IN BRIEF

- A qualitative study of the meaning of oral health for people with visibly damaged teeth who did and did not go to the dentist.
- The relevance of oral health varied between people and changed over time.
- People constructed their own 'margins of relevance' of oral health, which influenced dental attendance.
- Dentists can explore and challenge the margins of relevance to open new horizons for their patients.

The relevance of oral health for attenders and non-attenders: a qualitative study

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Background Low expectations of health mean that oral health becomes a low priority for some people, an appreciation of which would help dentists when a non-attender does come to the surgery.

Objective To provide an insight into why oral health is not important to some people and how this attitude might hinder access to dental care.

Method In this qualitative study, purposive sampling was used to recruit two groups of participants with sociably visible missing, decayed or broken teeth but apparently differing responses to that status. The data analysis used social systems theory as operationalised by grounded theory techniques.

Results The core category that emerged from the data was that people constructed their own 'margins of the relevance' of oral health. For some people oral health was highly relevant whilst for others it was not very relevant. The degree of relevance of oral health was organised along seven dimensions: the perceived 'normal' state of oral health, the perceived causes of oral health and disease, the degree of trust held in dentistry, perceptions of oral 'health' as a commodity, perceptions of the accessibility of oral health care, perceptions of 'natural' oral health and judgements of character.

Conclusions If certain aspects of oral health are not relevant, little that is said about those aspects will be meaningful to people. The key is to either emphasize or gently challenge those ideas and beliefs that allow or hinder the margins of relevance.

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INTRODUCTION

Many people do not adopt healthy behaviours such as going to the dentist. An understanding of this phenomenon might help dentists to encourage optimal dental attendance.

Earlier research has identified may barriers to dental attendance including the availability of treatment, cost, the image of dentists and lack of information.[1,2] Other research has focused on people's expectations of the 'ideal dentist' who is seen as skilled with an ability to put the patient at ease and friendly.[3]

These factors, while observed by the patient, are outside his or her control. But people actively participate in the *process* of access to dental care because they choose whether or not to attend based on their expectations.[4] For example, while fear is often cited as a reason for not going to the dentist, the real reason may be that teeth are a low priority.[5–7] An appreciation of how oral health is or becomes a low priority would help dentists when a non-attender does come to the surgery. It may also assist in planning services to better meet the need of such people.

Qualitative research methods are well suited to exploring the perspectives of people. Loosely structured interviews or focus groups are used to allow people to discuss topics in their own words in ways that are relatively unshaped by the assumptions of the researcher. This approach may uncover a broader range of ideas and specific perspectives that might not be discovered in pre-structured questionnaires. Rather than collecting data that are statistically representative, the data are intended to be conceptually representative, capturing the breadth and depth of possible responses. This approach allows ordinary people to describe the links they make between different ideas and to hold self-contradictory positions.

Few qualitative studies have considered access to dentistry.[1,8] This paper reports on a qualitative interview study that explored the meaning of oral health for people with socially visible missing, decayed or broken teeth who did or did not go to the dentist. Its aim is to provide an insight into why oral health is not important to some people and how this attitude might hinder access to dental care.

METHOD

Purposive sampling was used to recruit two groups of participants with similar clinical status but apparently differing responses to that status. Both groups had decayed, missing or broken teeth as judged that were visible to a lay person at a distance of one to two metres. One group were planning to visit the dentist whilst the others were not seeking care. Participants included males and females of different ages and social groups. Recruitment continued until data became repetitious ('saturation'). Saturation was achieved at 20 participants. Recruitment used a combination of advertisements in shop windows and local publications, dental practitioners and snowball sampling. Ethical approval was granted by King's College London Research Ethics Committee.

Each participant was interviewed twice; at baseline and then at least three months later when they had had an opportunity to visit the dentist.

The interviews were open-ended and carried out individually. Participants were encouraged to speak freely about their daily lives and general expectations before moving on to a general discussion about oral health. Photographs of people with varying degrees of oral health and disease were introduced during the interview. This strategy aimed to stimulate participants to make observations of oral health without asking leading questions. In later interviews more directive prompts were used, including dental leaflets, oral hygiene aids and dental instruments. During the second interview participants were asked what 'quality of life' meant to them and how they thought it might relate to oral health.

The data analysis used the perspective of social systems theory and grounded theory techniques so that the analysis was grounded in participants' perspectives and daily lives.[9-11] First, the interviews were audio-recorded and transcribed verbatim. The transcripts were read line-by-line to identify concepts (codes) held by the participants. Related concepts were then categorised into dimensions of meaning. Then categories were grouped together until a 'core distinction' could be identified that accommodated all the other categories and concepts that emerged as people talked about their oral health.

Seven dimensions emerged, which are illustrated through individual quotes. The quotes represent conceptual dimensions in the meaning of oral health rather than topics grouped statistically. The data contain a number of instances where participants changed their views as they observed conflicting ideas. Again these changes are illustrated by quotation.

RESULTS

The core distinction that emerged from the data was that people constructed their own 'margins of the relevance' of oral health. From some perspectives oral health was highly relevant to everyday life whilst for others it was hardly relevant at all. Oral health that was 'relevant' to every day life was something positive that enabled other benefits. For one participant oral health was not only crucial to her psychological and physical well-being but also affected family relationships:

'It makes you happier, if you're happy inside, you live longer. Your whole self, if you feel right, cause if you're happy about yourself you're not stressed out. You know, you're more relaxed, more happy, you know, and the more happy the children are, cause you're happy, it shines on them.' (Karen, Employed within the home, age 48, 4/4/01).

Conversely, oral health was 'not relevant' as long as there was no pain. Another participant felt that only pain brought teeth into consciousness and he assumed that others thought the same – the norm being that: *'If you are in pain – because lets face it, that's the only time people actually think of their teeth'* (James, IT technician, age 30, 20/10/01). In the latter case, such a person might only consider his teeth relevant, and visit the dentist, when in pain.

The margins of relevance constructed by participants had a powerful effect on the meaning of oral health. They acted as horizons of possibilities that were the limit of what was visible to individuals along a scale of highly relevant to not relevant. Anything beyond an individual's horizon of possibility was not relevant to them. Thus some people could scarcely imagine situations that were outside their expectations, such as having a winning smile.

The relevance of oral health had seven dimensions, each containing polar views. Participants' views within these dimensions existed already and were then drawn upon when they talked about oral health. Individual expectations about oral health guided and constrained what was relevant. As a result, if a particular view was held, other possibilities could be either possible or invisible. For example, if dental care was regarded as inaccessible or the ability to maintain oral health was seen to be outside a person's control, it was likely that other aspects of oral health, such as a desire for straight white teeth, were not seen as relevant to that person in everyday life.

The seven dimensions of oral health were:

- The perceived 'normal' state of oral health
- The perceived causes of oral health and disease
- The degree of trust held in dentistry
- Perceptions of oral 'health' as a commodity
- Perceptions of the accessibility of oral health care
- Perceptions of 'natural' oral health
- Judgements of character.

The perceived 'normal' state of oral health

'They are far too horrific to be real...please tell me it's not true'

Perceptions of 'normal' oral health varied dramatically between participants. Some talked about healthy teeth but did not mention disease, others saw oral disease as a normal part of daily life. Each person's margins of relevance fell somewhere between these extremes. Indeed, seeing oral 'health' as the norm at one pole could block the notion of oral disease on the other and *vice versa*.

For example, when one person was shown a picture of visible oral disease in a photograph, she was quite surprised: *'There is no need for anybody to have teeth like that, in this country'* (Kate, Administrator, age 38, 6/5/01). Not only was oral disease outside her experience, but she tended to blame the person with the oral disease for their situation. Tim indicated disbelief of pictures of decayed teeth: *'They are far too horrific to be real...That's my feeling, it's not real. Please tell me it's not true'* (Tim, Actor, age 35, 18/5/01).

In contrast, if the 'normal' state involved some kind of defect, positive images were negated, suggesting that perfect looking teeth were not part of everyday life: *'Well he's there to show off*

like...he's like – he's not like you or me' (Peter W, Unemployed, age 53, 19/10/00).

The perceived causes of oral health and disease

'...you can't help what happens to your teeth'

What people saw as normal was closely related to the other dimensions of oral health. If oral *disease* was the normal state of affairs, it was likely that the state of one's mouth would be outside one's control:

'There are times when you can't help what happens to your teeth... that photograph there – his teeth are naturally like that through no fault of his own' (Shelley, Unemployed, age 45, 5/10/01).

Other people indicated that the maintenance of healthy teeth could be attributed to internal reasons, that it was entirely controllable and that if they had disease they were responsible:

'And the reason why all my teeth went bad is because I'm a chocoholic. A very sweet tooth, very sweet tooth. I have a lot of sugar in my tea' (Karen, Employed within the home, age 48, 4/4/01).

The degree of trust held in dentistry

'It's a waste of time. I should sue 'em really'

Some people saw their oral health problems not only as outside their own control, but as the fault of the dentist. There was an extensive repertoire of tales of negligence or perceived incompetence. Distrust was also implied in tales of excessive treatment and exploitation of patients: *'...that wasn't causing me a problem so why do I need it done? – other than to make money'* (Teresa, Employed within the home, 19/10/01).

Others had complete faith in their dentist. Both views influenced the relevance of oral health by forming expectations of future visits to the dentist. Whilst some recounted harrowing experiences and a lack of trust, others had regained trust and gained confidence in dentistry:

'What was really nice about him he was also very – um, informal. The other one I had had was very much the 'us and them' kind of person. That makes a lot of difference... And the other thing was he would always go through what he was going to do' (Suzanne, Gardener, age 50, 1/4/01).

Developing trust in dentistry could increase confidence that opened the way for even more positive horizons on dentistry and oral health. Trust was contagious and could enable other aspects of oral health to become more or less relevant. Health promotion messages, for example, were negated because they were associated with a distrusted dentistry.

Perceptions of oral health as a commodity

'There's a market in teeth, you know'

New and improved dental technologies, cosmetic enhancement, dental care and products could be admired, and desired with dentistry and seen as something beyond 'health'. In observing a perfect white and possibly cosmetically enhanced smile, some participants accepted the notion of a 'bought' mouth and aspired to have one.

Others saw dental products and treatments as unnecessary and exploitative. When some people were shown dental products such as novel toothbrushes, dental floss, toothpicks and mouthwashes they would often respond in terms of: *'It's having to sell something different isn't it'* (Ray, Printer, age 62, 10/10/01). The relevance of dentistry was therefore challenged as an institution which created needs rather than met them: *'There's a market in teeth, you know'* (Fred, Lecturer, age 67, 11/10/00).

This view of dentistry as a 'product' saw it as something that exploited the public with unnecessary treatments while at the same time denying health resources to those in real need. This dimension was therefore closely related to the accessibility of dentistry.

Perceptions of the accessibility of oral health care

'They're all private now. Ones that aren't – they're fully booked up'

In some cases healthcare was assumed to be widely accessible:

'We have dentists, and we have access to dentists. Products, toothpastes, toothbrushes... most people can get some form of National Health dentist' (Kate, Administrator, age 38, 6/5/01).

Access to dental care also affected feelings of capability and control. It not only had to be available, but also obtainable. The statement above suggests that those who are unable to access care may be judged negatively. The same view might also be felt by those unable to gain access to dental care.

It follows that if dental services were perceived to be inaccessible, the relevance of oral health could be affected. For example, experiencing an extreme lack of choice, some chose to give up altogether:

'I went to one and, ah, they couldn't put me on their books so I thought 'Ah bollocks to it' and don't bother... They're all private now. Ones that aren't – they're fully booked up...' (Boots, Unemployed, age 30, 25/10/01).

Such an evaluation was shared by Jo. In retrospect she had lacked the confidence to ask for help:

'I didn't get it done because of my fear of it all... a lack of assertiveness as well. I wasn't able to say 'I want this, I want this, I want this'' (Jo, Assistant teacher, age 46, 7/4/01).

These perspectives were not always held consciously yet could have a powerful effect on the relevance of oral health and, in turn, behaviours including dental attendance. Whichever view was held, it coloured the relevance of other aspects of oral health.

Perceptions of 'natural' oral health and judgements of character

'I wouldn't entertain the geezer'

Two other dimensions, 'perceptions of authenticity' and 'judgements of character', involved positive or negative observations about the 'naturalness' of teeth and the appearance of the mouth. Some people saw the diseased mouth as the norm and the 'natural' mouth with anything else deemed 'unnatural' to be artificial and false:

'That girl, well she's got – well her teeth look almost too perfect. Perhaps she's had some expensive attention on them...' (Fred, Lecturer, age 67, 11/10/00).

'Unnatural' held negative connotations of insincerity, vanity and effeminacy. One participant said of a photograph:

'...he's a tart isn't he? Aye? – you can see that straight away can't you. Way he's smiling, the false smile... I wouldn't entertain the geezer.' (Boots, Unemployed, age 29, 26/11/00).

Conversely others made negative judgements about people with diseased teeth and admired straight white teeth. When

observing the same photograph as Boots, Karen responded: *'He's hunky dory isn't he? Yeah very nice, that's it. Mm, very nice'* (Karen, Employed with the home, age 48, 4/4/01). Again, such statements shaped participants' views on the significance of their oral health in their daily lives, rendering it highly relevant or of little relevance.

Change and paradox

As the relevance of oral health was held on seven dimensions there were opportunities for contradiction, where one view did not tally with another. Some contradictions were noticed by the participants and could trigger change in existing beliefs and expectations. Throughout the interview, oral health had a low degree of relevance for James. However, through the process of comparing his teeth to the teeth of the person in the picture he indicated the possibility of increased relevance:

'Yeah, set of perfect teeth, absolutely perfect... bit depressingly perfect really. I think you look at those and wish that yours were absolutely straight' (James, 28/5/01).

This demonstrates that the relevance of oral health could be gently challenged and there is a possibility that the margins of relevance could be positively influenced as a result.

DISCUSSION

These data reveal that the people who might most benefit from dental treatment can have ideas of oral health that differ radically from those of dentists. Some people don't go to the dentist because oral health is a low priority for them.[7] This priority is determined by relevance. If certain aspects of oral health are not relevant to someone, little that is said about those aspects will be meaningful to them. Health education and other advice may simply pass by unnoticed, as if out of sight.

The seven dimensions are a framework for the ideas and expectations that people bring to the dental encounter. Experiences on these dimensions could accumulate, inhibiting dental attendance through a sequence of events beginning with the expectation that dentists blame patients for neglecting themselves. The view of dentistry as an exploitative and unnecessary commodity may sustain a feeling of distrust. If the dentist then suggests expensive treatments, that distrust is reinforced.

Two routes are available to dentists who wish to make oral health more relevant to patients: to emphasise beliefs that allow a greater relevance, and/or to challenge gently those beliefs that hinder the shift. The seven dimensions can guide such interactions. If oral health has low relevance to someone then the dentist can explore the dimensions to identify any barriers to relevance. That exploration alone might prompt a contradiction and shift of relevance. In essence, the dimensions could act as a 'topic guide' for discussions with patients (Table 1).

Table 1 Topics that could be used to explore the relevance of oral health to patients

Topic guide
Find out what 'normal' oral health is for the patient
Ask what the patient thinks are the causes of oral health and disease
Find out about the patient's past experiences at the dentist
Does the patient view dental products as useful for maintaining oral health or as exploitative?
Ask about the patient's experiences of finding a dentist
Find out what 'natural' oral health means to the patient.

This use of relevance and its component dimensions to bridge the gap in understanding between dentists and patients would go someway towards a concordance model of communication.[12] Rather than expecting patient compliance with dentists' instructions, this model focuses on shared power and understanding between professionals and patients. By taking the patient's margins of relevance into account, a concordant and more effective dentist-patient relationship can be built. For example, dentists typically expect regular attendance and registration from their patients.[13] If this norm does not concord with that of the patient, attempts to provide dental treatment are likely to be blocked because they are not relevant. The *negotiation* of recall intervals advised in the recent guidance from the National Institute of Clinical Excellence is an example of moving toward concordance.[14]

The active role taken by people is apparent in the mismatch between the ways lay people and dentists think about the mouth. Dentists assume that oral conditions that inhibit function (such as the ability to eat) will prompt a visit to the dentist. However, these data show it is only when that function is relevant to an individual that it will bother them. It is not whether something can be accomplished, but whether the person might want to accomplish it.[15] A major implication for dentists is the importance of establishing by enquiry and by listening, what is relevant to the patient.

Impacts on the function of the mouth can also be negated through normalisation. Some people saw good oral *health* as normal and easily obtainable. In contrast, others experienced oral *disease* as a normal part of everyday life with good oral health as an exception. If a person's experience is that many people have a problem, it may seem so normal that it is has no impact on their quality of life. People who feel that something is neither customary nor available are unlikely to seek it out. A wide range of clinical conditions can be normalised in this way. The dynamic nature of normalisation is illustrated in the different attitudes towards oral health held by different generations. Earlier generations regarded losing their natural teeth and wearing dentures as to be expected. Yet few young people now could regard such an expectation as normal and acceptable. Other research has shown that people with chronic oral disease get used to their condition and do not notice the difficulties it causes.[16]

Some participants in this study made judgements about people with oral disease. These observations may reflect a 'healthist' culture, where healthy behaviour is regarded as a duty with illness seen as a moral failing.[17-19] In this culture the low relevance held by some participants was not necessarily blissful ignorance. Although oral health may not be relevant to a person, they may feel ashamed at their failure and be embarrassed about going to the dentist. In turn, the feeling that it is difficult to access treatment can affect the ability to do so. The effect may be to compel some people to avoid the whole notion of oral health and deny its relevance. This state of constantly avoiding aspects of health has been described as that of a 'failed consumer'. The effect of this state is to reduce the margins of relevance still further,[20] in which case dentists must be careful not to reinforce a sense of worthlessness in

occasional patients, which may reduce relevance and further decrease attendance.

A number of contradictions were observed where participants took two conflicting perspectives simultaneously. These contradictions created instability that might allow them to consider new possibilities. Dentists will be familiar with this situation, where someone who does not normally worry about their teeth may seek treatment in anticipation of an important family event. Studying a photograph in a particular way made one participant in this study realise that it might be an advantage to have nice teeth. Such contradictions are an opportunity for dentists, because there is this potential for change. To take that opportunity, dentists require the communication and observational skills necessary to create, identify and act on these contradictions.

Whilst dentists might try to expand people's margins of relevance, this action must be treated as an important ethical dilemma. If treatment is difficult to obtain, is it perhaps unethical to increase people's desire for something they cannot have. Raising the expectations of people with poor health may reduce their quality of life, especially if they cannot access oral health care. However, raised expectations are an essential step toward improving health. Expanding peoples margins of relevance would go some way towards empowering them to action to improve their health.[4,21]

One other concern is to realise that these data do not explain all behaviours toward dentistry. People act within the constraints of their environment. For example, these findings should not distract attention from structural barriers to dental attendance such as a workforce shortage and low availability of dental care.

In conclusion, these are the first qualitative data on the views of people with socially noticeable damaged teeth. People actively construct meanings that can hinder beneficial health behaviours. Knowledge of the seven dimensions that form the margins of relevance can help dentists understand why some people do not attend the dentist and help them communicate with patients to make oral health more relevant to them.

1. Finch H, Keegan J, Ward K *et al. Barriers to the receipt of dental care: a qualitative research study.* London: Social and Community Planning Research, 1988.
2. Land T. What patients think of dental services. *Br Dent J* 2000; **189:** 21-24.
3. Lahti S, Verkasalo M, Hausen H, Tuutti H. Ideal role behaviours as seen by dentists and patients themselves and by their role partners: do they differ? *Community Dent Oral Epidemiol* 1996; **24:** 245-248.
4. Carr A J, Gibson B J, Robinson P G. Measuring quality of life: is quality of life determined by expectations or experience? *Br Med J* 2001; **322:** 1240-1243.
5. Todd J E, Lader D. *Adult dental health 1988, United Kingdom.* London: OPCS, 1991.
6. Blinkhorn A S, Hastings G B, Leathar D S. Attitudes towards dental care among young people in Scotland. *Br Dent J* 1983; **155:** 311-313.
7. Nuttall N M. Initial development of a scale to measure dental indifference. *Community Dent Oral Epidemiol* 1996; **24:** 112-126.
8. Hill K B, White D A, Morris A J, Goodwin N, Burke F J T. National evaluation of personal dental services: a qualitative investigation into patients' perception of dental services. *Br Dent J* 2003; **195:** 654-656.
9. Luhmann N. *Social systems.* Stanford: Stanford University Press, 1984.
10. Glaser B. *Doing grounded theory.* Mill Valley: Sociology Press, 1998.
11. Gregory J, Gibson B, Robinson P G. Variation and change in the meaning of oral health related quality of life: a 'grounded' systems approach. *Soc Sci Med* 2005; **60:** 1859-1868.
12. Weiss M, Britten N. What is concordance? *Pharm J* 2003; **271:** 493.
13. Gibson B J. Access to dental services. *In* Gulliford M, Morgan M (eds) *Access to health care.* pp 174-188. London: Routledge, 2003.
14. National Collaborating Centre for Acute Care. *Dental recall. Recall interval between routine dental examinations.* London: National Institute for Clinical Excellence, 2004. Clinical Guideline 19.
15. Higgs P, Hyde M, Wiggins R, Blane D. Researching quality of life in early old age: the importance of the sociological dimension. *Soc Pol Admin* 2003; **37:** 239-252.
16. Gibson B J, Drennan J, Hanna S, Freeman R. An exploratory qualitative study examining the social and psychological processes involved in regular dental attendance. *J Public Health Dent* 2000; **60:** 5-11.
17. Lupton D. *The imperative of health.* London: Sage Publications, 1995.
18. MacEntee M I, Hole R, Stolar E. The significance of the mouth in old age. *Soc Sci Med* 1997; **45:** 1449-1458.
19. Crawford R. Healthism and the medicalisation of everyday life. *Int J Health Sci* 1980; **10:** 365-368.
20. Bauman Z. *Work, consumerism and the new poor.* Buckingham: Open University Press, 1998.
21. Freire P. *Pedagogy of the oppressed.* Harmondsworth: Penguin, 1972.