Title of manuscript:

Oral health and access to dental care: a qualitative investigation among older people in the community.

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Abstract

Objective:

The aim of this study was to explore older persons' beliefs and attitudes towards oral health and access to and use of dental care services.

Background:

As the proportion of dentate older people increases, the need and demand for dental services will rise ¹.

Design:

Focus groups and semi-structured interviews were used to collect data from

Setting and Subjects:

The study participants included 63 older people in Perth, Western Australia.

Results:

Five major themes emerged from the interviews – the need for information and knowledge; accessibility of services; cost and affordability of oral care; fear and anxiety regarding dental visits and relationships with dentists. Attitudes and behaviours were slow to change in this group.

Conclusion:

This investigation provided important perspectives regarding oral health and dental access for older people residing in the community and demonstrated the importance of understanding this group when considering provision and use of services.

Introduction

Although older adults normally recognize the importance of oral health for their quality of life ², many will only visit a dentist in response to pain ³. As the proportion of older adults increases and they retain their teeth, the need and demand for dental services will rise ¹. Older adults have an increased risk of dental caries and periodontal disease ^{4,5} and more 'active decay' than the young, yet many fail to obtain necessary dental care ⁶. MacEntee has developed a model of oral health which focused on three themes: comfort, hygiene and health and briefly considered the use of dental services⁷ and this oral health model has recently been revised⁸.

The situation in Australia is similar to that in Europe and the U.S. ^{4,9} with the capacity to supply dental services in Australia unlikely to meet growing demand ¹⁰. Consequently, the need for dental services to focus on preventive care rather than treatment has been identified ⁵.

Even appropriate policies and sufficient services may not be adequate if the role of dental care and oral health in the context of older people's lives is not understood. Locker has previously noted the narrow clinical approach normally adopted in dentistry and provided an early conceptual framework in oral health linking the clinical conditions to personal and social outcomes¹¹. Macentee and colleagues gave a good summary of various approaches to modelling oral health⁷, noting criticisms of the Locker model as being too medical. They describe a qualitative study of 24 older healthy people fromVancouver with moderate dental problems, came up with three main categories: comfort, hygiene and health. This model was later refined by Brondani and colleagues using a focus group with 30 women and 12 men who added four extra factors diet, personal expectation, economic priorities, personal and social environment⁸.

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It was considered important to investigate perceptions of treatment and care within the context of oral health. The aim of this study was to explore older persons' beliefs and attitudes regarding oral health, and the issues relating to their access to and use of dental care services.

Methods

Eight focus groups and 13 semi-structured interviews were undertaken. Purposive sampling ensured participants represented a range of socio-demographic and organisational groups. Key individuals (champions) assisted recruitment and interviews were conducted at convenient locations. All group discussions and interviews were recorded on audiotape with detailed handwritten notes by a non-participant note-taker. The focus groups and interviews were transcribed verbatim. Transcripts and field notes were then analysed for themes using QSR N6 NUDIST¹².

Topics covered included the importance of oral health; access to dental services; oral health care information; past and present experiences of dental services; level of satisfaction with dental services; and suggestions for improvement to dental care services. Andersen's behavioural model for the use of health services considered characteristics of health services and population characteristics including predisposing characteristics, enabling resources (e.g. health insurance) and need (e.g. dental disease). Predisposing characteristics can be mutable (e.g. health attitudes) or immutable (e.g. age and sex). This provides a useful model for this study ¹³ ¹⁴.

Participants completed a brief demographic questionnaire. The transcripts were coded to reflect emerging concepts, themes, and patterns using NUD*IST6 ¹². Ethics approval was obtained from the Human Research Ethics Committee of the University of Western Australia.

Results

Characteristics of Study Participants

In total, 63 people participated in this study, with the majority being female, receiving some form of government pension and not in paid employment (Table 1). Sixty seven percent received the Age pension, or "Mature Age Allowance" with a health care card. Twenty three percent received a war veterans' pension with a health care card. Seventy five percent of participants visited a dental health professional in the previous two years, mostly for restorative or repair work

Results from Focus Groups and Interviews

Emergent themes distilled as five key areas: information and knowledge; accessibility of dental care services; fear and anxiety; costs and affordability of services; and relationships with service providers.

Information and Knowledge Regarding Oral Health

¹ The Age Pension is paid to people once they reach 65 years (younger for women born before 1949) and depends on income and assets. (http://www.centrelink.gov.au/internet/internet.nsf/payments/age_eligible.htm) The Mature Age Allowance was paid to people not yet old enough to receive the Aged Pension but has been discontinued

⁽http://www.fahcsia.gov.au/guides_acts/sslaw/ssa/b819822a/7681a169/7eba90be/c1dca9c5.html)The pension.

Although a small number of participants expressed concern over a perceived lack of information relating to oral health and dental care, the majority believed that their knowledge and access to this information was adequate however, some individuals lacked basic knowledge on oral care.

Acquiring information. Many participants had acquired their oral health knowledge during childhood, yet did not consider that their knowledge might be inadequate or dated. A number of participants highlighted the importance of practices of their family of origin.

The cause of my problem is that as a child, I was never taught oral hygiene, never taught to scrub my teeth and never ever did and as I grew up I was busy doing other things and I would always forget. So as a result of that I have damaged teeth ... (male, 70 years)

Participants considered that dentists were the primary source of information on oral health.

Information was obtained from brochures and posters in clinics, and directly from the dental professional. Other possible sources of oral health information for participants included literature in medical practitioners' surgeries and pharmacies, product packaging and labels, internet sites, and publications from seniors' groups.

Many participants indicated a preference for brochures, or articles in seniors' publications and community newspapers. Other participants identified product television advertising as a good source of oral health care information.

'And the advertising for Mouth Wash Brand and things like that, they are the things you take notice of'. (female, 75 years)

Importance of oral health. All participants acknowledged that good oral health was very important, supporting this view with examples drawn from their own experiences, and those of family and friends. The most commonly reported benefit of maintaining good oral health was the increased likelihood of retaining one's natural teeth. Many participants expressed pride in the fact that they still had their own teeth. Participants wished to avoid having to wear dentures, which they perceived as uncomfortable and less attractive than natural teeth.

I have a special reason for having to be particularly careful because I have got partial dentures and some of my own teeth and I think it is so important that I look after the remaining teeth because I have got ... if I had complete artificials, they would not be very comfortable, so it is an extra incentive for me to look after the ones I have left'. (male, age unknown)

Most participants perceived a strong relationship between oral health, good nutrition, and good general health.

I think it is vital because if you haven't got decent teeth, we can't eat properly. You can get complications either from eating the wrong things or not chewing properly.' (female, 73 years)

A number of female participants mentioned their concern for cosmetic issues such as appearance and fresh breath. Two participants indicated that oral health was important for social reasons, because they believed it affected their ability to speak clearly.

Most study participants associated poor oral health with pain, and considered avoiding pain and discomfort a major benefit of maintaining good oral health. It was apparent, however, that participants generally considered the absence of pain to be evidence that they are free from dental problems

Maintenance of oral health. Most participants suggested that brushing their teeth (or dentures) improved and maintained their oral health. Some used an electric toothbrush while ,. many participants regularly used dental floss, mouthwashes and gargles.

Having a healthy diet and reducing sugary foods, was considered important for maintaining good oral health. Very few participants mentioned regular dental check-ups in the context of improving oral health.

A number of individuals described unusual oral health practices or beliefs, indicating, perhaps, that they lack adequate oral health knowledge.

Yes. If I eat watermelon I rub the whites of the watermelon across my teeth'. (female, 62 years)

"... but of course another thing is they invented this chlorophyll toothpaste which seemed to prevent decay

I have got very strong teeth because I eat a lot of crusts and things like that. (male, 78 years)

Such beliefs sometimes persisted from childhood and influence decisions regarding oral health and dental treatment.

Perceived need for dental care services. Although all participants agreed that oral health was important, many did not have regular check-ups. A number of participants would only consult a dental professional if they had a problem with their teeth, and considered the absence of pain as an indication that they had no dental problems.

I have got no real trouble with my teeth now, I have got no toothache. It's only when they deteriorate to such a point that they break, they crumble, I have two teeth like that now. (male, 78 years)

Pain was not sufficient motivation for some participants to visit a dentist. One participant, for example, had been experiencing toothache for over three months without seeking treatment.

Many participants considered that dental check-ups are unnecessary for those with a full set of dentures. People with dentures generally only visited a dentist if they damaged their dentures, or wanted them replaced. As the following comment illustrates, this need may not arise often.

I have never had a problem other than to... since 1952 I have had two lots of false teeth and that's my lot. The first lot lasted me 'til about - well over thirty years'. (female, 73 years)

Some people may not personally consult a professional in response to an emergency with dentures. At least one participant posted her dentures somewhere to be repaired. Many people were resigned to wearing poorly fitting or uncomfortable dentures, and some described attempts to adjust or repair their own dentures:

No. I have got a chain saw sharpener, when my teeth don't fit properly, I get the chain saw sharpener, take a bit off. (male, 69 years)

Participants who regularly visited the dentist indicated that they responded positively to written reminders. Although most participants had routine check-ups on an annual basis, some visit their dentist every six months, usually in response to the dentist's prompting.

Regular dental check-ups were considered by these participants to be an important way to preserve their oral health, and minimise the need for repairs or treatment. Some were hopeful that routine checks would lead to lower dental expenses in the future.

'Definitely six months... I feel happier about it because if anything is about to go then it can be picked up sooner. And maybe it will be less expensive'. (female, 73 years)

Government-funded dental services. Individuals who relied upon government-funded dental services often needed information regarding eligibility criteria, qualifying periods, and treatment options. A number of participants voiced concern regarding the availability of such information, and described situations in which their lack of knowledge of the 'system' had affected their eligibility for treatment.

[int: do you know how you have to wait generally?]

'A couple of years. Unfortunately when I got the last lot done ... I didn't realise that you had to go back every 12 months to have them checked, otherwise they take you off the list. I now have to wait to go back on the list.' (female 68 years)

Accessibility

Although participants believed their access to dental services was reasonable, many were aware that transport and health problems could limit their ability to travel for dental treatment in the future.

The majority of participants drove themselves to appointments, or had their partner or a relative take them. Some made use of public transport. There was general concern, however, that other more elderly or frail persons might find public transport difficult.

'and if they have any sort of disability it could be a problem... I have a friend - she couldn't go on the bus. At the moment she can drive, but later on she [may have problems]'. (female, 73 years)

This was a theme that recurred throughout the interviews. Participants considered their own circumstances to be manageable but they often expressed concern for how other less able, less 'fortunate' older persons might be affected by the issues being discussed. In many cases, these concerns were supported by actual examples of hardships experienced by friends and neighbours.

It is quite hard because you have to go through the government and be on the list.'????????

Proximity to dental services. Some study participants using government-funded dental services described their difficulties in accessing services that were distant from their homes.

Well the only place in Perth where you can get emergency treatment straight away is Suburb1. I live in Suburb2. I am a kilometre from the station and to go to the station, get the train... and then I have to

walk about three quarters of a kilometre to the clinic. And once I got there and I was attended to.... I find that totally unrealistic for an older person. And it might be somebody a lot older than me or with problems with walking or... a number of difficulties which could very easily be the case'. (female, 64 years)

Although people using private dental services were able to access any dental practice, some study participants still travelled considerable distances to visit a dentist with whom they had a comfortable relationship.

'No, my dentist I have had for 20 years, but 15 of those I have lived in Suburb1And that is where he is. Now we live in Suburb2 but I still go back.' (female, 72 years)

Some participants chose to consult a local dentist after moving into a new suburb, although a small number only made the change once their dentist retired or stopped practicing

I drive. I chose that because my previous dentist was in the city and thought this time, plus he died, I thought I would go somewhere easy.' (female, 80 years)

Waiting periods. Those who used publicly funded dental services expressed major concerns over the requirement to wait for dental treatment.

Waiting times at appointments. A number of participants were kept waiting some time before being treated at public clinics, despite having an appointment. Some perceived this as a lack of respect, and were frustrated and angry at being forced to wait.

The first guy I had was a young guy who was very patronising and very rude and kept me waiting for about an hour'. (female, 74 years).

I can't afford to sit in the clinic for an hour without someone saying to me, "there won't be anyone to see you for at least half an hour". That would give me time to ring someone up and tell them that I will be late for the next appointment'. (male, age not provided).

Not all participants considered that waiting at the clinic was a barrier to obtaining dental care. Some used that system to their advantage, presenting at clinics for emergency treatment, and waiting until a dentist was free to see them.

If I make an appointment, it is pretty good but if anything happens I go up there at 8.15 and they open at 8.15 and I tell them what I want Whoever hasn't got an appointment, they get you and I think I went in at 9.00 the other time. And sometimes if I can't get an appointment for weeks I just say don't worry about it, I will just come up at 8.15 and sit here. You don't wait such a terrible long time'. (female, 75 years)

Gaining Appointments. Many participants expressed frustration and despair over the delay between their needing treatment, and receiving treatment within the public system.

I think the waiting time for older people who can't afford to go to a private dentist is absolutely diabolical. I know people who have been waiting years to see a dentist at the dental hospital and still haven't got anywhere'. (female, 73 years)

I have had a lot of trouble trying to get dentures made, especially dentures that fit. Waiting time is about two years in the public health system and if you make any complaints or anything at all up there you get treated as an absolute second-class citizen. You get really told to get back in your box. You get treated like you should be grateful when they do things for you'. (male, 69 years)

Others were more concerned by the apparent lack of flexibility with appointments once they were made. The threat of losing their place in the queue if they inadvertently missed an appointment was an issue for some.

Cost and Affordability

The expense of dental services was raised as an issue in all focus groups. Some of the discussions regarding costs were generated by conversations about how dental services might be improved for persons in this age group. However, many participants made it clear that cost can be a significant barrier to obtaining dental treatment.

'He cleans his teeth about ten times per day. I go broke buying mouthwash and toothpaste and stuff but that is keeping the remains of them clean. But all that poison is still going through his system....

He would need an operation to cut the teeth out... we don't have the money'. (female, 73 years)

I try to hang out as long as I can because we can't afford it. I would go every six months like I used to because it is important. My husband hasn't had a pension for two years. Our dentist understands our financial situation and lets us pay as we can. Sometimes we go without other things. We don't want him to wait too long'. (female, 68 years)

Expense of treatment. The consensus among participants was that dental services were expensive, particularly when compared to other medical services, which are free or heavily subsidised.

When we first came over here I had my teeth checked. I had one filling and it cost me \$190 for one filling five years ago, and they kept sending me six months reminders and I thought for the first reminder I went and I didn't have to have anything done, but I think they charged me \$95 for me to open my mouth. And that is why I am now going to [the government clinic]' (female, 68 years). That's what discourages you isn't it? (male, 71 years). [some agreed in unison]

Although acknowledging that their dental treatment was expensive, some participants believed that they had received good value for the money they spent.

Let me tell you what my top plate and my partial plate cost me at the dental hospital: \$170. Plus four, five extractions, so it is very, very good. I was very excited when they told me the price, because after years of working ... I thought I am getting something back'. (male, 70 years)

Some people were resigned to meeting the perceived high costs of dental treatment because they had established a relationship with a dentist, and were happy with the treatment they received.

I have had a lot of work done on my mouth and my present dentist has all my records so if I have to go somewhere else... but the history must be valuable for the right treatment for me. So I hesitate to go anywhere else. I am happy with the treatment, I'm not happy with the cost.' (male, 67 years)

I am in the same position, he is expensive but I wouldn't change him. Because he is good.' (female, 66 years)

Private health insurance. Approximately half of the study participants had private health insurance covering dental care. Participants mostly considered that the insurers' refunds were inadequate compensation for the high fees charged.

[Cost is an important factor. I find it costly, and]... 'for people who have only got the pension and not any superannuation and they are not ... well, what you get from (Private Insurance Fund) is not very much for dentistry. I am on the ancillary plus but it does not make a lot of difference I think.' (female, 80 years)

Some participants with private insurance suspected that they might be charged higher fees than patients without insurance.

'...one of the first questions you get when you are filling in your paper is do you have private cover?

Often the thought goes through my mind, what's it to you? I mean that is my private personal arrangement. But the first thing I feel having said yes is you are ready to go onto another column which is twice the price. (male, 67 years)

'There is no proof of it though.' (female, 59 years)

But having said that, on the medical side of it I have no complaints whatsoever...' (male, 67 years)

Schedule of fees. A number of participants stated that a standardised schedule of fees for dental services would encourage them to seek treatment and have regular check-ups. Many agreed that fees should be discounted for older persons.

'I have no objection to paying for dental work but within reason.' (female, 70 years)

If you get value for money.' (male, 67 years)

I think having scheduled fees, the doctors... there are those that bulk bill I believe, but dentists and lawyers... but dental in the health area, there doesn't seem to be control or ... a recommended price. If they were just published for example, the price ranges are from here to here for a one-sided filling... a guide, so when you are at the dentists and having a checkup you say "what do you charge for the filling", so you will know if you are at the top of the scale or at the bottom and you can say "well I can do better than that".' (female, 59 years)

Fear and Anxiety

The majority of participants described some experience of painful or traumatic dental treatment. Although many of these experiences had occurred when participants were children, some reported negative experiences with treatment received when they were adults.

It was apparent that early traumatic experiences made strong and lasting impressions on people. The language used to describe them was emotive, and the scenarios were generally explained in vivid detail. Many participants used words such as 'horrendous', 'terrible', 'butcher', 'excruciating', 'horrible', and 'terrified' to describe their experiences.

The negative experiences were generally associated with pain, injections, and/or drilling.

Although many participants were able to describe specific incidents in detail, others reported more generalised negative impressions.

The fear associated with visiting the dentist was a major barrier for some people. Most described their fear as persistent and confronting, even though they had more positive, 'pain free' experiences as adults.

'See I had had experiences as a child and although I now know better and my dentist is good too, but there is a bit of fear attached to it. I had a lot of fillings and the anesthetic didn't work properly'.

(female, 59 years)

In my 20s and 30s I still didn't like it, I had a fear of dentists. When I was three or four years old I had an abscess, the dentist took out the tooth and it really hurt. ... I felt I was going to be tortured.

My fear of the dentist has never really gone, even if they are good'. (female, 68 years)

Many participants were reluctant to visit a dental health professional because of fear of physical pain and discomfort. Many had difficulty overcoming their fear, and consequently avoided the dentist.

I really avoid the dentist if I can. Which I have been able to.' (female, 62 years)

Others, committed to maintaining their oral health, believed in having regular dental checks, and reported 'toughing it out'. One participant noted her fear came from experience in Indonesia.

It's that needle, they get in... and they never give me enough. They never leave me long enough for it to start working. They are in too much of a hurry to get going, get onto that drill. I suppose it goes back to when I was young and it was not my part to tell the dentist how to do the job. You sit there and suffer it.' (laughs) (male, 70 years)

I don't like dentists and I tell him that often, poor man. But I go because I have to go and I just take deep breaths. He knows the problem that I get a bit uptight perhaps because in Indonesia the Chinese dentists were good but they didn't use any anaesthetic, they just pulled the teeth out.' (female, 60 years)

Some participants used techniques to relax and endure the experience, while others visited dentists who create a pleasant, relaxing environment.

'I do meditation and it is good to go to the dentist, sit in that chair and meditate and I am terrified of the dentist, but it does help.' (female, 64 years)

The dentist I had in Melbourne before coming here asked me what sort of music I would like to hear.

He put earphones on and I would listen to Mozart ... and I just concentrated on the music.' (female, 72 years)

Relationships

Participants who regularly visited dentists held a strong view that dentists, dental techniques, and dental outcomes are vastly improved. Some participants who hadn't seen a dentist for many years shared this perception.

The majority of participants in this study - regardless of whether they used private or public dental services - were satisfied with the standard of dental care and treatment. Many described their treatment as 'excellent' and 'very good'.

First of all, these young dentists ..., they are very well trained and technically efficient operators now and when you add that to the modern equipment, these quick drills, you don't have to be in the dentist's chair half an hour having a filling, they are doing it in 2-3 minutes.' (male)

I am very satisfied because... he does is what is necessary and he seems to know what he is doing and he explains everything to me and I think he takes very good care of my teeth.' (female, 75 years)

Some participants, while very positive about the professional and personal qualities of their dentist, were not happy with way they were treated by other staff such as dental hygienists and receptionists.

'And the dental hygienist -well I think she was She put me off again forever! This really is a weakness with dentists that I think must be stressed..' (female, 66 years)

Need for trust. Many participants described the importance of trust in their relationship with the dentist. Trust was considered vital because of the anxiety associated with undergoing treatment. Concerns regarding financial issues and costs can also be alleviated when the relationship is sound.

I have been fortunate with the dentist I have had the last 25 years. He lived across the road from us, I saw him grow up. I think having faith in a person or someone you can rely on is a big plus.' (male, 71 years)

I think the main problem that consumers have with dentists is that unless we are really sure about our dentist... we had one that I am quite convinced, if you saw you coming he would book his holiday and do more than was strictly necessary. Fortunately the dentist I have now, in consultation suits me, we will decide what is completely necessary... you are in their hands.' (female, 73 years)

Most participants who had established a good relationship with their dentist described a reluctance to move to a different practice, even if there was one more conveniently located, or if they perceived that their current treatment was expensive.

Participants who attended public dental clinics were less able to build a relationship with a dental professional. The high turnover of staff at public clinics was mentioned by a number of participants who used government-funded services.

The last chappie I saw was a young chappie. I feel he is an apprentice because they are the type of people you see. And I don't know who I am going to see next time. Because [my other dentist] has gone. Whoever they give me I have to be satisfied up there.' (female, 75 years)

Need for involvement. There were participants using both public and private dental care services who perceived that they had little control over their treatment. Some felt that their dental professional failed to listen to them. A number of others described having to battle to have their needs met.

You are at their mercy, you don't know what they are doing in there working do you?' (male, 70 years)

'Very recently I went to my six-month check-up and a scale and polish. ...my dentist has a hygienist these days ... when she has finished everything is nice to feel with the tongue, but those two[teeth] are rough at the back. But she and the dentist do not seem to really listen to me. They are still rough[the teeth] and I go home ... it aggravates me. They are not really accepting what I say ...' (female)

Discussion

The participants who took part in the focus groups and interviews were generally well educated and physically mobile. Thus, their potential to access dental care services and oral health information was reasonably high. Five major themes emerged from the interviews - information and knowledge, accessibility, cost and affordability, fear and anxiety, and relationships. In this study perceptions of treatment were important to participants in addition to oral health.

Information and Knowledge

Many participants acquired their oral health knowledge from parents and teachers. This raises questions about the relevance and accuracy of that information, and suggests that beliefs and behaviour are very slow to change for many older people. Participants expressed many incorrect and irrelevant beliefs about maximising and maintaining oral health. Many participants believed that dental disease was not present until they felt pain as was found in a Canadian study ¹⁵. Although some participants were influenced from product advertising, other information clearly originated from childhood.

Although dental professionals were considered an important source of oral health education, their influence was limited to those who actively seek their services. The need for more transparent, accessible information on public dental services and facilities was an issue for those without the means to pay for private dental care. The view that older persons experience fewer dental and oral health problems was pervasive, as was the belief that having dentures removed the need for dental checks or treatment ¹⁶.

Accessibility

Physical accessibility of dental services in the private sector seems to pose few problems for older persons who are relatively mobile. Most participants in this study had a dental surgery in close proximity, although many preferred to travel further for treatment by a trusted professional. In contrast, government-funded dental services were considered difficult to access because of their limited number and location, and the waiting times for and at appointments.

Affordability

The fees for private dental services represent a significant and substantial barrier for many of the older persons. Even participants who were able to afford health insurance were concerned about the cost of their treatment. Many deferred treatment because of financial difficulties. Evidence from other qualitative studies ¹⁷ and longitudinal research ^{18, 19} also suggests that costs deter people from seeking dental treatment. Ettinger found the ability to pay for treatment was positively associated with having visited a dentist in the past year ²⁰.

Fear and anxiety

Discussions revealed considerable anxiety regarding dentists and dental treatment. Liddell and Locker's review concluded that dental anxiety is generally underestimated in older persons, since this age group has a tendency to underestimate their need for dental treatment ²¹. A substantial number reported painful or traumatic experiences in the past, and described being reluctant to seek treatment. This is consistent with the finding that fear was a major barrier for those 55 years and over ¹⁷. Few participants in our study reported being relaxed and positive about seeking dental treatment.

Relationships

The issue of trust was significant for many persons in our study. For some participants, it was important to have a trusting relationship with their dental professional because of concerns about high fees for services. Others were more concerned about their physical comfort and favoured a dentist with a gentle, empathetic approach. For participants, being consulted about treatment options was highly valued. One study²² found that older persons were more likely to identify medical professionals as sources of social control than younger adults. This represents an opportunity for members of the dental and medical professions to educate older community members and encourage positive oral health behaviours. However, many of the participants in our study described feeling intimidated by some dental professionals and were reluctant to express their needs and concerns about treatment with their dentist. Persons relying on public dental services were concerned that they were usually treated by different, often young 'inexperienced' dentists, and felt they lacked the opportunity to develop relationships with these professionals.

Additional consideration of the emergent themes in this study suggested that factors of interest could be classified into one of two groups – those that could readily be changed and those that could not be changed as previously noted ²³. In this framework, potential access to health services is influenced both by structural factors within the health system itself, and process factors, which include characteristics of the population of interest. The characteristics of the population are categorised as predisposing, enabling and need, and there are both mutable and immutable elements within the predisposing and enabling factors.

Socio-economic factors affecting individuals' ability to pay for private services and having health insurance may be difficult to change. Attitudes towards the importance of oral health, and

knowledge of dental care practices that were acquired during early years of life may be deeply entrenched.

It is apparent that that some issues may be addressed both by the individuals, and the health system. A 2001 review noted that although 25% of the adult population was eligible for public dental services, only 12% of dentists worked within the public system ²⁴. There is a lack of prestige and remuneration associated with working within the public system, and turnover of dentists in the public sector is high ^{10, 24}. This study has revealed that this situation represents a barrier to older persons who require longer term, trusting relationships with dental care professionals. Further, the capacity of the public system to meet both need and demand for treatment is compromised by the lack of resources ²⁴...

The issue of affordability of private dental services was a significant barrier for older persons, but there may be options such as clearer information on fees or providing discounts for seniors and low-income earners. Having access to clear information on fees may reduce anxiety about costs.

Anxiety about physical pain may also be assisted through the provision of information for patients regarding improved dental practices and technologies, and the importance of regular oral health checks. It is also important to address the need in this group for more information on cleaning and caring for teeth and dentures

Conclusion

Many participants based their current behaviour on experiences and information from many decades ago emphasising the importance of temporal factors in oral health. Much of our health research does not adequately describe the ability of people to change their health behaviours over

time and this is going to be particularly important in oral health and findings from this study emphasise the importance of a life course approach to oral health.

It is also apparent that there is a strong emotional component to people's perceptions, attitudes, and experiences of dental care. Anxiety and fear are common responses and significant barriers to older persons' seeking treatment. Dental care professionals have considerable impact on persons in this age group, who wish to establish a long-term relationship with a dentist who is honest, caring, and prepared to consult and communicate with their patient. The costs of private dental services, and the availability and accessibility of government-funded treatment are significant issues for older persons. Current demand for dental services from persons in this age group may be inhibited by the perception that check-ups and treatment are less important in the aged and those who have dentures. Older persons need information and education to improve their dental and oral health care practices.

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References

Table Characteristics of study participants

Variables	n (%)
Sex	
Female	46 (73%)
Male	17 (27%)
Age	
Female	59-92 (median 71.5 years)
Male	67-82 (median 70 years)
Receive Government Pension	
Yes	51 (81%)
No	11 (18%)
In Paid Employment	
Yes	10%
No	90%
Private Health Insurance	
Hospital Cover	32 (52%)
Ancillary Cover	31 (48%)
Usual Dental Service	
Private	42 (71%)
Public	14 (24%)
Both	3 (5%)

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