

# Pre-treatment denture patient expectations in a university clinic

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## ABSTRACT

**Background:** It has been indicated that expectation of patients can greatly influence the result of treatment. Many prosthetic failures result not from technical difficulties but of mismatch between patient expectation for prosthesis and the dentist's goal for the same treatment.

**Materials and methods:** One hundred patients were selected with an average age of 58.4 ranges of 30-78 years. Patients were interviewed to answer a questionnaire related to patient's expectation measurement. This was justified through statements related to fit, function, comfort, esthetics, and general expectations.

**RESULTS:** It was found that many patients did not expect dentures to look just like or having better appearance than natural teeth. Others however reported high expectation in relation to fit and function.

**Conclusion:** Most patients gave realistic expectations concerning the items of comfort, esthetics and general expectations compared with having no teeth and with natural teeth. They showed high expectations however in response to function and fit. They believed that dentures should fit perfectly and not move and that they should be able to eat and chew as well with dentures as with natural teeth.

**Key words:** Expectation, function, realistic, comfort. (J Bagh Coll Dentistry 2006; 18(1) 33-37)

## INTRODUCTION

Many patients do not know what to expect from dentures. They often expect the artificial teeth to be comparable in form and function to the natural dentition<sup>(1)</sup>. It has been indicated that expectation of patients can greatly influence the result of treatment in both medicine and dentistry<sup>(2,3)</sup>. Many prosthetic failures result not from technical difficulties but of mismatch between patient expectation for prosthesis and the dentist's aim for the same treatment.

Davis et al reported that patient's expectations of dentures before treatment were unrealistically high and that informational videotapes presentations did not significantly alter these expectations<sup>(4)</sup>.

Patient's expectations can also be affected by social and psychological influences. Moulton<sup>(5)</sup> related complete denture problems also to the emotional state of the wearer. Bolender et al<sup>(6)</sup> showed a connection between emotional problems and denture problems. Complete dentures must not be constructed if the patient is under extreme physical or mental stress<sup>(7)</sup>. It is important that a summary of the findings determined during examination should be presented to the patient in a simple language so that the chance of misunderstanding by the patient will be minimal<sup>(8)</sup>.

Expectations may be influenced by family experience, friends and those who are completely dependent on the judgment of their dentist. Careful explanation of prosthodontic objectives and procedures could be the basis for proper communication with the patients<sup>(9)</sup>. The dentist must explore the patient's history and denture experience and listen with care to the comments and complaint of the patient in order to build proper trust and confidence<sup>(10)</sup>.

The aim of this study was to determine patient's expectations in relation to complete denture treatment before the commencement of denture construction, and to study its relation to patient's demographic status and denture experience.

## MATERIALS AND METHODS

For this study, 100 patients were selected from those assigned to fourth year prosthodontic clinic at College of Dentistry, University of Baghdad. A questionnaire that was developed at SUNY at Buffalo to measure patient's expectations has been simplified and adapted to our patient's needs and understanding<sup>(11)</sup>.

The questionnaire included social demographic information such as age, educational level, occupation and past denture experiences. It also included questions related to patient's expectations of their dentures. This was justified through eight statements related to fit, function, comfort, appearance and general expectations. Two of these questions compared dentures with natural teeth and with no teeth.

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Two compared the appearance of dentures with that of ideal natural teeth and with patients own natural teeth. The remaining items concerned fit, ability to eat and chew, ability to speak and appearance of dentures compared with natural teeth.

The Questionnaires were explained to all patients at the initial visit. Due to the fact that many of those patients were illiterate, the questionnaires were not submitted to them directly but were explained thoroughly and asked by the authors personally in an interview and the answers were recorded.

## RESULTS

A total of 100 patients participated in this study, 69 males and 31 females with average age of 58.4 ranging from 30–78 years. The demographic and denture experience information are listed in table 1 and 2.

Most patients (56%) had no previous denture experience, while the rest (44%) had worn dentures for an average of 6 years. Almost two third of those patients (33%) had only one set, 18% had two or more previous dentures and 5 had maxillary dentures only. The most common reason for seeking treatment was functional i.e eating, chewing and speaking 26%, followed by a combination of both function and appearance 24%, poor fit 18%, comfort 4% and appearance and others 10% .

The most frequently mentioned request for improving their new dentures were poor fit 25%; function and appearance 8%, others 6%. Six patients were satisfied with their current dentures and the only reason for having a new set was the breakage of the dentures or the teeth.

The patient's expectation data before the denture construction treatment is presented in table 3. A high realistic or low expectation label was assigned to each item option on the bases of the most frequently occurring response to that option. The results in table 4 present the percentage of patients responding in each of the three categories (low, realistic and high). Concerning the item no. 1, 2, 7, 8 patients gave realistic opinions. They indicated that having dentures should be much better than having no teeth but some how worse than having natural teeth and those they should be able to speak with dentures as with natural teeth. They thought that dentures can not exactly look like natural teeth. On the other hand, many patients

were not very optimistic in the way that their dentures will appear compared with ideal natural teeth and with their own teeth.

Most patients showed high expectation in response to the two function items. They believed that dentures should fit perfectly and not move and that they should be able to eat and chew as well with dentures as with natural teeth. As it can be noted from table 2, a large number of the patients were experienced denture wearers with an average of 6 years denture experience. Most of them were not satisfied with their dentures for one reason or another. Only six patients were satisfied and the reason for seeking new dentures were fracture of the old dentures. The experience of those satisfied patients did not however change their expectation toward the new dentures.

## DISCUSSION

Fortunately as it can be noted, many patients did not expect dentures to look just like or having better appearance than natural teeth. While this may be a minor point, the fact is that a large number of the patients still believe that dentures should fit perfectly and not move. They also think that they should be able to eat and chew as well with dentures as with natural teeth. Patients rarely expect to see with an artificial eye or to have natural use of an artificial hand or leg, yet they expect the artificial denture to have the same function of the natural teeth <sup>(1)</sup>. Dentists could contribute to this mistaken belief. They must neither over simplify nor complicate the procedure to the patient. Careful instruction at the time of diagnoses and treatment planning with patience and cooperation from the patient may lead to a more realistic expectation. Patients should know that dentures are artificial subjects and have limitations.

It is very normal to feel strange with new dentures. A feeling of mouth fullness with slight change in appearance may be present. They should be reminded that dentures most commonly the lower may become dislodged during eating, chewing and even speaking. This is related to the fact that the supporting area of the lower jaw is less than the upper and that the lower denture is close to the most active muscle in the body, the tongue, which may frequently unseat the denture. All these anatomic and physiologic factors and others more must be explained thoroughly to the patients.

It is also possible that patient's expectation can be affected by social and psychological influences. Fear, anxiety and depression are examples of psychologic factors that affect adaptability <sup>(12)</sup>. For some patients the decision that the loss of natural teeth is necessary can create such an emotional turmoil that maladaptive response to subsequent dentures could result <sup>(10)</sup>. Dentist must be aware of the high risk groups of depressed patients within the patient pool in the clinic. This may help recognition of the problem and make the right referal for psychologic diagnosis and treatment <sup>(13)</sup>.

Considering all the facts and reasons mentioned and listed our student dentists and dentists in general must give time i .e generous length of time to each edentulous patient at the initial treatment visit. Patients at this appointment must be educated to accept the fact that dentures in no way can substitute natural teeth exactly, but they do however aid in providing compatibility with the oral tissues in maintaining oral function, comfort and providing socially acceptable appearance .

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**Table 1: Demographic Information (N -100)**

Gender	No.
Male	69
Female	31
Age	-----
Mean	58.4
Range	30 – 78
Education	
12 Years	16
High school graduates	16
College graduates	2
Illiterate	66
Employment Status	
Employed	22
Retired	25
Homemaker	33

**Table 2: Denture experience ( N = 100 )**

No.	Item	No.
1 -	<b>Number of years dentures worn</b>	
	<b>Mean:</b>	<b>6</b>
	<b>Range:</b>	<b>0-30</b>
2 -	<b>Number of previous sets</b>	
	<b>None</b>	<b>45</b>
	<b>One</b>	<b>33</b>
	<b>Two or three</b>	<b>18</b>
3 -	<b>Current Dentures</b>	
	<b>Complete</b>	<b>49</b>
	<b>Maxillary</b>	<b>5</b>
	<b>None</b>	<b>46</b>
4 -	<b>Reason for seeking treatment</b>	
	<b>Fit</b>	<b>18</b>
	<b>Function</b>	<b>26</b>
	<b>Comfort</b>	<b>4</b>
	<b>Appearance</b>	<b>4</b>
	<b>General</b>	<b>24</b>
	<b>Others</b>	<b>6</b>
5 -	<b>What would u like to improve in your new denture ?</b>	
	<b>Fit</b>	<b>25</b>
	<b>Function</b>	<b>8</b>
	<b>Appearance</b>	<b>8</b>
	<b>Others</b>	<b>6</b>
	<b>General</b>	<b>6</b>

**Table 3: Expert evaluation of patient expectations**

No	Option	Expectation
1	<b>In general having dentures should be much better than having no teeth</b>	R
	Like having no teeth	L
	Worse than having no teeth	L
2	<b>In general having dentures should be better than having natural teeth</b>	H
	Like having natural teeth	H
	Worse than having natural teeth	R
	Much worse than having natural teeth	
3	<b>Compared with ideal natural teeth I think dentures should appear:</b>	
	More attractive	H
	Just as attractive	R
	Less attractive	L
4	<b>Compared with the natural teeth that I had I think dentures should appear</b>	
	More attractive	H
	Just as attractive	R
	Less attractive	L
5	<b>I think that dentures should fit perfectly and not more</b>	
	Agree strongly	H
	Disagree some what	R
	Disagree strongly	L
6	<b>I think that I should be able to eat and chew as well with dentures as with natural teeth</b>	
	Agree strongly	H
	Disagree some what	R
	Disagree strongly	L
7	<b>I think that I should be able to speak as well with dentures as with natural teeth</b>	
	Agree strongly (or some what)	R
	Disagree some what (or strongly)	L
8	<b>I think that dentures should look just like natural teeth</b>	
	Agree strongly	H
	Agree some what	R
	Disagree strongly	L

H =high : R = realistic : L = Low

**Table 4: The percent of pre-treatment denture patient expectations**

No.s	Items	High	Realistic	Low	No Opinion
1	Having dentures vs. having no teeth	--	97	3	--
2	Having dentures vs. having natural teeth	30	60	8	2
3	Appearance vs. ideal natural teeth	25	29	46	--
4	Appearance vs. natural teeth	26	29	40	5
5	Dentures should fit perfectly and not move	72	23	2	3
6	Ability to eat and chew with denture vs. natural teeth	49	38	6	7
7	Ability to speak with dentures vs. natural teeth	1	72	19	8
8	Dentures should look just like natural teeth	29	37	31	3