The subjective meaning of dentition and oral health: Struggling to optimize one’s self-esteem

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Abstract

The aim of this study was to explore what dentition and oral health mean to adult dental care patients’ well-being. Qualitative, taped interviews were conducted with 15 participants (over 20 years of age), who were patients at private and public dental health care units in the western part of Sweden. The constant comparative method of grounded theory was used. The interviews were consecutively analyzed in hierarchical coding processes until saturation was achieved. A conceptual model was generated illuminating the meaning of dentition and oral health for the participant’s well-being. The core category of the model, struggling to optimize one’s self-esteem, was related to four categories, which further described the psychosocial process of increasing one’s self-esteem and contributing to well-being. These categories were labelled investing in oneself, being attractive to others, being able to socialize and showing ones social belonging. People who are satisfied with their teeth in terms of function and appearance seem to have developed an optimized self-esteem, which contributes to the well-being in individuals. Consequently, inequalities in oral health according to social belonging may lead to inequalities in self-esteem and well-being.

Key words: Grounded theory, well-being, oral health, dentition and self-esteem

Introduction

Everyone is affected by their oral health in one way or another, and for many people a nice smile is an important part of their overall appearance and well-being. Oral health has been investigated in some studies and these have described how subjectively good oral health increases one’s quality of life (Trulsson, 2003). However, what does a subjectively perfect dentition truly mean to adults? It has been suggested that 45% of dentulous individuals feel that endentulousness would have a major impact on their lives leading to decreased confidence and a reduced ability to carry out everyday activities because of facial changes attributable to tooth loss (Davis, Fiske, Scott & Radford, 2000).

In our Western society, the ideal body image represents youth, beauty, vigour, intactness and health (Cronan, 1993). The focus on appearance seems to have increased considerably in Western cultures, particularly with the increased flow of media images of models and celebrities in recent decades. An increasing number of people in the Western world undergo cosmetic surgery (McGrath & Mukerji, 2000) including breast enlargements, facelifts and tummy tucks. Earlier, these methods for improving one’s looks were exclusively for the wealthy and/or for celebrities. Today almost everyone in the industrialized world has access to these kinds of appearance-enhancing technologies, including whitening and aesthetic correction of the dentition.

Studies show no age difference in subjective importance of attractiveness for the well-being; rather attractiveness seems to be similarly important for young as for old individuals (Trulsson, Strandmark, Mohlin & Berggren, 2002; Trulsson, 2003). The appearance of a person’s teeth affects judgement about their facial attractiveness (York & Holtzman, 1999). There also seem to be great similarities in perception of aesthetics between countries (Cons, Jenny, Kohout, Freer & Eismann, 1983) as well as between individuals (Shaw, 1981). However, there are differences in female and male perceptions of
attractiveness. Large eyes; a small nose and a small chin are seen as attractive in women whereas prominent cheekbones and narrow cheeks are considered attractive in men (Cunningham, 1986). A study by McGrath and Bedi (2002) shows that oral health affects quality of life, most often through physical aspects rather than by social or psychological aspects related to oral health. Anderson and Nordenram (2004) found that elderly of today generally are satisfied with their oral health and even though dental care is regarded as expensive, it is something that is given high priority. A large smile, which includes straight, white, healthy teeth, is considered equally attractive in both sexes (Cunningham, 1986). An earlier study (McGrath & Bedi, 2000) suggests that there are gender differences regarding the social impact of oral health on quality of life and well-being. Dissatisfaction with the attractiveness of one’s dentition seems to have a greater impact on quality of life and well-being for women than for men. In addition, women’s dissatisfaction with their bodies is more stable over the life span than is men’s (Tiggemann & Lynch, 2001). Studies have also shown that women are more focused on attractiveness when talking about their dentition while men focuses more on functional issues, for example, chewing. Nonetheless, it has also been found that oral function and attractiveness were judged by men to be important for their feelings of manliness, virility and potency (Trulsson, Engstrand, Nannmark, Berggren & Brånemark, 2003).

The aim of this study was to explore what dentition and oral health means to individuals over 20 years of age visiting dental health clinics on a regular basis as experienced and described by themselves.

Method

Grounded theory

The constant comparative method for grounded theory described by Glaser and Strauss (1967) and advanced by Strauss and Corbin (1998) and Charmaz (2000) was used in collecting and analyzing data. Grounded theory aims at making meaning explicit by generating concepts, models or theories that are grounded in empirical data. The basic principles of grounded theory include theoretical sampling and hierarchical analysis, constant comparisons, theoretical sensitivity and saturation (Hallberg, 2006). Theoretical sampling is used to reach saturation and is guided by the emerging categories (Strauss & Corbin, 1998). Saturation, although somewhat “elastic”, is reached when new interviews do not bring additional information into the emerging categories, i.e. when new data fit into the categories already devised (Charmaz, 2000). Theoretical sensitivity refers to the researcher’s reflexive way of developing research questions and doing analysis. Grounded theory is rooted in symbolic interactionism and includes that meaning is constructed and changed through interactions between people (Charmaz, 2000). Accordingly, perceptions of the world are individual and constantly changed by individuals’ interaction with it.

Criteria for judging the validity of a grounded theory study include fit, work, modifiability and relevance (Glaser, 1978). Fit has to do with how closely categories fit with the incidents they are representing. Work means that the emerging model/theory explains how the problem is being solved with much variation. Modifiability means that the model/theory can be altered when new relevant data is compared to existing data. Relevance means that the study concerns a salient social problem and is not only of academic interest. One assumption in qualitative research is that data is generated in the interaction between researcher and participant (Strauss & Corbin, 1998; Charmaz, 2000). Therefore, the relationship between these two subjects should be focused upon, i.e. reflexivity (Hall & Callery, 2001), which contributes to the validity of the results. Reflexivity includes that the researcher identifies and critically reflects on preconceptions he or she brings into the study and on how these preconceptions affect the analysis of data.

Participants

The study sample consisted of 15 individuals over 20 years of age, all living in Western Sweden. The study group was strategically selected (in terms of gender, age and residence) from patients attending dental health clinics for regular dental check-ups. According to grounded theory, a strategic sampling of participants is recommended to obtain a heterogeneous group and for maximizing the variations of experiences in the studied group (Glaser & Strauss, 1967). The first contact with the participants was an information letter from their dentist asking if they were interested in participating in the present study. If the person was interested in participating, he/she was requested to call the interviewer (UH) to schedule a time and place for the interview. The interviewer was not known to the participants in advance and she did not take part in their dental treatments.

Qualitative interviews

A qualitative, taped interview, lasting about 1–1.5 hour, was conducted in a conversational style.
with each participant. The interview was conducted by UH (a sociologist and Doctor of Public Health Science) in a quiet room at the university or in the private home of the participant (if the participant preferred that). An interview guide was used and it concerned the participants’ thoughts and feeling on themes such as the meaning of dentition, the meaning of oral health, and the participant’s history of early dentition. Based on these themes, the interviewer asked relevant follow-up and probing questions. During the interview, the participants had the opportunity to raise questions of relevance to them. Open interviews require active and engaged involvement on the part of both researcher and participant in responding, clarifying and elaborating communication. Data was created through this process and the quality of data was influenced by the trusting relationship between researcher and participant (Hammersley, 1987). Data collection and analysis were conducted simultaneously (Glaser & Strauss, 1967; Strauss & Corbin, 1998; Charmaz, 2000) and continued until new interviews did not provide additional information, i.e. until saturation was reached.

Analysis of data

All interviews were transcribed verbatim and consecutively analyzed in hierarchical coding processes, i.e. open and selective coding and analysis continued until saturation was achieved. Open coding of the interview transcripts included that the substance of the data was being caught and segmented into substantive codes, which were labelled concretely. The process of open coding ended up with a clustering of substantive codes with similar content into summarizing categories. These categories were given more abstract labels than the substantive codes belonging to it. Further, relationships between categories were sought and verified in the data. In the selective coding process, categories were saturated with additional information, assessed by new interviews or added by re-coding previously assessed data (i.e. theoretical sampling). A core category was identified, describing a psychosocial process. This core category was central to the data and could be related to other relevant categories grounded in the data. During the entire process of analyzing the data, ideas, preliminary assumptions and theoretical reflections were written down in notes or memos in order to keep track of the analysis (Glaser & Strauss, 1967; Strauss & Corbin, 1998; Charmaz, 2000). According to Charmaz (2000), the unit of analysis in a grounded theory study, concerns events and actions in the data rather than the separate individuals per se; the number of participants is less interesting than the content and quality of the data.

Results

In the analysis of the interviews, a conceptual model was generated that illuminated the subjective meaning of dentition and oral health. The core category in the model, struggling to optimize one’s self-esteem, was related to four additional categories, which further elaborated the psychosocial process of increasing one’s self-esteem. These categories were labelled investing in oneself; being attractive to others; being able to socialize; and showing one’s social belonging (see Figure 1). When the participant was satisfied with his/her teeth and oral health, he/she perceived an optimized self-esteem and well-being. Each category is described below and selected quotations from the interviews intend to illustrate further the content of the categories.

Struggling to optimize one’s self-esteem

Participants in the present study experienced that having healthy, relatively straight, white and clean teeth optimized their self-esteem and contributed to well-being in public as well as in private. According to the participants, increasing one’s self-esteem was seen as something desirable as making life more enjoyable in terms of social activities and private well-being. To have subjectively good enough teeth, regardless if it was prosthesis or own teeth and oral health also gave the individual a feeling of personal security. Some of the participants in the study had

![Figure 1. Model showing the meaning of teeth and oral health as perceived by the participants in the study.](image-url)
earlier in life suffered from poor oral health and had undergone many expensive and complicated dental treatments. Their goal was thereby to regain their oral health and they were struggling to optimize their self-esteem and their well-being. The participants were willing to do their utmost to maintain or achieve good oral health. Not having absolutely straight teeth was not seen as a problem to them, it could even be seen as something charming. Accordingly, there was a variation in the data showing that good oral health was related to higher self-esteem and vice versa. The following quotations illustrate how the participants expressed the meaning of good oral health and how it optimized their self-esteem and their well-being:

If I were ashamed of my teeth, that would make them as much a disability as anything else.

Things like your hair and your teeth and such, and your makeup contribute to your sense of self-esteem. Having clean hair and looking neat and having clean teeth, maybe some lipstick and eyeshadow and mascara.

The core category struggling to optimize one's self-esteem is further understood through the categories related to it, described below.

Investing in oneself

According to the participants, one way of optimizing one's self-esteem was to be able to show subjectively good enough teeth and oral health to others and to oneself. The participants said that taking good care of one's teeth was a way of investing in oneself. The feeling of healthy and clean teeth was viewed as very desirable and as having a major impact on personal well-being. Proper care of teeth could mean, for example, brushing one's teeth and using toothpicks regularly to keep one's teeth clean and fresh. Some of the participants described how they enjoyed the feeling of having been to the dentist and having calculus removed from the teeth. All of the participants said that they were willing to make the necessary efforts to maintain or to achieve healthy teeth:

Another important thing is that you feel good. It's...childish really...but every year after I go to the dentist I love the feeling of getting my plaque taken away, and being able to touch my tongue to those clean spots. It's a matter of personal well-being, and something you do for yourself, but that's all right, isn't it?

Being attractive to others

The participants described how they began to take an interest in their appearance, including how their teeth looked from 12–15 years of age. After that, it became important to them to have clean and subjectively good-looking teeth in order to have fresh breath and to be attractive to others: “Well, it was a matter of not having bad breath, of your mouth smelling clean when you went out with girls, of having brushed your teeth thoroughly.” It seemed, when looking at the data, that this way of thinking about one's physical appearance started earlier for the girls than for the boys. Some of the participants claimed that they had sometimes considered whitening their teeth in order to look better. In particular, the younger participants described how they were affected by fashion models and magazines and said that they compared their own teeth with the teeth of the models. The somewhat older participants had also thought about whitening their teeth but they claimed that this way of thinking had not come from the influence of the media. All of the participants in the study claimed that physical appearance was important to them and that they wanted to look good.

Being able to socialize

Being able to socialize with others without being embarrassed because of their teeth was described as considerably important to the participants. According to the interviews missing or decayed teeth sometimes made it hard to pronounce specific words correctly, which made them embarrassed to speak in public. In addition, it made it difficult or impossible for them to eat in public. Eating with other people was described as desirable and important to participants' well-being and to feelings of self-esteem: “It's also about your self-image, being able to socialize and eat with other people”. Difficulties associated with eating and speaking, and the related embarrassment, led to withdrawal from social settings. If the participants felt ashamed of their teeth or ashamed of their functioning, they would withdraw from or avoid participating in social gatherings or activities. They did not want to feel ashamed of themselves because of their teeth as this affected their self-esteem negatively. To be orally problem-free was also important in order to socialize with others. The younger participants in the study had not reflected much on their oral health. Rather, they had taken their oral health for granted. Some of them stated that they did not visit a dentist on a regular basis because they could not afford to do so. The older participants in the study described their oral health as important
to them and said they went to the dentist as often as was necessary, irrespective of the costs of dental care. Sometimes they went to the dental clinic several times a year in order to achieve or to maintain good oral health.

**Showing one's social belonging**

This category illustrates that participants thought that putting an effort into caring for their teeth and being able to afford to go to the dentist on a regular basis indicated to others that they had the financial means to do so. Participants argued that possessing clean, healthy, white, and relatively straight teeth indicated that one has enough money to maintain good oral health and a good oral standard. This physical characteristic also implicitly communicated one's social belonging: “Of course your teeth indicate your social status. Which is too bad for poor people, who are somehow very vulnerable.” Participants thought that some individuals chose to spend their money on things other than oral health care and, therefore, held the belief that only a small number of individuals actually could not afford to utilize oral health care. Participants who could not afford dental treatments said that they would be willing to sell some of their private belongings to obtain the money for dental care. However, many of the participants also felt sorry for people who could not afford dental treatment and they did not approve of this inequality.

**Discussion**

Although this study is based on a relatively small sample, which is a necessary condition for qualitative analysis, the result gives a deeper understanding of the meaning of dentition for the individual's self-esteem and contribution to the well-being. The participants, who either had their own teeth or had their own teeth combined with prosthesis, were all visiting a dental health clinic for a regular dental check up. A potential bias of this study could be that people who are not concerned about their teeth and, therefore, not visit the dental clinic regularly are not included in the study. The analysis of the data illustrates a psychosocial process showing that the appearance of one’s dentition and one's oral health affects one's self-esteem and well-being. This is our main finding of the study, meaning that healthy, clean, white, relatively straight teeth, that functioned subjectively reasonably well, i.e. having good oral health, optimized self-esteem and well-being. It seemed to be equally important to have good self-esteem both in terms of one’s public life and in one’s private life. Optimized self-esteem led to a sense of personal security and well-being. However, many of the participants said that they were concerned about the discolouration of their teeth, and wanted them to be whiter. This finding is in line with the findings by Alkhatib, Holt and Bedi (2004), who found that in the general population more than 50% are concerned about their dental appearance in terms of tooth colour.

Self-esteem is a subjective aspect of the self which is the most crucial and central aspect of the concept of self (Johnsson, 1997). Self-esteem can be defined as the degree of worth, value, respect and love the individual may hold for himself/herself as a human being. Individuals who have positive self-esteem and experience well-being also have the key to health (Campbell & Lavallee, 1993). This study suggests that individuals who are satisfied with their dentition have the possibility to optimize their self-esteem and their well-being. To feel that one’s teeth are attractive and functional is seen by the participants in the present study as crucial to their self-esteem and well-being. The younger participants in the study appeared to be more affected by the dental appearance of fashion models than were the older participants. It is also suggested that dental appearance affects judgment of facial attractiveness regardless of gender (Trulsson et al., 2002).

The participants in the present study described that having healthy, white teeth reflected their social class. Inequality of oral health owing to socio-economic factors is a well-known problem in Sweden (Hjern, Grindefjord, Sundberg & Rosen, 2001) and one that politicians are struggling to address. Many individuals cannot afford to go to the dentist on a regular basis and accordingly their oral health suffers. Individuals with stable finances have a greater likelihood of gaining or maintaining good oral health compared with individuals with unstable financial situations. This implies that in one way social belonging may determine an individual’s oral health and, according to this study, the possibility of increasing one’s self-esteem and contribution to the well-being and thereby improving one’s health. The category investing in one-self describes the subjective meaning of having healthy teeth. The participants described that they were willing to make significant financial efforts and to spend the time needed in order to gain or maintain good oral status. The participants who did not have much money said they even would be willing to sell their paintings, stocks or anything else valuable they owned in order to be able to afford dental treatment. According to the interviews, it was also seen as important to be able to display a good oral standard to others and thereby to be recognized as someone who can afford it. Many of the
participants also expressed regret about this inequality in oral healthcare access and thought that everyone should have the same opportunity to have and maintain a standard of good oral health.

Being attractive to others was perceived as very important to the participant’s self-esteem and well-being. This is also in line with previous studies (Trulsson et al., 2003; Campbell & Lavallee, 1993; Ernulf, 1995). Relationships and interactions between people have increased in speed and decreased in duration. First impressions and the appearance of a person have become more and more important (Ernulf, 1995). In order to participate in mutual social interactions one must be included and valued by others. Studies show that people prefer to form relationships with and invest in individuals who are in some way useful to their own interests (Gilbert, 2001). Individuals, therefore, are highly motivated to improve their appearance in order to secure a good outcome, using “attractiveness enhancement strategies”, to increase their own status to peers or potential sexual partners (Gilbert, 2001). Previous research also shows that one’s appearance is an important factor determining how one is treated by others (Newcomb, 1956; 1961). According to Ernulf (1995), attractive and slender individuals have the greatest chances of both private and professional success. The face, smile and teeth are included in our first impression of another person. Whether or not one finds the person attractive determines whether one wants to get to know him or her at a deeper level (Ernulf, 1995).

Conclusion

The conclusions derived from this study are the following:

- The subjective meaning of having good oral health was to optimize one’s self-esteem and well-being.
- Investing oneself was one strategy used for optimizing self-esteem and gaining good oral health.
- Consequences of optimized self-esteem, good oral health and well-being was being able to socialize, being attractive to others and showing one’s social belonging.

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