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# The Consequence of Complete Dentures on Quality of Life of Edentulous Patients in the South-Indian Population Based on Educational and Socioeconomic Grades

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# **Abstract**

## **Purpose**

The purpose of this study was to establish the level of denture satisfaction with sociodemographic variables and educational status of the patients rehabilitated with complete denture.

#### Materials and method

A total number of 250 completely edentulous patients were selected who fulfilled the inclusion and exclusion criteria. The patients had no past medical history which affects the oral condition; they were first-time denture wearers with period of edentulousness altering between six months to one year and were in the age group of 40-50 years, and were willingly involved in the study. The subjects were grouped according to their socioeconomic status such as employment, education and income level. The correlations were statistically determined using regression analysis.

#### Results

Statistical analysis was done using Statistical Package for Social Sciences (SPSS, Chicago, Illinois, USA), version 16.0. The significance of percentage error of the two groups was tested by Student t test and p value denoted level of significance (p<.05). Based on the education level, 30.47% of the population were under primary level of education, 57.82% completed higher secondary education and 11.72% of the population were graduates. Based on employment status, 53.12% of the population was unemployed, 32.03% were employed while 14.84% of the population were pensioners. Based on income per month, the population was classified as 6.25%, 31.25%, 21.09%, 22.66%, 18.75% for no income, less than 3000, 5000, 8000 and more than 10000 respectively. Psychological comfort, social ability, and functional improvement was better with higher secondary education level, employed and lower income individuals.

#### Conclusion

Rehabilitation of an elderly individual not only includes clinician skills but also the personal perception by the patient. The study concludes that the though there was no statistically significant difference, the individual with secondary level of education and with employed low socioeconomic status had better denture satisfaction than the other category.

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edentulism, quality of life, complete denture

## Introduction

Management of edentulous patients during rehabilitation with complete dentures is still lacking with respect to patients based on educational level and socioeconomic status [1]. The need for thought of oral health-related quality of life (QoL) has been increasingly accepted over the last decades, and many studies highlight the psychosocial impacts of oral conditions. This study is based on considerations in making of complete dentures of different sociodemographic variables such as age, gender, literacy level, socio-economic and educational status may affect satisfaction towards dentures. To assess this, a consistent questionnaire that included questions from domains such as mastication, appearance, speech, comfort, health, denture care and social status is used to establish level of denture satisfaction with sociodemographic variables and educational status of the patients.

The removable denture prosthesis (RDP) must be able to restore the chewing function, aesthetics and phonetics to compensate partial edentulism [2]. Considering the biomechanics involved allows the specialist to design a removable partial denture prosthesis by establishing and maintaining lift, stabilization and retention termed the Housset triad. With these imperatives taken into account, and depending on the number of teeth lost and the type of edentulous areas bounded by remaining teeth or without posterior tooth support, the constraints on the prosthesis will be different and functional rehabilitation altered. One such method is by measuring food bolus granulometry before swallowing, associated with analysis of the kinematic parameters developed to distinguish patients with normal mastication from those with badly impaired mastication [3]. Impaired chewing function leads to raise of food bolus particle size, measured by the median particle size of the food bolus at swallowing. It has been revealed that adults with impaired mastication could be distinguished from those with normal function if the median particle size of the bolus that they produced, when chewing raw carrot reached a cut-off value of 4 mm, called the masticatory normative indicator (MNI) [4]. The adjustment of chewing behaviour to food hardness can also characterize healthy mastication. Adaptation to increasing food hardness marks in an augmented number of chewing cycles and an increase in the chewing sequence duration, with no modification of the chewing frequency (number of cycles per second) in healthy subjects [5,6]. The mean chewing frequency is slowed down in subjects with chewing deficiencies while eating any type of resistant food. Earlier studies on the chewing ability of dentally impaired subjects showed that a decrease in the number of functionally paired teeth and oral rehabilitation with removable dentures were linked to a decreased masticatory values [7,8]. But, the physiological impact of RDP rehabilitation has been seldom studied. Also, the objective of this work was to estimate the impact of partial edentulous areas rehabilitation by removable partial denture prosthesis with a socioeconomic and educational point of view.

Beside the therapist's ability and the quality of dentures, individual factors connected with the patient are very important for the final satisfaction with dentures. Patients are sometimes not satisfied with the constructions which are best, according to the therapist's judgment. Satisfaction with dentures seems to have multiclausal character. According to the results of Frank's studies, the most frequent areas of dissatisfaction were as follows: fit (33.6%), mastication (29.5%), natural tooth problems (26.3%), overall perception (26,2%), oral cleanliness (20.4%), speech (17.9%), appearance (17.8%), denture cleanliness (15.3%) and odour (13.2%) [9,10]. In different studies concerning satisfaction or dissatisfaction with partial removable dentures, more concern was placed on upper partial dentures. Dentists consider dentures to be successful when they meet certain methodological standards, whereas patients

assess them from the viewpoint of personal satisfaction. The capability to adapt to new dentures will usually reduce in proportion to the individual status. To assess this, a consistent questionnaire that included questions from domains such as mastication, appearance, speech, comfort, health, denture care and social status was used to determine level of denture satisfaction with socio-demographic variables of completely edentulous patients rehabilitated with prosthesis.

#### **Materials And Methods**

The study was conducted at the Department of Prosthodontics, Sri Ramachandra Institute of Higher Education and Research (SRIHER) with the approval of the ethics committee. A total number of 250 completely edentulous patients were selected who fulfilled the inclusion and exclusion criteria. The patients had no past medical history which affects the oral condition, first-time denture wearers, period of edentulousness altering between six months to one year and Class I edentulous state as classified by American College of Prosthodontics and in the age group of 40-50 years who were willingly involved in the study was selected. The subjects were grouped according to their socioeconomic status such as employment, education and income level. According to the employment level, they were divided into Employed, Self-Employed, Unemployed and Pensioners. According to education level, they were separated as Primary (till standard five), Secondary (till standard nine), and Tertiary education. Income level they are divided into low, middle, and high-income group. The removable prosthesis was fabricated in the Department of Prosthodontics and their quality were assessed based on the method given by Sato et al [11]. The patients were interviewed at 2-3 months post-treatment. A single person conducted all the questionnaire surveys to reduce the discrepancy. A standardized questionnaire, with 19 questions based on denture satisfaction level and masticatory capacity in the domains of Functional limitation, Psychological discomfort, Psychological disability, and Social disability was administered [12]. All the questions were calculated in scale of satisfied, moderately satisfied and hardly ever. The denture satisfaction questions were only asked at the post-treatment interview and relevant to the satisfaction of their new maxillary/mandibular complete dentures the patients received according to the Likert scale. Statistical analysis was done using Statistical Package for Social Sciences (SPSS, Chicago, Illinois, USA), version 16.0. Significance of percentage error of two groups was tested by Student t test and p value denoted level of significance (p<.05).

# Results

# Distribution of sample

Based on the education level, 30.47% of the population were under primary level of education, 57.82% of the population have done higher secondary education and 11.72% of the population were graduates. Based on employment status, 53.12% of population was unemployed, 32.03% of the population were employed while 14.84% of the population were pensioners. Based on income per month population were classified as 6.25%, 31.25%, 21.09%, 22.66%, 18.75% for no income, less than 3000, 5000, 8000 and more than 10000 respectively.

# Psychological discomfort

On postoperative evaluation based on education, the satisfactory level for psychological comfort was higher for higher secondary educated persons followed by primary education and graduate persons. The distribution of sample was Higher secondary - 41, primary - 22 and graduate - 8 for satisfaction level questionnaire (SAQ)4 and SAQ5, Higher secondary - 55, primary - 29 and graduate - 10 for SAQ9. Based on masticatory ability, the distribution of sample was Higher secondary - 42, primary - 20 and graduate - 2 for masticatory ability questionnaire (MCQ)9 and Higher secondary - 56, primary - 24 and graduate - 12 for MCQ12. Though there was no statistical significance, the psychological comfort was better with Higher

secondary education level (Table 1).

Questionnaire	Education level	Satisfied	<b>Moderately Satisfied</b>	Not Satisfied	Pearson Chi-Square P value
	Primary	22	10	1	
SAQ4	Higher Secondary	41	15	17	0.119659
	Graduate	8	3	4	
	Primary	21	10	2	
SAQ5	Higher Secondary	44	12	18	0.105918
	Graduate	8	5	2	
	Primary	29	2	2	0.066393
SAQ9	Higher Secondary	55	9	10	
	Graduate	10	0	5	
	Primary	20	13	0	
MCQ9	Higher Secondary	42	30	2	0.818271
	Graduate	8	7	0	
	Primary	24	8	1	
MCQ 12	Higher Secondary	56	16	2	0.867339
	Graduate	12	2	1	

## **TABLE 1: Psychological Discomfort Based on Education**

SAQ - Satisfaction level questionnaire, MCQ - Masticatory ability questionnaire

On postoperative evaluation based on employment status, the satisfactory level for psychological comfort was more for employed persons followed by unemployed and pensioner persons. The distribution of sample was Employed - 47, Unemployed - 16 and Pensioner - 10 for SAQ4 and Employed-50, Unemployed - 15 and Pensioner - 12 for SAQ5, Employed - 68, Unemployed - 18 and Pensioner - 13 for SAQ9. Based on masticatory ability, the distribution of sample was Employed - 49, Unemployed - 15 and Pensioner - 9 for MCQ9 and Employed-61, Unemployed - 19 and Pensioner - 16 for MCQ12. Though there was no statistical significance, the psychological comfort was better with employed persons (Table *2*).

Questionnaire	Employment Status	Satisfied	Moderately Satisfied	Not Satisfied	Pearson Chi-Square P value
	Unemployed	16	4	5	
SAQ4	Employed	47	21	14	0.818145
	Pensioner	10	6	3	
	Unemployed	15	6	4	
SAQ5	Employed	50	16	17	0.518909
	Pensioner	12	6	1	
	Unemployed	18	2	5	
SAQ9	Employed	68	7	8	0.538068
	Pensioner	13	2	4	
	Unemployed	15	10	0	
MCQ9	Employed	49	32	2	0.696123
	Pensioner	9	10	0	
	Unemployed	19	6	0	
MCQ12	Employed	61	18	4	0.605909
	Pensioner	16	3	0	

#### **TABLE 2: Psychological Discomfort Based on Employment**

SAQ - Satisfaction level questionnaire, MCQ - Masticatory ability questionnaire

On postoperative evaluation based on income, the satisfactory stage for psychological comfort were higher for low income individuals followed by upper middle class, lower middle class and higher class individuals. The distribution of sample was lower class -25, upper middle class -17, lower middle class-16 and higher class - 13 for SAQ4 and lower class -25, upper middle class - 17, lower middle class-19 and higher class - 12 for SAQ5, lower class -34, upper middle class -25, lower middle class-18 and higher class - 17 for SAQ9. Based on masticatory ability, the distribution of sample was lower class -23, upper middle class -19, lower middle class-14 and higher class - 14 for MCQ9 and lower class -29, upper middle class -20, lower middle class-21 and higher class - 21 for MCQ12. Although there was no statistical significance, the psychological comfort was more with lower income individual, while it was very less with no income participants (Table 3).

Questionnaire	Income per month	Satisfied	Moderately Satisfied	Not Satisfied	Pearson Chi-Square P value
	Nil	0	0	1	
	3000	25	11	4	
SAQ4	5000	16	7	4	0.306507
	8000	17	7	4	
	10000&above	13	4	7	
	Nil	0	0	1	
	3000	25	9	6	
SAQ5	5000	17	5	5	0.342548
	8000	19	8	2	
	10000&above	12	6	6	
	Nil	1	0	0	0.150084
	3000	34	2	4	
SAQ9	5000	18	6	3	
	8000	25	2	2	
	10000&above	17	1	6	
	Nil	0	1	1	
	3000	23	17	0	
MCQ9	5000	14	13	2	0.649235
	8000	19	10	1	
	10000&above	14	10	1	
	Nil	1	0	0	
	3000	29	10	1	
MCQ12	5000	21	6	0	0.847432
	8000	20	8	1	
	10000&above	21	3	0	

# **TABLE 3: Psycological Discomfort Based on Income**

SAQ - Satisfaction level questionnaire, MCQ - Masticatory ability questionnaire

# Social disability

On postoperative evaluation based on education, the satisfactory stage for social ability were higher for Higher secondary educated individuals followed by primary education and graduate individuals. The distribution of sample was Higher secondary-49, primary - 25 and graduate - 9 for SAQ3, Higher secondary-51, primary - 23 and graduate - 8 for SAQ7. Based on masticatory ability, the distribution of sample was Higher secondary-49, primary - 24 and graduate - 12 for MCQ10, Higher secondary-57, primary - 23 and graduate - 13 for MCQ11 and Higher secondary-54, primary - 25 and graduate - 9 for MCQ13. Though there was no statistical significance, the social ability was better with Higher secondary education level (Table 4).

Questionnaire	Education level	Satisfied	<b>Moderately Satisfied</b>	Not Satisfied	Pearson Chi-Square P value
	Primary	25	6	2	
SAQ3	Higher Secondary	49	12	13	0.564003
	Graduate	9	3	3	
	Primary	23	7	3	
SAQ7	Higher Secondary	51	12	11	0.295081
	Graduate	8	2	5	
	Primary	24	8	1	0.725246
MCQ10	Higher Secondary	49	24	1	
	Graduate	12	3	0	
	Primary	23	9	1	
MCQ11	Higher Secondary	57	15	2	0.532581
	Graduate	13	1	1	
	Primary	25	6	1	
MCQ13	Higher Secondary	54	18	2	0.357926
	Graduate	9	4	2	

## **TABLE 4: Social Disability Based on Education**

SAQ - Satisfaction level questionnaire, MCQ - Masticatory ability questionnaire

On postoperative assessment based on employment status, the satisfactory level for social ability were higher for employed individuals followed by unemployed and pensioner individuals. The distribution of sample was Employed-57, Unemployed - 16 and Pensioner - 13 for SAQ3 and Employed-57, Unemployed - 17 and Pensioner - 12 for SAQ7. Based on masticatory ability, the distribution of sample was Employed-58, Unemployed - 16 and Pensioner -15 for MCQ10, Employed-61, Unemployed - 19 and Pensioner - 17 for MCQ11 and Employed-61, Unemployed - 17 and Pensioner - 15 for MCQ13. Though there was no statistical

significance, the social ability was better with employed individuals (Table 5).

Questionnaire	Employment Status	Satisfied	Moderately Satisfied	Not Satisfied	Pearson Chi-Square P value
	Unemployed	16	5	4	
SAQ3	Employed	57	13	13	0.94543
	Pensioner	13	4	2	
	Unemployed	17	3	5	
SAQ7	Employed	57	15	11	0.869279
	Pensioner	12	4	3	
	Unemployed	16	9	0	
MCQ10	Employed	58	23	2	0.682443
	Pensioner	15	4	0	
	Unemployed	19	6	0	
MCQ11	Employed	61	18	4	0.438342
	Pensioner	17	2	0	
	Unemployed	17	8	0	
MCQ13	Employed	61	17	4	0.567791
	Pensioner	15	3	1	

# **TABLE 5: Social Disability Based on Employment**

SAQ - Satisfaction level questionnaire, MCQ - Masticatory ability questionnaire

On postoperative evaluation based on income, the satisfactory level for social ability were higher for low income individuals followed by upper middle class, lower middle class and higher class individuals. The distribution of sample was lower class -27, upper middle class -24, lower middle class-19 and higher class - 13 for SAQ3 and lower class -26, upper middle class -24, lower middle class-19 and higher class - 13 for SAQ7. Based on masticatory ability, the distribution of sample was lower class -28, upper middle class -20, lower middle class-19 and higher class - 18 for MCQ10, lower class -28, upper middle class -23, lower middle class-20 and higher class - 22 for MCQ11 and lower class -32, upper middle class -24, lower middle class-20 and higher class - 14 for MCQ13. Though there was no statistical significance, the social ability was better with lower income individual, while it was very less with no income individual (Table 6).

Questionnaire	Income	Satisfied	Moderately Satisfied	Not Satisfied	Pearson Chi-Square P value
	Nil	0	1	0	
	3000	27	6	7	
SAQ 3	5000	19	7	1	0.062094
	8000	24	1	4	
	10000&above	13	6	5	
	Nil	0	1	0	
	3000	26	9	5	
SAQ 7	5000	19	3	5	0.112107
	8000	24	1	4	
	10000&above	13	6	5	
	Nil	0	1	0	0.535895
	3000	28	10	2	
MCQ 10	5000	19	8	0	
	8000	20	9	0	
	10000&above	18	6	0	
	Nil	0	1	0	
	3000	28	11	1	
MCQ 11	5000	20	7	0	0.316671
	8000	23	5	1	
	10000&above	22	2	0	
	Nil	0	1	0	
	3000	32	7	1	
MCQ 13	5000	20	6	1	0.220572
	8000	24	4	1	
	10000&above	14	10	0	

# **TABLE 6: Social Disability Based on Income**

SAQ - Satisfaction level questionnaire, MCQ - Masticatory ability questionnaire

## **Functional limitation**

On postoperative assessment based on education, the satisfactory level for functional improvement was higher for Higher secondary educated individuals followed by primary education and graduate individuals. The distribution of sample was Higher secondary-49, primary - 25 and graduate - 9 for SAQ1, Higher secondary-51, primary - 23 and graduate - 8 for SAQ2. Based on masticatory ability, the distribution of sample was Higher secondary-47, primary - 28 and graduate - 10 for MCQ1, Higher secondary-42, primary - 21 and graduate - 8 for MCQ2, Higher secondary-46, primary - 26 and graduate - 7 for MCQ3, Higher secondary-40, primary - 27 and graduate - 6 for MCQ4, Higher secondary-52, primary - 25 and graduate - 10 for MCQ5, Higher secondary-57, primary - 23 and graduate - 13 for MCQ6 and Higher secondary-46, primary - 23 and graduate - 8 for MCQ7. Though there was no statistical significance, the functional improvement was better with Higher secondary education level (Table 7).

Questionnaire	Education level	Satisfied	<b>Moderately Satisfied</b>	Not Satisfied	Pearson Chi-Square P value
	Primary	19	7	7	
SAQ1	Higher Secondary	40	18	16	0.898575
	Graduate	10	2	3	
	Primary	22	7	4	
SAQ2	Higher Secondary	42	17	15	0.819816
	Graduate	9	4	2	
	Primary	28	5	2	
MCQ1	Higher Secondary	47	27	2	0.082518
	Graduate	10	5	1	
	Primary	21	11	1	0.874791
MCQ2	Higher Secondary	42	30	2	
	Graduate	8	7	0	
	Primary	26	5	2	
MCQ3	Higher Secondary	46	26	2	0.136418
	Graduate	7	7	1	
	Primary	27	6	0	
MCQ4	Higher Secondary	40	31	3	0.032246
	Graduate	6	8	1	
	Primary	25	8	0	
MCQ5	Higher Secondary	52	20	2	0.712573
	Graduate	10	4	1	

	Primary	23	9	1	
MCQ6	Higher Secondary	55	17	2	0.019939
	Graduate	5	10	0	
	Primary	23	10	0	
MCQ7	Higher Secondary	46	26	2	0.612193
	Graduate	8	6	1	

#### **TABLE 7: Functional Limitation Based on Education**

SAQ - Satisfaction level questionnaire, MCQ - Masticatory ability questionnaire

On postoperative assessment based on employment status, the satisfactory level for functional improvement was higher for employed individuals followed by unemployed and pensioner individuals. The distribution of sample was Employed-49, Unemployed - 10 and Pensioner - 13 for SAQ1 and Employed-49, Unemployed - 12 and Pensioner - 14 for SAQ2. Based on masticatory ability, the distribution of sample was Employed-56, Unemployed - 19 and Pensioner -13 for MCQ1, Employed-50, Unemployed - 12 and Pensioner - 11 for MCQ2, Employed-57, Unemployed - 14 and Pensioner -12 for MCQ3, Employed-50, Unemployed - 15 and Pensioner -12 for MCQ4, Employed-60, Unemployed - 18 and Pensioner -13 for MCQ5, Employed-62, Unemployed - 16 and Pensioner -9 for MCQ6 and Employed-54, Unemployed - 17 and Pensioner - 11 for MCQ7. Though there was no statistical significance, the functional improvement was improved with employed individuals (Table 8).

Questionnaire	Employment Status	Satisfied	Moderately Satisfied	Not Satisfied	Pearson Chi-Square P value
	Unemployed	10	9	6	
SAQ1	Employed	49	14	20	0.16965
	Pensioner	13	4	2	
	Unemployed	12	10	3	
SAQ2	Employed	49	18	16	0.228617
	Pensioner	14	3	2	
	Unemployed	19	6	6	
MCQ1	Employed	56	27	2	0.717146
	Pensioner	13	6	2	
	Unemployed	12	12	1	
MCQ2	Employed	50	31	2	0.772695
	Pensioner	11	8	0	

	Unemployed	14	11	0	
MCQ3	Employed	57	22	4	0.456581
	Pensioner	12	6	1	
	Unemployed	15	10	0	
MCQ4	Employed	50	30	3	0.852958
	Pensioner	12	6	1	
	Unemployed	18	7	0	
MCQ5	Employed	60	21	2	0.851833
	Pensioner	13	5	1	
	Unemployed	16	9	0	
MCQ6	Employed	62	18	3	0.062266
	Pensioner	9	10	0	
	Unemployed	17	8	0	
MCQ7	Employed	54	26	3	0.676367
	Pensioner	11	8	0	

# **TABLE 8: Functional Limitation Based on Employment**

SAQ - Satisfaction level questionnaire, MCQ - Masticatory ability questionnaire

On postoperative assessment based on income, the satisfactory level for functional improvement were higher for low income individuals followed by upper middle class, lower middle class and higher class individuals. The distribution of sample was lower income class - 30, upper middle class -21, lower middle class-14 and higher class - 8 for SAQ1 and lower class - 35, upper middle class -13, lower middle class-10 and higher class - 9 for SAQ2. Based on masticatory ability, the distribution of sample was lower class -38, upper middle class -25, lower middle class-13 and higher class - 11 for MCQ1, lower class -36, upper middle class -28, lower middle class-15 and higher class - 1 for MCQ2, lower class -35, upper middle class -30, lower middle class-21 and higher class - 10 for MCQ4, lower class -42, upper middle class -20, lower middle class-15 and higher class - 9 for MCQ5, lower class -33, upper middle class -20, lower middle class-15 and higher class - 9 for MCQ6 and lower class -35, upper middle class -17, lower middle class-15 and higher class - 11 for MCQ7. Though there was no statistical significance, the functional improvement was better with lower income individual, while it was very less with no income individual (Table 9).

Questionnaire	Income	Satisfied	Moderately Satisfied	Not Satisfied	Pearson Chi-Square P value
	Nil	1	0	1	

	3000	30	15	12	
SAQ 1	5000	14	3	2	0.715441
	8000	21	10	2	
	10000&above	8	1	0	
	Nil	2	1	1	
	3000	35	27	18	
SAQ 2	5000	10	2	1	0.753563
	8000	13	1	0	
	10000&above	9	1	2	
	Nil	2	1	1	
	3000	38	18	10	
MCQ 1	5000	13	10	2	0.738232
	8000	25	11	1	
	10000&above	11	1	1	
	Nil	1	0	1	
	3000	36	23	3	
MCQ 2	5000	15	10	3	0.990977
	8000	28	20	1	
	10000&above	11	1	0	
	Nil	1	0	1	
	3000	35	9	1	
MCQ 3	5000	23	13	5	0.738682
	8000	30	13	1	
	10000&above	7	1	0	
	Nil	1	2	1	
	3000	42	18	0	
MCQ 4	5000	21	10	4	0.983131
	8000	30	10	1	
	10000&above	10	1	0	
	Nil	1	1	0	
	3000	41	10	0	

MCQ 5	5000	15	18	3	0.764083
	8000	20	4	1	
	10000&above	9	1	0	
MCQ 6	Nil	3	1	1	0.763359
	3000	33	9	0	
	5000	15	13	3	
	8000	20	11	0	
	10000&above	9	2	1	
MCQ 7	Nil	3	1	1	0.97878
	3000	35	4	0	
	5000	15	13	3	
	8000	17	4	0	
	10000&above	11	1	1	

**TABLE 9: Functional Limitation Based on Income** 

SAQ - Satisfaction level questionnaire, MCQ - Masticatory ability questionnaire

# **Discussion**

Psychological assessments of patients have been found to be without influence on patients' judgment of dentures, whereas, others have been reported to distinguish significantly between satisfied and dissatisfied denture wearers [13,14]. Several studies demonstrated that the patient's judgment can be predicted by information related to patient perceptions, expectations, and prior experiences [15]. Denture quality is defined in relation to a number of areas difficult to assess and no generally accepted standards exist. Accordingly, the validity and reliability of recordings of the quality of complete dentures are often doubtful [16]. Edentulism is considered a handicap with impacts on quality of life and nutrition. Provision of new complete dentures improves oral health-related quality of life. Patient's satisfaction with their dentures is likely to be affected by their ability to perform certain tasks with them [17]. The present study was done to evaluate whether education level and socioeconomic status have an effect on the satisfaction level of the patient. Studies in edentulous subjects strongly support the concept that patient-based measures are more sensitive than functional measures for detecting differences between treatments [18].

The present study revealed that patient satisfaction was better with employed individuals but with the low-income group compared to the high-income group. In addition, the secondary level of educated individual had better satisfaction. This is contradictory to Poljak-Guberina et al. who found that age, education, marital status, income state, size of the residence and regional affiliation did not have a significant influence on satisfaction of patients with the prosthesis [19]. Also, not wearing prostheses was not linked to neuroticism. On the contrary, some researchers found no relationship between denture satisfaction and personality [20].

However, they used incomprehensive personality tests and paid little attention to reliability, validity, and suitability of the used tests. Moreover, Lowental and Tau found no relation between denture satisfaction and personality found no relationship between denture satisfaction and personality when denture satisfaction was assessed using denture satisfaction questionnaire [21].

# **Conclusions**

Rehabilitation of an elderly individual not only includes clinician skills but also the personal perception by the patient. The study concludes that though there was no statistically significant difference, the individual with a secondary level of education and with employed low socioeconomic status had a better denture satisfaction than the other categories.

# **Additional Information**

# **Disclosures**

**Human subjects:** Consent was obtained by all participants in this study. Institutional Ethics Committee issued approval IEC-NI/11/OCT/25/26. The ethical approval has been obtained. **Animal subjects:** All authors have confirmed that this study did not involve animal subjects or tissue. **Conflicts of interest:** In compliance with the ICMJE uniform disclosure form, all authors declare the following: **Payment/services info:** All authors have declared that no financial support was received from any organization for the submitted work. **Financial relationships:** All authors have declared that they have no financial relationships at present or within the previous three years with any organizations that might have an interest in the submitted work. **Other relationships:** All authors have declared that there are no other relationships or activities that could appear to have influenced the submitted work.

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