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Pasifika adolescents' recommendations for increasing access to oral health care

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Abstract

Background and objectives: There are inequities in Pasifika adolescents' access to oral health care and to date, few studies have reported on how these disparities could potentially be addressed.

Methods: In 2017, a mixed-method study investigating Pasifika adolescents' understandings and experiences of oral health care was conducted. The qualitative component involved 17 Pasifika adolescents (from four cities) facilitating focus groups with 59 of their Pasifika peers. The first and second authors conducted an inductive thematic analysis of the focus group data. This paper focuses on one theme that emerged in the qualitative data, the participants' suggestions for increasing Pasifika adolescents' access to oral health care.

Results: The participants' recommendations included: reducing the costs of oral health care (which we note is free) and oral health products, easier access to appointments or having appointments arranged for them, creating more youth-friendly clinics, and rewards for attendance. Having younger as well as more Pasifika/Māori oral health professionals were further suggestions, as was educating parents and the wider Pasifika communities on the importance of oral health and regular dental visits.

Conclusion: This is an exploratory study and the participants' suggestions should be considered by District Health Boards, private practitioners who participate in the Adolescent Oral Health scheme, as well as Pasifika peoples, as a conversation starter on how to address the inequities in Pasifika adolescents' oral health care access.

Background

Accessing oral health care

In New Zealand (NZ), basic oral health care for adolescents is publicly funded and delivered by dentists or dental therapists contracted to District Health Boards through either the Adolescent Oral Health Scheme (AOHS) or the Community Oral Health Service (COHS) (Børsting et al. 2015, Ministry of Health, 2016). Although this basic oral health care is 'free' for all adolescents until they reach 18 years of age, Pasifika[1] adolescents are less likely to access[2] this care than their 'other' ethnicity counterparts (Areai et al. 2011; Smith et al. 2018; Teevale et al. 2013). For example, a secondary analyses of data collected for the *2009 New Zealand Oral Health Survey* (Ministry of Health 2010), showed that fewer than half (31.1%) the number of Pasifika adolescents (aged 15 to 19 years) had visited their oral health professional in the previous year compared with their 'non-Pacific' counterparts (62.9%) (Smith et al. 2018). Data collected for the *Youth '12 Survey* found similiar disparities in Pasifika adolescents' access to oral and general health care (Fa'alili-Fidow et al 2016). Furthermore, the two most recent annual updates of the *National Health Survey* (2013/2014 and 2015/2016) report among Pasifika adults (over 15 years) and children (below 14 years), lower utilisation of oral health care compared to their non-Pasifika counterparts (Ministry of Health 2015; 2016).

In its strategic vision document *Good Oral Health For All, For Life*, the Ministry of Health (2006) identified Pasifika peoples as affected by inequities in oral health care access and outcomes. The WHO (2012) has committed to improving the oral health of 'vulnerable' groups worldwide. Given that Pasifika adolescents experience a greater oral health burden than their NZ European counterparts and are less likely to access dental care, then studies exploring how to boost Pasifika adolescents' access to oral health care and outcomes are necessary (Schluter et al 2017). However, to date very few studies have investigated how this could be achieved.

Barriers to accessing oral health care and potential solutions

Two recent studies have identified potential barriers to Pasifika adolescents accessing oral health care, which have included a lack of arranged appointments (such as in primary school), unwelcoming clinical environments, and not understanding what a dentist does (due to the

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[1] The term Pasifika refers to people who have migrated to NZ from South Pacific countries (including Samoa, Tonga, the Cook Islands, Fiji and others) and their descendants (Ferguson et al. 2008). In numerous Pacific languages the term Pacific translates into Pasifika, which is framed as a powerful term because of its self-definition. The term Pasifika is used in this study because of its links with self-definition and empowerment;.

[2] Here, the term access refers to Pasifika adolescents utilisation of oral health services and the ease in which they can access these services in accordance with their needs (Levesque et al 2013).

lack of dentists in some Pacific Islands)[3] (France et al., 2017; Smith et al., 2018). Other identified barriers are an inconsistency between parents' teachings on oral health and parents' own oral health behaviours, lesser emphasis placed on individual health in collectivist Pasifika cultures, embarrassment associated with being unable to purchase oral health products recommended by an oral health professional, and feeling awkward when being treated by oral health professionals (some of who were perceived as failing to consult Pasifika adolescents about their treatment).

In order to overcome some of these barriers, Pasifika adolescents have said they should be encouraged to bring support people to the clinic, oral health professionals ought to be more approachable, and models of health care more aligned with Pasifika cultural beliefs (such as allowing time to establish rapport), need to be implemented (France et al. 2017). Moreover, Fitzgerald et al. (2004) maintain that access to oral health care services amongst NZ adolescents generally might be increased if younger staff members were employed, clinics were designed to appeal to youth, and dental appointment reminders were sent via text message (Fitzgerald et al. 2004).

Aims and objectives

This study aimed to explore Pasifika adolescents' suggestions for how access to oral health care services could be increased amongst their peers. As Pasifika adolescents are at the forefront of this inequity in access, then arguably, they are well positioned to offer suggestions for how it could potentially be addressed. However, it is the intersection of societal, cultural and clinical aspects that impact on Pasifika peoples' access to oral/general health care. For instance, the lower socio-economic status of many Pasifika families, cultural beliefs (such as placing the needs of the extended family over one's own), and experiences of discrimination in health care, act as barriers to accessing oral and general health care (Freedman and Martin, 1999; Mila-Schaaf et al. 2008; Suaalii-Sauni et al. 2009; Teevale et al. 2013 Kolandai-Matchett; 2017).

Methods

This article reports qualitative data from a mixed method study that explored Pasifika adolescents' understandings and experiences of oral health care. Some study findings have been reported elsewhere (Smith et al., 2018); however, this paper focuses on one dominant theme that emerged from the qualitative data analysis.

After approval was obtained from the University of Otago Ethics Committee (reference 16/147) in the second academic semester of 2016, Pasifika community groups and secondary schools (with high numbers of Pasifika students) in Invercargill, Dunedin, Christchurch and Auckland, were contacted and informed about the study. After the first researcher met with adolescents who expressed interest in participating and gathering their informed consent (or parental proxy consent for those below 16 years), 17 Pasifika adolescents were employed as peer researchers to facilitate focus groups with their peers. The peer researchers were 13 females and four males, who ranged from 14 to 18 years, and self-identified as Samoan (seven), Tongan (six), Cook Island (two), and Samoan/Māori (two)[4].

The peer researchers participated in a training session with the first researcher, where they were taught about the need for confidentiality, how to follow up on responses, and practised using the digital recorder. They were also supplied with an interview schedule, which was checked against the peer researchers' literacy levels and adjusted if needed. The interview schedule contained a series of open-ended questions designed to gather detailed information on the participants' understandings and experiences of oral health care, what aspects they considered that oral health care professionals needed to be aware of when caring for Pasifika patients, and finally barriers to, and facilitators for, accessing oral health care services.

In health research, 8 to 12 focus group participants is commonly cited as being ideal (Curry and Nunez-Smith 2015). Nevertheless, given the tasks asked of the peer researchers and their lack of research experience, it was decided that four to six focus group participants was adequate.

The peer researchers facilitated 16 focus groups (two peer researchers co-facilitated a focus group) with 59 (39 females and 20 males) Pasifika adolescents. The focus group participants (who were predominantly friends, classmates or siblings of the peer researchers) were aged between 12 and 19 years and self-identified with at least one Pasifika ethnicity (including Samoan, Tongan, Cook Island, Tokelauan, Kiribati, Fijian and Niuean/Samoan). Two participants who solely identified as Māori and one as New Zealand European also participated in focus groups. Three peer researchers did not successfully record their focus groups. A peer researcher also conducted a focus group with only two participants, while two peer researchers jointly conducted a focus group with eight participants. Such deviations from set instructions are a risk of youth-friendly research designs (Murray 2016).

[3] Some academics have challenged the notion that linking Pasifika inequities with migrant issues when 62% of Pasifika people residing in New Zealand are born here (Statistics New Zealand, 2013), fails to prevent the inequities in health services being addressed. However, to ignore this comment would have undermined our desire to centre the young people's perspectives. Moreover, it is possible that the participant was a recent immigrant, as this information was not collected. This is to avoid creating a binary where Pacific immigrants are constructed as 'more of an outsider' than those born here and because the terms 'Pacific born' versus 'New Zealand born' are considered as insulting by some (Medical Council of New Zealand 2010).

[4] The peer researchers from Auckland and Christchurch attended schools located in a low socioeconomic locale, while those in Dunedin and Invercargill attended mid-range decile schools. Information on the socio-economic status of peer researchers' families was not obtained because to do so may have thwarted our desire to create a youth-friendly research design and a sense of trust.

Data analysis
LS and RR[5] jointly analysed the focus group data using an inductive thematic approach (Thomas 2006). Both authors made separate list of independently identified themes in transcripts as they read (transcribed by the first author) and coded text responses that highlighted these themes. These lists were compared and found to correspond.

While co-analysing the data RR alerted LS to specific cultural practices that may have impacted on the participants' responses. For instance, RR explained that sharing food is linked with hospitality in Pasifika cultures, which is of central importance (Thompson et al. 2009). This may explain why numerous participants discussed the notion of being provided with food after their dental visits. The dual coding and analysis processes meant that some participant's responses (such as "giving them a feed of Macers" or "lollies after") were not simply glossed over as irrelevant or attempts at humour.

The identified themes were grouped into five overarching categories and were presented to the peer researchers (in a booklet form) for their feedback. The peer researchers provided comments on these themes, which also acted as a form of triangulation that helped to ensure the robustness of research findings, but also provided additional data. This article reports on one of these identified themes, which is participants' suggestions for increasing Pasifika adolescents' access to oral health care.

Findings are reported using a qualitative description, which is characterised by 'staying close to the data' without engaging in complex theoretical interpretations of participants' accounts (Kim et al. 2016). Qualitative description was selected as children/adolescents' perspectives remain largely unexplored in oral health research and thus, we wanted to present the participants' accounts in 'their own words' as far as possible (Marshman et al. 2015; Smith et al. 2018).

Results

Reducing the costs of oral health care and products
The overwhelming majority of participants were aware that free basic oral health care was available for all NZ adolescents until 18 years of age. Nevertheless, reducing the cost of oral health care was a common recommendation for increasing access to oral health care services. For instance, peer researchers (henceforth PR) nine and ten respectively said "lower the prices" and "give free visits, free quotes". The participants in focus group eight also discussed reducing the cost of oral health care.

> FG8P1[6]: Make the price of checking your teeth cheaper.
> FG8P2: Lower … the price cost.
> FG8P4: Give them a dental health cleaner discount or make it a lot cheaper.

Some participants also suggested that the price of oral health products, such as dental floss and toothpaste needed to be reduced "because it is expensive" (FG10P4). Another participant linked this to financial hardship experienced by Pasifika families, for example "The dentists … should understand like the money factor is something that Pacific Islanders find hard at the moment so they should make their stuff cheaper" (FG13P3). Extending the free oral health care available for adolescents until 21 years of age was a further suggestion for increasing Pasifika adolescents' access to dental care services. For instance, "Instead of stopping … dentist care at 18 maybe it should be 21" (FG9P4).

Making dental visits easier or having appointments arranged
Many participants explained that making access to the dental clinic easier would encourage greater utilisation. For instance, oral health professionals should provide "home visits or school visits" (FG12P3) or "visit the schools to check-up for the teens" (PR16). The participants in focus groups five and FG1P1 discussed how schools could make it easier for students to attend dental appointments.

> FG5P1: Like access … [make it] easy like they come to the school like I went at primary school because I was kind of acquired to go there.
> FG5P3: Yeah like if they bring to school … and pull us out of class then …
> FG5P2: We would.
> FG5P3: But if it … we have to go somewhere else it's like na.

> FG1P1: We need … easier ways, to … better access … our dentists … like school organise a … proper dentist come pick you up from school and take you. So it was like oh I've got the dentist, school's okay with me going … so it's already organised for you.

FG1P4 also stated that Pasifika adolescents needed reminders about their dental appointments. However, she went on to explain how they also need reminders to brush their teeth because many had other responsibilities or commitments.

> FG1P4: Maybe just like 'cause you only go when it pops up like a reminder of it … like check ups, not more check ups but just like … there's always something happening so you know you have to brush … or just how important teeth are.

Rewards
Another common strategy for increasing access to oral health care services mentioned by the participants was to offer rewards for attendance. Most of these comments related to receiving gifts of food, for instance, "Have food there (FG2P1) and "Free food" (FG2P5). Two participants in focus group three elaborated in slightly more detail:

[5] RR self-identifies as Samoan/English, AW as Fijian/Pacific Islander/New Zealand European/Scottish, while LS, LFP and CC identify as New Zealand European.
[6] Focus group 8 participant 1

FG3P2: They could give you a lollipop for free, a sugar free one you like that will make you come back because you like the lollipop.
FG3P6: If they give you a feed afterwards or something that'd be a good reason.

Other participants also suggested that being rewarded with free toothpaste and/or a toothbrush was a way of encouraging oral health care attendance. For example:

FG13P2: Offering them something …
FG13P4: Free toothpaste 'cause they always give free toothbrush …
FG13P3: No toothpaste …
FG13P4: But what would you brush your teeth with? Toothpaste right?
FG13P3: Water (laughter).

FG3P1: Oh if they'd offer a free toothbrush and give you some free samples of toothpaste and … give you some discounts on toothbrushes and toothpaste.

Youth-friendly clinics

Creating more welcoming clinical environments was a further suggestion for increasing Pasifika adolescents' access to oral health care services. Two participants maintained that dental clinic environments were akin to a "horror movie" (FG10P3) or were "like we're in prison" (FG13P2). However, FG13P2 explained that oral health professionals needed "to understand that we're still kids so we kind of want the dental appointments to be fun". The participants in focus group 13 made some suggestions for how this could be achieved:

FG13P2: Like make it fun put some more music on.
FG13P4: It's always like the Breeze channel on when you do go in.
PR13: I'm like put some hip-hop on.
FG13P1: Put some gospel …
FG13P3: Like Mai FM
FG13P3: Oh but speaking for the Pacific Islanders, they would smile a lot more if you put on their radio station so it would be easier to work with their teeth.
FG13P3: Or crack a joke.

Younger and Māori/Pasifika oral health professionals

A number of suggestions for increasing Pasifika adolescents' dental clinic attendance related to oral health professionals. For example, one participant said adolescents should be able to choose their own dental professionals because "they just assign us to a person [that] maybe you don't like" (FG8P1). Some participants said that employing younger oral health professionals would promote better communication. For instance, "The dentists … they're a lot older and it's … hard for us to communicate, but I understand that, they're more experienced, but it would be good to see … younger people in that field" (FG13P1). Moreover, increasing the number of Pasifika and Māori oral health professionals was a further recommendation for boosting dental attendance. Being treated by Pasifika/Māori oral health professionals was considered as being able to address the language and/or cultural barriers that some Pasifika adolescents currently experience. For example:

FG7P2: If there were more Pacific Island dentists then it would encourage Pacific Islanders to go because they wouldn't feel so patronised.

FG11P1: They need to employ more Pacific Islanders, more dentists so they can understand more of our situation, what we're going through …
FG11P2: Because there's a language barrier between us and the dentist.

FG12P4: It would probably be a lot nicer to see a lot more Pacific Islanders more Māori dentists …
FG12P2: Polynesians.
FG12P4: … You see a whole lot of other ethnicities instead of like Pacifics and Polys.
FG12P2: Oh another point is with some people not being able to speak English. So it would be good to have people from different cultures to translate to some of the kids at school 'cause New Zealand is mixed race, so why not have a mixture, but then again we've … got to aim to be a dentist (laughter) …
FG12P4: Be more involved in the health industry.

Parents and wider Pasifika communities

Many participants also made suggestions for how Pasifika adolescents' access to oral health care services might potentially be increased as a result of parental and community education. A number stated that individual health care was not considered as such a priority, as Pasifika cultures are collective and "based around family, friends, religion" (PR10). At the same time however, some participants said that because parents play a large role in shaping their children's oral health behaviours then they should also be educated on the importance of oral health and regularly accessing dental care.

FG5P3: We always do what our parents say, so if … our parents … know how important it is, then obviously, they'll make us go.

FG7P2: If the parents understood then they would make the kids go because there's not much you can do as a kid to resist what your parents say, and if your parents don't understand why you have to go to the dentist, then they're not going to force you to go to the dentist, therefore you don't go to the dentist.

Nevertheless, some participants maintained that discussing the importance of good oral health and regularly accessing dental care should extend beyond individual families to wider Pasifika communities or "not just individually, but as a whole" (FG12P3).
The participants in focus group 12 also stated:

FG12P4: Get the community together and then tell them …
PR12: Oh so like presentations.
FG12P5: Get the parents more involved.

Disseminating information about the importance of regular dental visits and oral hygiene could be achieved through community presentations (as seen in the above excerpts), as well as distributing pamphlets in churches, screening advertisements on social media and television. Some participants said that these presentations should include visual images of poor oral health so that Pasifika adolescents would be scared into maintaining good oral hygiene.

PR8P 2: Making ads …
PR8P3: On TV. Bring them the information, like ask … schools, but maybe bringing the Pasifika people in a room … and them maybe sending pamphlets to churches...
PR8P4: Tell the dentist or [dental] therap[ist] to have a really good talk with them, and show them all the consequences … they're going to face if they don't keep up.

FG10P2: If you tell us how bad other people's teeth are and show them images and pictures then it would make them scared … if they come into our schools and do presentations … just to promote … the importance of making your teeth healthy.
FG10P1: Or when we have the parents' conferencing [at school] … after the conference they could tell them, like promote it.

PR4: Market [oral health] at high schools and on social media-great influencer.

One participant also said that any presentations or pamphlets should be in Pasifika languages so that they would appeal to parents and older family members. For instance, "If … resources were available in our language, then my parents and my grandparents and my families might care a little bit more and they'll understand how important it is" (FG12P3).

Discussion

The overwhelming majority of participants made suggestions for increasing Pasifika adolescents' access to oral health care services, which included reducing the cost of oral health care and products, making access to the clinic easier, providing rewards for attendance, making the clinical environment more welcoming and youth-friendly as well as having more approachable, younger and Pasifika/Māori oral health professionals. Moreover, having oral health professionals visit their school and being allowed out of class, or alternatively, having transport to the clinic arranged for them were additional suggestions for increasing rates of attendance amongst Pasifika adolescents. There were also recommendations related to increasing the importance placed on oral health in Pasifika families and communities through education (including presentations, advertisements and pamphlets). These presentations were considered to be more effective if they were in Pasifika languages.

Evaluating the research

Pasifika adolescents are less likely to access the free oral health care that is available to them than other groups of adolescents (excluding Māori) (Areai et al. 2011; Teevale et al. 2013; Børsting et al. 2015; Ministry of Health n.d.; Smith et al. 2018). To date, we are not aware of any other studies reporting in depth on Pasifika adolescents' suggestions for how the disparity in access to oral health care could potentially be addressed.

However, we are unable to discuss whether there were any differences between participants of diverse Pasifika ethnicities, given that the peer researchers conducted the focus groups and not the members of the research team. However, we propose that such differences would only be likely if there was homogeneity among the ethnicity of focus group participants, which maybe difficult as adolescents, like adults, are likely to have a selection of friends from various cultural backgrounds.

Moreover, asking peer researchers to facilitate the focus groups meant that on some occasions responses were not followed up when further prompts would have been ideal (for instance, when FG10P3 described dental clinics as being like a "horror movie"). Nevertheless, the focus group participants also discussed aspects such as being unable to afford toothpaste and also used youth slang, which may not have occurred in a focus group conducted by an adult member of the research team. Consequently, employing peer researchers as focus group facilitators both benefitted and limited the data collection and study findings (Smith et al 2018).

Almost all participants said that they had visited a dental clinic in the previous year. Consequently, the recommendations of Pasifika adolescents who have never been to the dental clinic or the reasons why they choose not to attend cannot be reported. Ideally, research on barriers to accessing dental care and suggestions for encouraging greater dental access amongst Pasifika adolescents and adolescents in general, should endeavour to include the perspectives of these participants, as this would provide greater insights into the most dentally underserved. Moreover, the link between low socioeconomic status and ethnicity has been very briefly touched on in this article; however, this confounding relationship needs further exploration in subsequent research.

Finally, some of the suggestions for boosting dental attendance could be seen as unfeasible (for example, reducing the costs of dental care for adolescents when it is free for those aged under 18 years), or alternatively, contrary to the messages dental professional ought to give (for instance, rewarding dental attendance with lollies). Readers need to be circumspect about these recommendations. At the same time however, given that children's voices are missing in dental research then we do not want to censor the participants' responses and therefore present all the suggested recommendations (Smith et al 2018).

Reducing the costs of oral health care and products

The majority of participants were aware that basic oral health care was free for adolescents until they reached 18 years of age. Consequently, the numerous participants who said that reducing the costs of dental visits may increase access to oral health care services may have been drawing on their parents' oral health experiences or alternatively, the societal construction of oral health care as expensive (Fitzgerald et al. 2004; Murray 2015). The participants may also be thinking more broadly and subsuming the costs of oral health care products, travel costs associated with getting to appointments, or more costly orthodontic treatments, with the cost of dental visits (Smith et al. 2018). These additional costs may be more challenging for Pasifika families who receive lower average weekly incomes than their Māori, Asian and New Zealand European counterparts and are subsequently overrepresented in the statistics for financial hardship (Pasifika Futures 2017). As the peer researchers did not follow up with questions exploring why this was the case, then this can be considered as speculation.

Nevertheless, other national studies have found that adolescents eligible for free dental care consider dental visits as unaffordable and therefore they only attend the clinic when it is urgent (Fitzgerald et al. 2004; Murray et al. 2015). Consequently, the pervasive societal discourse of dental care as expensive may overide adolescents' knowledge that oral health care is free until they are 18 years of age.

The participants' suggestion that publicly funded oral health care should be extended until 21 years of age parallels recent calls from some dental professionals and politicians for this free care to be extended (One News 2018). However, at present, Pasifika adolescents are less likely to access the free oral health care that is available to adolescents under 18 years of age than their NZ European counterparts (Teevale et al. 2013; Borsting et al. 2015; Smith et al. 2018). Consequently, extending the age of 'free basic oral health care to 21 years, may not serve to address disparities in access to oral health care. More complex solutions are needed to boost Pasifika adolescents' access to oral health care; however, ignoring this recommendation would be undermining our desire for a democratic research design, where Pasifika adolescents' perspectives are centred.

Rewards

Being gifted food rewards was an additional suggestion for increasing rates of Pasifika adolescents' dental attendance. Receiving food rewards for dental visits initially seems contrary to the normal exchange that occurs in a dental clinic. However, in Pasifika cultures, giving a small gift is associated with hospitality and welcome (Thompson et al. 2009). Gifting a small token of healthy food may be read as a signal of hospitality, but also an acknowledgement of Pasifika patients' cultural backgrounds. An example might be gifting relatively inexpensive sugar-free chewing gum, which helps neutralise harmful acids after eating, and could serve this purpose (Matthews 2015). Also raised was the potential to give toothpaste, toothbrushes or dental floss as a gift. These would seem to be particularly appropriate given participants' comments about the challenges in purchasing these oral health products.

Making dental visits easier or having arranged appointments

Some participants reported that making access to the dental clinic easier would increase rates of dental attendance. Some Pasifika adolescents have reported that they do not know how to access primary health care services, including oral health care (Teevale et al. 2013). Others have said that they have apathy to arrange their own oral health appointments or alternatively, are too busy with un/paid work commitments to arrange appointments (France et al., 2017; Smith et al., 2018). Having oral health professionals visit secondary schools or arranging transport from school to the dental clinic may alleviate these barriers to access.

In some Pasifika cultures, children are expected to obey and not question their parents (Pereira 2010). Consequently, if parents are not aware of the importance of regular dental attendance and 'force their child' to go (as reported by FG7P2), then it is unlikely that Pasifika adolescents (or many adolescents regardless of ethnicity) will challenge their parents to go. If oral health professionals did arrange appointments, visit schools (and similar training sites for those who have left school), or arrange transport to the dental clinic, then this may 'bypass' those parents who do not ensure their child's dental attendance. It may also alleviate the issue of Pasifika and NZ adolescents who may be apathetic, or alternatively, too busy with extra-curricular activities to arrange their own appointments after school (Smith et al. 2018).

Youth-friendly clinics and younger oral health professionals

Some participants also recommended that tuning radios in waiting rooms to more youth-friendly stations, as well as hiring younger staff would potentially attract more adolescents to the clinic. As stated earlier, employing younger staff has previously been proposed as a strategy for increasing all adolescents' access to the clinic regardless of ethnicity (Fitzgerald et al 2004). However, despite FG13P1 explaining that older oral health professionals were harder to communicate with because of the age difference, s/he acknowledged their greater clinical experience. Employing younger staff despite less clinical experience than their older counterparts and tuning a radio to a more 'pleasing' station than the Breeze (which plays easy listening music) also highlights how Pasifika adolescents are members of youth culture and as such, desire youth-friendly clinical environments.

Pasifika/Māori oral health professionals

Some participants stated that Pasifika adolescents should have choice in regard to their treating oral health professional. However, anecdotal evidence suggests that some dentists do not participate in the AOHS because of its limited reimbursement rates (Smith et al. 2018). Although adolescents should have autonomy over the choice of their oral health professionals as adults do

(Fitzgerald et al., 2004; France et al. 2017), this may not be possible in some locations due to the limited number of dentists participating in the AOHS.

Patients prefer oral health professionals who are friendly and approachable (Shigil and Awinashe 2010; Henríquez-Tejo and Cartes-Velásquez 2016). Perhaps if oral health professionals exhibited humour in their interactions with Pasifika adolescents and more generally in their practice, it would attract more adolescents to the clinic, as well as helping to thwart the common societal perception of health professionals as aloof (Dieppe 2002). Some participants in France et al.'s (2017) qualitative research study also stated that if dental professionals exhibit humour it would also encourage greater dental attendance amongst Pasifika youth.

The participants also recommended that more Pasifika/Māori oral health professionals are needed in order to boost Pasifika adolescents' access to oral health care. This is because they either "wouldn't feel patronised", would "understand more of our situation, what we're going through" and there would not be a "language barrier" or the subsequent need for "a translator". Unfortunately, the ethnic composition of oral health professionals is not representative of wider NZ society with only 1% of oral health professionals being Pasifika in 2009 (Dental Council of New Zealand 2017). Increasing the number of Pasifika/Māori oral health professionals may reduce reported incidence of unintended cultural bias or discrimination based on ethnicity, which are frequent reported barriers to Pasifika peoples accessing oral, mental and general health care (Medical Council of New Zealand 2010; Smith et al 2018). For example, sharing a common language and cultural understandings with a treating oral health professional means that simple mistakes, such as mispronouncing names and touching a person's head without permission (in Pasifika cultures the head is considered sacred) will likely be avoided. In this way Pasifika adolescents are more likely to feel welcomed and accepted while instances of 'feeling patronised' at the clinic, as reported by FG7P2 may potentially be avoided (although this is speculation as FG7P2 was not asked to elaborate on why s/he felt patronised). Nevertheless, such comments imply that some oral health professionals may be in breach of the cultural competence standard required by the New Zealand Dental Council.

Parents and Pasifika communities

Findings of the study support those of national and international research, in that parents act as role models in regard to their children's oral health and hygiene practices (Hall-Scullin et al. 2015; Johansson and Ostberg 2015; France et al. 2017). As the participants identified parents as role models, they recommended that parents as well as wider Pasifika communities (given the collectivist nature of Pasifika cultures) should be educated on the importance of oral health and regular dental attendance. According to the participants this could be achieved through community presentations and pamphlet drops in churches. Having these presentations delivered by Pasifika people in Pasifika languages, may lead to greater engagement and comprehension amongst Pasifika peoples (Public Health Group 1997; Tiatia 2008; Medical Council of New Zealand 2010).

Health promoters have identified churches as helpful partners in community health initiatives and the dissemination of information (Taufa 2008) as the church is integral focus for many Pasifika communities and families (Ministry of Health 2008). Consequently, if the Ministry of Health or District Health Boards did disseminate pamphlets on the importance of oral health and regular dental visits through the church, then this may reach a wider audience than placing pamphlets in dental clinics alone, given the higher rates of religion and church attendance amongst Pasifika populations (Statistics New Zealand 2013; Manuela and Dilbley 2015). Disseminating pamphlets through the church may mean that this oral health information was more likely to reach parents, as pamphlets distributed at school may lie dormant in school bags (Smith, 2012).

In stating this however, it should be noted that church attendance amongst Pasifika youth is declining, especially amongst adolescents born in New Zealand (Manuela and Dibley 2015). Nevertheless, religious affiliation and rates of church attendance have remained significantly higher amongst Pasifika peoples in general, compared to New Zealand Europeans (Department of Statistics 2013; Manuela and Dibley 2015). Having information on oral health care and the Adolescent Oral Health Scheme disseminated through churches, may be more likely to reach Pasifika parents than if it was distributed through schools and dental clinics alone.

Advertisements screening on social media and television promoting regular oral health visits and the importance of good oral hygiene was a further recommendation for increasing dental attendance. Nowadays, the use of social media is pervasive, especially among young adults and adolescents (Pau 2014; Lenhard and Pew Research Centre 2014). If adverts focusing on the importance of regularly accessing dental care appeared on social media, then perhaps more adolescents would see these advertisements than if they screened on television.

Conclusion

Interventions aimed at addressing the disparities in oral health care access and outcomes experienced by Pasifika adolescents are needed. This study has provided some suggestions for how access to dental care among Pasifika adolescents can potentially be increased, as well as how oral health professionals can deliver a welcoming, youth-friendly and culturally competent standard of oral health care. However, more research is needed that includes the perspectives of other stakeholders including dentists, oral health therapists, parents and the wider Pasifika community. A multipronged strategy can be developed that aims to increase Pasifika adolescents' access to oral health care.

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References

Areai DM, Thomson WM, Foster Page LA, Denny SJ, Crengle S, Clark TC, Ameratunga SN, Koopu PI (2011). Self-reported oral health, dental self-care and dental service use among New Zealand secondary school students: Findings from the Youth 07 Study. *N Z Dent J*. 107: 121-126.

Børsting T, Stanley J, Smith M (2015). Factors influencing the use of oral health services among adolescents in New Zealand. *NZ Dent J*. 111:49 -57.

Curry L, Nunez-Smith M 2015. *Mixed methods in health sciences research: A practical primer*. Los Angeles: Sage.

Dental Council of New Zealand. (2017). *Dental Council workforce analysis 2013-2015*. Wellington: New Zealand Dental Council.

Dieppe P (2002). Soundbites and patient centred care. *Br Med J*. 325: 605.

Fa'alili-Fidow J, Moselen E, Denny S, Dixon R, Teevale T, Ikihele A (2016). Adolescent Health Research Group, Clark, TC. 2016. *Youth '12: The Health and wellbeing of secondary students in New Zealand: Results for Pacific young people*. Auckland: University of Auckland.

Ferguson PB, Gorinski R, Samu WT, Mara D (2008). Literature review on the experiences of Pasifika learners in the classroom Wellington: New Zealand Council for Educational Research.

Fitzgerald RP, Thomson WM, Schaefer CT, Loose MA (2004). An exploratory qualitative study of Otago adolescents' views of oral health and oral health care. *NZ Dent J*. 100: 62-71.

France AJ, Anderson VR, Laqekoro Z, Foster Page LA (2017). Pacific adolescents' attitudes to and beliefs about oral health and oral health care in two southern cities. *N Z Dent J*. 113: 17-24.

Hall-Scullin E, Goldthorpe J, Milsom K, Tixkle M (2015). A qualitative study of the views of adolescents on their caries risk and prevention behaviours. *BMC Oral Health*. doi:https://doi.org/10.1186/s12903-015-0128-1.

Henríquez-Tejo R, Cartes-Velásquez R (2016). Patients' perceptions about dentists: A literature review. *Odontoestomatologia*. 18: 15-22.

Johansson G, Ostberg A-L (2015). Oral health-related quality of life in Swedish young adults. *International Journal of Qualitative Studies on Health and Well Being*. 10: 1-12.

Kim H, Sefcik JS, Bradway C (2016). Characteristics of qualitative descriptive studies: A systematic review. *Res Nurs Health*. 40: 23-42.

Kolandai-Matchett K, Langhm E, Bellringer M, Siiita P A-H (2017). How gambling harms experienced by Pacific people in New Zealand amplify when they are culture-related. *Asian J of Gambling Issues and Public Health*. 7: DOI: 101186/s40405-017-0026-3

Lenhard A, Pew Research Center (2015). *Teen, Social Media and Technology Overview 2015*. Pew Research Center: Washington D.C.

Levesque J-F, Harris, MF, Russell, G (2013). Patient-centred access to health care: Conceptualising access at the interface of health systems and population. *Int J Equity Health*. 12: 18.

Manuela S, Sibley CG (2015). The Pacific Identity and Wellbeing Scale – Revised: Comparisons across *Pacific groups. N Z J Psychol.* 44: 61-72.

Mara D, Foliaki L, Coxon E (1994). Pacific Islands Education. In Coxon E, Marshall J, Massey L, (editors). *The politics of learning and teaching in Aotearoa-New Zealand*. Palmerston North: Dunmore Press. p. 180-214

Marshman Z, Gupta E, Baker SR, Robinson PG, Owens J, Rodd H, Benson PE, Gibson B (2015). Seen and heard: Towards child participation in dental research. *Int J Paediatr Dent*. 25: 375-382.

Matthews F (2015). The use of sugar free chewing gum as a supplement in the prevention of dental caries: Narrative Review *J Oral Res*. 4: 129-136.

Medical Council of New Zealand (2010). *Best outcomes for Pacific peoples: Practice implications*. Wellington: Medical Council of New Zealand.

Mila-Schaaf K, Robinson E, Schaaf D, Denny S, Watson P (2008). *A health profile of Pacific youth: Findings of Youth2000- A national secondary school youth health and wellbeing survey*. Auckland: The University of Auckland.

Ministry of Health (2006). *Good oral health for all, for life.* Wellington: Ministry of Health.

Ministry of Health (2010). *Our oral health: Key findings of the 2009 New Zealand Oral Health Survey*. Wellington: Ministry of Health.

Ministry of Health (2008). *Improving quality of care for Pacific peoples*. Wellington: Ministry of Health.

Ministry of Health (Internet). Age 5 and Year 8 oral health data from the Community Oral Health Service 2018 (cited June 6 2018). Available from: http://www.health.govt.nz/nz-health-statistics/health-statistics-and-data-sets/oral-health-data-and-stats/age-5-and-year-8-oral-health-data-community-oral-health-service.

Ministry of Health (2015). *Annual update of key results 2014/15. New Zealand Health Survey*. Wellington: Ministry of Health.

Ministry of Health (2016). *Annual update of key results 2015/2016: New Zealand Health Survey*. Wellington: Ministry of Health.

Murray C (2016). Peer led focus groups and young people. *Children & Society*. 20: 273-286.

Murray C (2015). Dental attendance, perceptions of cost and self-care of school year 12 and 13 students: A focus on Southland, New Zealand. *N Z Dent J*. 111: 133-141.

Nettleton S (1992). *Power, pain, and dentistry*. Buckingham: Open University.

One News (2018 Feb 7). 'It is so sad that we see that in NZ' – charity dentist sees weekly DIY tooth extractions. [accessed 2018 May 30]. https://www.tvnz.co.nz/one-news/new-zealand/so-sad-we-see-in-nz-charity-dentist-sees-weekly-diy-tooth-extractions

Pasifika Futures (2017). *Pasifika people in New Zealand: How are we doing?* Pasifika Medical Association: Auckland.

Pau CK (2014). SNS (Social Networking Samoans): Exploring the ethnic identities of Samoan Facebook users in New Zealand. [Dunedin]: University of Otago.

Pereira J (2010). Spare the rod and spoil the child: Samoan perspectives on responsible parenting. *Kotuitui: New Zealand Journal of Social Sciences.* 5: 98-105.

https://www.facebook.com/dialog/feed?app_id=1458530537567960&redirect_uri=https%3a%2f%2fwww.tvnz.co.nz%2fone-news%2fnew-zealand%2fso-sad-we-see-in-nz-charity-dentist-sees-weekly-diy-tooth-extractions&link=https%3a%2f%2fwww.tvnz.co.nz%2fone-news%2fnew-zealand%2fso-sad-we-see-in-nz-charity-dentist-sees-weekly-diy-tooth-extractions&caption=&name='It+is+so+sad+that+we+see+that+in+NZ'+%e2%80%93+charity+dentist+sees+weekly+DIY+tooth+extractions+&ref=storyfacebook&picture=https%3a%2f%2fwww.tvnz.co.nz%2fcontent%2fd

Pope C, Ziebland S, Mays N (2000). Qualitative research in health care: Analysing qualitative data. *Br Med J*. 320: 114-116.

Public Health Group (1997). *Making a Pacific difference: Strategy initiatives for the health of Pacific people in New Zealand*. Wellington: Ministry of Health.

Samu TW, Suaalii-Sauni T (2009). Exploring the 'cultural' in cultural competencies in Pacific mental health. *Pacific Health Dialogue*. 15: 120-130.

Schluter P, Kanagaratnam S, Taylor S, Tautolo E-L (2017). Acculturation and its impact on the oral health status of Pacific children in New Zealand: Findings from the Pacific Islands Families Study. *J Pub Health Dent*. 77: 255-233

Shigil K, Awinashe V (2010). Patient-dentist communication: An adjunct to successful dental treatment. *J Prosthodont*. 19: 491-493.

Smith LA, Cameron C, Foster Page LA, Waqawai A, Richards R (2018). Pasifika adolescents' understandings and experiences of oral health care. *N Z Dent J*. 114:165-173.

Smith LA (2012). *Gender and the school formal* [doctoral dissertation]. [Dunedin]: University of Otago.

Smith LA, Tumilty E, Foster Page LA, Thomson WM, Gibson B (2018). Children's rights in their oral health care: How responsive are oral health professionals to children's rights. *International Journal of Children's Rights*. 26: 354-378.

Statistics New Zealand (2014). 2013 *Census: QuickStats about culture and identity.* (cited 2 November 2018) Available from www.stats.govt.nz.

Suaalii-Sauni Suaalii-Sauni T, Wheeler A, Saafi E, Robinson G, Agnew F, Warren H, Erick M, Hingano T (2009). Exploration of Pacific perspectives of Pacific models of mental health service delivery in New Zealand. *Pacific Health Dialogue*. 15: 18-27.

Taufa S (2008). Viewpoint: Socioeconomic and family factors. In: Craig E, Taufa S, Jackson C, Han D, editors. *The health of Pacific children and young people in New Zealand: Introduction, viewpoints and executive summary*. Wellington: Ministry of Health. p. 17-19.

Teevale T, Denny S, Percival T, Fleming T (2013). Pacific secondary students' access to primary health care in New Zealand. *N Z Med J*. 126: 1-11.

Thomas D (2006). A general inductive approach for analyzing qualitative evaluation data. *Am J Eval*. 27: 237-246.

Thompson S, McDonald F, Talakai M, Taumopeau V, Te Ava A (2009). *Training manual for teaching working with Pacific students: Engaging Pacific learners*. Wellington: Ako Aotearoa

Tiatia J (2008). *Pacific cultural competencies: A literature review*. Wellington: Ministry of Health.

WHO (Internet). *Implementing Health 2020:2012-2014* 2014 (cited June 6 2018). Available from https://euro.sharefile.com/share/view/s73db1a792664325a

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