of general dentists in Western Australia reported a lack of experience in managing patients with special needs as the primary reason for not treating these individuals (4). This complemented the views of specialists in special needs dentistry who have suggested that general dentists may feel pressured to refer these individuals, not only because of this lack of experience or training, but also due to a lack of support and growing productivity pressures placed on them when working in the public dental system (5). Internationally, there has been significant advocacy for better training of oral health professionals in relation to managing the needs of patients with special needs in an attempt to address the reported lack of preparation and experience of clinicians in this area (6-9). Interestingly, a study from Taiwan found that lack of encouragement from hospital policies was identified by more than half of dentists surveyed to be a reason for their unwillingness to treat individuals with special needs (10).

Despite this being a significant factor for basic access to care for these populations, the Australian and international literature remain relatively limited in this area. As a result, the aim of this study was to ascertain the views of clinicians as to whether

they perceived there to be barriers to managing patients with special needs within the Australian public dental system. It was anticipated that in addition to identifying their own relative lack of experience that clinicians may also identify barriers associated with the resourcing and funding of public dental services as factors that influenced their willingness to treat individuals with special needs.

Methods

Qualitative methods were used to explore the views of clinicians working within the public dental system in relation to managing patients with special needs. Dental clinics with programs and initiatives targeted towards individuals with special needs were approached regarding their interest in being included in this study. Clinical managers at these clinics advertised internally to their clinicians using a recruitment flyer. All clinicians working at these clinics, including dentists, oral health therapists, dental hygienists, dental therapists, and dental prosthetists, were eligible to participate.

Clinicians who contacted the research team were invited to participate in a semi-structured interview or focus group to discuss their experiences which were either conducted in person, by phone, or online video communication software (Zoom (Zoom Video Communications, Inc., San Jose, CA, USA) or Microsoft Teams (Microsoft Corporation, Redmond, WA, USA)). A question guide was used to direct discussions to the factors that participants

perceived may impact on their willingness to provide care to individuals with special needs and included:

1. Can you tell me about your professional background and your current role at the clinic?
2. Do you treat patients with special needs?
3. Do you feel able to provide your patients with special needs with the treatment they require?
4. Do you feel there are any factors that prevent you from being able to do so?
5. Are there factors that you feel may affect the willingness of clinicians to treat individuals with special needs?

Interviews were conducted by a single member of the research team for consistency and digitally recorded. Interviews were professionally transcribed and checked for accuracy by the research team prior to undergoing analysis.

Analysis involved an initial reading of the responses to increase familiarity prior to coding using a grounded theory approach and inductive thematic analysis (11). This process involved identifying and coding of responses related to perceived barriers. These were subsequently recoded to reflect emerging themes in the responses. Data analysis was completed using NVivo software (QSR International, Melbourne Vic, Australia) and was primarily completed by a single member of the research team.

Ethics approval was granted by the Melbourne Dental School Human Ethics Advisory Group (Ethics ID: 1544156.2), the Tasmanian Health

and Medical Human Research Ethics Committee (Ethics Ref No. H0015272), the Central Adelaide Local Health Network Human Research Ethics Committee (Ref No: 11629), and the Human Research Ethics Committee of the Northern Territory Department of Health and Menzies School of Health Research (HREC Ref No. 2019-3364).

Results

Participant characteristics and responses to questions

A total of 27 clinicians participated working across four different government-funded dental services (Table 1). Ten of the clinicians were male (55.6%) with participants having an average post-graduation clinical experience of 22.9 years (Range: 3-48 years, SD 11.9 years). Twelve of the clinicians (44.4%) worked in rural and regional areas and one third (n=9, 33.3%) had an overseas primary dental qualification.

All participants treated patients with special needs and chose to respond to all questions in their interviews. When asked *'Do you feel able to provide your patients with special needs with the treatment they require?'* the majority of clinicians (n=19, 70.4%), including all oral health therapists and prosthetists, answered negatively. Two of the three positive responses were from clinicians in managerial positions with the remainder (n=5, 18.5%) being unsure. All participants responded positively to either or both of the questions *'Do you feel there are any factors that prevent you from being able to do so?'* and *'Are there factors that*

you feel may affect the willingness of clinicians to treat individuals with special needs?'

Emerging themes related to barriers to providing care for patients with special needs

A wide range of views were expressed by clinicians when asked to reflect on perceived barriers to providing care for individuals with special needs. However, these were generally related to two central themes:

- (i) a lack of confidence in their own ability as clinicians (Figure 1), and
- (ii) a lack of support provided to them by the systems in which they worked (Figure 2).

(i) Ability and confidence of the clinicians

When clinicians talked about their willingness to treat patients with special needs, much of their reluctance was related to some doubt in their ability and wanting to practise by the principles of beneficence and non-maleficence.

"(Dentists) want to do the right thing for the patient ... I think that's pretty much the main barrier. The lack of confidence in their knowledge or ability." (Dentist 17)

"They'll hesitate about harming a patient or doing something incorrectly that compromises their medical condition so that

they have a very severe adverse medical reaction.” (Dentist 11)

However, two main themes underpinned this reluctance. The first was that clinicians felt they had inadequate training or experience in managing those with special needs.

“I might not be providing the best treatment because I'm muddling my way through sometimes.” (Dentist 14)

“We're worried that we're going to do the wrong thing ... because it's not something that we come across a lot. So you're not comfortable with your decisions because it's just not part of your usual practice.” (Dentist 20)

This was further exacerbated by difficulty in obtaining information about their patients to make appropriate treatment decisions. This was often sought from other health professionals, mainly medical practitioners. Once in possession of the relevant information, clinicians generally felt more comfortable with providing treatment.

“In terms of accessing more information from specialists [medical] ... it's really difficult ... I've actually had to hound them to get some information about the condition that the patient is suffering from and how safe it is to go ahead with dental treatment” (Dentist 7)

"They're not too worried about doing it and as long as they get the right advice." (Dentist 15)

Other themes that emerged from discussions were the potential for burnout, physically and/or psychologically, when frequently managing complex patients or the anxiety associated with adverse events and possible litigation. Some of these issues potentially reflected inadequate support provided by their work environment.

"To be very honest, I think most clinicians are fairly caring and they have empathy for the patient ... [but] it's much more tiring to see a special needs patient and sometimes you can get a bit frustrated." (Dentist 14)

"Doubting their abilities. Being worried about something going wrong. Worried about potential for litigation." (Dentist 15)

(ii) Lack of support for clinicians in public dental system

Further to the insecurities that clinicians had in their own abilities, there was a general sense that the public dental system was not fully conducive to meeting the needs of patients with special needs. When it came to providing care, the most reported concern was that clinics were under-resourced, including references to facilities or equipment, such as general anaesthetic (GA) facilities and hoists or wheelchair tilts, as well as inappropriate infrastructure for the needs of some patients to physically access the clinic, or to enable clinicians to provide treatment safely.

"I find it sometimes quite difficult if you've got a slightly mentally-challenged patient who might need one or two small fillings to be done. And you can't access [the teeth needing treatment] at all because you can't clean them, and you can't have a GA at all." (Dentist 6)

"We don't have good wheelchair access; we don't have a hoist ... there is a physical limitation to what I could perform for those patients." (Dentist 17)

"In terms of the autistic kids, it's the whole thing. The whole environment can be quite clinical. So, it's not a welcoming environment for a kid with the sensory issues. The noise, smells, and you know all sorts of lovely stuff going on." (OHT 3)

A large proportion of the frustrations of clinicians was related to a feeling of lack of support and their inability to provide what they felt was the appropriate level of care. Clinicians provided examples such as long waiting lists, the inability to complete recalls or ongoing care, time and productivity pressures, and inadequate workforce. Although these were not necessarily unique to managing patients with special needs, they felt that the consequences of these were likely to be more significant for these vulnerable populations.

Productivity pressures: *"We've got productivity goals ... That's just never going to come anywhere near those if you're treating special needs patients."* (Dentist 4)

Time pressures: *"The biggest barrier to treatment for me is time ... Everything else, the physical constraints you can deal with ... But if you don't have time, then none of that is going to happen."* (Dentist 20)

Waiting lists and ongoing care: *"The public system has some quite firm guidelines which relate to waiting lists. Adults generally do not go on a recall which is a limitation."*
(Dentist 11)

Workforce: *"We cannot meet the needs of our client base, nevermind even factoring in our disability cohort or our medically-compromised cohort ... we don't have enough dentists and we don't have enough chairs."* (Dentist 4)

Clinicians felt that some of these issues, for example, related to current policies, were due to a lack of awareness or understanding about individuals with special needs beyond the clinician group. Several clinicians felt this also extended to other administrative staff, particularly those making appointments. In triaging and scheduling patients, they felt that there was little consideration given to trying to assess the needs of these patients. As a result, clinicians felt they were undermined by this lack of information to

prepare for the patient and insufficient time in the appointment to reflect their more complex needs.

"There's very limited consideration about people with special needs and how some of those people need more time for an appointment. This is why it's really important to ask more questions ... customer service officers might be the first point of call to our service, but they don't bother to ask an open question." (OHT4)

Overall, they felt these issues reflected a lack of priority within the public dental system towards addressing the oral health needs of those with special needs.

"We historically have targeted particular groups within the community ... but we've never really focused on special needs as a priority group. There's never been a channel of resources in that area. So it just doesn't seem to be a priority." (Dentist 19)

"It's a really good question about what are your priorities? I would hope that people with special needs are a priority group ... Because of their circumstances. But how do we all do it better? Well, it comes down to training, support, time, education." (OHT 4)

Other concerns relating to the oral health of patients with special needs

There were a few additional concerns that were raised by clinicians, and although they did not directly pertain to barriers to providing care for individuals with special needs, they were factors that were important to the oral health of this population. Clinicians raised concerns around three main issues:

1. Underserved populations, such as those in aged care:

"To be honest I don't know where these patients go but we are going to see huge numbers of them ... And often if they're not able to be treated in the chair. They're the ones that will be assessed for a GA and their examination and a clean will be done under GA." (Dentist 19)

2. Lack of awareness or priority of oral health amongst carers:

"Do the carers have the knowledge ... that we have a service that can provide these sort of patients with that sort the care?" (Dentist 21)

"I also see a group of disability clients ... The carers are not doing their part ... they are not caring the way that they should be." (Dentist 1)

3. Lack of understanding of other health professionals about oral health:

"The medical staff often didn't understand what dentistry was about or who or what we had to do." (Dentist 16)

"Specialists, outside of dental, sometimes perhaps have limited education or understanding ... just making dentures for everyone or having teeth out and having full dentures put in is not going to solve problems" (Prosthetist 1)

Discussion

The oral health needs of individuals with special needs, and the complexity often involved in addressing them, is well recognized such that Australia and New Zealand led many parts of the world in establishing the dental specialty, Special Need Dentistry, to advocate for, and assist with, meeting the needs of people with special needs (12). However, a complete reliance on a limited specialist workforce to manage the needs of the growing population of individuals with disabilities and complex medical issues is not viable, nor was it an expectation or the intention (5, 13). More recently, there has also been growing concern that referrals to these services have reflected a diagnosis or disability rather than patient complexity, raising concerns that many referrals are potentially unnecessary and/or inappropriate (5, 14). In addition, the growing weight of such referrals on limited specialist services may impact on the timeliness of care given already lengthy waiting lists (5, 14, 15).

The literature has sought to understand these referral tendencies reporting a lack of experience or training of dentists in this area (4) which has been reflected in the current study (Figure 1). While advocacy from the specialty has resulted in improved exposure to Special Needs Dentistry in the training of Australian oral health professionals, attention should also be focused on oral health professionals trained overseas who were a significant proportion of our study sample and may not receive training in this area (9). There is a notable absence of content in this area within examinations of international dental graduates applying to practise in Australia (16). This new consideration, which has emerged from the current study, suggests the need to reinforce the basic expectation that providing healthcare to individuals with special needs is not only an expectation of the dental profession, but also an obligation to the wider community as signatories to the Convention on the Rights of Persons with Disabilities (17, 18).

Another theme that emerged was that clinicians found it challenging to access the desired information to better equip them when attempting treatment. It is understandable that not all individuals with special needs may be able to recount the details required by a treating health professional, but this lack of information often extended to families, carers, and other health professionals that were approached. To some degree these concerns reflect and isolation or the lack of interdisciplinary interaction between the dental profession and other parts of healthcare and a historical

notion that the mouth is separate from the rest of the body (19, 20).

Previous studies have suggested that clinicians felt that the low level of oral health literacy amongst carers and other health professionals significantly impacted on their understanding of preventive oral health messages and the oral health issues faced by their patients with special needs (21). This was reinforced by the responses of participants in this study. Given the insecurity many clinicians have with regards to their knowledge of disability or various medical conditions and medications, it seems reasonable for them to be hesitant for them to want to provide treatment for these patients when they may have concerns about whether this treatment is safe for the patient. Likewise, given the relative unfamiliarity of other health professionals with dental procedures, this may then also pose an issue if these medical professionals are unable to offer the advice oral health professionals require resulting in an ongoing struggle for patients to receive even the most basic dental care.

The presentations and treatment needs of individuals with special needs can, at times, be overwhelming for a clinician with less experience and may be a reason for the reluctance of many to attempt treatment and a key reason for referral (5). The issue in these cases is not just the additional pressure on the public dental system (22), but the undue suffering of these individuals because of disease that could have been prevented, and that they often endure

quietly on waiting lists because they may be unable to advocate for their own needs: *"Unfortunately these special needs patients are often the least complaining ... so we don't get that pressure from their carers ... We all know they're suffering but it's just because they don't have the ability to complain."*

The simple solution would appear to be better preventive care for this population. However simple as this may seem, is not something that can be addressed by the dental profession alone. The current situation appears to demonstrate that efforts to do so in the past have seemingly been ineffective. It is only with the support of carers, families, and all health professionals that a more integrated and holistic approach to health and prevention may be achieved. The literature has recommended improved oral health education and greater interdisciplinary education of all health professionals as a first step (23, 24). In addition, establishing these relationships would enable further reorientation of preventive messages in oral health towards being supported by a common risk factor approach (25).

In leading advocacy in this area, the oral health profession, and, in particular, the public dental system, needs to listen to concerns from its workforce, to find ways to reduce the reliance on specialist services, and enable care by all oral health providers. The answer, once again, is likely to be utilizing the skills of all dental personnel to form an integrated team to improve access to care at the primary care level with a clinical focus on prevention

supported by wider oral health promotion and education (26). As was highlighted by one of the participants, *"I think that [clinicians] should be more aware that this is the new normal and they should be more willing to see these patients ... With the ageing population ... there are actually a lot more of these patients that will be needing care, especially within the public system"*. The problem is that there continues to be a significant proportion of the dental workforce who are unwilling to manage this group of individuals (4, 27).

The other significant concern raised by the current study was the lack of support provided to clinicians. In particular, the sense of being unable to fulfil their duty of care because of under-resourcing; namely long waiting lists, policies that appear to discourage ongoing care and recalls, inadequate access to facilities and equipment, and productivity pressures based on surgical output that appears to place little importance on processes which support the improvement and maintenance of the oral health of this vulnerable population (28-30).

Concerns about inadequacy of funding and resources within the Australian public dental system are not new with this shortage of resources and overwhelming demand creating an environment whereby patients are more likely to require and receive a dental extraction than preventive treatment (31, 32). The significant impact this approach can have on the oral health, particularly of vulnerable populations, such as those with special needs, have been raised (32)

and have been reinforced by the current study. What often is forgotten, however, is the potential flow-on effects this can have on the general health and well-being of these individuals who already have significant and complex health needs. The issue is not that these problems are not known, but that a status quo exists that limits cultural change and continues to impact on the perceptions and willingness of clinicians to treat those with more complex needs (33, 34).

Part of the issue is that the system guides clinicians away from providing patient-centered care, almost discouraging a preventive approach, in favor of enabling a purported equity of access across the population, largely because of under-resourcing for existing demand. Unfortunately, this is because current funding models promote surgical treatments of disease rather than early interventional or preventive treatments (29, 35). In addition, despite the additional complexities associated with treating those with special needs, the current funding models do not include measures that reflect the complexity associated with the provision of oral health care and the time required to provide it.

Given the paucity of research in this area, this study offers an initial insight into reasons why clinicians may be unwilling to treat patients with special needs and thus why these individuals experience such barriers to access of care. Although our findings reinforce some of what has been reported in the literature with regards to lack of experience and training (3, 4), it does also

raise new issues pertaining to barriers within the public dental system itself. Given that our sample was limited to a small number of community dental clinics, further research is required to ascertain if the concerns raised by participants are reflective of those of the majority of clinicians working in the public dental system in Australia as well as in other countries.

Regardless, the initial portrait that has been painted was one where clinicians felt that they faced an uphill battle. Some are confronted by challenging presentations of those with special needs, for which they feel they have not been adequately trained. They are unable to obtain the support they require and work in a system that is not equipped to manage the needs of those it is mandated to treat. As a result, it is not surprising that they would rather refer these patients than put themselves in a compromising position, not only because of their own concerns about their ability to manage the needs of the patient in their surgery, but also because of the potential impacts on their productivity or the risk of not adhering to recommended guidelines because they felt it was in the best interests of the patient.

Further research is required to understand the specific challenges clinicians have with managing those with special needs and the additional supports they feel may empower them to treat them as well as the level of complexity amongst patients necessitating specialist referral. Likewise, greater reflection is also required from the public dental system about how it can address these issues where

attempts to create apparent equity may inadvertently be creating greater inequity and a form of veiled discrimination for the most vulnerable members of our community.

Conclusion

Oral health professionals in the Australian public dental system may be reluctant to treat patients with special health care needs because of a perceived lack of knowledge and experience in managing their needs. This is further complicated by the under-resourcing of these health services, in terms of infrastructure, funding, and workforce. In addition, the perceived lack of priority or understanding for oral health amongst carers and the wider disability sector was identified as a barrier, with clinicians having difficulty in obtaining the relevant information to facilitate dental treatment.

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Human Research Ethics Committee (Ref No: 11629), and the Human Research Ethics Committee of the Northern Territory Department of Health and Menzies School of Health Research (HREC Ref No. 2019-3364).

Table 1. Qualifications of participants across health services

	Dentists	Oral Health Therapists	Dental Prosthetists
Location of practice			
Northern Territory (Oral Health, Top End Health Service)	2	0	0
South Australia (South Australian Dental Service)	8	0	0
Tasmania (Oral Health Services Tasmania)	7	4	1
Victoria (Carrington Health, Link Health and Community)	4	1	0

Primary dental qualification			
Trained in Australia	13	5	1
Experience of clinician			
New graduate (<5 years)	1	1	0
6-10 years	4	1	0
>10 years	16	3	1

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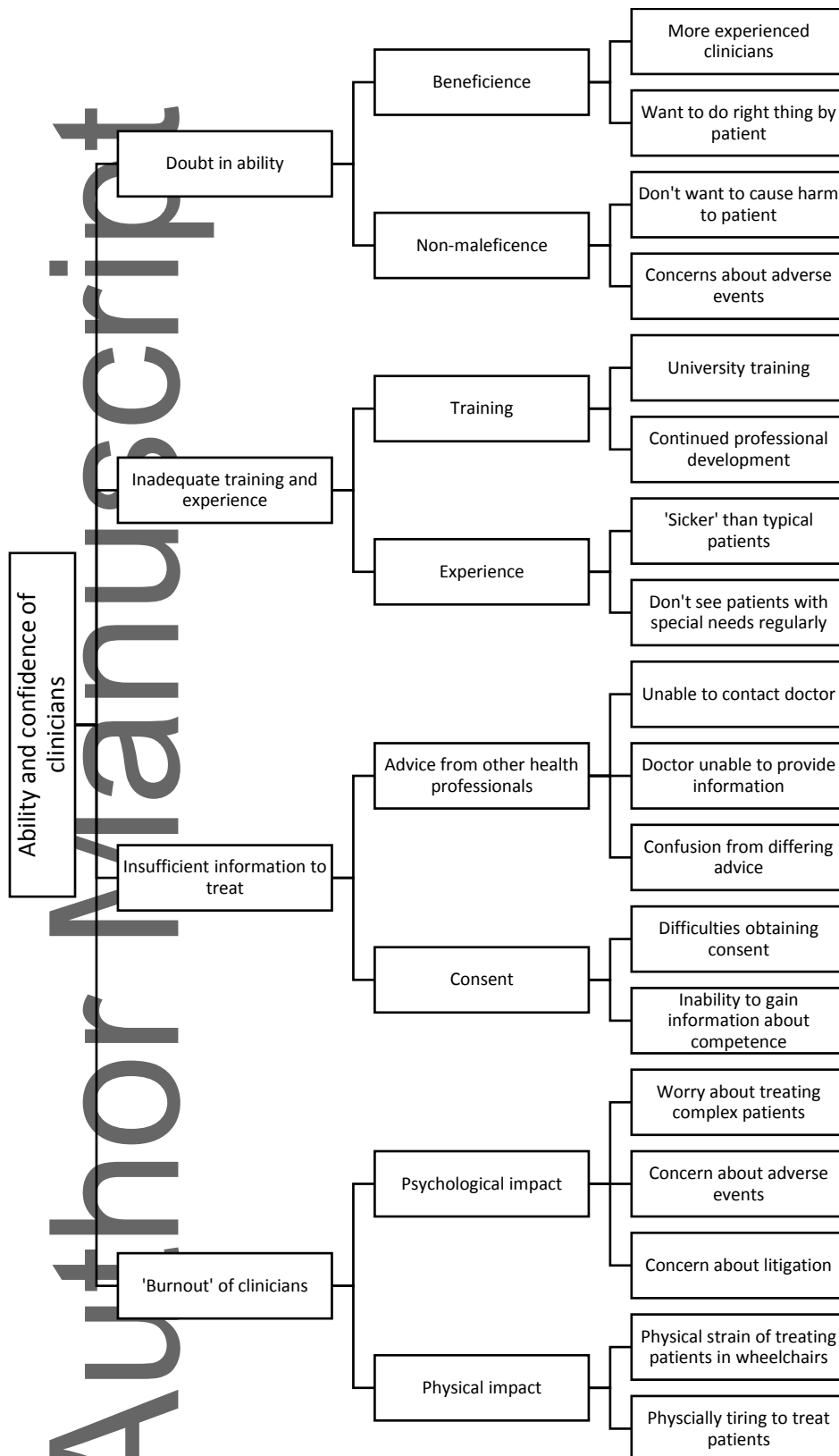


Figure 1. 'Ability and confidence of clinician' theme determined from inductive thematic analysis.

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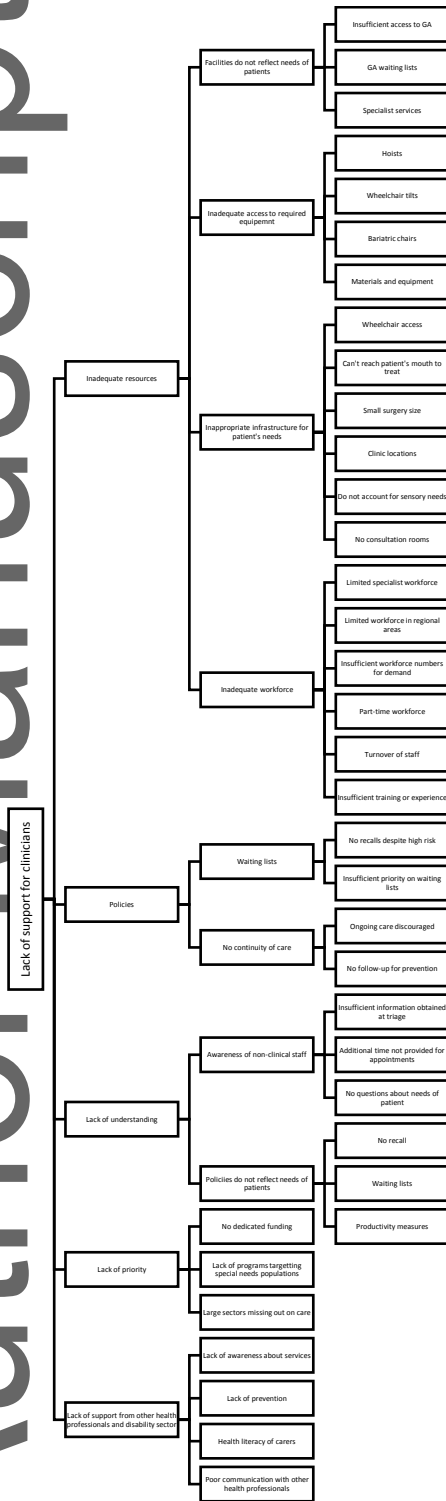


Figure 2. 'Lack of support for clinicians' theme determined from inductive thematic analysis

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