

Impact of dentofacial deformity and motivation for treatment: A qualitative study

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Introduction: Satisfaction with the outcome of orthognathic treatment is generally high; however, an important minority remains dissatisfied with the results. The reasons for this could be inadequate patient understanding and preparation, external motivation, and unrealistic expectations. In-depth appreciation of these issues can be obtained using qualitative research methods, but there is a paucity of qualitative research in this field.

Methods: This was a cross-sectional qualitative study of orthognathic patients conducted at a teaching hospital. In-depth interviews were conducted with 18 prospective orthognathic patients. The data were managed by using the framework approach and analyzed by using the critical qualitative theory.

Results: Two main themes were explored in the interviews: the impact of the dentofacial deformity and the motivation for treatment. Both the everyday problems of living with a dentofacial deformity and the motivation for seeking treatment could be classified either as exclusively practical (including functional and structural), exclusively psychological (including psychosocial and esthetic), or a combination. Different coping strategies were also described. The sources of motivation ranged between purely external to purely internal, with most subjects between these 2 extremes.

Conclusions: In this article, we present a classification of the impact of dentofacial deformity that is a refinement of the traditional one that includes esthetic, functional, and psychosocial factors. The motivating factors, together with the triggers for accessing treatment and the source of motivation, are generally linked directly or indirectly to the problem and the impact of the condition. However, in a few patients, the motivation might not relate to the impact of the problem but to a complex array of other factors such as personality, upbringing, and relationships. Therefore, clinicians should not make assumptions but explore these factors on an individual basis without preconceived ideas. (Am J Orthod Dentofacial Orthop 2012;141:734-42)

Patients with a facial deformity exhibit higher levels of psychological stress than those without a deformity, particularly in social situations.¹ People who have a disfigurement or deformity often experience problems in social interactions, leading to lowered self-esteem and a tendency to become introverted and reclusive.² Increasingly, orthognathic treatment is viewed as a psychological intervention in addition to

a physical treatment, since there is evidence that it has psychological benefits, including improved self-esteem, social adjustment, and quality of life.^{3,4}

Although satisfaction with orthognathic treatment is generally high, an important minority of patients are dissatisfied with the outcome, often despite technically good results.⁵⁻⁷ This might be due to the extent of the impact of the problem, personality, motivations, and expectations; this is why it is important to investigate these fully before offering treatment.

Traditionally, the impact of dentofacial deformity has been described as esthetic, functional, and psychosocial; examples include eating, social embarrassment and discomfort, self-consciousness, and bullying.^{3,8-20}

With regard to the psychological impact of dentofacial disharmony, previous research has found that orthognathic patients do not appear to be more psychologically distressed or depressed than normal; however, they do suffer increased anxiety.^{7,21-25}

The motivation for choosing to undergo orthognathic treatment has been studied extensively in the past, with the main motivations cited as esthetic, functional, and psychosocial improvement.^{8,14,17,26-35}

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With regard to the source of motivation, distinction has been made between internal and external motivation; internal motivation is derived from the patient's deep-seated desire to have the treatment, and external motivation indicates pressure from others.³⁶

Dentofacial deformity has been purported to be the most difficult oral condition to measure,³⁷ largely because it involves a subjective assessment of what constitutes normal esthetics.³ The majority of research in this field has involved quantitative methodologies, and most authors have used questionnaires and other psychometric instruments to explore the psychological aspects of treatment.^{5,7,21,30} Although the findings of these studies are invaluable in expanding our understanding of these issues, these techniques cannot elucidate the same depth of understanding from the perspective of the patients that qualitative techniques can.

Qualitative research is used increasingly in the fields of health care, social research, and public policy because biomedical resolutions are only partial remedies, and a more holistic approach to answering research questions is needed. It has been said that qualitative research can "reach the parts other methods cannot reach."³⁸⁻⁴⁰ It is widely agreed that qualitative research is a form of social inquiry, which is interpretive (it aims to understand how people interpret the world around them) and naturalistic (it examines phenomena in natural settings).⁴¹ Qualitative methods are useful for the study of human and social experiences, feelings, thoughts, motivations, expectations, and attitudes—all of which are crucial to clinical knowledge.⁴²

Although there are many different, and often conflicting, approaches to conducting qualitative research, some generally accepted methodologic stances are common to all, as shown in [Table I](#).

The aims of this study were to qualitatively explore and analyze the full range of impacts of dentofacial deformity, and to understand patients' motivations for seeking orthognathic treatment.

MATERIAL AND METHODS

This was a qualitative interview study with a cross-sectional design. Ethical approval was obtained from the joint research and ethics committee of The Joint University College London/University College London Hospitals NHS Trust Committees on the Ethics of Human Research, and all participants were treated according to the principles of the Declaration of Helsinki. The subjects were recruited between March and September 2009 from orthognathic clinics. Inclusion criteria were patients with a dentofacial deformity aged 16 years and over, who had not yet commenced orthognathic

treatment. Exclusion criteria were patients under the age of 16 years; patients with congenital craniofacial anomalies—eg, due to craniofacial syndromes or clefts of the lip or the palate; patients with acquired facial defects—eg, trauma; and patients who had previously received orthognathic treatment.

Purposive sampling, a common method of sampling in qualitative research, was used in this study, whereby participants were selected to represent key characteristics that enable the researcher to explore and understand the theories and topics under scrutiny. Four subcategories were chosen to reflect the influence of age, sex, ethnicity, and type of deformity, and to ensure that a representative sample was obtained. A minimum of 12 subjects was needed to capture a range of views, as can be seen from the sampling frame ([Table II](#)).

Data were collected by using semistructured in-depth interviews that were carried out by a trained researcher (F.S.R.), who is widely experienced in conducting qualitative research. A topic guide was used to focus the interviews and ensure that key topics were explored; however, the interviews were exploratory, and the interviewer was free to deviate from the guide if deemed necessary. All topics under investigation were probed fully until the interviewer was satisfied that the perspective of the interviewee was captured in detail. Each interview was digitally recorded and transcribed verbatim on completion, and the transcripts were coded to protect confidentiality.

Analysis of the data

Many different types of qualitative analysis exist, but the approach that was most appropriate to this research was what is commonly called the framework method developed by the National Centre for Social Research.⁴³ Recently, a distinction has been made between the data management phase, termed the "framework," and the analysis stage, which is now called "critical qualitative theory" and is a form of thematic analysis. The data from the transcripts were summarized into a framework in an Excel spreadsheet (Microsoft, Redmond, Wash) subdivided into main themes and subthemes. Thus, the critical qualitative theory method uses the framework as the primary resource for the analysis and not the original transcripts, and the data are arranged in a systematic way that is grounded in the accounts of the participants and yet oriented to the particular research objectives. This allowed the researcher to maintain an overall perspective of all patients together.

After this, a descriptive, or thematic, analysis was carried out that involved examining what was being said. This included summarizing phenomena by examining the data in a theme and looking across all subjects to

Table I. Approaches used in qualitative research⁴⁴

Researcher	Design	Methods	Analysis and output
Studies the phenomenon from the perspective of those being studied	Is flexible and adaptive	Are flexible and sensitive to the situation	Answer questions such as what, why, how
Adopts a holistic approach	Is conducted in a real-world setting rather than in an experimental surrounding	Involve close contact between the researcher and those being studied	Are often complex
Maintains “empathic neutrality” and uses personal insight while sustaining a nonjudgmental position		Involve methods such as interviewing and observation	Identify theories arising from data rather than from a priori hypothesis
			Explain phenomena both within a subject and across subjects

Table II. Sampling frame for in-depth interviews

	Men	Women
Age group		
16-25 years	At least 4	At least 4
25+ years	At least 2	At least 2
Ethnicity		
BME	At least 2	At least 2
Type of deformity		
Class II	At least 3	At least 3
Class III	At least 3	At least 3
Total	6	6

BME, Black and minority ethnic.

Table III. Details of patients interviewed

	Men	Women
Age group		
16-25 years	4	7
25+ years	5	2
Ethnicity		
BME	4	2
Malocclusion type		
Class II	3	4
Class III	3	5
Total	9	9

BME, Black and minority ethnic.

identify the ranges of views, perceptions, feelings, and behaviors. The next stage was categorization; the researcher began to interpret the data and apply more abstract categories to distil the key dimensions. The subsequent stage was classification, which involved conceptualizing the categories, whereby the categories became more summative, abstract, and theoretical in their descriptions.

Finally, the associative analysis was conducted. It involved detecting patterns of association between phenomena observed, developing explanations, and seeking wider applications and generalizations. This involved looking across the whole data set, both within and between patients, for links between different concepts and building theories about why these links existed.⁴⁴

The qualitative analysis was carried out by 2 researchers (F.S.R. and M.B.); one was a clinician experienced in qualitative analysis, and the other was a senior social researcher who was instrumental in developing and conducting this type of analysis.

RESULTS

Eighteen patients (9 male, 9 female) were approached and consented to being interviewed (Table III).

The findings from the interviews could be divided into 2 main themes: the impact of the dentofacial deformity and the motivation for treatment, with related subthemes (Table IV).

The subjects first became aware of the dentofacial deformity in a variety of ways. There was a general awareness of a problem with the teeth or face, but many subjects were not aware what the problem was attributed to specifically. A number of people had noticed a problem with their teeth but were unaware of the underlying skeletal discrepancy and what the actual problem was until a professional pointed it out to them. Whereas for some, a professional diagnosis simply raised their awareness of the defect, but, for others, it led to a “fixation” on the defect (patients 8-10 and 13).

“It bothers me because once you know about it you can’t help noticing it (patient 13).”

“I just thought there was something about my face . . . and I thought it was my nose . . . and then they told me that my lower jaw was growing too far forward. I then . . . realized hang on, no my nose is fine, it’s my lower, it’s this part of my mouth I don’t like, and it just became a kind of fixation (patient 8).”

Table IV. Main themes and subthemes from the interviews

<i>Impact of dentofacial deformity</i>	<i>Motivation for treatment</i>
Initial awareness of problem	Trigger for treatment now
Nature of the problem	Reason for wanting treatment (motivation)
Impact on interpersonal relationships (childhood and adult)	Source of motivation
Impact on employment	
Impact on confidence	
How the problem makes them feel	
Coping strategies	

The nature of the dentofacial problem was closely linked to, and usually the same as, the impact of the problem but is discussed separately as the primary physical cause of the subsequent impacts of dentofacial deformity. The nature of the problem was divided into an exclusively practical problem, an exclusively psychological problem, and a combination.

The practical problem manifested itself in 2 ways: a functional or a structural problem. Functional problems included problems with eating, speech, or other activities. Examples of problems with eating included tiredness when eating (patient 3); only being able to bite with certain teeth (patient 5); not being able to eat the foods wanted or the way the subject liked (patient 15); and eating took a long time and was messy, with spitting and making noise when eating (patients 5 and 13). Problems with speech ranged from not pronouncing certain letters clearly, to lisping when speaking or having a major problem with articulation (patient 13). Other functional problems included not being able to bite clear adhesive tape with the front teeth (patient 5), the tongue getting trapped between the teeth (patient 8), biting the inside of the cheeks (patient 14), and the lower lip getting trapped under the top teeth (patient 17).

Practical structural problems involved people being objectively aware of the physical condition and where the problem was (eg, a vertical gap between the front teeth or the mandible longer than the maxilla). In these subjects, the awareness of the defect and the "ideal" dental and facial appearance were purely objective; they acknowledged the problem as a physical one only (patients 12, 13, and 16), without any apparent psychological consequences.

"I had kids making fun of that (my teeth), I also had kids making fun of my cast arm, I also had kids making fun of my haircuts that my mum used to make me have and to be honest, it never really bothered me because, I never let that sort of thing bother me. I'm more

worried about the impact it's going to have on my eating habits than anything else (patient 13)."

A dentofacial deformity or a malocclusion presented a psychological problem for many. Traditionally, this has been termed psychosocial to encompass the "interrelation of social factors and individual thought and behaviour."⁴⁵ Although a dentofacial deformity has psychosocial impacts, it also has psychological impacts that do not directly relate to the social environment: eg, a feeling of victimization or hopelessness when seeing the reflection in the mirror independently of negative reactions from others.

"Sometimes I get so emotional and just sit down and look at in the mirror and I'm like what's going on, what happened to me (patient 3)."

In many subjects, there was a combination of both practical and psychological problems as a result of the dentofacial deformity.

The impact of living with a dentofacial deformity or malocclusion followed from the nature of the problem and was often synonymous. The effects on everyday life were divided into impacts on interpersonal relationships, impacts on employment, and psychological impacts.

With regard to interpersonal relationships, the defect had effects on both new and existing relationships. On the extreme end of the spectrum, some patients avoided meeting new people completely and, as children, had avoided making friends, using avoidance tactics such as staying in the library during breaks (patient 11). As adults, they avoided socializing and had not made friends (patient 7). There were senses of paranoia (patient 18) and insecurity (patients 8 and 14), and feeling defensive (patient 1) because of concerns that others were making judgments based on their appearance. Some were bullied as children because of their appearance (patients 11 and 14). Problems forming intimate relationships were also described (patients 9 and 14). Some participants had been teased by siblings in childhood (patients 4, 6, and 18), and this had led to problems with interfamily relationships when they took their frustrations out on those close to them or put up barriers such as avoiding family gatherings (patients 6, 7, 14, and 18).

Negative impacts on employment were described: lack of self-confidence, low self-esteem, and fear of rejection kept people from applying for the jobs they wanted.

"I'm not achieving what I should be, and that's one of the reasons, I don't like public standing up and doing

public speaking, I find it difficult to voice my opinions in groups (patient 14).”

Others controlled their working environments to minimize contact with others.

“I avoid face-to-face communication with people. I always had a very good salaried paid job, but I moved out from it because I was very uncomfortable . . . there, so now I do work in the warehouse, so I’m always at the back (patient 7).”

There was a sense, and in some cases experience, of being discriminated against due to the visible defect, with adverse impacts on career progression.

“When I’m in an interview say and there’s two girls and me . . . they’re not gonna choose me because of my look. I was gonna be a like presenter and they like said you struggle with your talking and your look doesn’t look on the um on the camera basically very good so they got someone else . . . that was so horrible (patient 3).”

The psychological impacts were wide ranging, with effects on self-image, image projection, and self-confidence, and feelings of victimization. There was anxiety that other people would judge them based on their face or teeth, and people worried that they were not projecting an accurate image of themselves and their personality as a result. Others felt vulnerable and exposed, and that they could not stop people for focusing on their flaw; there was a general sense of wanting to look “normal” and not stand out in a crowd (patients 1, 9, and 13).

“They (people) look at this part of your face when you’re speaking, it’s the most visible and apparent part of you. Sometimes I would actually like to stick a balaclava on or something like that so just my eyes were visible, then I could talk to people without being conscious of it. I’m much happier talking to people on the phone, I don’t particularly like face-to-face contact with people, and your mouth is the . . . I mean, your face, it’s the focus for people isn’t it (patient 1).”

As expected, a dentofacial deformity had negative effects on self-confidence and self-image. This affected people internally (negative self-image) and in social situations, with both new people and existing acquaintances and family. Negative self-image ranged from mild dislike of the appearance of the teeth and face to a sense of self-loathing, with people using expressions such as “deformed,” “freak,” and “damaged inside.” There was a sense of having something wrong with them. In some subjects, the impacts on self-confidence were so strong that they caused a low mood and even depression (patients 6, 7, and 14).

Those who had concerns regarding their teeth and bite alone tended not to have significant impacts on their self-confidence. This was especially true of those whose reasons for treatment were purely functional. These patients mentioned feelings of embarrassment but did not relate the problem to their self-image or confidence (patients 12, 13, and 15). Those whose primary concern was their facial appearance experienced more impacts on self-confidence and self-image.

There was a feeling of victimization, “why me,” of being singled out and punished unfairly, and not knowing why. Some expressed feeling let down and looked down on as a result (patient 6). There was a general feeling that life was more difficult and might have turned out differently if they had not been affected in this way, that they had an additional hurdle to jump or a “millstone” around their neck (patient 14). Those who expressed these feelings tended to have the strongest impacts on their day-to-day lives as a result of their defect.

Two types of coping mechanism were described. Avoidance coping behavior involved avoiding seeing or thinking about the defect, and also preventing others from seeing it. Patterns of behavior included not going out (patient 2), not socializing, not eating in front of people (patient 14), not having photographs taken (patient 14), not smiling (patient 4), not thinking about the problem, not allowing friends or family to discuss it, and not looking in the mirror (patient 6).

An altered coping strategy involved carrying out their normal day-to-day activities but modifying their behavior to minimize the impact of their condition. There was a huge range of altered behaviors that included covering the mouth to hide the teeth, not biting together to hide the bite (patients 4 and 10), not posing for photos straight on (patient 9), keeping the mouth open (patient 17), retracting the jaw (patient 14), mirror checking with posing on their best side to reassure themselves, putting the tongue under the top lip so it looked fuller (patient 14), moving or blinking during photographs so the photo would be ruined and not be put in the album, posturing the jaw forward (patient 11), and positioning strategies so that people were unable to view them in profile (patient 3). These were often described as subconscious and had become part of a learned habit.

There were 4 main triggers for patients to seek orthognathic treatment at a particular time.

1. Eligibility: people came for treatment at varying ages, and many were still growing; therefore, the trigger for treatment at this point was that they had stopped growing and were now suitable for treatment.

2. Availability: for a variety of reasons, people had become aware that this treatment was available and an option for them; some had heard about it from friends or relatives, and others were told by their dentist or orthodontist.

“From the moment I heard about it, there was some sort of a light bulb went on up there and I just was happy. It’s, like, you know, you having some sort of illness and finding there’s a cure for it, so that’s the kind of thing. I never knew there was a cure for it, so I was really, really happy about it (patient 13).”

3. Incident or experience: a particular encounter, experience, or event acted as the trigger for seeking treatment.

“A failed relationship (was a trigger for seeking treatment), and I thought the reasons for it were to do with my self-esteem and my behavior related to this, and I thought I ought to do something about it (patient 14).”

4. Climax in the effects of the problem: the problem that had been observed for a variable length of time was now becoming critical.

“My facial expression changed in a way because I’m not sure if my lower jaw recessed or what it was but I did notice a massive difference . . . between the lower jaw and the top jaw was a wake-up call (patient 13).”

The same classifications used for the range of impacts could be applied to the motivating factors: exclusively practical motivation (including functional and structural), exclusively psychological motivation (including psychosocial and esthetic), and a combination. Often a person’s motivation was simply to address the problems that the deformity was directly causing, but, for others, the real motivation was to bring about other secondary changes in their lives, such as having more confidence and being able to get on with life without having to worry about the problem.

“I don’t like where I’m going at the moment, and that’s why I’m doing something about it, because I want my life to change, because I want to be out there, I want to be with the outside crowd, I want to go out, I want to talk to people, I want to be friendly with my colleagues and everyone. That’s everything that I want to and, at the moment, the only thing that’s stopping me from doing so is just my teeth (patient 7).”

This research supports the traditional classifications of external and internal motivation but suggests that the 2 categories form a continuum, with purely external motivation at 1 end and purely internal motivation at

the other, rather than distinct and separate factors. Motivation is also inextricably linked to the nature and the impact of the problem. For example, 1 subject whose motivation registered on the internal end of the spectrum had become increasingly aware that he was only biting on his back teeth and had always had problems eating certain foods. He wanted the treatment so that he could enjoy food.

“Once it starts interfering with my eating habits which I take religiously, I’m very serious about my, I love to eat, I eat a lot, I’m known for that and you know anything that would have an impact on that will annoy me (patient 13).”

Another subject, whose motivation for treatment was purely external, had been told by a senior colleague that she needed to have the treatment for career progression and admitted, if she had not been told, that she probably would not have had the treatment.

DISCUSSION

Clinical reasoning is based, not just on experimental evidence, but also on a subjective evaluation by the clinician that is formulated via interpretive interaction, communication, empathy, and experience.⁴² Just because these intangible concepts, which lead to clinical decisions, cannot always be defined according to biomedical variables and statistics does not mean that they should not be studied and measured in other ways; they are every bit as important as the results of controlled clinical trials. The duty of the clinician is 2-fold: to understand the disease and to understand the patient. The latter can best be achieved with qualitative research methods.⁴⁶ Qualitative research is increasingly recognized as contributing to evidence-based medicine; however, despite calls for more qualitative research to be conducted and published, it has not materialized.^{42,47,48}

Unfortunately, qualitative studies are even less common in dentistry. In a systematic literature search of qualitative dental research, we found only 49 articles published between 1999 and 2006. The authors of 1 study concluded that qualitative methodology is underused in oral-health research.⁴⁹ A PubMed search of the terms *orthodontic** and *qualitative* yielded only 31 articles published between 1969 and June 2011. The majority related to dental public health, facial deformity, and cleft lip and palate, and were mixed methods or questionnaire-based studies and not pure qualitative research. Thus, the paucity of qualitative research in this field needs to be addressed.⁵⁰⁻⁵²

Evidence from well-conducted experimental trials answers part of the puzzle of how best to treat our

patients. The remaining enigmas can only be answered with rigorous qualitative research methods. Even though this is widely accepted, there is a paucity of well-conducted qualitative research; without this, clinicians cannot carry out the best evidence-based practice.

There is a wide range of techniques and methods for carrying out qualitative research. When deciding on the most appropriate technique for exploring impact and motivation in this study, we considered using grounded theory or interpretive phenomenologic analysis as we and others had used previously and in other qualitative studies in dentistry or the cleft and craniofacial services.⁵³⁻⁵⁹ However, a review of the literature and advice from experts in social research and psychology suggested that critical qualitative theory, by using the framework approach, was more suitable to answering the research question. This was due to the nature of the research and the in-depth understanding that was required within the time and resource constraints. In addition, the aim of this research was to provide findings that would be generalizable and could be applied to similar cohorts of patients. Thus, a form of analysis was needed that was transparent and rigorous, carried out in as neutral and unbiased a manner as possible, with findings that were accessible and defensible and able to support wider inferences.^{43,60} In addition, this technique is being used increasingly in dentistry.⁶¹⁻⁶³

Interviews were the tool used to collect the data, since observation or focus groups were thought to be inappropriate for exploring these potentially sensitive topics, and we could not explore in depth the patients' individual experiences.

The sample of 18 subjects might be considered relatively small; this limits the criteria used to capture a range of experiences and might have an impact on the generalizability of the findings. Nevertheless, diversity was achieved against the criteria established a priori in the sample frame used. These were considered the most important criteria for this area of study; therefore, the research is likely to give a good indication of the diversity in the population of patients seeking treatment for this condition.

Traditionally, the impacts of living with a dentofacial deformity and the motivation for treatment have been divided into 3 main categories: esthetic, functional, and psychosocial.⁶⁴ However, this research revealed a subtly different distinction, and impacts were divided into an exclusively practical problem (including functional or structural), an exclusively psychological problem (including psychosocial and esthetic), or a combination of them.

This categorization is a refinement of the traditional one, since esthetic impacts can be purely practical

because of the structural defect or have profoundly psychological ramifications, and the same can be said of functional impacts. Whereas it is accepted that the psychosocial impacts of dentofacial deformity are far-reaching, other psychological impacts do not involve social interactions, hence the decision to call the impacts psychological instead of psychosocial.

The evidence indicates that a dentofacial deformity can have a significant impact on a person's life, and this might not solely be related to the defect itself but reflect the person's past experiences, psychological constitution, and personality. As a result, the degree of impact is not necessarily proportional to the extent of the deformity. Therefore, the impact of the problem might be more complex than is immediately obvious to the clinician.

The range of motivation for treatment could also be classified according to the same categories: exclusively practical, exclusively psychological, or a combination. The source of motivation for treatment has been reported to be an important factor in predicting satisfaction with outcomes; therefore, it was thought to be important to explore the full range and source of motivating factors, and the triggers for actually proceeding with treatment.^{22,36,65,66} Traditionally, the source of motivation has been categorized as either external or internal: internal motivation stems from a long-standing concern with the physical defect and a commitment to treatment to correct it, and external motivation arises from a desire to please others, to either have the treatment due to pressure from others or make a change in the external environment (eg, a better job or a new relationship).³⁶ Our research supports this classification, but we found that, rather than distinct categories, the source of motivation was a spectrum, with purely externally motivated patients at 1 end and those who were purely internally motivated at the other, but most were somewhere in between.

A recurring theme from the interviews when discussing the impact of the problem was the range of coping strategies. All participants had adopted coping strategies to help them deal with their problems, and these could be categorized as either avoidance behavior or altered behavior. Avoidance behavior involved completely avoiding any situation that might highlight the defect. Altered behavior involved carrying out normal day-to-day activities but altering situations to minimize the emphasis on the defect. A trend was noticed, but not conclusively proven from the data, that the greater the impact of the problem on people's lives, the more likely they were to adopt avoidance strategies rather than altered behavior. This has not been previously reported.

CONCLUSIONS

Understanding orthognathic patients' experiences and motivations through robust qualitative methodology might be a key to improving satisfaction rates. The range of impacts of dentofacial deformity and the motivation for treatment can be classified as either exclusively practical (including functional and structural), exclusively psychological (including psychosocial and esthetic), or a combination of the two. It is likely that a few patients are at either extreme of this spectrum, but most will be positioned somewhere between the 2 ends.

The range of motivating factors, together with the triggers for accessing treatment and the source of motivation, is generally linked to the impact of the condition, either directly or indirectly. However, in a few patients, the motivation might not relate to the impact of the problem but to a complex array of other factors such as personality, upbringing, and relationships. Therefore, clinicians should not make assumptions but explore these factors without preconceived ideas.

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