

## Evaluation and Comparison of Complete Dentures' Complaints: Post-insertion

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### المستخلص

**الهدف:** يقارن هذا البحث بين المشكلات التي يعاني منها مرضى الطقم الكامل وفقاً لأحدث تصنيف ورد لهذه المشكلات.

**المنهجية:** تمّ اختيار (٤٠) شخص يرتدون الطقم الكامل منذ حوالي خمس سنوات، واختيارهم كان عشوائياً من مناطق متفرقة، معدّل أعمارهم كان بين (٥٥-٦٥) عام. وجّهت الأسئلة المتعلقة بمشكلات الطقم الكامل لكل منهم، نظمت الأسئلة وفقاً لأحدث تصنيف ورد لهذه المشكلات.

**النتائج:** أظهرت النتائج أن النسبة المئوية للمرضى الذين يعانون من عدم التعوّد على الأطقم (٦٢.١%) كانت أكبر من النسبة المئوية لمشكلات عدم ثبات الطقم (٦١.٣%) ومشكلات عدم الارتياح (٣٩.٣%).

**التوصيات:** تمّ مناقشة وتفسير نتائج هذا البحث وفقاً لبحوث أجريت لتقييم الحالة النفسية والانفعالات العصبية لمرضى الأطقم الكامل والتي تعدّ الأساس في تقييم الطقم فضلاً عن التقييم المعتاد لحالتهم التشريحية والفلسجية والمرضية.

### Abstract

**Aims:** This study aims to compare patients' complaints and problems of wearing complete dentures.

**Methodology:** The sample included 40 Iraqi patients who are wearing complete dentures from about five years ago. They were selected randomly with a age range between (55–65) years. The questions asked to the patients were listed according to the recent classification of post-insertion problems.

**Result:** The results showed that the percentage of patient's complaint from adaptation problems (62.1%) was higher than looseness problems (61.3%) and discomfort problems (39.3%) as followed.

**Recommendation:** Dentists need thorough knowledge of anatomy, physiology, pathology and psychology. The assessing of the psyche and emotions of patients is extremely complex long period study at the same patient will give the more about this subject.

**Keywords:** Evaluation, Comparison, Post-insertion Complaints, Complete Denture

### Introduction

The most common complaints by the patients give a comprehensive outline of how the prosthetists may diagnose their causes and how they should be treated<sup>(1)</sup>. The complaints demanding a quick treating and the adaptation of the patients to the required changes in their habits pattern is difficult. So, the patients' education is essential and the factors which may limit the prognosis of treatment must be explained to them<sup>(2)</sup>.

The follow-up care of complete denture is an important and critical phase in the treatment of the edentulous patient and can uncover minor problems and complaints. Complete denture problems are divided into many general categories. Specific problems are listed in each category and their probable causes, specific diagnostic procedures, and appropriate corrective measures are present<sup>(3)</sup>.

The objective of this study aimed to compare and evaluate the percentage of post insertion problems according to the recent classification that divided them into: Discomfort problems, looseness problems and adaptation problems. At is manifestly impossible to cover every complaint which may be made by the patients. This study deals with most common<sup>(4)</sup>.

### Materials and methods

#### The sample:

The study sample has included 40 Iraqi patients who are wearing complete dentures from about five years ago (half was male and the others were females). They were selected randomly with an age range is (55–65) years old. The selection of the patients was done according to certain criteria, which include patient with good mentality and general health. This is to ensure that the patient can cooperate this study to each one. A clinical case sheet was designed and filled for each patient including:

Each patient was seated on dental chair and asked to participate in the study after explaining the aim of

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### Methods:

I- General information about each patient:

1- Name 2- Age 3- Sex 4- General Health 5- Address

II- The dental history of each patient was taken by asking them certain questions. These questions were asked to the patients who were divided according to the classification of post-insertion problems<sup>(1)</sup>. (This classification is related to the patient's complaint):

#### I) Questions associated with (discomfort problems) include:

- A- Do you have areas painful to pressure?
- B- Do you feel pain on insertion and removal the dentures?
- C- Do you have difficulties when occlude?
- D- Do you bite on cheek during mastication or speech?
- E- Do you bite on lips?
- F- Do you have numbness or pain in the lower lip?
- G- Do you bite on tongue during mastication or speech?
- H- Do you have difficulty in swallowing?
- I- Do you have pain about periphery of dentures?
- J- Do you have burning sensation?
- K- Clinical examination and ask about ulcers in the mouth?

#### II) Questions associated with (looseness problems of dentures) include:

- A- Do you have movement of dentures during mastication or speaking?
- B- Is the lower denture rise when mouth is opened?
- C- Is the lower denture rise when the tongue is protruded?
- D- Do you feel tilting of dentures?

#### III) Questions associated with (adaptation problems) include:

- A- Do you feel noise on eating or speaking?
- B- Do you have difficulties on eating?
- C- Can you cut the meat easily (If the teeth are blunt)?
- D- Do you have speech problems?
- E- Do you have gagging reflex?
- F- Are you satisfying with denture appearance?
- G- Are you adapting the dentures?

If the patient complains from the problem, we mark (yes), and if he didn't complain, we mark (no).

### Results

The results of this study showed that the percentage of patient's complaint from adaptation problems on wearing complete denture (62.1%) was higher than looseness problem (61.3%) and discomfort problems (39.3 %) as followed.

**Table 1.** Statistical data with ANOVA test among the percentages of each (post insertion problem of complete dentures)

Problems		Results		Total	Comparison of significant	
		Yes	No		P-value	Sig.
Discomfort	f	173	267	440	-	-
	%	39.3	60.7	100		
Looseness	f	98	62	160	0.00	High (P<0.01)
	%	61.3	38.8	100		
Adaptation	f	174	106	280	0.00	High (P<0.01)
	%	62.1	37.9	100		
Total	f	445	435	880	0.853	Non Significant (P>0.05)
	%	50.6	49.4	100		

f= Frequency; P-value=Level of probability at p≤0.05; Sig.= Significance; %=Percent

Table (1) gives the number of answering (yes) and (no) for each problem and the percentage of each one with statistical analysis shows the significant between them.

**Table 2.** The percentage of discomfort problems according to the questions asked to patients

Question of discomfort problems	Frequency	Percent	Comparison of significant	
			P-value	Sig.
A	38	22	0.00	High (P<0.01)
B	33	19.1		
C	35	20.2		
D	17	9.8		
E	15	8.7		
F	2	1.2		
G	14	8.1		
H	3	1.7		
I	8	4.6		
J	3	1.7		
K	5	2.9		
Total	173	100		

P-value=Level of probability at  $p \leq 0.05$ ; Sig.= Significance

Table (2) shows the percentage of discomfort problems according to the questions asked to the patients, and figure (1) explains the distribution of this problems.

**Table 3.** The percentage of looseness problems according to the questions asked to the patients

Questions of Looseness problems	Frequency	Percent	Comparison of significant	
			P-value	Sig.
A	34	34.7	0.097	Non Significant (P>0.05)
B	26	26.5		
C	20	20.4		
D	18	18.4		
Total	98	100		

P-value=Level of probability at  $p \leq 0.05$ ; Sig.= Significance

Table (3) shows the percentage of looseness problems also according to the questions asked to the patients, and figure (2) shows the distribution of those problems.

**Table 4.** The percentage of adaptation problems according to the questions asked to the patients

Questions of Adaptation problems	Frequency	Percent	Comparison of significant	
			P-value	Sig.
A	38	21.8	0.00	High (P<0.01)
B	26	14.9		
C	16	9.2		
D	14	8		
E	7	4		
F	37	21.3		
G	36	20.7		
Total	174	100		

P-value=Level of probability at  $p \leq 0.05$ ; Sig.= Significance

Table (4) represents the percentage of adaptation problems according to the questions asked to the patients, and figure (3) shows the distribution of this problems.

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**Table 5.** Distribution of discomfort problems among gender

Questions of discomfort problems		Gender		Total	Comparison of significant	
		Male	Female		P-value	Sig.
A	f	19	19	38	0.574	Non Sig. (P>0.05)
	%	50	50	100		
B	f	18	15	33		
	%	54.5	45.5	100		
C	f	17	18	35		
	%	48.6	51.4	100		
D	f	9	8	17		
	%	52.9	47.1	100		
E	f	6	9	15		
	%	40	60	100		
F	f	0	2	2		
	%	0	100	100		
G	f	9	5	14		
	%	64.3	35.7	100		
H	f	1	2	3		
	%	33.3	66.7	100		
I	f	6	2	8		
	%	75	25	100		
J	f	1	2	3		
	%	33.3	66.7	100		
K	f	1	4	5		
	%	20	80	100		
Total	f	87	86	173		
	%	50.3	49.7	100		

f= Frequency; P-value=Level of probability at  $p \leq 0.05$ ; Sig.= Significance; %=Percent

A comparison between the sexes is also done in this study and for each problem. Table (5) explains the distribution of discomfort problems among gender.

**Table 6.** Distribution of Looseness problems among gender

Questions of looseness problems		Gender		Total	Comparison of significant	
		Male	Female		P-value	Sig.
A	f	15	19	34	0.449	Non Sig. (P>0.05)
	%	44.1	55.9	100		
B	f	15	11	26		
	%	57.7	42.3	100		
C	f	11	9	20		
	%	55	45	100		
D	f	12	6	18		
	%	66.7	33.3	100		
Total	f	53	45	98		
	%	54.1	45.9	100		

f= Frequency; P-value=Level of probability at  $p \leq 0.05$ ; Sig.= Significance; %=Percent

Table (6) explains the distribution of looseness problems among gender while table (7) shows the distribution of adaptation problems among gender.

Table 7. Distribution of adaptation problems among gender

Questions adaptation problems	Gender		Total	Comparison of significant	
	Male	Female		P-value	Sig.
A	f	19	19	0.713	Non Significant (P>0.05)
	%	50	50		
B	f	12	14		
	%	46.2	53.8		
C	f	8	8		
	%	50	50		
D	f	7	7		
	%	50	50		
E	f	6	1		
	%	85.7	14.3		
F	f	18	19		
	%	48.6	51.4		
G	f	18	18		
	%	50	50		
Total	f	88	86		
	%	50.6	49.4		

f= Frequency; P-value=Level of probability at  $p \leq 0.05$ ; Sig.= Significance; %=Percent

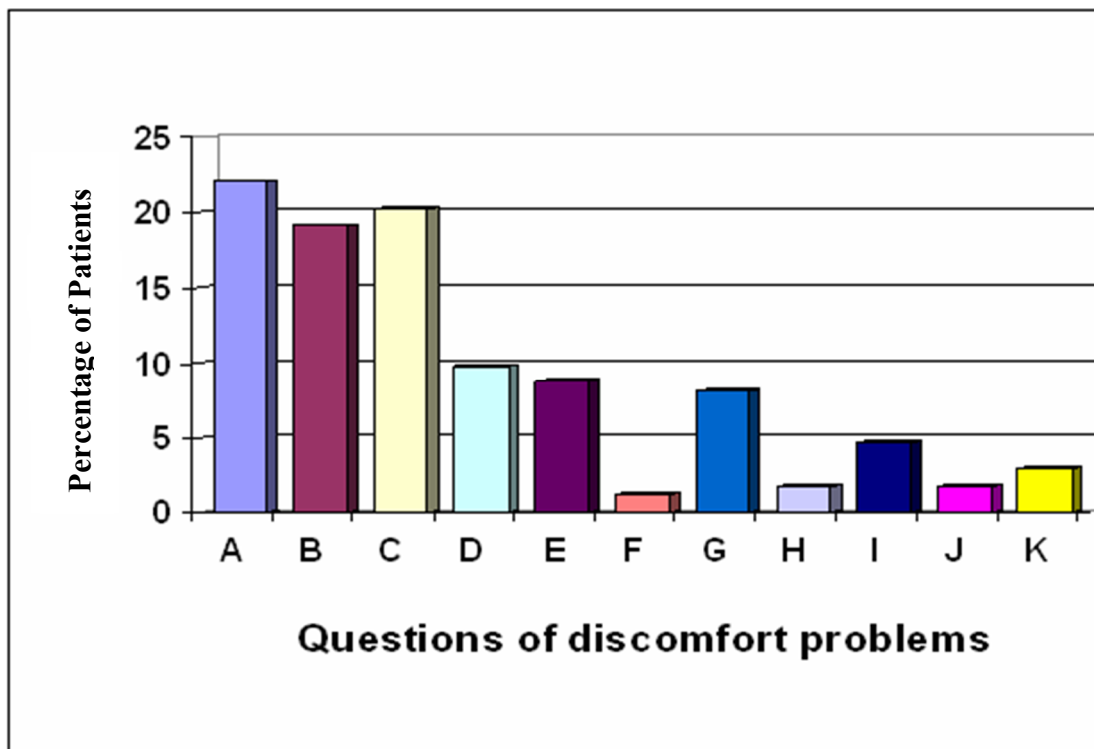


Figure 1. The distribution of discomfort problems according to the asked questions

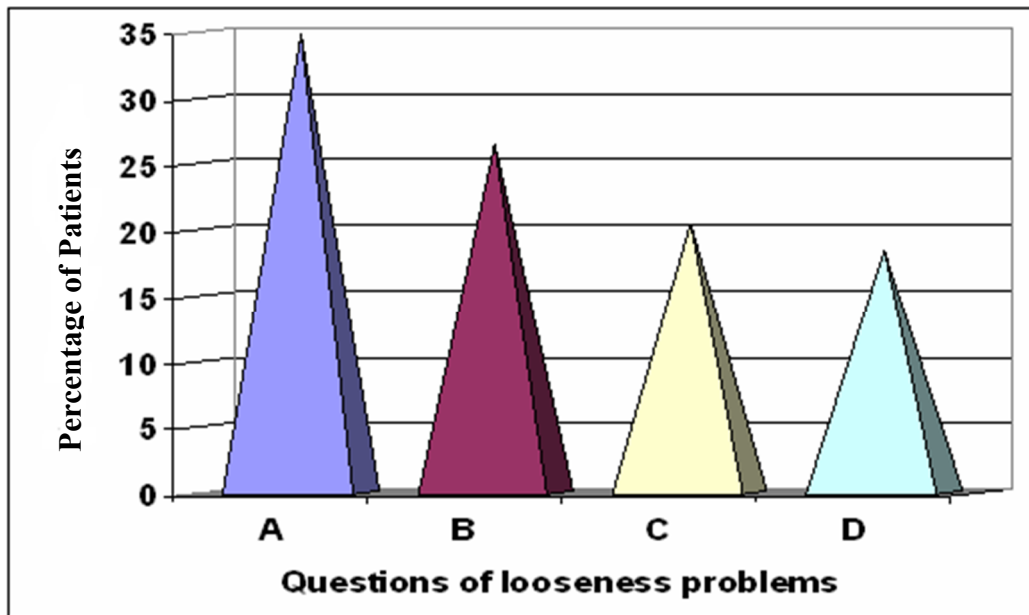


Figure 2. The distribution of looseness problems according to the asked questions

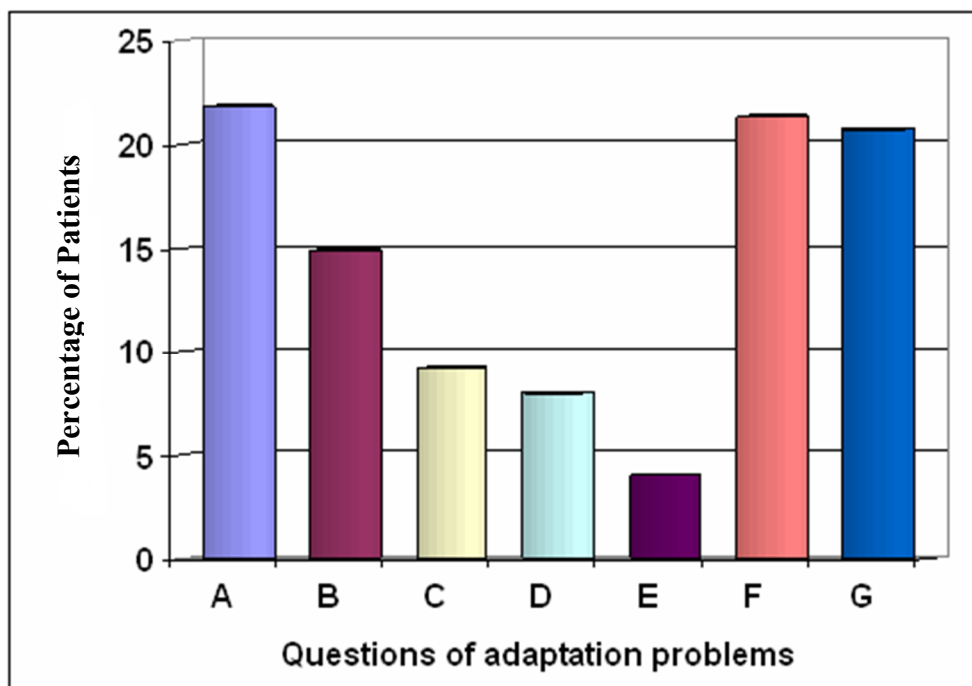


Figure 3. The distribution of adaptation problems according to the asked questions

### Discussion

This study showed that the percentage of adaptation problems of complete denture were the higher than (looseness and discomfort) problems, that feeling of refused as emotional problem is related to the patients own previous experience, his own personality, and his attitude. They are presented by inflexibility and inability to adapt to a new situation and difficulties. This related to psychological state of patients and emotional problems that may cause rejecting dentures for reasons unrelated to clinical or technical adequacy<sup>(5)</sup>.

The psychologist William James has defined emotion as "the state of mind that manifests itself by perceptible change in the body, which is important in the development of personality" <sup>(6)</sup>. The emotional reaction of an aged person is by subjective factors, while the ability to make objective judgment diminishes with progressive senescence, therefore, the patient's satisfaction may often be an expression of his general feeling of gratification toward dentist or an institution that gives him normal life conditions. And the attitude of the patient frequently determines the success or failure regardless of the practical full denture prosthesis <sup>(7)</sup>.

The dentist must improve and modify to some degree the mental attitude of the patient and encourage him to accept the treatment he suggests. And the dentists must train themselves to reassure the patient, to perceive the patient's wishes, and to know how and when to limit the patients' expectations <sup>(7)</sup>. The patient was punctual for appointments cooperated in their treatment, and understood the reasons for the treatment and was highly motivated <sup>(8)</sup>.

Since a connection between emotional problems and denture problems may exist, a health questionnaire should be used as a guide for a structured personal interview with the patient. The main question is about the complaint "what is the problem?" And record the patient's symptoms and understand what information should be elicited in history taking. And finally develop a questioning style that is consistent through and obtains the most information <sup>(8)</sup>.

All form of prosthodontics treatment requires clinical skills that are well supported by adequate technical services. Equally important is good rapport and mutual understanding between the patient (who mostly old age) and the dentist (who should understand that the time leaves its imprint on every living thing) <sup>(7,9)</sup>. So, communication is the key factor in the management of patients. Thus, the process of examination must include an evaluation of the patient in broadest sense medical status, dental condition and personality, so that realistic basis for the formulation of treatment plan, the likely outcome of treatment and the ability to generate effective interpersonal communication is possible <sup>(9)</sup>.

Practicing dentistry is not easy. Technologic and psychological understanding of the needs, wants, desires and expectations of our patients, as well as some of the frustrations and limitations of what we can provide <sup>(10)</sup>.

### **Recommendations:**

1. Make this study to the same patients, that means ask the patients the questions immediately after insertion the denture and repeated them after five years (long period study).
2. Make a study with the same aim with concentration about the effect of sex on the adaptation of the patients to the post insertion problems.

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