Effect of sociodemographic variables on complete denture satisfaction

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INTRODUCTION

Although the prevalence of edentulism is falling in all age groups, the number of older people is still increasing. India, being a developing country and having a huge population, lacks awareness and management about edentulous state.2,3 Rehabilitating edentulous patients with complete dentures has been the treatment of choice. Study by van Waas4 showed that statistically insignificant correlation exists between clinical variables and satisfaction in complete denture wearer. It was also found that only features of denture-supporting area assessed by clinician are poor predictors of satisfaction with complete denture wearer.5 Because edentulism is a chronic disease so functional improvement is more important than cure; that’s why outcomes based on patient are most important.6 This is also supported by other published literature that sensitivity of patient-based measure are more than functional measured to differentiate between treatments.7,8 Patient’s perception about subjective experience of their denture is also important for dentists to motivate complete denture wearers.

The success of complete dentures is dependent on the multiple factors.10 Patient perception is important for successful treatment. The author of the present study hypothesized that apart from biological and technical considerations in fabrication of complete dentures11,12 different socio-demographic variables such as age, gender, literacy level, socio-economic and marital status may affect satisfaction towards complete dentures. To evaluate this, a standardized questionnaire that included questions from domains such as mastication, appearance, speech, comfort, health, denture care and social status was used to determine level of complete denture satisfaction with socio-demographic variables.

KEY WORDS: Dentures; Satisfaction; Compliance; Socio-economic status; Educational status
MATERIALS AND METHODS

All the recruitment for the study was done from Prosthodontics clinic of Medical University, Lucknow. The subjects who fulfilled the inclusion criteria were enrolled in this study. The inclusion criteria were: without systemic diseases (on the basis of medical history and physician consultation) which affected oral functions, first time denture wearer, period of edentulousness between six months to one year and class 1 completely edentulous patient according to classification of completely edentulous state by American College of Prosthodontists.13 Patients were excluded if they belonged to class 2, 3 or 4 types, single arch complete denture and TMJ disorder. Approval for two study was taken from ethical committee of institution. Subjects had the opportunity to withdraw at anytime and were voluntarily involved in this study with informed consent form signed. 45 - 79 years of subjects were included and asked for their socio-demographic variables such as age, gender, literacy level, socio-economic and marital status. The socio-economic status was divided into upper high, upper middle and poor class based on the monthly income of the subjects.14

In this study, a total number of 136 subjects were enrolled that had fulfilled the inclusion criteria and had received complete dentures. All the included subjects were divided into five groups on the basis of age, gender, literacy (illiterate subjects were questioned orally by a lay person and ticked choice on behalf of subjects), socio-economic and marital status (Table 1).

Complete Denture was fabricated by post graduate student with four years clinical experience under guidance of the faculty member of the department using standard clinical and laboratory procedures. Their quality was assessed on the basis of quantifying method for denture quality by Sato et al.15 as per which only good quality dentures were selected for the study. Before starting denture therapy, treatment eagerness (own will or advised by others) and priority for denture treatment esthetics, phonetics or function were questioned. At the denture insertion appointment, printed and verbal post insertion instructions were given to each patient with particular emphasis to report to the Prosthodontic clinic after two months for follow up. Those patients who had been wearing their denture regularly (everyday for at least 8 hours) were included in the study. A standardized questionnaire of 38 questions was given. Particular questions were related to either positive or negative attitudes. This questionnaire had 20 and 18 number of positive and negative attitudes questions. The questionnaire had domains of mastication, appearance, speech, comfort, health, denture care and social status. Questions (1 - 38) were recorded as yes, no or uncertain. All the items of positive nature were scored as 2, 1, or 0 (yes, uncertain and no, respectively) and reversely for the negative items. Statistical analysis was done by using Statistical Package for Social Sciences (version 15.0) (SPSS Inc., Chicago, IL, USA). Significance of percentage error of two groups was tested by Student "t" test and for level of significance "P" value was used. "P" value of less than .05 was considered statistically significant.

RESULTS

This study was conducted on 100 subjects who had received their complete dentures and were administered with questionnaires containing questions related to quality of satisfaction towards complete dentures. After completion of the questionnaires the scoring was done as per groups on the basis of different domains.

Table 1. Groups and Subgroup of recruited subjects

| Group | Sub-group | Age | Sub-group |
|-------|-----------|-----|-----------|
| A     | Age       | 1   | 45 - 65 years |
|       |           | 2   | Above 65 years |
| B     | Gender    | 1   | Male |
|       |           | 2   | Female |
| C     | Education level | 1 | Illiterate |
|       |           | 2   | Primary level |
|       |           | 3   | Secondary level |
|       |           | 4   | Graduate level |
|       |           | 5   | Post-graduate level |
| D     | Socio-economic status | 1 | Socio-economic status |
|       |           | 2   | Upper-middle |
|       |           | 3   | Poor |
| E     | Marital status | 1 | Married |
|       |           | 2   | Widow/widower |

Table 2 showed that esthetics and function were significant priority for denture treatment for subgroup 1 and subgroup 2, respectively. Level of satisfaction was higher in subgroup 2 subjects regarding their mastication, appearance, comfort, health, denture care and social status except speech in which subgroup 1 subjects showed more satisfaction (Table 3).

Literate sub-group of subjects were self motivated and more aware for motivated and more aware for esthetic and function in comparison to illiterate sub group (Table 6). Level of satisfaction in mastication, appearance, speech, comfort, health, denture care and social status were found statistically significant with literacy level. Majority of illiterate patient showed partial satisfaction or dissatisfaction (Table 7).

Poor income subjects were advised by others to get denture treatment and their priority was eating properly with complete denture (Table 8). Level of satisfaction was higher in upper high income group regarding appearance, speech, comfort, denture care and social status but significantly only in case of social
### Table 2. Age-wise distribution of patients regarding their denture compliance

|                        | Group 1 45 - 65 years (n = 50) | Group 2 Above 65 years (n = 50) | X^2  | P   |
|------------------------|--------------------------------|--------------------------------|------|-----|
| Treatment eagerness    |                               |                                |      |     |
| Own will               | 41 82                         | 33 66                         | 3.33 | .06 |
| Advised by others      | 9 18                          | 17 34                         |      |     |
| Priority               |                               |                                |      |     |
| Good looks             | 38 76                         | 14 28                         |      |     |
| Eating                 | 12 24                         | 36 72                         | 23.08| <.001|
| Speech                 | 0 0                           | 0 0                           |      |     |

### Table 3. Age-wise distribution of patients regarding quality of satisfaction towards complete denture

| Satisfaction       | Sub-group 1 45 - 65 years (n = 50) | Sub-group 2 Above 65 years (n = 50) | X^2  | P   |
|--------------------|-------------------------------------|-------------------------------------|------|-----|
| Mastication        |                                     |                                     |      |     |
| a. Satisfactory    | 24 48                               | 25 50                               | 0.22 | .89 |
| b. Partially Satisfactory | 14 28   | 13 26                               |      |     |
| c. Not Satisfactory | 11 22                               | 13 26                               |      |     |
| Appearance         |                                     |                                     |      |     |
| a. Satisfactory    | 3 26                                | 17 34                               | 1.53 | .46 |
| b. Partially Satisfactory | 10 20 | 6 12                                |      |     |
| c. Not Satisfactory | 27 54                               | 27 54                               |      |     |
| Speech             |                                     |                                     |      |     |
| a. Satisfactory    | 18 36                               | 16 32                               | 0.15 | .94 |
| b. Partially Satisfactory | 10 20 | 12 24                               |      |     |
| c. Not Satisfactory | 22 44                               | 32 44                               |      |     |
| Comfort            |                                     |                                     | 13.47| <.001|
| a. Satisfactory    | 18 36                               | 35 70                               |      |     |
| b. Partially Satisfactory | 14 28 | 10 20                               |      |     |
| c. Not Satisfactory | 18 36                               | 5 10                                |      |     |
| Health             |                                     |                                     | 5.37 | .07 |
| a. Satisfactory    | 12 24                               | 23 46                               |      |     |
| b. Partially Satisfactory | 13 26 | 10 20                               |      |     |
| c. Not Satisfactory | 25 50                               | 17 34                               |      |     |
| Denture care       |                                     |                                     | 2.10 | .35 |
| a. Satisfactory    | 36 72                               | 42 84                               |      |     |
| b. Partially Satisfactory | 5 10     | 3 6                                |      |     |
| c. Not Satisfactory | 9 18                                | 5 10                                |      |     |
| Social status      |                                     |                                     | 0.22 | .90 |
| a. Satisfactory    | 23 46                               | 25 50                               |      |     |
| b. Partially Satisfactory | 16 32 | 14 28                               |      |     |
| c. Not Satisfactory | 11 22                               | 11 22                               |      |     |

### Table 4. Gender-wise distribution of patients regarding their denture compliance

|                        | Male (n = 50) | Female (n = 50) | X^2  | P   |
|------------------------|--------------|----------------|------|-----|
| Treatment eagerness    |              |                |      |     |
| Own will               | 61 76.3      | 16 80          | 0.13 | .72 |
| Advised by others      | 19 23.7      | 4 20           |      |     |
| Priority               |              |                |      |     |
| Good looks             | 6 7.5        | 10 50          |      |     |
| Eating                 | 74 92.5      | 10 50          | 21.50| <.001|
| Speech                 | 0 0          | 0 0            |      |     |
status. Upper middle income group was more satisfied with mastication and significantly satisfied with health (Table 9).

**DISCUSSION**

Limited number of documented literature was present on complete denture satisfaction on Indian population. Therefore, this study was planned to assess the level of satisfaction of the subjects wearing complete denture prosthesis reporting to the Prosthodontic Department of CSM Medical University, Lucknow. This study would help subjects to show their satisfaction with the prostheses and it may help prosthodontists to pay increased attention to the factors of patient concern. This study was carried out in one hundred edentulous subjects on the basis of questionnaires pertaining to level of satisfaction with complete dentures two months after dentures insertion. Quality of satisfaction questionnaires includes the domains of mastication, appearance, speech, comfort, health, denture care and social status of the subjects.

Regarding eagerness of subjects towards denture treatment status. Upper middle income group was more satisfied with mastication and significantly satisfied with health (Table 9).

**Table 5. Gender-wise distribution of patients regarding quality of satisfaction towards complete denture**

| Satisfaction | Male (n = 80) | Female (n = 20) |
|--------------|--------------|-----------------|
|              | Number | %       | Number | % | X^2 | P       |
| Mastication  | a. Satisfactory | 40 | 50 | 9 | 45 | X^2 = 0.24 | P = .89 |
|              | b. Partially Satisfactory | 20 | 25 | 5 | 25 | |
|              | c. Not Satisfactory | 20 | 25 | 6 | 30 | |
| Appearance   | a. Satisfactory | 24 | 30 | 5 | 25 | X^2 = 1.39 | P = .50 |
|              | b. Partially Satisfactory | 13 | 16.25 | 3 | 15 | |
|              | c. Not Satisfactory | 43 | 53.75 | 12 | 60 | |
| Speech       | a. Satisfactory | 28 | 35 | 4 | 20 | X^2 = 1.94 | P = .48 |
|              | b. Partially Satisfactory | 16 | 20 | 6 | 30 | |
|              | c. Not Satisfactory | 36 | 45 | 10 | 50 | |
| Comfort      | a. Satisfactory | 43 | 53.75 | 10 | 50 | X^2 = 0.74 | P = .60 |
|              | b. Partially Satisfactory | 17 | 21.25 | 6 | 30 | |
|              | c. Not Satisfactory | 20 | 25.00 | 4 | 20 | |
| Health       | a. Satisfactory | 34 | 42.50 | 3 | 15 | X^2 = 5.19 | P = .07 |
|              | b. Partially Satisfactory | 16 | 20.00 | 6 | 30 | |
|              | c. Not Satisfactory | 30 | 37.50 | 11 | 55 | |
| Denture care | a. Satisfactory | 55 | 69.30 | 15 | 75 | X^2 = 1.39 | P = .50 |
|              | b. Partially Satisfactory | 10 | 11.95 | 3 | 15 | |
|              | c. Not Satisfactory | 15 | 18.75 | 2 | 10 | |
| Social status| a. Satisfactory | 40 | 50 | 9 | 45 | X^2 = 0.84 | P = .66 |
|              | b. Partially Satisfactory | 20 | 25 | 7 | 35 | |
|              | c. Not Satisfactory | 20 | 25 | 4 | 20 | |

**Table 6. Educational status-wise distribution of patients regarding their denture compliance**

| Treatment eagerness | Illiterate (I) (n = 24) | Primary level (PL) (n = 11) | Secondary level (SL) (n = 34) | Graduate level (GL) (n = 17) | Post-graduate level (PGL) (n = 14) |
|----------------------|-------------------------|-----------------------------|-------------------------------|-----------------------------|-----------------------------------|
|                      | Number | % | Number | % | Number | % | Number | % | Number | % | Number | % | X^2 | P       |
| Treatment eagerness  | Own will | 13 | 54 | 7 | 64 | 28 | 82 | 10 | 59 | 12 | 86 | X^2 = 8.21 | P < .08 |
|                      | Advised by others | 11 | 46 | 4 | 36 | 6 | 18 | 7 | 41 | 2 | 14 | |
| Priority             | Good looks | 3 | 12.5 | 1 | 9.1 | 5 | 15 | 3 | 18 | - | - | |
|                      | Eating | 21 | 87.5 | 10 | 90.9 | 29 | 85 | 14 | 82 | 14 | 100 | X^2 = 2.75 | P < .60 |
Table 7. Educational status-wise distribution of patients regarding quality of satisfaction towards complete denture

| Satisfaction | Illiterate (I) | Primary level (PL) | Secondary level (SL) | Graduate level (GL) | Post-graduate level (PGL) | Total no. of patients |
|-------------|----------------|-------------------|----------------------|---------------------|--------------------------|----------------------|
|             | Number         | %                 | Number               | %                   | Number                    | %                    |
| Mastication |                |                   |                      |                     |                          |                      |
| a. Satisfactory | 8 | 33.3 | 7 | 63.64 | 14 | 41.2 | 9 | 52.94 | 11 | 78.6 | \( X^2 = 20.12, P < .01 \) |
| b. Partially Satisfactory | 4 | 16.7 | 2 | 18.2 | 14 | 41.2 | 6 | 35.3 | 2 | 14.3 |                    |
| c. Not Satisfactory | 12 | 50 | 2 | 18.2 | 6 | 17.65 | 2 | 11.76 | 1 | 7.14 |                    |
| Appearance |                |                   |                      |                     |                          |                      |
| a. Satisfactory | 2 | 8.33 | 4 | 36.36 | 8 | 23.53 | 6 | 35.3 | 10 | 71.43 | \( X^2 = 36.52, P < .001 \) |
| b. Partially Satisfactory | 2 | 8.33 | 1 | 9.09 | 4 | 11.76 | 8 | 47.1 | 1 | 7.14 |                    |
| c. Not Satisfactory | 20 | 83.3 | 6 | 54.55 | 22 | 64.71 | 3 | 17.65 | 3 | 21.43 |                    |
| Speech |                |                   |                      |                     |                          |                      |
| a. Satisfactory | 9 | 37.5 | 2 | 18.2 | 8 | 23.53 | 7 | 41.2 | 8 | 57 | \( X^2 = 8.06, P = .43 \) |
| b. Partially Satisfactory | 4 | 16.7 | 3 | 27.3 | 10 | 29.41 | 4 | 23.53 | 1 | 7.14 |                    |
| c. Not Satisfactory | 11 | 45.83 | 6 | 54.55 | 16 | 47.1 | 6 | 35.3 | 5 | 35.71 |                    |
| Comfort |                |                   |                      |                     |                          |                      |
| a. Satisfactory | 9 | 37.5 | 6 | 54.55 | 15 | 11 | 11 | 64.7 | 11 | 78.6 | \( X^2 = 15.07, P < .05 \) |
| b. Partially Satisfactory | 4 | 16.7 | 2 | 18.2 | 12 | 3 | 3 | 17.65 | 3 | 21.43 |                    |
| c. Not Satisfactory | 11 | 45.83 | 3 | 27.3 | 7 | 3 | 3 | 17.65 | - | - |                    |
| Health |                |                   |                      |                     |                          |                      |
| a. Satisfactory | 3 | 12.5 | 4 | 36.4 | 15 | 49.12 | 5 | 29.4 | 9 | 64.3 | \( X^2 = 15.21, P = .05 \) |
| b. Partially Satisfactory | 7 | 29.2 | 2 | 18.2 | 7 | 20.6 | 7 | 41.2 | 3 | 21.43 |                    |
| c. Not Satisfactory | 14 | 58.3 | 5 | 45.5 | 12 | 35.3 | 5 | 29.4 | 2 | 14.13 |                    |
| Denture care |                |                   |                      |                     |                          |                      |
| a. Satisfactory | 11 | 45.85 | 8 | 72.73 | 31 | 91.2 | 16 | 94.12 | 9 | 64.3 | \( X^2 = 25.11, P < .001 \) |
| b. Partially Satisfactory | 3 | 12.5 | 1 | 9.1 | 2 | 5.9 | 1 | 5.9 | 3 | 21.43 |                    |
| c. Not Satisfactory | 10 | 66.7 | 2 | 18.2 | 21 | 61.8 | 10 | - | 2 | 14.3 |                    |
| Social status |                |                   |                      |                     |                          |                      |
| a. Satisfactory | 7 | 29.2 | 5 | 45.5 | 16 | 27.1 | 10 | 58.18 | 10 | 71.43 | \( X^2 = 9.23, P = .31 \) |
| b. Partially Satisfactory | 8 | 33.3 | 3 | 27.3 | 12 | 35.3 | 4 | 23.53 | 3 | 21.43 |                    |
| c. Not Satisfactory | 9 | 37.5 | 3 | 27.3 | 6 | 17.65 | 3 | 17.65 | 1 | 7.14 |                    |

in age group category, it was found that maximum number of subgroup 1 subjects was self-motivated whereas subgroup 2 subjects were motivated by others for the treatment. In this finding, it is obvious that the subgroup 1 subjects at this age are socially active, professionally engaged and most of them are economically sound, for which the treatment is mandatory whereas in subgroup 2, age compromised, social and economic dependence and in some cases medically compromised conditions like diabetes mellitus, hypertension, retinopathy etc. limited for seeking denture treatment. In priority for denture treatment, subgroup 1 subjects were more conscious about their esthetics and subgroup 2 subjects were concerned towards functions. Subgroup 1 subjects consisted of potentially active age group which require social and professional acceptance in which esthetic concern is of utmost important. On the other hand, the subgroup 2 conscious of retired persons, age-wise and social-
Table 9. Socio-economic status-wise distribution of patients regarding quality of satisfaction towards complete denture

| Satisfaction | Upper high | Upper middle | Poor | Total no. of patients |
|--------------|------------|--------------|------|----------------------|
| Mastication  | Number     | %            | Number | %          | Number | %          | X^2     | P         |
| a. Satisfactory | 12        | 50.0         | 15    | 57.7       | 22     | 44.0       | 7.12    | .13       |
| b. Partially Satisfactory | 10        | 41.7         | 5     | 19.2       | 12     | 24.0       |         |           |
| c. Not Satisfactory   | 2         | 8.3          | 6     | 23.1       | 16     | 32.0       |         |           |
| Appearance            | Number     | %            | Number | %          | Number | %          | X^2     | P         |
| a. Satisfactory       | 13        | 54.2         | 9     | 34.6       | 8      | 16.0       | 12.26   | .016      |
| b. Partially Satisfactory | 2         | 8.3          | 3     | 11.5       | 11     | 22.0       |         |           |
| c. Not Satisfactory   | 9         | 37.5         | 14    | 53.8       | 31     | 62.0       |         |           |
| Speech                | Number     | %            | Number | %          | Number | %          | X^2     | P         |
| a. Satisfactory       | 11        | 45.8         | 9     | 34.6       | 13     | 26.0       | 4.06    | .40       |
| b. Partially Satisfactory | 3         | 12.5         | 7     | 26.9       | 11     | 22.0       |         |           |
| c. Not Satisfactory   | 10        | 47.7         | 10    | 38.5       | 26     | 52.0       |         |           |
| Comfort               | Number     | %            | Number | %          | Number | %          | X^2     | P         |
| a. Satisfactory       | 18        | 75.0         | 14    | 53.8       | 1      | 42.0       | 7.76    | .101      |
| b. Partially Satisfactory | 4         | 16.7         | 5     | 19.2       | 14     | 28.0       |         |           |
| c. Not Satisfactory   | 2         | 8.3          | 7     | 26.9       | 15     | 30.0       |         |           |
| Health                | Number     | %            | Number | %          | Number | %          | X^2     | P         |
| a. Satisfactory       | 12        | 50.0         | 14    | 53.8       | 11     | 22.0       | 20.47   | .001      |
| b. Partially Satisfactory | 7         | 29.2         | 8     | 30.7       | 8      | 16.0       |         |           |
| c. Not Satisfactory   | 5         | 20.8         | 4     | 15.3       | 31     | 62.0       |         |           |
| Denture care          | Number     | %            | Number | %          | Number | %          | X^2     | P         |
| a. Satisfactory       | 24        | 100          | 18    | 69.2       | 35     | 70.0       | 9.49    | .05       |
| b. Partially Satisfactory | -         | -            | 3     | 11.5       | 5      | 10.0       |         |           |
| c. Not Satisfactory   | -         | -            | 5     | 19.2       | 10     | 20.0       |         |           |
| Social status         | Number     | %            | Number | %          | Number | %          | X^2     | P         |
| a. Satisfactory       | 16        | 66.7         | 12    | 46.2       | 22     | 44.0       | 11.71   | .02       |
| b. Partially Satisfactory | 8         | 33.3         | 9     | 34.6       | 11     | 22.0       |         |           |
| c. Not Satisfactory   | -         | -            | 5     | 19.2       | 17     | 34.0       |         |           |

Table 10. Marital status-wise distribution of patients regarding their denture compliance

|            | Married (n = 82) | Widow/widower (n = 18) |
|------------|------------------|------------------------|
| Treatment eagerness | Number | % | Number | % | X^2     | P         |
| Own will     | 69     | 84.15       | 15     | 83.3       | 0.07    | .78       |
| Advised by others | 13     | 15.85       | 3      | 16.7       |         |           |
| Priority     |       |             |       |             |         |           |
| Good looks   | 15     | 18.3        | 2      | 11.1       | 0.54    | .46       |
| Eating       | 67     | 81.7        | 16     | 88.89      |         |           |
| Speech       | 0      | 0           | 0      | 0          |         |           |

ly compromised for which functional aspect is more concerned.

While considering the quality of satisfaction towards complete denture therapy, subgroup 2 subjects were more satisfied with their dentures regarding all domains except speech where the subgroup 1 subjects were more satisfied. This finding may be due to the fact that the ageing population has overwhelming desire for satisfaction at all level of functions in their daily life which have been fulfilled by their dentures. Other reasons might be due to older subjects do not prefer to go to dentist regarding poorly fitting denture and satisfied with their poorly fitting dentures. It was also supported by the fact that stereognostic ability is poor in older subjects than younger ones. It was found that presence of prosthesis improve stereognostic ability so subjects having poorer stereognostic ability showed more satisfaction than those having better stereognostic ability. Regarding eagerness towards denture treatment in gender category, female were self-motivated whereas the male were advised by others for the same (Table 4). This finding clearly showed that females are more aware and concerned about their denture treatment to restore their lost esthetic, social wellbeing and function. There were equal number of opinions of female towards function and esthetics for priority of making dentures where-
Table 11. Marital status-wise distribution of patients regarding quality of satisfaction towards complete denture

| Satisfaction | Married (n = 82) | Widow/ widower (n = 18) |
|--------------|-----------------|-------------------------|
|              | Number | %    | Number | %    |
| Mastication  |        |      |        |      |
| a. Satisfactory | 49     | 56.76 | 10     | 55.6 |
| b. Partially Satisfactory | 22     | 26.83 | 5      | 27.8 |
| c. Not Satisfactory | 11     | 13.41 | 3      | 16.7 |
| Appearance   |        |      |        |      |
| a. Satisfactory | 25     | 30.51 | 5      | 22.8 |
| b. Partially Satisfactory | 15     | 18.33 | 1      | 5.6  |
| c. Not Satisfactory | 42     | 51.22 | 12     | 66.7 |
| Speech       |        |      |        |      |
| a. Satisfactory | 46     | 56.09 | 8      | 44.4 |
| b. Partially Satisfactory | 17     | 20.73 | 4      | 22.2 |
| c. Not Satisfactory | 19     | 23.17 | 6      | 33.3 |
| Comfort      |        |      |        |      |
| a. Satisfactory | 52     | 63.41 | 6      | 61.1 |
| b. Partially Satisfactory | 23     | 28.05 | 2      | 11.1 |
| c. Not Satisfactory | 7      | 8.54  | 5      | 27.8 |
| Health       |        |      |        |      |
| a. Satisfactory | 48     | 58.54 | 8      | 44.4 |
| b. Partially Satisfactory | 17     | 20.73 | 6      | 33.3 |
| c. Not Satisfactory | 17     | 20.73 | 4      | 22.2 |
| Denture care |        |      |        |      |
| a. Satisfactory | 65     | 79.34 | 13     | 72.2 |
| b. Partially Satisfactory | 6      | 7.32  | 1      | 5.6  |
| c. Not Satisfactory | 11     | 13.41 | 4      | 22.2 |
| Social status|        |      |        |      |
| a. Satisfactory | 41     | 50.00 | 8      | 44.4 |
| b. Partially Satisfactory | 24     | 29.34 | 6      | 33.3 |
| c. Not Satisfactory | 17     | 20.73 | 4      | 22.2 |

as the male were more concerned for the function. This showed that unlike males females were equally conscious about their esthetic as well as function after denture treatment.15

While considering the genders in this study, the majority of the denture wearer was male. It is because most of the Indian females are housewives. They have limited social interaction and the male/female ratio was also higher in the study population.16 The quality of satisfaction in this study have been found that male were more satisfied than female in mastication, appearance, speech and health (Table 5). There was equal satisfaction level in comfort and social status of both the groups. In denture care, female were found more satisfied than male. It may appear because male patients are more complied towards denture treatment and satisfaction than their female counterparts. Taylor and Dokru20 surveyed 29 male and 30 female complete denture patients ranging from 52 - 92 years of age and found that male patients were more satisfied with dentures than female, which is similar to the present finding. Awad and Feine21 and Baer et al.22 also documented that satisfaction is also depend upon gender. The eagerness of treatment of postgraduate/professional level of literate group of subjects was found to be self-motivated followed by others literate groups, whereas the illiterate group of subjects has to be motivated by others for the denture treatment (Table 6). This finding revealed that with the increase in literacy rate there is increase in treatment motivations, which may be related to awareness towards denture treatment. The need for denture treatment for esthetics as well as function was found higher with increased literacy level, whereas illiterate group was mainly concerned about their functions. This showed that with the increase in literacy rate there is awareness for esthetics as well as function towards denture treatment.

While studying quality of satisfaction of denture treatment of illiterate group of patients with the different levels of literate group, the level of satisfaction was found different in different literacy level. The overall level of satisfaction was found significantly higher in maximum literate level. Therefore, the level of satisfaction is higher with the increase in literacy rate. This finding revealed that literate subjects may easily understand the instruction and limitation of the artificial replacement of teeth.23 With the increase in literacy rate there is increase in treatment motivation, which may be related to awareness towards denture treatment.

While studying the compliance of subjects, towards denture in different socio-economic status regarding motivation, the upper high income group subjects were self-motivated, whereas the poor income group of subjects was motivated by others for treatment (Table 8). This finding revealed that the denture treatment is directly related to the income status of subjects. Regarding priority for denture treatment, maximum number
of poor income group subjects made their denture for function followed by upper high income group subjects were found maximum in esthetics as well as function. These findings showed that poor income group subjects are more concerned about function for their denture treatment, whereas the upper high and upper middle income group subjects were concerned about both esthetics and function.

The satisfaction level towards denture treatment in different economic status level revealed that in appearance and health, the upper and middle income group patients were found significantly higher in satisfaction than lower income group (Table 9) whereas in mastication, speech comfort, denture care significantly higher in satisfaction than lower income group the upper and middle income group subjects were found significantly higher in satisfaction than lower income group the upper high and upper middle income group subjects were found significantly higher in satisfaction than lower income group.

The satisfaction level towards denture treatment in different economic status level revealed that in appearance and health, the upper and middle income group patients were found significantly higher in satisfaction than lower income group.

Effects of sociodemographic variables on complete denture satisfaction

The satisfaction level towards denture treatment in different economic status level revealed that in appearance and health, the upper and middle income group patients were found significantly higher in satisfaction than lower income group whereas in mastication, speech comfort, denture care significantly higher in satisfaction than lower income group the upper high and upper middle income group subjects were found significantly higher in satisfaction than lower income group.

While considering the marital status of subjects regarding compliance towards treatment motivation, the present study has shown that there were no significant difference in married and widow/widowers. Both married and widow/widowers were found equally self-motivated and also have been motivated equally by others for denture treatment (Table 10). This similarity may be due to smaller sample size in widow/widower group, which may require further research on a larger sample size in female. While considering the priority for denture treatment, the concern for esthetics was found slightly higher in married and the concern for the function was found higher in widow/widower group. This finding revealed that the widow/widower are least concerned about their esthetics rather they want to restore the function due to various psychological problems whereas the married groups were concerned about both esthetics and function, as they may have been socially and professionally engaged.

While considering the satisfaction levels of different marital status group of patients towards their complete denture, it is observed that mostly the married group of patients was more satisfied in all levels of satisfaction, whereas the widow/widower group was either partially or dissatisfied (Table 11). This variation in marital status regarding satisfaction level reveals that the widow/widower group of patients was psychologically depressed in all satisfaction levels.

In this study, few limitations are present. Few subjects have complained to their dentist during the follow-up visit, thus introducing bias. This study have small sample size and short follow-up period. Further studies need to target more and diverse population.

CONCLUSION

Socio-demographic characteristics such as age, gender, socio-economic, educational and marital status were associated with denture satisfaction variables, but not significant with every variable. Although these variables may represent important co-factors in the patient’s acceptance of dental prosthesis, they may affect the way a patient perceives dental prosthesis outcomes. Aged over 65 years, male, higher income level, higher literacy and married status are significantly associated with denture satisfaction with many but not all domains.

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