Grounded Theory on Factors Involved in the Decision-Making Processes of Patients Treated with Implant Therapy

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Purpose: The aims of this research were to describe the process leading to desire for implant treatment, describe how patients missing teeth gained information about implant treatment, identify gatekeeping factors for implant treatment, and note experiences in changes in oral health–related quality of life. ***Materials and Methods:*** The constant comparative method for a grounded theory was used in collecting and analyzing data. Ten informants participated in the study, all of whom were treated with implant-supported fixed dentures during the past year. ***Results:*** The emerging core category was that participants experienced a journey from social stigma to exhilaration. This process ended in the perspective that the participants' new lives with dental implants were very good and meant an end to their social stigma, but gatekeeping factors before treatment, such as cost and dental anxiety, were noted. The dentist's opinion and suggestions were the most decisive part of the decision-making process, and trust in the dentist and dental team was crucial in the decision to undergo treatment and in the overall treatment experience. Great improvement in oral health–related quality of life was noted. ***Conclusion:*** This qualitative study gives as the core category and main finding the importance of patients' trust and confidence in the dentist and his/her staff in the process of transforming desire for dental implant treatment into demand and also in making it more likely for patients to be satisfied with treatment regardless of complications. *Int J Prosthodont 2012;25:270–278.*

Edentulousness and the use of dentures have a pronounced impact on patient well-being and oral health–related quality of life.[1] For edentulous individuals in particular, treatment with dental implants over the past 30 years has made it possible for dramatic improvements in oral rehabilitation.[2] The need and demand for prosthetic treatment, especially implant treatment, has changed for many individuals at the same time, which is in line with the general development of society.[3] The overall desire for better oral health–related quality of life as well as for natural-looking dental reconstructions has become a reality in prosthetic dentistry, although studies indicate that need, as assessed by clinicians, overestimates the rehabilitative need in comparison with assessment done by patients.[4]

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This paper is part of a larger study where the intention was to evaluate need and demand for treatment with dental implants. Need and demand are difficult to measure since prosthodontic treatment is highly individual and not closely related to oral status.[5] Need is stated as socially established in the interaction between the patient and dentist. The professional attitude toward need must be that there is no true objective or subjective need. Need is established only in a communicative dialogue with mutual respect between the clinician and the patient. In the prosthetic treatment decision-making process, the emancipatory perspective with the patient-dentist dialogue is of utmost importance to achieve an optimal treatment result.

Need does not always lead to demand for treatment or utilization depending on the gatekeeping processes between need and demand and between demand and utilization. Demands must be accepted through the knowledge that there is no objective need and that demand depends on the patient's opinion. The concept of *gatekeeping* refers to the social and psychologic processes that transform need into demand and demand into utilization. These factors are dependent on the patient's opinion. Therefore, sociodental factors should be included and evaluated in studies on need and demand for utilization of prosthodontic care.[6]

Still, many patients do not choose dental implants as a rehabilitation opportunity. Current knowledge about the factors behind these decisions is based on technical aspects[7] and not on subjective or psychologic factors. There are few studies in this field and most of them are derived from different questionnaires with only a few questions concerning these topics.[8] Individual opinions are difficult or impossible to capture in the analysis of questionnaire studies. Important aspects may be overlooked when it comes to the patient's perspective. A qualitative study method makes it easier to go deeper into these issues and to reflect opinions and results that may be concealed from a quantitative study perspective. This study was conducted according to the grounded theory, which aims to develop understanding and interpretation of an individual's description of experiences rather than to try to seek the objective truth. In the past decade, there has been an increasing interest in analyzing and describing the patient's point of view, but only a few qualitative studies have been presented with implant treatment as the focus.[9–11]

The aims of this study were, by using the constant comparative method for grounded theory, to describe the process patients missing several or all teeth go through before receiving treatment with a fixed implant-supported denture and to describe how patients gained information about implant treatment and the process leading to the desire for implant treatment. Other aims were to identify gatekeeping factors that were important from the patient's perspective and changes in oral health–related quality of life after implant treatment.

Materials and Methods

Qualitative Method

The constant comparative method for grounded theory, originally described by Glaser and Strauss (modified grounded theory), was used in collecting and analyzing data.[12,13] This qualitative method aims at generating concepts, models, and theories grounded in empirical data. This method implies analyzing open, axial, and selective coding to create a structural formula in the analysis. The basic principles of grounded theory include concurrent sampling and analysis, constant comparisons, theoretic sensitivity, and saturation. Saturation is reached when new interviews do not bring additional information into the categories devised in the earlier interviews.[14] Grounded theory was developed in sociology and is founded on symbolic interactionism, ie, constructed and changed within interactions between people. Perceptions of the world are individual and constantly interacting.[15] Grounded theory is one of approximately 30 qualitative research methods and includes both induction and deduction, which means constructing a hypothesis from the obtained data and drawing conclusions with a starting point from this hypothesis. Induction is a main part of grounded theory—a main difference between qualitative and quantitative research.

Criteria for judging the quality of a grounded theory study include fit, relevance, modifiability, parsimony, and scope.[16] Fit means that the core category fits when it is relevant and integrates other concepts, creating a dense, saturated, and practically applicable emerging theory. Relevance implies that the generated theory involved important phenomena and is interesting to the reader, and modifiability means that the theory could be adjusted according to new data. Parsimony and scope concern the extension of the emerging theory.

One assumption in qualitative research is that data are brought forward in interactions between the researcher and informant.[14] Therefore, the relationship between the two should be considered because of its importance to the results. This reflexivity implies that the researcher must identify preconceptions that might bias the interview.[17]

Ethical Aspects

The study design was supported by the Research Ethics Board at the University of Uppsala, Uppsala, Sweden. Requirements concerning informed consent and confidentiality were promised and secured.

Study Group

Ten informants (six women and four men, mean age: 69 years, age range: 54 to 84 years) participated in the study. Informants were patients at the Specialisttandvården Kaniken, Folktandvården (Specialist Dental Care, Public Dental Health Services), Uppsala, Sweden, and treated with implant-supported fixed dentures according to well-known and accepted procedures.[18] The patients were all referred from dentists in Uppsala County to a clinic with specialists in prosthodontics and were strategically selected from the register at the clinic on the basis of sex, age, and place of residence. No consideration was paid to personal factors, but all informants considered themselves to be of good health, although two had diabetes. Socioeconomic factors were not included in the interview but could be estimated to be distributed averagely. Patients' dental experience was discussed in the interview but was not considered in the

Table 1 Treatment History of Informants

Patient	Age (y), sex	No. of implants (arch)	Major complication	Year of implant treatment	Total cost (patient portion) (per 1,000 SEK)*	Subjective opinion of cost
1	70, F	6 (max)	None	2009	58 (24)	Not important
2	84, M	6 (max)	None	2009	72 (19)	Not important
3	75, F	6 (max), 5 (mand)	Bone augmentation	2008	164 (27)	Hesitated
4	68, M	4 (max), 3 (mand)	Failed osseointegration (n = 1)	2008	108 (32)	Not important
5	67, M	4 (max)	None	2008	110 (28)	Not important
6	64, F	5 (max)	Failed osseointegration (n= 3)	2008	46 (16)	Not important
7	76, F	6 (max), 5 (mand)	None	2009	132 (24)	Not important
8	71, F	6 (max)	Failed osseointegration (n = 1)	2009	67 (24)	Not important
9	61, M	2 (max), 2 (mand)	None	2009	73 (33)	Not important
10	54, F	4 (max)	Fractured superstructure	2009	85 (42)	Great importance

M = male; F = female; max = maxilla; mand = mandible.
*Patients' portions of the cost differ because of individual prerequisites that influence the subsidized part from the National Dental Insurance System in Sweden.

selection of informants. In the pretreatment discussion, all informants had received written information about estimated costs, risks for major complications, and normal operative procedures on two occasions. All informants were treated with implant-supported fixed dentures during the past year. The cost for the implant treatment was subsidized according to the National Dental Insurance System in Sweden. The intention of this sampling procedure was to obtain a heterogenous group to maximize the variations of experiences in the group studied. The dental situations of the informants are presented in Table 1.

Approach

An open, taped interview lasting up to 1 hour was conducted with each subject in a quiet room on premises other than the clinic. An interview guide was used, and the themes concerned oral function and dental status, daily living, and quality of life before and after treatment with an implant-supported fixed denture; the relative importance of having confidence in the dentist and how this is obtained; gatekeepers such as treatment costs, dental anxiety, or others; how the informant had obtained information on implant treatment; and how the decision process started making a latent desire manifest.

The interviewer was a prosthodontist (first author) with vast experience with dental implant treatment but without knowledge of the informants or involvement in their treatment. The informants were told that they could end the interview at any point and had the opportunity to raise questions of relevance to them. Each theme of questions gave the opportunity for a broader discussion as for a variety of potential gatekeepers. Data collection and analysis were conducted after each interview and continued until new interviews did not provide additional information. Saturation was reached after 10 informants.

Procedure

After the selection of a presumptive informant from the patient register, each subject was informed by letter about the study and asked if they were willing to participate. Written and verbal information concerning the aim and procedure of the study was given to all subjects. After written consent was obtained, a taped interview was scheduled with each individual.

Data Analysis

Interviews were transcribed verbatim and analyzed in open, axial, and selective coding processes.[12,13] The process of open coding ended up with clustering of substantive codes with similar content into summarizing categories (axial coding). Relationships between categories were sought, and data were put together. In the selective coding, categories were saturated by additional information, assessed by adding re-coded data that were earlier analyzed. A core category was identified that was central in the collected data and related to the subcategories.

Table 2 Journey from Social Stigma to Exhilaration

Subcategories	Feelings experienced
1. Becoming an insecure person	Increasingly worsened oral health
	Living with pain and anxiety
2. Becoming a determined person	Desire for a better solution turned into demand
	Having trust in the dentist
	Going through with treatment
3. Becoming the person I once was	Being free from pain and social stigma
	Having feelings of gratitude
4. Acquiring a more realistic perspective	Recognizing the disadvantages of treatment

Results

Journey from Social Stigma to Exhilaration

The core category that emerged in the present study was that participants took part in a journey from social stigma to exhilaration, as seen in Table 2. This illuminates the journey from deteriorated dental health with pain and lowered self-esteem, which resulted in social withdrawal (eg, social stigma), to the decision of going through with implant treatment, to feelings of gratitude and becoming the person they once were. This process allowed patients to end up with a more realistic perspective that their new life with dental implants was very good and meant an end to their social stigma. However, the process had some gatekeepers such as fear of pain, including the risk of having problems afterward with the implants, and costs.

The dentist's opinion and suggestions were the most decisive part in the decision-making process, and trust in the dentist and dental team was crucial not only for the decision to undergo treatment but also for the overall experience with treatment. All informants had considered the possibility of implant treatment for some time. Some made their decision after having initially discussed it with their families, while others made their decision because of comments from acquaintances or advertisements, a lack of taste when eating, or the feeling of loose dentures. It was obvious that trust in the dentist and his/her skills played an important role in the decision-making process. A perhaps even larger and more important factor was the possibility to discuss treatment options with the dentist, especially having the opportunity to discuss the informant's individual need for treatment. Some informants changed clinicians during this process because of a lack of trust.

Only two gatekeeping factors were mentioned by the informants: cost and dental anxiety; however, other potential gatekeepers were discussed. Cost was considered as a gatekeeping factor of little importance. All but one of the informants said that they would desire and demand this treatment at almost any cost and were prepared to take out a bank loan if necessary. A correct estimation of cost together with a pronounced trust in the dentist seemed to be of importance in the decision-making process. One informant remarked, "He is a very skilled dental surgeon and I trust him completely."

Becoming an Insecure Person

Increasingly Worsened Oral Health. The participants described a history of many years of deteriorating oral health depending on different causes such as accidents, anxiety, and disease. This deteriorated oral health caused physical pain, infection, and discomfort as well as difficulty with chewing and fear of oral hygiene maintenance because of the risk of losing teeth. The participants' points of view were that they had done everything in their power to improve their dental status over the years, including both considerable economic and personal efforts in trying to

have good oral hygiene. Despite these efforts, they experienced a deteriorating oral health impossible to improve or cure. This deteriorating oral health also led to embarrassment in relation to others; participants did not want to be seen as messy or someone who did not take care of their teeth for economic or ignorant reasons. Therefore, participants withdrew from many social activities, and when they met others, they tried not to show their teeth. One participant noted, "I had anxiety all the time. I had anxiety every morning; the first thing was to feel with the tongue if anything was loose, and you didn't want to laugh too much or open the mouth."

Living with Pain and Anxiety. Finally, the participants had lost so many or all of their teeth that they had to wear dentures. However, wearing dentures was even worse than having poor oral health. The dentures caused physical pain and soreness and were connected to feelings of shame and a variety of practical problems, such as anxiety over the denture falling out, gagging, and severe difficulties in chewing desired food. A major impairment in the ability to sense different food tastes was also reported by all informants. The social consequences were immense. Participants felt ashamed and did not tell anyone except their closest family members that they had a denture.

A sense of powerlessness was also reported. They could not do anything about their ability to adapt to their denture. A sense of insecurity was common, along with great reluctance to dine in public restaurants or at home with friends, fear of the denture falling out at work, difficulties with speech, and difficulty with breathing during exercise. This resulted in a common and almost unanimous feeling of diminished social contacts. Informants recalled, "It was difficult all the time. I lost a kilo per week; I couldn't eat, just couldn't. I gagged all the time. I couldn't be among people" and "I couldn't sense any taste. My husband had to do all the tasting when I was cooking."

Becoming a Determined Person

Desire for a Better Solution Turned into Demand. Participants described how they had come to desire a better solution for their dental problems than wearing a denture. The life situation with the denture was unacceptable, with difficulties in eating as well as social, physical, and psychologic problems. In line with this, participants started to gather information about treatment with dental implants (how and where to get it). They talked to others that had already gone through with the treatment and discussed the issue with their family members.

Participants described the cost for dental implants as a gatekeeping factor of little importance in the process of deciding whether to undergo implant treatment. The reason for this seemed to be confidence in the dentist and the belief in having received a correct pretreatment estimation of cost, as well as having had the possibility of discussing treatment options with their dentist. Only one informant postponed treatment for a couple of years because of the cost; all others considered cost of little importance and were prepared to take out a bank loan if necessary. In the end, the desire for a better solution turned into a demand, since informants truly desired treatment with dental implants. As one participant recalled, "I made up my mind because having a denture was no alternative. So I quit smoking and put the money aside, saving it for the treatment cost."

Having Trust in the Dentist. It was of great importance for the participants to find a dentist they could really trust regarding medical skills and as a person. This was true also for the dental team; participants had a need for the same feeling of trust in them as in the dentist. The feeling of being involved in the treatment was important. Some participants changed dentists because of a lack of trust when discussing possible dental implant treatment. Participants had known previously about dental implant treatment through the media, from discussions with dentists or relatives, or from advertisements, but the final decision was made after discussions with their families, and ultimately, with their dentist.

Anxiety regarding treatment was seen as a minor problem, also considered to be dependent on the participants' trust in the dentist, although some patients in other circumstances had been very reluctant to receive dental treatment because of anxiety over injections or visible blood. "Trust in the dentist is the most important thing, yes it is. You feel that this is right. Wow, it was like a burden was taken from my shoulders," remarked one patient.

Going Through with Treatment. When having to live with deteriorated dental health or dentures, participants did their best to hide their situation from others. However, participants seemed to have no problems telling workmates or friends as soon as the implant treatment was scheduled.

Participants were very satisfied with the results of implant treatment, feeling as though both oral function and esthetics were restored and gaining improved self-confidence and self-esteem. Some participants noted orofacial esthetics as the most important factor for self-confidence. The dominant opinion was that implant-supported fixed partial dentures felt better than a conventional fixed partial denture and

were comparable to natural teeth. The treatment outcome was described by all informants as a substantial improvement in oral comfort and quality of life even though some participants described pain after the implant operation and some had experienced difficulties with implants that did not integrate, yielding prolonged treatment and additional operations. No one described this as having any negative influence on their opinion of the overall treatment, which they all considered a success. Those who had experienced disintegrated implants blamed themselves for causing unsuccessful osseointegration. No one considered this as a result of poor management from the dentist.

Some participants had anxiety before surgery but no one considered the treatment to be painful or complicated, although some informants lost implants and had to undergo additional operations. One informant recalled, "I read in the papers about Bengt Feldreich [Swedish celebrity]; he had this operation and it came out very well, and he was old at the time. And then I thought that if he could do it, I can."

Becoming the Person I Once Was

Being Free from Pain and Social Stigma. Participants stated great improvement/recovery in oral health–related quality of life and were readily prepared to recommend implant treatment and their dentist to others in spite of complications. Participants said that their psychologic, physical, and social well-being was considerably improved. They claimed that they regarded their implant-supported fixed dentures as their own natural teeth and that it felt and functioned physically like their natural dentition. For example, the ability to sense different food tastes, which was highly diminished while wearing a removable denture according to all participants, was regained after treatment. The sense of regained security was very common; participants stated being able to sneeze and cough, and their social contacts were no longer restrained because of the fear of dropping their denture while eating among others.

A couple of participants noted the lack of orofacial esthetics when having dentures as highly important, and felt that after treatment they had regained their looks and self-esteem. A fixed implant-supported denture was compared with having a natural dentition when it came to esthetics. "When you look at yourself in the mirror and see all the tooth gaps—that really takes your self-esteem down, and now I feel like a whole new person. Self-esteem is totally dependent on esthetics," remarked one patient. Another added, "It was so fun getting my new teeth. The first thing I did on that day was go to a restaurant."

Having Feelings of Gratitude. All participants spontaneously expressed gratitude to the dentist and his/her staff. For those who had had recurrent infections, loose teeth, or badly functioning dentures, the fixed implant-supported denture gave the patients the feeling of a good dental status and of being orally healthy for the first time in many years. They did not have to visit their dentist as often as before, and they were pain free. Patients said, "He should receive applause" and "It's the best thing that has happened to me, ever."

Acquiring a More Realistic Perspective

Recognizing the Disadvantages of Treatment. Sometime after treatment and experiencing the feelings of becoming the person they once were and of gratitude, participants started to become aware of minor negative side effects of the implants. When first being asked about any discomfort from the implant-supported fixed dentures, all participants expressed that the problems were very small. However, when discussing this further, most participants found it difficult to maintain optimal dental hygiene. Those who received a fixed implant-supported denture in the maxilla reported difficulties in speech. This seemed to diminish over time. Some felt that they had too many teeth and that increased salivary production had become somewhat annoying. Most patients accidently bit their tongue or cheek sometimes. "I'm totally satisfied but it's a bit difficult to keep the oral hygiene up," and "It's a bit difficult with the speech, and I get rather much saliva," were both remarked.

Discussion

All informants experienced a deteriorating dental status followed by a period of wearing a removable denture, except one informant who did not have any teeth or a removable denture. The consequences on oral function were severe and made most informants reduce their social interactions and contacts. Self-perception was affected, and participants felt like deviating and uncertain persons, similar to the results from another study by Trulsson et al.[9] Both this and the present study show how informants with removable dentures developed avoidance strategies to ensure that no one would notice the denture. To manage uncertainty, they often avoided social contacts, especially when eating. These avoidance strategies contributed to restricted social participation and a change in self-image.

The use of the grounded theory method in this study revealed the importance of the patient's trust in

the dentist as the core category and main finding. This trust seems to be vital to make the patient choose, accept, and go through with treatment, perhaps even more so to make the patient more likely to be satisfied with the final treatment result. This expression of trust in the dentist was common, even for informants who had experienced complications. They thought themselves to be the cause of these complications, and no one questioned the dentists' skills or management.

The design of a qualitative study includes control of quality in all phases from research question, research approach, data collection, and analysis. This study is based on an extensive amount of data (more than 150 pages) from a heterogenous group strategically selected from the patient register. Data collection continued until saturation was reached and no additional information was gained. This sampling procedure is considered as being closely related to internal validity.[19] The emerging categories describing trust and confidence in the dentist were all grounded in data, and the statements given were done so with the intent of showing the trustworthiness of the authors' interpretation. External validity concerns transferability to a new context.[19] The authors' opinion is that the results from this study could be transferable to other groups treated with implant-supported fixed dental prostheses with similar characteristics to this study group. As stated in a previous study in this series of papers, there was a great increase in interest for implant treatment from 1989 to 1999. Almost the entire study population (95%) expressed desire for implant treatment in 1999—a strong increase and one of the main findings in this series of studies. This implies a high possibility that the results from this study could be applicable in other similar groups.[3] However, patients not able to be successfully treated with fixed implant prostheses were not included, nor were informants who had to pay the full cost of treatment themselves.

It is important for qualitative studies to identify preconceptions that might bias the interview. The interviews were conducted by a dentist who could influence the patients' answers. People might answer a dentist differently than they would a social scientist. Dentists are often not very familiar with interview techniques and not used to guiding interviews with questions related to a problem or treatment. On the other hand, the dentist may be able to go deeper into questions regarding treatment and complications. The results from this study show similar results to a study by Trulsson et al in which the interviews were conducted by a social scientist.[9] This indicates good validity for the present study. In both studies, though, the patients were referred to a specialist clinic, which could mean a risk for bias. Most patients were referred because the general practitioner did not perform implant treatment, not because of any anticipated specific treatment difficulty. This should mean that the patients in many aspects are similar to most patients who would undergo implant treatment.

The results of this study differ from the results of another qualitative study that showed that patients with chronic periodontitis shared the opinion that they had to depend on the care provider independently, irrespective of whether they agreed to the treatment plan. The patients also had difficulties foreseeing the results of treatment.[20] A conclusion from that study was the importance of providing thorough information about the planned treatment and to give attention to the patients' individual needs. In this study, informants described information regarding treatment and costs as very good and also recalled thorough individual preparation before treatment, resulting in deep trust in the dentist and staff.

The differences in these studies can depend on several factors besides the eventual difference in information and mutual discussion patterns. Trust in the dentist could also be the result of a long treatment period and long treatment sessions, which most often is the case in implant treatment. This has been shown in other studies to have an impact on the patients' relationship with and experience of the overall treatment result.[21,22] The possibility to freely discuss the treatment options and to be given the opportunity of talking about psychosocial factors has previously been deemed important for the subjective opinion of prosthetic treatment.[23] The patient panorama could also be somewhat different in this study with implant treatment patients compared to the other study on patients with periodontal disease.[20] In addition, with implant treatment, the outcome could be more easily described with a higher degree of prognostic accuracy than that for periodontal disease.

Orofacial esthetics seemed to be of greater importance than good dental function for some informants, which has been described in other studies.[24] These patients expressed that their self-esteem and self-confidence were severely depressed by having gaps in their teeth, even when they were only visible to themselves. This is in accordance with another study where the eventuality of losing a tooth or getting dentures was compared with being unemployed.[25] The informants in this study described the feeling of being restored and regaining self-esteem when they once again had fixed teeth.

Informants were asked if there were any obstacles (gatekeepers) in the decision-making process. The two factors mentioned were cost and dental anxiety, but neither was described as being of importance.

Two informants had hesitated for a period of time to choose implant treatment because of the cost but were determined to go through with treatment. Some informants had been prepared to take out a loan but chose not to since the total cost was much less than they had anticipated. This opinion that the total cost was not as high as they thought was unanimous for all informants. The pretreatment cost estimation showed to have good accuracy, which strengthened the confidence in the dentist and his/her staff. A weakness of the study was that these patients had passed the gatekeeping process and expressed demand. A study of patients not demanding implant treatment would be of great interest but outside the scope of this study.

However, a new regulation was introduced in the National Dental Insurance System in Sweden a few years ago. This regulation permitted highly subsidized treatment costs for prosthodontic services. The cost for dental implant therapy is low from an international perspective. It is likely that this might have an impact on the desire for implant treatment, although most informants declared that they would desire this treatment regardless of cost and were prepared to take out a bank loan if necessary. Of importance is that the participants in this study were referred to a specialist clinic with the pronounced intention of having dental implant treatment and were to some degree prepared for the costs and different segments of treatment. Those without the economic prerequisite had probably declined the offer of referral.

Some informants described having dental anxiety but had gone through with treatment without hesitation because of the pretreatment information received, which was considered to be very accurate.

Cost and dental anxiety were discussed as being important, and perhaps this is the case for many dental treatments; however, these factors did not impact this study group. When asked if they knew of any friends or acquaintances that had declined implant treatment because of cost or dental anxiety, informants seemed to recall very few such cases. Still, the gatekeeping effect may occur long before contact is made with a dentist, which of course is not perceived in the care system and even less so in a specialist clinic. A recent qualitative study from the United Kingdom among elderly individuals promoted two main themes: patients' fear and anxiety (relating to the pain of surgery, complications of the procedure, and immediate postsurgical denture use) and the appropriateness of the procedure in an elderly person. The impact of cost was not included in this study. This difference compared to the present study could in part depend on age and cultural differences (appropriateness for an elderly person). The present study group was younger, and perhaps implant treatment is a more commonly accepted treatment option in Sweden regardless of age. Another reason for this difference could be that the informants in this study were treated patients and had concluded their decision-making process, and the reported confidence in their dentist made dental anxiety a minor concern.[10]

Another study claimed that implant-supported fixed dentures allow the patient to regain health and function to a higher degree than with fixed partial dentures or removable dentures.[26] The results of this study confirm this and are also in line with yet another qualitative study regarding eating that indicated that implant-supported mandibular overdentures provided a significant improvement compared to informants with adjusted prostheses.[11] The informants in this study unanimously declared the feeling that implant-supported fixed partial dentures felt better than conventional fixed partial dentures and were comparable to their own natural teeth.

Everyone in the study group who had used a removable denture (all but one) reported an obvious decrease in the ability to taste. This effect of the removable denture was considered as a clear decrease in quality of life. After receiving the implant-supported fixed denture, the ability to taste food was regained.

The percentage of elderly individuals without teeth and wearing removable dentures has dramatically decreased in Sweden over the past decades.[27] On the other hand, a greater share of the population is getting older, and they will probably face the risk of losing their teeth at an older age. This is also proposed to be the case in other parts of the industrialized world, eg, in the United States.[28] This means that in the foreseeable future, there will be many patients with dentures and probably an increased desire for implant-supported dentures.

In line with the results of the present and other studies, it should be politically urgent to make it possible for those denture wearers who cannot accept their denture to have the opportunity to get subsidized dental implant treatment within the national insurance system. This study shows the importance of giving patients the opportunity of regaining self-esteem and becoming the person they once were with the feeling of social security, regained attraction, and good dental status.

Conclusions

The core category and main finding was the importance of the patients' trust and confidence in the dentist and his/her staff in the process of transforming

desire for dental implant treatment into a manifest demand and in making it more likely for patients to be satisfied with the treatment results regardless of complications. Mutual discussions in the treatment-planning process, good pretreatment information, and accurate cost estimation were reasons for developing this trust and confidence. Experienced complications such as nonintegrated implants were not considered as a result of bad management from the dentist; instead, participants put the blame on themselves.

All informants had considered implant treatment for some time and made their decision when they felt confident in the dentist and after discussions with their families and dentists.

Neither of the two identified gatekeeping factors (cost and dental anxiety) was important in the decision to undergo implant treatment. No other gatekeeping factors were put forward by the informants in this study.

Great improvement/recovery in oral health–related quality of life was stated in terms of regaining self-esteem and being secure in social settings. The ability to taste different foods was also regained after implant treatment, and the perception of the implant-supported fixed denture was the same as that of natural teeth.

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