

Patient Satisfaction in Dentures Among Edentulous Patients.

Khaidem Deba Singh¹, Amarjit Yanglem²

¹Associate Professor, Dental College, JN Institute of Medical Sciences, Manipur.

²Assistant Professor, Dental College, JN Institute of Medical Sciences, Manipur.

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ABSTRACT

Background: Several researchers have pointed out that one of the most important correlated factors for the success of dentures is understanding the patient and his/her psychology. Patients' background may influence his/her psychology and thereby his/own satisfaction over the denture. **Aims:** The present study was aimed to assess the patients' overall satisfaction in using complete dentures compared to normal teeth by various socio-demographic variables. **Methods:** Edentulous patients who received complete dentures at least two months back in the JN Institute of Dental Sciences, Imphal, during the period Jan 2016- Dec 2017 were selected in this cross-sectional study. After obtaining informed verbal consent, by using a pre-tested semi-structured questionnaire their socio-demographic details were collected. Further, a set of 38 questions was designed to evaluate the quality of satisfaction (related to mastication, appearance and speech). **Results:** Patients aged above 65 years felt satisfied with the dentures compared to younger patients and widowed/divorced patients. The quality of satisfaction in terms of mastication, appearance and speech when analysed by socio-demographic variables did not show any statistically significant difference. Literacy was the only factor directly associated with satisfaction in mastication ($p < 0.01$) whereas both literacy and income had a direct association with satisfaction in appearance (p value of < 0.001 and 0.016 respectively). No socio-demographic variable was found to have significant association with satisfaction in speech. **Conclusion:** While giving prosthodontic treatment in edentulous patients, it is important to ascertain the socio-demographic background of patients which might influence the psychological state of the patients.

Keywords: Dentures, Edentulous, Satisfaction, Socio-demography

INTRODUCTION

Only edentulous patients know the problem of not having even a single tooth in the mouth. Loss of teeth causes adverse aesthetic and biomechanical sequelae, a predicament that is worse when the patient is edentulous and the entire periodontal ligament is lost. Hence, there is a need for proper prosthodontic therapy. Now, several researchers have pointed out that one of the most important correlated factors for the success of dentures is understanding the patient and his/her psychology.^[1-10] Many geriatric patients complain to dentists about their dentures when in fact everything is alright and actually all they want is a word of reassurance and a little understanding. A sympathetic word when inserting it into the mouth often does wonders.

Patients' background may influence his/her psychology and thereby his/own satisfaction over

the denture. But this area has not been probed in detail as of now.

Aims and Objectives

The present study was aimed to assess the patients' overall satisfaction in using complete dentures compared to normal teeth by various socio-demographic variables. The study further aimed to evaluate their quality of satisfaction across the different socio-demographic backgrounds.

MATERIALS AND METHODS

Edentulous patients who received complete dentures in the Dental College, JN Institute of Medical Sciences during the period Jan 2016- Dec 2017 were the study subjects of the present hospital-based cross-sectional study. Only patients who have been using the denture for at least two months were included. After obtaining informed verbal consent, by using a pre-tested semi-structured questionnaire their socio-demographic details (age, sex, literacy, income and marital status) were collected. This was followed by asking their perception on the dentures compared to natural teeth. Further, a set of 38 questions (20 for

Name & Address of Corresponding Author

Dr. Amarjit Yanglem
JNIDS, Porompat,
Imphal,
Manipur.

positive attitudes and 18 for negative attitudes) designed to evaluate the quality of satisfaction (related to mastication, appearance and speech). Data collected was entered in excel sheet which was later transported to SPSSv22 for data cleansing and analysis. Descriptive statistics in the form of mean, standard deviation, percentages etc. were used for analysis and presentation. Also analytical test in the form of chi-square and its modifications were used for testing significance between satisfaction level and the socio-demographic variables. For this, a p-value of less than 0.05 was considered as statistically significant.

RESULTS

Completed data sets could be obtained from 100 patients during the study period. The mean age (SD) of these patients were 64.3 (±7.32) years. Half of the patients were old age persons aged above 65 years. Males outnumbered females in the ratio of 4:1 (80M+20F). Nearly one-fourth (24%) of the study-subjects were illiterate. Half of all the patients belonged to low income families whereas 24% and 26% of them were from upper income and moderate income families respectively. By marital

status 82 of them were living currently with their spouses whereas 18 were either widowed, widower or divorced.

The general satisfaction of using dentures when compared to natural teeth across the background socio-demographic variables is illustrated in Table 1. Out of the five socio-demographic variables only age and marital relationship had significant association with the general satisfaction. Patients aged above 65 years and currently married patients felt satisfied with the dentures compared to younger patients and widowed/divorced patients respectively (p-0.004 and < 0.001 respectively).

The quality of satisfaction in terms of mastication, appearance and speech when analysed by socio-demographic variables did not show any statistically significant difference (Table 2). Literacy was the only factor directly associated with satisfaction in mastication (p<0.01) whereas both literacy and income had a direct association with satisfaction in appearance (p value of <0.001 and 0.016 respectively). No socio-demographic variable was found to have significant association with satisfaction in speech.

Table 1: Patients' background characteristics by general satisfaction compared to normal teeth

Satisfactory rate	By age in yrs			By sex			By literacy status			By income				By marital status		
	≤65	>65	p-value	M	F	p-value	Illiterate	Literate	p-value	Upper	Middle	Lower	p-value	Currently married	Widow/divorced	p-value
Better	3 (6)	9 (18)	0.004	21 (26.3)	2 (1.0)	0.33	4 (16.7)	18 (23.7)	0.39	2 (8.3)	3 (11.5)	7 (14)	0.38	16 (19.5)	1 (5.6)	<0.001
As it is	22 (44)	31 (62)		40 (50)	12 (6.0)		9 (37.5)	43 (56.6)		17 (10.8)	13 (50)	23 (46)		55 (67.1)	7 (38.9)	
Worse	25 (50)	10 (20)		19 (23.7)	6 (3.0)		11 (45.8)	15 (19.7)		5 (20.9)	10 (38.5)	20 (40)		11 (13.4)	10 (55.5)	

Table 2: Socio-demographic variable by quality of satisfaction

Satisfaction	By age (yrs)			By sex			By literacy			By income				By marital status		
	≤65	>65	p-value	M	F	p-value	Illiterate	Literate	p-value	Upper	Middle	Lower	p-value	Currently married	Widow/divorced	p-value
Mastication			0.89			0.89			<0.001				0.13			0.92
Satisfied	24 (48)	25 (50)		40 (50)	9 (4.5)		8 (33.3)	41 (53.9)		12 (50)	15 (57.7)	22 (44)		49 (59.8)	10 (55.6)	
Partial	14 (28)	13 (26)		20 (25)	5 (2.5)		4 (16.7)	24 (31.6)		10 (41.7)	5 (19.2)	12 (24)		11 (13.4)	5 (27.8)	
Not satisfied	11 (22)	13 (26)		20 (25)	6 (3.0)		12 (50)	11 (14.5)		2 (8.3)	6 (23.1)	16 (32)			3 (16.6)	
Appearance			0.46			0.50			<0.001				0.016			0.34
Satisfied	13 (26)	17 (34)		24 (30)	5 (2.5)		2 (8.3)	28 (36.8)		13 (54.2)	9 (34.6)	8 (16)		25 (30.5)	5 (22.8)	

Not satisfied	6) 10 (2 0)	4) 6 (1 2)	13 (16. 2)	5) 3 (1 5)	2 (8.3) 20 (83.4)	14 (18.4) 34 (44.8)) 2 (8.3)) 3 (11.5)	11 (22) 31 (62)	15 (18.3) 42 (51.2)	1 (5.6) 12 (66.6)	
Speech			0.94		0.48		0.43		0.40		0.60	
Satisfied	18 (3 6)	16 (3 2)	28 (35)	4 (2 0)	9 (37.5)	25 (32.9)	11 (45.8)	9 (34.6)	13 (26)	46 (56.1)	8 (44.5)	
Partial Not satisfied	10 (2 0)	12 (2 4)	16 (20)	6 (3 0)	4 (16.7)	18 (23.7)	3 (12.5)	7 (26.9)	11 (22) 26 (52)	17 (20.7)	4 (22.2)	
	22 (4 4)	22 (4 4)	36 (45)	10 (5 0)	11 (45.8)	33 (43.4)	10 (47.7)	10 (38.5)		19 (23.2)	6 (33.3)	

* Figures within parentheses indicate percentages.

DISCUSSION

The study showed that the period of denture wear is directly related to the literacy rate. Winkler Sheldon¹ has pointed out that better health care for complete denture wearers can be achieved if they are educated enough. Literacy status and income having direct relationship with satisfaction in aesthetic appearance with the prosthodontic denture as found out from the current study could not be compared with any earlier study finding as they were non-existent. Similarly, “none of the socio-demographic variables having any association with speech” could not be compared with any previous findings. Of course, it is felt that the very small sample size in tabular cells might have masked any statistically significant difference between the strata. Still, the current study findings indirectly support the earlier study-findings of need for understanding patients’ background details and their psychology for a meaningful treatment of edentulous patients.^[2-12]

Taylor RG in his study found that male patients are usually more satisfied than their female counterparts considering mastication with the dentures.^[13] This relationship could not be established with the current study finding. The difference in the study-setting, study period and the very small sample size in the current study might explain this disparity.

Langer mentioned that there is influence of social adjustment on patient’s satisfaction though their correlation is weak.^[14] The study revealed to consider the socio-psychological aspects as Grieder et al pointed how to help identify patients’ needs by considering psychological aspects of aging.^[15]

CONCLUSION

Out of all the seemingly important socio-demographic variables, only age and currently married status had a direct association with the general satisfaction in using complete dentures among edentulous patients. Regarding quality of satisfaction for mastication the only socio-demographic factors that had a direct relationship were literacy status. For satisfaction regarding aesthetic appearance, both literacy and income had a direct relationship. Not a single socio-demographic factor was found to be directly associated with satisfaction in speech.

While giving prosthodontic treatment in edentulous patients, it is important to ascertain the socio-demographic background of patients which might influence the psychological state of the patients.

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