An exploratory qualitative study of Otago adolescents' views of oral health and oral health care

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Abstract

Objectives
To investigate Otago adolescents' views of oral health and oral health care, in order to increase understanding of the influences on their use or non-use of free care.

Design
The study employed a qualitative approach, using focus groups and grounded theory analysis.

Participants
Participants ranged in age from 13 to 18, and included both genders and a variety of educational attainments, ethnicities and family incomes. Focus groups were conducted in schools, training centres, a place of employment, a CYF (Child, Youth and Family) Home, and a University Hall of Residence.

Results
While aware of the normative pressure to attend for free dental care and engage in oral health care, Otago adolescents consider doing so to be "just so gay". They exhibit strongly held preconceptions about the expense of dentistry and the respective competence of dentists and dental therapists. The dental surgery environment was viewed as a major disincentive. Adolescent oral health beliefs centred on two models: the medicalised, pragmatic view of oral health (which valued the function of teeth); and the cosmetic view of oral health (which valued the aesthetics of teeth); or a combination of these two models. In both models, media advertising for oral health care products was a significant source of oral health information. The preferred oral health behaviour associated with the medicalised model was frequent use of chewing gum and rapid toothbrushing, and, for the cosmetic model frequent use of chewing gum and breath fresheners.

Conclusions
These findings support the international literature on the use/non-use of dental services even when the financial barriers to seeking such services has been removed. New Zealand dental care has developed without reference to the changing norms of youth culture, and the conventional dental practice setting is not viewed by adolescents as being inviting or appropriate. Increasing the uptake of free oral health care by that group will require some innovative approaches.

Introduction

New Zealand adolescents have been able to obtain publicly-funded oral health care under the Dental Benefit scheme since the mid-1940s. Historically, uptake rates for such care have always been lower than those for the School Dental Service (de Liefde, 1988), and attention is turning to ways of increasing the uptake of adolescent oral health care. However, before any improvements to the system can be seriously considered, it would be prudent to first obtain an adequate understanding of adolescents' oral health behaviour and their attitudes to dental care.

A number of overseas studies have focused on such topics, with the vast majority conducted in Scandinavia (where a considerable amount of research into adolescent oral health has been conducted), Britain and North America, with a reasonably consistent pattern emerging. First, poor dental attendance by adolescents appears to be a problem in most Western industrialised countries. Males, low-SES individuals and members of ethnic minorities appear to be at particular risk of missing out on care despite, in some settings, considerable State-funded assistance for dental care (Deery et al, 1999; Hawley and Holloway, 1992; Jalevik et al, 1999; Manski and Magder, 1988; Watson et al, 2001; Yu et al, 2001). Secondly, group norms appear to be important influences on adolescents' views of oral health and their use of dental services (Ekman, 1989; Aström and Risse, 1996; Kusseila et al, 1996). Thirdly, adolescents' self-care behaviour is viewed as grooming behaviour, rather than being motivated by oral health concerns (MacGregor and Balding, 1987; Aström and Risse, 1996).

Such studies highlight the psychosocial nature of many of the barriers to oral health care and the attainment of oral health, although Freeman (1999a) also argues for a stronger attention to the agency of individuals in understanding why they may actively resist dental attendance. Barriers may exist not only at the level of the individual, but also within the patient-dentist dyad and in wider society, with dental anxiety, financial costs, low perceptions of need, and lack of access all having been noted (Freeman, 1999b). By the time adolescence is reached, factors such as parental dental attendance, gender, and educational achievements and aspirations have already had an impact on adolescents' awareness of their dental health needs. Dentists may be seen by adolescents as parental figures whose authority must therefore be questioned (Freeman, 1999a).

At the same time, however, adolescents' interest in their appearance may provide an impetus for regular attendance and awareness of the need for dental care. The US literature, in particular, reflects a strong presumption that better-educated dentists and better public information programmes will reverse the barriers to care (with an accompanying construction of "the adolescent" as passive and malleable). However, there are likely to be pitfalls in such a unidimensional approach to understanding adolescent oral health behaviours.

The use of oral health services by New Zealand adolescents

Although there may be doubts about the quality of some of the data, the uptake of adolescent oral health care appears to vary by region. Kangaratnam (1997) reported that a relatively high 89.5 percent of 15-year-olds in the area served...


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by the Southern Regional Health Authority were enrolled in the Dental Benefit scheme in the mid-1990s. By contrast, the "Open Wide" Northern Region Dental Health Services Consultation Report (1998) stated that fewer than 60 percent of eligible adolescents aged 13-18 in the Northern Region utilised the Dental Benefit scheme, with low awareness of the existence of free services for this age group. Nye and Wilson (1993) noted that as many as 80 percent of Porirua College students did not receive dental care.

A recent report prepared for the New Zealand Ministry of Health pointed out that the delivery of oral health services to adolescents in recent years has been characterised by low levels of utilisation in some areas, and increasing disparity between "higher risk" groups and those who have more ready access to dental care. Problems with continuity between the school dental services and programmes aimed at adolescents were highlighted. The report also asserted that it is unlikely that traditional programme approaches will significantly increase the uptake of care, pointing out that those at highest risk are least likely to respond to such approaches (New Zealand Ministry of Health, 2001).

Some strategies to improve the uptake of services are found in the District Health Board Toolkit Improve Oral Health (2001) and the "Open Wide" Northern Region Dental Health Services Consultation Report (1998). The 1998 report provided a review of four initiatives (including three services using mobile units, as well as a mini-bus service to transport students to a dental surgery), funded by the Health Funding Authority to counter poor dental service utilisation in Auckland. The Toolkit emphasised the need for District Health Boards to work with oral care providers to improve the use of dental services by adolescents, but offered no specific suggestions as to how this could be achieved.

The oral health care of Maori adolescents (rangatahi) is of particular concern. Broughton and Koopo (1996) highlighted under-use of Dental Benefit care by adolescent Maori in Rotorua, and a report by Te Puni Kokiri (1996) noted that, despite free dental care for children and adolescents, Maori oral health shows no signs of improving. Information provided by Midland Health to Te Puni Kokiri in 1996, for example, showed that approximately 30 percent of Maori adolescents in that region had either dropped out or failed to utilise the Dental Benefit scheme. The comparable estimate for non-Maori was 25 percent. The report identified a number of barriers to dental care, including the mobility of Maori whanau, the lack of a proactive Maori dental health strategy, previous adverse experiences with dental services, and cost. In response to these concerns, the report recommended that a specific Maori oral health strategy be developed and that the recruitment and selection of dental professionals be incorporated in the role of the Ministry of Health, key health agencies and other Maori units. The report also emphasised the importance of using community health workers as agents of change for Maori health, and suggested that health workers could support students in attending for dental care. These recommendations were expanded by Broughton and Te Moana-i (1999) in their response to the New Zealand Oral Health Goals for the New Millennium report (Edward et al., 1999). The authors outlined a number of strategies which address issues of affordability, acceptability, appropriateness and accessibility. These include increasing the number of Maori care providers, offering new Maori dental services, and promoting Oranga Niho, as well as developing a national Oranga Niho strategy and recognising whanau well-being. Authors such as Edward (1992), McKegg (1993), McLeod (1999), and Thomson (1993) have also emphasised the significance of understanding Maori attitudes to health and the corresponding need to develop policies which are culturally appropriate and relevant.

**Rationale for the current study**

It is apparent that the time-honoured approach of merely providing free care through the traditional dental setting has not been as successful as the profession might have hoped. Renewed concern about the fall in uptake of publicly-funded oral health care which is associated with the transition to adolescent oral health care prompted the Ministry of Health to allocate funds (in late 2002) toward promoting the uptake of that care. The South Island oral health provider network was formed by a coalition of South Island District Health Boards (DHBs) in order to manage and allocate that additional funding. It was decided that research into adolescents' views of oral health and oral health care would be prudent before launching any innovations designed to increase uptake rates for adolescent dental care (Thomson and Fitzgerald, 2003). In particular, research was needed to explore the validity of the assumptions underpinning the profession's current perceptions of adolescent oral health and use of services. In other words, a better understanding of how adolescents viewed oral health and dentistry was required if any new initiatives were to be more effective than past efforts. The aim of this study was to use the qualitative research approach to investigate the reasons for Otago adolescents' low uptake of free dental health services.

**METHOD**

Focus groups were used for data collection with the preferred make-up of each group being 10 adolescents of a similar age; however, as Table I illustrates, this pattern was not maintained due to local sampling constraints. Approximately 150 young males and females from the following communities were accessed: rural and urban adolescents; higher and lower socio-economic status (SES) groups; Maori, Pacific Islanders and other non-Pakeha; full-time students, and employed and unemployed adolescents; adolescents living with disabilities; and adolescents coping with significant social and personal stresses requiring their accommodation in a Child, Youth and Family (CYF) home. Selection of appropriate focus groups to satisfy these criteria was achieved through the research team's shared local knowledge of the various Otago communities. Sampling was designed (and evaluated throughout the data collection phase) to ensure diversity among participants, but was not designed to result in a statistically valid representation of the wider Otago adolescent community.

Recruitment to the study was negotiated through school principals (for high schools) or, in the other establishments, through the most senior and locally available manager of the organization; for the Pacific Island School, it was organised through a fono (community meeting) with parents and staff. When no directive individual sampling was enforced (as occurred in some schools, for instance), participants were allocated to focus groups by selecting the first ten students to supply a completed consent form.

All participants remain anonymous, and the names of the participating institutions have also been withheld. However, information on the ages, gender and a rough assessment of SES of the participants (through collection of the parents’ or guardians’ occupation) was collected from each group to verify sampling diversity. Ethnic diversity was ensured by purposive sampling from known groups of Maori and Pacific Island adolescents. Attempts to increase Maori and Pacific Island
Table I - Geographic location and social make-up of focus group

<table>
<thead>
<tr>
<th>Location of Focus Group</th>
<th>Make-up of Group</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School, Dunedin 1</td>
<td>4th form sports class, 14-year-old males described by teacher as &quot;of a variety of IQs&quot; (This was a very disruptive group)</td>
<td>16</td>
</tr>
<tr>
<td>Integrated High School, Dunedin</td>
<td>14- and 16-year-old females</td>
<td>17 divided into 2 groups</td>
</tr>
<tr>
<td>High School, Dunedin 2</td>
<td>16- and 17-year-old females</td>
<td>14</td>
</tr>
<tr>
<td>CYF Family Home, Dunedin</td>
<td>Males aged from 14-16 years</td>
<td>4</td>
</tr>
<tr>
<td>Pacific Island Home School Programme, Dunedin</td>
<td>See footnote*</td>
<td></td>
</tr>
<tr>
<td>Adolescent Training Centre, Dunedin</td>
<td>Males and females age 15-18 (males 15-16, females 18)</td>
<td>6</td>
</tr>
<tr>
<td>Govt Youth Agency, Dunedin</td>
<td>Females actively looking for work with the intention of leaving school (15 years old)</td>
<td>2</td>
</tr>
<tr>
<td>Rural High School 1</td>
<td>1 female and 1 male chosen from each year of secondary school making a group of 13-, 14-, 15-, 16- and 17-year-olds</td>
<td>10</td>
</tr>
<tr>
<td>Rural High School 2</td>
<td>3rd Form (13-year-olds), equal number of males and females</td>
<td>8</td>
</tr>
<tr>
<td>Rural High School 3</td>
<td>Females (16- and 17-year-olds)</td>
<td>14</td>
</tr>
<tr>
<td>Rural High School 4</td>
<td>3rd Form (13- and 14-year-olds) and 5th Form (15- and 16-year-olds)</td>
<td>21 divided into 4 groups</td>
</tr>
<tr>
<td>University Students, Dunedin</td>
<td>Members of a Hall of Residence (males and females aged 17 and 18)</td>
<td>3</td>
</tr>
<tr>
<td>Home for Adolescents with Disabilities</td>
<td>See footnote†</td>
<td></td>
</tr>
<tr>
<td>Adolescents with full time work, Dunedin</td>
<td>Workers at a fast food establishment</td>
<td>3</td>
</tr>
</tbody>
</table>

*Owing to the untimely death of that Programme’s co-ordinator, we were unable to conduct this focus group.
† After a lengthy discussion with the Director, these (developmentally disabled) teenagers did not take part in focus group sessions, as they were highly medicalised and unable to exercise autonomy over decisions about seeking oral health care.

Involvement through the high school focus groups were also made by the provision of information sheets and consent forms in the Maori and Samoan languages, as well as in English, however the research findings will be presented within a Pakeha interpretative framework, and will not generally be broken down by ethnic group. To induce attendance at the focus groups, all participants received a free movie pass after they had engaged in the 40-minute focus group discussion. All focus group discussions were taped and then transcribed and analysed by the first author using Atlas.Ti qualitative software, which allows the focus group transcripts to be rapidly analysed to identify common conceptual themes; this is a standard social science procedure known as "thematic coding" (Tolich and Davidson, 1999). This coding was also verified by the research assistants who, as trained cultural anthropologists, were also able to supply fieldnotes (Emmerson et al, 1995) on the focus groups, which provided a further component of data, specifically, the finding of the lack of relevance of the public health understandings of the importance of dental care to the participants’ lives.

The two focus group leaders were trained following de Laine (1997) and were selected to increase rapport with participants through their personal characteristics of being in their early twenties, and representing both genders, and Maori and non-Maori ethnic groups. Both leaders attended every focus group together using the discussion protocol outlined in Table II; thus, no standardisation of their group leadership was required. Debriefing after the first focus group suggested that the provision of snacks and a variety of written tasks for the participants (in order to reduce their boredom) could result in better data, and this was carried out for all subsequent groups. After the first three focus groups had been conducted, the discussion strategies were evaluated and retained and possible emerging themes from the data were identified. For the remaining discussions, a short session of structured questioning around the identified emerging themes was added to the protocol in order to “ground” (Strauss and Corbin, 1990) the accumulating data.

Ethical approval for this study was obtained from the University of Otago Ethics Committee.

RESULTS

The common themes which emerged from each discussion group are summarised in Table III.

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Nestleton (1992) notes that dental examinations and oral health campaigns are a Foucauldian exercise in the training of bodies, and the adolescents in this project were superbly trained in such self-surveillance. Thus, they were well able to produce what they considered would be the "appropriate" definitions of good oral health strategies in response to the researchers' questions (such as the need for 6-monthly dental check-ups, regular toothbrushing and the avoidance of sweets). Subsequent discussion, however, revealed a large gap between such prescriptive accounts of "good" dental care and participants' actual oral health-promoting behaviors.

The alternative, resistant oral health behavior which undercut the normative perspective was apparent in joking *sotto voce* responses during the focus group interaction, giggling and whispering behind hands, and in the passing of notes between participants (source - fieldnotes and tape transcriptions). The substance of these remarks - initially only barely heard by the focus group leaders - was that the subject area of the whole research project (ie oral health) was "gay, gay, gay", or, in other words, irrelevant.

The significance of this finding relies on adequately interpreting the meaning of the word "gay" in contemporary Otago youth culture. The research assistants offered the meaning as "boring or pointless, with a sense of the slightly feminine about it" (an interpretation subsequently verified by asking 300 first-year University of Otago students to define the term). Our primary finding is that, while participants were keenly aware of the normative pressure to attend the dentist, such an activity was understood to be trivial and boring. However, this did not manifest in indecision over whether to attend the dental clinic, as even in the youngest group of 13- and 14-year-olds, attitudes to oral health and attendance patterns at the dentist appeared to be quite firmly set. Instead, it reflected the lack of relevance of the topic of oral health in their lives.

Dental Attendance

While around three-quarters of participants mentioned going to the dentist in the previous year, there was one focus group (the vocational training group for Maori and Pacific Islanders) where very few had attended. Non-attenders did not directly identify themselves in other groups, although not all the participants chose to comment. The analysis of the focus groups certainly indicates that approximately one-quarter of the participants were symptomatic (rather than regular) dental attenders, with some volunteering that their most recent visit was as long ago as "four years", or that they "could not remember". For such young people, "more tooth pain" was generally put forward as a reason for attending, or, for the young men from the training centre, "teeth starting to fall out".

When discussing likely future attendance as adults, the proportion of symptomatic attenders changed to include most participants, with the cost of using dental services being the overriding reason for this proposed change in behaviour. For example:

> I would only go as often as I had to like if it was really serious; Like you have to pay for the check-ups even when there is nothing wrong with you; Yeah, they should make the check-ups cost a lot less. (Females, Rural High School)

Perceptions of the dentist and the dental surgery setting

**Cost**: The high cost of dentistry emerged as the single most unanimous perception of dental services by all participants

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1 After the sociologist Michel Foucault, whose work suggested that social control occurs not only through people or institutions coercing us, but also through the way in which we control and constrain ourselves.

2 This was not the only group to include Maori and Pacific Islanders, as evidenced by consent forms returned in te Reo and Samoan languages.
of all ages. Not even pain figured as prominently in people’s thinking. That the recipients of such a wide range of free dental services should regard the dentist as so expensive is an interesting example of the very fixed, pre-existing ideas which the young people brought to their discussion of oral health. Many participants authorised their comments on the expense of dental care through reference to family experiences of dental costs, although few were able to state accurately the approximate cost of a routine dental check-up (estimates ranged from $20 to $200). Clearly, the expense associated with dental care was a received view rather than a personal experience. Potential strategies for managing the payment of dental fees in the future were drawn directly from parental behaviour, and included paying off the dentist month by month, the much less popular options of saving or attending the School of Dentistry, and the most preferred option of all, diminished and symptomatic attendance.

Participants were also interested in evaluating whether or not dental services offered good value for money. Here, answers were somewhat tentative, one tool for assessment being to compare the value of the dentist against that of the doctor. However, the dentists fared rather badly in this case:

The doctor [is better /the] gives you the diagnostics, like they can look after your whole body (Female, Rural High School).

The doctor [is better - agreement from the whole group]. 'cause like imagine if you had something serious like AIDS or cancer...teeth are not that big a deal (Male, Dunedin High School).

Some participants attempted to rationalise dental fees with the high student loans which they surmised that dentists would need to pay back, and the large cost of the dental equipment which was needed to run the dental surgery, but others were less understanding:

Well, it’s a really easy job - look, they make you wait 10 minutes, then they look into your mouth for 5 minutes and then they charge you hundreds of dollars. (Female, Rural High School).

The expertise of the dentist and dental therapist: The relative expertise of the dental therapist and the dentist was a popular point of conversation, emerging as it often did from discussions of unfavourable dental experiences and comparisons between experiences of the dental therapist while at primary school to more current experiences of the dentist. Opinions seemed fairly evenly divided on the dental therapist, with, on the one hand, laughing reminiscences of humble bees, butterflies and spiders made from cotton swabs, and the other, memories of angry, rough-handed therapists.

In assessments of expertise, dentists were viewed as being superior to the (mainly female) dental therapists of primary school:

Yeah they [dentists] don’t hurt as much, they are older and they have more experience. Like they know what they are doing. (Male, Rural High School).

But you sometimes wondered whether the dental nurses (therapists) were properly trained; Yeah, I don’t reckon they were – I think they were real dodgy [general agreement] (Females, Rural High School).

Some more cynical participants argued that what was perceived to be better service from (mainly male) dentists was a result of the strategies required to successfully operate a small business (ie, being “nice” in order to retain clients), and not all of the young people were happy with the competence of their dentists. Questions were raised, for instance, about one dentist’s refusal to wear gloves, while another appeared to be overservicing. Rough and unsympathetic handling of patients (particularly the boys) was also noted.

Problems of competence also emerged in discussions of the Dental School students:

Then I had one guy who nearly choked me because he put a rubber dam in my mouth and then he forgot to cut a hole in it for me to breathe and I was kind of going [she makes a strangled noise] [laughter]. So, I was lying there nearly suffocating because this rubber dam had no air holes in it for me to breathe into, but then he finally realised what was happening, and he cut me one. (Female, fast food worker).

While some of the young people were clearly unhappy with their current dental arrangements, they also appeared notably lacking in autonomy with respect to their choice of provider, with nearly all weekly acquiescing to the dentist whom their parents/guardians selected. For example, the following statement was made by a student who had no intention of changing his dentist:

My Mum said this one at [location deleted] was pretty good but she mucked up my tooth, she mucked up my sister’s tooth so I don’t think she actually was that good... (Boy, Dunedin High School).

The location of the young people in either rural or urban settings did not affect their ability to change dentists, as all the rural focus groups revealed quite diverse arrangements for dental care. These examples, then, of apathy and personal lack of interest in obtaining the “best” dental care are possibly the results of its perceived irrelevance to their lives. The fast food workers, however, argued that they were forced for financial reasons to use the Dental School services, even though the competence of the students worried them.

When asked to comment in more general terms on the nature of their health care providers, participants understood dentists to be wealthy and clever, and capable of long years of study, but also somewhat “gross” for the career choice that they had made. In the views of the participants, this was a choice which, in the long term, exposed them to the perils of being bitten, of looking at “disgusting furry teeth”, inhaling bad breath and generally looking into people’s mouths and “fiddling with teeth” - a day-long activity which they surmised would be uniformly disgusting (only one student out of 150 supposed that he might consider becoming a dentist).

The surgery environment: The dental surgery surroundings were particularly evocative for all the respondents, with strongly polarised reactions evoked with respect to the high-pitched drilling, the vibrations of the polishing equipment, the sharpness of the dental probe (the “hook thing”), the bad tastes of the mouthwash, and the peculiarly “clean” smell of the dentist’s surgery. For some, the smell was “wet dog”, recalling for one the smell of “a funeral parlour”. For others, the smell signified hygiene standards, although, for many, it was somehow just “too” clean for comfort, even though it was a necessary feature as “otherwise you would have all bugs crawling up over your teeth”.

Because the dental surgery aroused such strong emotions (one young man from the CYF family home suggested the only way he would go more frequently to the dentist was to be “knocked out”), waiting there for any length of time at all
became a source of serious discomfort and the experience could not be ameliorated for many. Posters were often singled out as a particularly unpleasant aspect:

A lot of the pictures are gross; Yeah they are awful especially for little kids — all those pictures of people without teeth and stuff; yeah how stupid!; Yeah, they make you feel bad just to look at them. (Females, Dunedin High School).

When asked for suggestions to improve the surroundings of the dental clinic, some of the participants suggested TVs, Gameboys and better magazines. However, there was a sense that such a step would make no serious headway at improving the experience for teenagers unless, to paraphrase several groups of participants, “you can make the receptionist and the dentist into teenagers, because that’s the only way that kids are going to want to come.” The behaviour of receptionists toward adolescent patients is not an area on which we were able to discover any research findings, but several boys in this study commented negatively that the receptionist did not “like them” and made them feel particularly bad when waiting for their turn in the dentist’s chair.

Adolescent Oral Health Beliefs

Two understandings of oral health emerged as being held contemporaneously or individually by participants — the germ-filled mouth model and the cosmetic model of oral health. In the first model, the mouth was considered to be a potential jungle of bacteria, only barely held in check with the administration of copious amounts of chewing gum and Smint™ and, in times of serious infection, the use of mouthwashes (by a dedicated few). These participants maintained regular (but brief) brushing of teeth once or twice a day (sometimes moving on to tongue brushing if the situation appeared severe). The “scientific” information on which this model of health was constructed was mostly gleaned from current television commercials for mouth care products. Adolescents often recited entire lines of dialogue from such advertisements to illustrate a point in their discussion of appropriate oral health behaviours. For instance, while the meaning of gingivitis usually eluded them, most recognized the term from what was a particularly well-liked advertisement featuring magnified lush cartoon drawings of oral bacteria growing between teeth and then being swept away by a commercial mouthwash. Consider the following responses to a girl who comments that she never uses mouthwash:

What? [incredulous] Haven’t you seen the ads? [murmurs of general agreement] Yeah, if you don’t use it you get gingivitis, yeah, you’ve got to use it. (Females, Rural High School).

Plaque was also a fairly well-recognised term, and a component of the “diseased” mouth, although the specifics of the mode of action of tooth decay appeared generally to be poorly understood.

Concern for their teeth within this “germ-filled mouth model” was pragmatic and related to the utility of teeth, for instance: “you want to be able to chew”; “you need them to bite stuff”; and “yeah, one day you might be eating an apple and your tooth will fall out just like that ad with the kid with the brick.”

The cosmetic model of oral health, in contrast, focused very strongly on maintaining an attractive appearance as the primary reason for engaging in oral health promoting behaviours. Consider the following answer to the question of the reasons for promoting healthy teeth:

Because then as you get older you still have got nice teeth; they won’t fall out; you won’t need to get falsies; yeah you won’t have false teeth, then you can eat a balanced diet; and so you won’t look ugly; yeah it looks real gross if you have like black teeth; and boys will like you — and that’s a major priority (Females, Rural High School).

Another group argued, “it’s not important to have really healthy teeth, just not really ugly teeth.” Teeth in this scenario fulfilled a primarily social role rather than a biological one, as one young man observed “[if you don’t have good teeth, then] you won’t get none in a while [laughter]”. While generally not so explicitly stated, the purpose of remaining attractive to potential dating partners was a very clear motivation for oral health behaviours.

Participants convinced of the cosmetic benefits of dental health embarked on a programme of self-medication with chewing gum and the breath-freshening mint Smint™ in order to reduce the likelihood that they would develop bad breath. Bad breath was understood as “heinous” and thus detrimental to any type of social interaction. Chewing gum was also used and was particularly preferential to flossing, which was uniformly regarded as being far too time-consuming to be considered as a regular practice. Mouthwash was considered “too much of a bore” to take to school, although some participants were interested in mouth sprays. However, most appearance-conscious young people considered such sprays a little too “American”, and also thought it was easy to “O.D.” on their use. The tooth-whitening products proved of interest, although many noted regretfully that they were too expensive. Some participants argued that it “weakened” the teeth, however, and a small backlash was developing in one of the rural schools around the embarrassment of being associated with “glow in the dark” teeth.

In these brief accounts, the strong influence of a “technological fix approach” to problems of health care is apparent, and we note that attendance for regular dental check-ups was understood to be part of neither model. Aside from tooth-whitening products, the other technological aids which created strong interest were the new Listerine breath-freshening strips and, strangely enough, “false teeth”. Dentures were quite seriously considered by adherents to both oral health belief models as a potential technological fix to problems of either excessive tooth decay (and its subsequent interference with mouth function) or bad breath and uneven, stained (therefore “ugly”) teeth. The socio-economic status of those who approved of false teeth tended to be lower (as estimated from their reporting of their parents’ occupations). At least half of all participants expressed the belief that they would progress towards false teeth themselves one day, some as early as their 30s, although most expected “falsies” by their 50s or 60s. Perceived advantages to dentures were ease of brushing (this was considered a very time-consuming practice of oral self-care and was not always undertaken systematically) and, for the youngest informants, the belief that “falsies” would mean that any dental work could be done on the teeth and left at the dentist while you walked away (pain-free). Concern regarding current oral symptoms was noted by many adolescents (eg., “I can’t floss my teeth because my gums start bleeding and I’ve got things in my teeth”). Dentures thus offered an alluring prospect of pain-free teeth. Some voices to the contrary could be heard in these focus groups, usually from the more
affluent students and participants’ first-hand experiences of their grandparents’ problems with their dentures.

**DISCUSSION**

Holmes (1998) has noted the following difficult aspects of fieldwork with young people: obtaining access to fieldsites and subsequent access to a wide diversity of young people within that fieldsite; establishing rapport with young people; interviewing them; and ethical concerns. These were relevant issues for this study. For instance, the variation in focus group size from the preferred number reflected the gatekeeping powers of organisational representatives determining access to participants. Sampling at the high schools was modified by teachers who (at times) used the project as a way of dealing with an unexpected absence by a teacher (in which case whole classes numbering around 30 students rather than the prearranged groups of 10 students were involved in what became multipart focus groups).

An early ethical challenge presented itself when, despite all participants having parental (or guardian’s) consent to participate, it became clear that they rarely appeared to have any understanding of the nature of the research and had arrived at the focus group location primarily because of the movie pass, and because a relevant authority figure had told them to attend. This was resolved by regularly including a question-and-answer session in which students could ask the research assistants about the project and for information about the focus group leaders themselves.

A further difficulty with focus groups as the primary data collection is the effect of peer group pressure on participants’ answers, with a degree of self-censorship to be expected in any semi-public information gathering process. There is also the strategic difficulty of managing groups of teenagers, although this was a problem for only one group. The aspect of self-censoring was most apparent in male participants’ discussions of rough treatment by dentists; obtaining the recorded observations of such treatment was particularly noteworthy, as males were willing to risk ridicule by admitting to receiving it. However, unless qualitative researchers have enough time and funding resources, focus groups (despite these disadvantages) remain preferable to the longer in-depth interviewing with participants because of their ability to efficiently sample a wide range of opinions in a relatively short period.

In relation to the research results, the primary finding of this research project has been the vast gulf which separates the world views of adolescents and oral health professionals on the constituents of “good” oral health care. This noticeable discrepancy between the prescriptive public health view of dental care (of which all adolescents are acutely aware and which they regard as boring and trivial; in their own words, “gay”) and the actual practices in which they engaged does not bode well for any strategies to further improve adolescent uptake of free dental care using the existing public education programmes.

The surprising perception that the cost of dental care was prohibitive, a firmly held belief for the majority of participants—despite the fact that their routine dental treatment was currently free—is a further important point for policy-makers to consider. According to participants, dentistry already suffers (in comparison with medicine) in regard to its perceived relevance, because of its specialised oral focus. The lack of State involvement in the funding of dental care for adult New Zealanders (other than that provided by supervised dental students or for a relatively small number of low-income patients) sends out a further clear message (from the participants’ perspective) that dental treatment is an optional extra in life, available only for those who can pay. Such a message runs completely counter to any efforts to emphasise the important contribution of continuing professional dental care to improve oral health over a life span, and adds an air of futility for the less affluent to the pursuit of oral health. When this was combined with reports of alienating dental surgery environments and a large number of complaints about dental treatment, the resulting lack of interest in utilising professional dental services by many young people in this study becomes less surprising. The received views on the expense of dentistry which the participants had already developed by the age of thirteen were also influential.

The adolescents’ lack of interest in professionally-provided oral health care and their sense of alienation in the dental surgery setting are especially noteworthy given contemporary health-care trends which focus on “empowering” citizens (Petersen and Lupton, 1996). The obverse of this strategy regretfully promotes negative sanctions for those who do not “do the right thing”, and (in this case) engage in some degree of dental neglect. The dental surgery may then become hostile and non-validating, placing adolescents under considerable normative pressure. Certainly, the current oral health-care delivery system’s constructed categories of “compliant or non-compliant” or “high- or low-risk” adolescents serve to perpetuate such pressures, and strategies which diminish this surveillance aspect of dentistry should be encouraged.

For a very vocal minority of the male adolescents interviewed, the negativity of the dental surgery was further compounded by personal relations with the dentist which were perceived to be cold, disengaged, and involving a treatment style which was (occasionally) physically rough and (more frequently) described as “careless”. The anecdotally reported use by dental practices of adolescent clients as “appointment fillers” — squeezed in between other, more “substantial” (read “lucrative” or “deserving”) patient appointments — would only serve to exasperate such feelings of alienation and may possibly be a founding cause for them. Further research is required to investigate this aspect of complaints over professional care.

Certainly, the adolescents in the current study are not calculating risk to their teeth in the same manner as would an oral health professional. Instead, the former adopt a perspective where, for instance, the social consequences of “heinous” breath (spoken of most frequently in association with cosmetic oral beliefs) apparently loom much larger than the physical effects of gum disease or plaque, or even the eventual loss of teeth. Furthermore, well-meaning professional advice to adolescents has tended to focus on technical models of risk communication which emphasise interventions based on scientific information about the consequences of dental neglect without recognition of the sociocultural meanings of risk imputed from such models (the “rotten teeth” posters, for instance). The effect of such strategies in producing risk minimisation responses such as creative ignorance and avoidance strategies among laypeople (Wyne, 1995) has been overlooked. Encouraging greater uptake of the adolescent oral health care scheme by Otago’s young people will rely on oral health professionals getting to know this sociocultural world much better in order to produce culturally meaningful models of risk reduction. This will require a substantial shift in how the world and interests of the adolescent client are conceptualised by the dental profession.

It is appropriate now to consider some of the implications of this research for current oral health-care directions.
A recent study commissioned by the Ministry of Health reviewed the effectiveness of youth-specific primary care, both internationally and in New Zealand (Mathias, 2002). The findings indicated much higher rates of access and utilisation of primary health care by adolescents when the service was specifically aimed at them (although the translation of this higher usage into better health outcomes requires verification through further research). The details of such innovation applied to adolescent dental care are beyond the scope of the current paper, but they might feature a central city location, a young receptionist and assisting staff, and one or more relatively recent dental graduates. An innovation like text messaging could be used to make appointments and send reminders. Where the setting is concerned, innovations in the layout of waiting room and surgery should be tried, providing that these were informed by consultation with young people and (possibly) a young architect. Whatever is done, it is essential that such innovations be rigorously evaluated. While such initiatives would inevitably entail what could be substantial start-up costs, the current willingness of the Ministry of Health to direct funding to the problem of adolescent dental care should ensure that these would be at least partially covered.

The study participants’ hierarchical ranking of doctors, dentists and dental therapists in terms of prestige and perceived competence also has certain policy implications, as the use of dental therapists in treating adolescents has been the subject of recent debate in New Zealand (Whyman, 2000). Although the exact details are currently unclear, the Health Practitioners’ Competence Assurance Act could enable the employment of dental therapists by some practices, and dental care for adolescents could be provided by those operators. However, this study indicates that using dental therapists in such a manner might be viewed by adolescents as yet another deterrent to taking up their entitlement to free care. Such a barrier might be overcome if the therapists used were young, empathetic and innovative, using what adolescents perceive to be “high” technology; however, careful “marketing” of such a practice arrangement would be required. Once again, the divergence in world views between professionals and adolescent clients must be more seriously addressed.

While the current project has enhanced our understanding of the way in which Otago adolescents view dentistry and their oral health, a number of questions remain unanswered. Are the Otago findings applicable to adolescents in other areas? To what extent do differences exist among practices with respect to the way in which adolescent dental care is organised and delivered? Do those variations make a difference as to how adolescent clients perceive and use their dental care? Clearly, this initial study indicates a wide-ranging potential research agenda around the continued exploration of adolescent oral health, and such an agenda would be enormously strengthened by broadening the range of participants in subsequent research to include the providers and facilitators of adolescent oral health care, not just the potential recipients.

CONCLUSIONS

This research suggests three explanations for the failure of some of these participants to regularly take up free dental services: the lack of relevance (and low esteem value) of professional dental services and professionally defined oral health goals in their lives (its “gay” quality); direct and (on balance) negative experiences of the culture of dentistry; and the adoption of received views (from older adults, then subsequently reinforced in peer groups) on the high cost of dental care in later life. We suggest that the lack of relevance of oral health for these teenagers may spring from two causes: a socially transmitted intergenerational sense of fatalism towards dental health (particularly for low-SES groups); and the unappealing aspects of the dental surgery environment, including professionally-produced oral health information. Together, these fuel a distinctive culture clash between oral health professionals’ worldviews and contemporary adolescent culture in Otago. This clash was a strong inhibitor of interest in attendance for free dental care, as the majority of young people were interested in their oral health (for reasons of concern over “germ filled mouths” and for the cosmetic benefits of good teeth to their appearance) and were positively oriented towards those oral health interventions which were endorsed by commercial advertising.

If we accept the value in further increasing the uptake by Otago adolescents of publicly-funded dental care, then this research can suggest several alternative strategies. First, we argue (based on the recommendations of the young people in this research project) for the creation of a trial specialised dental setting for adolescents only, designed with significant input from adolescents in order to increase the likelihood of young people who are current non-attenders utilising dental services.

Second, and perhaps more provocatively, we suggest that some profession-wide reflection is in order, to ponder the divergence between adolescents and professionals in cultural understandings of the value of professional dentistry to oral health, and to establish the grounds on which it may be that so many young people experience alienation when at the dentist. For instance, is there a relationship between such alienation and the previously noted anecdotal accounts of dentists’ practice of using adolescent patients as “appointment fillers”? What are the social realities of contemporary dental practice that reinforce these strategies (for instance, adolescent oral health is not the “main business” of any dental practice)? We recommend that further empirical research be conducted on dentists’, dental therapists’ and dental receptionists’ attitudes towards the adolescents in their practices with a view to understanding the profession’s contribution towards such alienation, and to explore ways of reducing it.

Moreover, further attention must be given to the complexity of maximising citizens’ oral health through health and social policy. While public health policy operates on specific evaluations of technical risk and cost-benefit analyses, the target populations of such policy rarely do so, relying instead on understandings of risk which are meaningful for them (Krimsky and Golding, 1992). Thus, while the principle of free oral health care up to age 18 may be viewed by the profession as being beyond reproach, the responses from the young people in this project suggest that it sends conflicting messages: their acute awareness that free dental care stops at age 18 appears to have created a sense of general futility about the likelihood of attaining and maintaining optimal oral health in adulthood. For participants of lower socio-economic status, this was potently reinforced by—and possibly derived from—adult family members’ struggles with access to dental care. Until current Government oral health policy is understood by users of dentistry as promoting the value of “healthy teeth for life”, the lack of relevance for adolescents of professional dental check-ups in maintaining good oral health is likely to remain, resulting in less-than-full uptake of such services, and contributing to erratic and symptomatic use of dentistry in adulthood. This is an orientation which may well be reproduced in later generations if the impact of received views of dentistry
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upon this particular group of participants is representative of their impact upon the wider adolescent population.

In conclusion, we suggest that there is much that is positive for the profession to take from this research. Within their own belief models, young people are concerned about oral health, and aligning professional dental culture (which admittedly will require something of a "wrench") with the priorities of youth culture would make a fertile ground for innovative dental interventions and the promotion of oral health; young peoples’ interest in oral health technology and their deep engagement with the popular media also suggest exciting new avenues through which such efforts could be effected.

Finally, dental professionals should consider opening themselves up to be the objects of further social science research. In this way, the environmental constraints and opportunities within which they develop their practices could be revealed, in order to assess the impact of these upon their care for adolescents. Along with recognition of the specific constraints under which oral health professionals practise, this could also ensure some insight into how these very pressures may be relieved for the betterment both of themselves and their adolescent clients.

REFERENCES


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