

SAUDI DENTAL PATIENTS ATTITUDE TOWARDS ESTHETIC DENTAL TREATMENT AT KSU, COLLEGE OF DENTISTRY, RIYADH

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ABSTRACT

The aim of this study was to assess the attitudes of Saudi patients, treated at the Dental College of King Saud University, towards their appearance and esthetic dental treatment. Data were collected by means of self-administered questionnaire. Patients were asked questions to measure their satisfaction with appearance, and to ascertain their attitude towards the current esthetic dental treatment they received. Statistical analysis of the data showed that the study sample indicated a high level of dissatisfaction with their appearance; also, they indicated that they are willing to invest more time and money in order to reach to esthetic satisfaction. One may conclude more need for the practice of esthetic dentistry in the society.

Keywords: Esthetic dentistry, appearance, attitude, satisfaction, patient

INTRODUCTION

Appearance and esthetics are matter of individual interpretation and preference. Several studies have indicated the effect of attractiveness on interpersonal relationships among preschoolers¹, school aged children² and adults³.

The importance of dentofacial attractiveness to psychosocial well being on an individual has been well documented⁴⁻⁶. Enhancement of facial beauty is one of the primary elective goals of patients seeking dental care⁷. Esthetic is a judgmental commodity, in many instances the ability of dentists to communicate and visualize the potential results of an esthetic procedure is essential. The dentist learns concepts of perception and tries to achieve the patient's desires for an esthetic appearance. Willard et al⁸ found that 28% of their population wanted to actively participate in decisions regarding their treatment. This is important for minimizing dissatisfaction resulting from unrecognized expectations. Rosental et al⁹ discovered that the greatest degree of satisfaction occurred when the dentist considered the patients feeling as the most important guide in denture esthetics.¹⁰

In the past decade, technological advances have provided dentists with increasing capability to restore and modify dental esthetic appearance. Although there is considerable research on technical aspects of esthetic procedures, little studies investigated patient's perception of esthetic treatments.

The aim of present study was to assess the attitudes of Saudi patients towards current esthetic dentistry treatment carried out at King Saud University (KSU), College of Dentistry, Riyadh.

MATERIALS AND METHODS

This study was conducted on patients attending clinics in College of Dentistry, KSU during three-months period. Patients whose chief reason for seeking care involved pain or a dental emergency were excluded from the study. To participate in the study, subjects had to be able to read and write Arabic.

To ascertain patient's satisfaction towards current esthetic dental treatment, a questionnaire was developed and pre-tested for use. Data were collected by means of a self-administered patient questionnaire (Figure 1).

Three hundred questionnaire forms were distributed among patients in the waiting area in the clinics. After a brief explanation of the study, patients were asked to complete a short written questionnaire. No clinical examination was conducted.

Data were entered into and analyzed by the statistical package SPSS version 10. The variables predominantly categorical were analyzed with frequency table analysis. Statistical significance was assessed by using Fischer's exact test. Size $\alpha=0.05$ test were conducted for statistical significance.

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Figure 1. The questionnaire used in the study

<p>1. Personal data Age: _____ Sex: _____</p> <p>2. Do you often smile? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>3. If the answer was NO, why? <input type="checkbox"/> I do not like to smile <input type="checkbox"/> My ugly teeth <input type="checkbox"/> Bad color of my teeth</p> <p>4. How do you like to change your smile? <input type="checkbox"/> Teeth color <input type="checkbox"/> Teeth position <input type="checkbox"/> Less showing gum <input type="checkbox"/> Lip fullness <input type="checkbox"/> Change distance between the jaws and the nose</p> <p>5. What was the recent dental treatment you received? <input type="checkbox"/> Build-up <input type="checkbox"/> Esthetic crowns <input type="checkbox"/> Orthodontics <input type="checkbox"/> Composite resin restorations <input type="checkbox"/> Esthetic bridges <input type="checkbox"/> Removal denture <input type="checkbox"/> Teeth bleaching</p> <p>6. Rank your satisfaction with the treatment procedure, time and cost</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; border-bottom: 1px solid black; text-align: center;">Treatment procedure</td> <td style="width: 33%;"></td> <td style="width: 33%;"></td> </tr> <tr> <td style="text-align: center;">Fully satisfied</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">1 2 3</td> <td></td> <td></td> </tr> <tr> <td style="border-bottom: 1px solid black; text-align: center;">Treatment time was</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">Shorttime</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">1 2 3</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">Cost was</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">Reasonable</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">1 2 3</td> <td></td> <td></td> </tr> <tr> <td style="border-bottom: 1px solid black; text-align: center;">Time and cost are</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">Time more important than cost</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">1 2 3</td> <td></td> <td></td> </tr> </table>	Treatment procedure			Fully satisfied			1 2 3			Treatment time was			Shorttime			1 2 3			Cost was			Reasonable			1 2 3			Time and cost are			Time more important than cost			1 2 3			<p>7. When you decided to treat your teeth did you do the following:</p> <p>— Discussed the treatment plan with my dentist. <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>— Discussed the alternative treatment plan with my dentist. <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>8. Did your dentist forecast the life expectancy of your esthetic treatment? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>9. Please, rank the important factor in seeking esthetic dental procedure. Start with no. 1 as the most important. <input type="checkbox"/> Appearance <input type="checkbox"/> Dental health <input type="checkbox"/> Durability</p> <p>10. Please, rank the following factors influencing dentist selection. Start with no. 1 as the most important. <input type="checkbox"/> Quality of treatment <input type="checkbox"/> Dentist personality <input type="checkbox"/> Cost of treatment <input type="checkbox"/> Dental practice - location <input type="checkbox"/> Dental practice - atmosphere</p>
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RESULTS

Questionnaires were distributed to 300 patients in the clinics in the College of Dentistry, KSU. One hundred and seventy six questionnaires were returned with a response rate of 65%.

The subjects ranged in age from 18 to 61 years-old with an average of 29 years. Fifty-seven percent of the samples were female and forty-three percent of the subjects were male.

As a mean of measuring dental satisfaction with appearance, subjects were asked "do you smile often?" and "would you like to change your smile?".

For the first question, 64% of subjects responded affirmatively while 36% responded negatively. Among those subjects who responded negatively, "ugly teeth" was the main reason for not smiling (52%), followed by "tooth color" (16%).

For the question of how they would like to change their smile, 82% of the subjects in the sample indicated a desire to alter their appearance when smiling, with 86% of these subjects demanding or interested in some change in their teeth (Table 1).

Responses to dental satisfaction with appearance were analyzed according to gender and age. In Table 2, results indicated that proportionally fewer females were dissatisfied ($p < 0.001$). In investigating the effect of age in relation to satisfaction no statistical significance was found.

Regarding their recent previous treatment to anterior teeth, 86% of the subjects in the study had previous treatment. Table 3 showed the various type of treatment recently provided to the subjects. Subjects answered a series of questions rating their opinions about their recent treatment procedure, time, and cost involved on a seven-point scale. The fre-

TABLE 1. NUMBER AND PERCENTAGE OF RESPONDENTS REQUESTING CHANGES TO ALTER THEIR APPEARANCE WHEN SMILING

Changes Requested	Number (%)
Teeth color	79(49%)
Teeth position	60(37%)
Less gum	14(9%)
Distance jaw/nose	5(3%)
Lips	3(2%)

quency distribution showed that the maximum rate of satisfaction was among patients who have had teeth whitening or bridge treated (100%), and the minimum rate of satisfaction was among denture-treated patients.

Same patterns were found when patients rated time and cost involved in treatment procedures. Patients who had denture-treated procedures stated that time and cost, respectively were unreasonable.

When asked whether time or cost was more important, 52% of the subjects stated that the two are equally important, 22% considered time more important, and 16% assigned greater value to cost. However, when asked of which they would be willing to invest more to achieve a better result in treatment, 8% said costs, 32% said time, and 60% said both.

In selecting their esthetic dental procedure, 67% of the subjects discussed the procedure with their dentist, but only 37% of the subjects discussed alternative procedures.

From the 176 respondents to the question of whether the dentist forecast the life expectancy of esthetic treatment, only 25% of subjects stated "yes".

Subjects were asked to rank several factors in the selection of a dental procedure, with a rank of 1 indicating the most important. Table 4 showed the factors and their mean ranks.

Finally, subjects were asked to rank in order of importance factors involved in selecting a dentist, a rank of 1 indicated most important. The factors and their mean ranks are shown in Table 5. Results indicated that the quality of treatment was ranked number 1 by the subjects, followed by personality of dentist, then cost of treatment.

DISCUSSION

The subjects selected for this study were a convenient sample of a university's dental hospital popula-

TABLE 2. DENTAL APPEARANCE SATISFACTION AMONG SUBJECTS BY GENDER

	Satisfaction		TOTAL
	Yes	No	
Male	43	41	84
Female	84	28	112
Total	127	69	196

p < 0.001

TABLE 3. PERCENTAGE OF VARIOUS TYPES OF RECENT ESTHETIC TREATMENT TO ANTERIOR TEETH AMONG SUBJECTS

Type of Treatment	Number (%)
Composite resin	93(55%)
Build up	27(16%)
Crowning	17(10%)
Whitening	12(7%)
Bridge	10(6%)
Ortho	5(3%)
Denal10es	5(3%)

tion, they may differ from other groups in socioeconomic status, in motivation for seeking dental care, and quality and extent of previous care.

The results of this study showed that approximately two third of subjects are dissatisfied with the Lancaster¹²ce. These results seem to be in agreement with the results of the study of Newmann et al where they studied personal esthetic satisfaction and oral self-image among adults. Of the subjects studied, 66% expressed some level of dissatisfaction with their appearance. However, the level of dissatisfaction reported by Goldstein¹¹ and Goldstein and Lancaster¹² was lower than the rate reported in this study. Goldstein and Lancaster¹² reported that 34% allocated dissatisfaction with their dental appearance. This difference may be explained by the different groups and methods used in the study.

Satisfaction with appearance was strongly influenced by gender in this study. Male subjects were more dissatisfied with their dental appearance. This finding is in disagreement with other studies. In Neumann et al, males tended to be less concerned with appearance of their teeth even when observable esthetics defects are present, while in Stenvik et al,¹³ no difference in the level of satisfaction between males and females were found.

Subjects were asked to rank several factors in the selection of a dental procedure. The result of this study is in agreement with Goldstein and Lancaster¹², where dental appearance was ranked as the most important factors. These results indicate that concerns about appearance and self-image were more important to the patient than health concerns. Given the long-standing psychologic findings that attractive persons are considered more qualified and receive generally better treatment than their unattractive peers', an attractive dental appearance may be held as an essential quality for greater success in life. Therefore, it is especially important that each dentist be

TABLE 4. MEAN RANKING OF FACTORS IN SEEKING DENTAL TREATMENT

Factors	Mean Ranking
Appearance	1.54
Dental Health	1.66
Durability	2.78

TABLE 5. MEAN RANK OF FACTORS
INFLUENCING IN DENTIST SELECTION

Factors	Mean Rank
Quality of treatment	1.38
Dentist personality	2.86
Cost of treatment	2.90
Dental practice location	3.86
Dental practice atmosphere	3.96

aware of the psychologic as well as the physiologic needs of each patient.

Patients in this study, indicated willingness to invest more money, time, or both to improve the result of their treatment. This result may indicate a departure from the consensus that patients always want "permanent" treatment with minimal cost as possible.

Because 82% of the subjects in the sample indicated a desire to alter their appearance when smiling, with 86% of these subjects wanting some change in their teeth, there is clearly a need for the practice of esthetic dentistry. This need is shown by the importance attached to appearance by subjects in the study. Supporting this, utilizing a nationwide stratified, multistage, probability sample of 1862 persons, 20 years of age or older, Linn¹⁴ found that in response to question regarding the importance of dental appearance in certain social situations, the majority of this sample rated dental appearance as "very important". Furthermore, Grogono et al¹⁵ indicated in their study of patients receiving osseointegrated implants that 44% hoped for improved self-confidence and 30% for improved appearance. It appears, therefore, that many people seek treatment for a mixture of social and psychological reasons, with the primary motivation being the need for acceptable dento-facial appearance.

Regarding selecting a dentist, results clearly indicated that patients considered factors pertaining to treatment as the most important followed by dentist personality. The dentist learns concept of perception and tries to achieve the patient's desires for an esthetic appearance. Unfortunately, dentists may develop concepts of an esthetic appearance that differ from patients¹⁶ or not to possess a sufficient degree of sensitivity to patients' needs for esthetics¹¹⁻¹⁷. In this study, 67% of the subjects discussed procedure with their dentist compare to 96% in Goldstein and Lancaster¹². This can create communication problems and unanticipated difficulties. Therefore, good communication in the dentist/patient relationship is important in analyzing and planning esthetic treatment according to individual needs and desires.

CONCLUSIONS AND RECOMMENDATIONS

On the basis of these results one may conclude that relatively high level of dissatisfaction with appearance among study sample indicated the need for

the practice of esthetic dentistry in the society, and in relation to esthetic dental appearance, patients are willing to invest more time and money.

As mentioned in the discussion, the study as a convenient one may not be a representative of the patient's population seeking esthetic dentistry and in view of this, further study should be conducted on a larger sample and one representative of the socioeconomic status of the population and the various health care providers sector of the population.

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