



# Original Article

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# Patient's Preferences in Selecting Prosthodontist Based on Age and Sex in a Tertiary Hospital in Kathmandu

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# **ABSTRACT**

# Introduction

Most of the dental research has focused on dentist's perceptions of patients based on their demographic profiles, while little is known about patient's perceptions of their dentists. Further, there is a lack of data regarding patient preferences in selecting prosthodontists based on gender and age in Nepal. This study aims to investigate the influence of various demographic factors on patient preferences in selecting their prosthodontist.

#### Methods

A sample of 358 patients presenting at the Department of Prosthodontics, Tribhuvan University Teaching Hospital, Institute of Medicine for replacement of missing teeth took part in this questionnaire-based study. The questionnaire was designed to assess the influence of sex and age of the prosthodontist on the decision to select a prosthodontist. Statistical analysis was performed by SPSS version 16.

## Results

Majority (258, 72.1%) preferred treatment by a prosthodontist of age <44 years. There was a significant association seen between participants' age, sex, and educational status and age preference for prosthodontists. Also, their sex, educational status, and prosthodontist among family and friends were significantly associated with prosthodontist's sex preference.

#### Conclusion

There was preference for younger prosthodontists by the study participants but they had no gender preference for having their treatment done.

### Keywords

Age, gender, preference, prosthodontist, treatment

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#### INTRODUCTION

atient-centered care (PCC) is an essential element of quality health-care.1 A committee on the quality of health care in America has defined PCC as the process of providing care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions'.1 It is found that patients preferences for the practitioners are associated with a better patient satisfaction,<sup>2</sup> an increased willingness to disclose symptoms<sup>3</sup> and better physician patient relationship.4 However, patient's preferences, needs, and values are often restricted by a variety of factors, such as the availability of health care professionals in a specific location and the types of health practices available.<sup>5</sup> communication skills, empathetic personality, ability to relieve pain are a few important traits that are considered by the patients when selecting the dentist.6 Demographic background and characteristics of the dentist may also affect the patient's perception. 7

On the basis of demographic characteristics such as gender, age, and nationality, general practitioners' preferences can be found in medical literature. Much of the literature shows same sex preferences among the patients. Available literature on patients' preferences for dentists, however, does not show same sex preferences which may be due to the perception that dentistry is less intrusive, sensitive, or embarrassing than other medical fields. Regarding the age of a dentist, there are a few studies showing patients' preferences for younger dentists. Regarding patients' preferences on different specialties of dentistry, a study conducted in Riyadh showed patient's preferences towards male prosthodontists.

There is a paucity of data regarding patient preferences in selecting prosthodontists based on gender and age in Nepal. The objective of this study was to explore the influence of various demographic factors on patient preferences in selecting a prosthodontist.

#### **METHODS**

An observational, cross-sectional study was conducted among patients visiting the Department of Prosthodontics, Tribhuvan University Teaching Hospital, Maharajgunj Medical Campus, a tertiary care center in Nepal. Ethical approval was obtained from the Institutional Review Committee of the Institute of Medicine, Tribhuvan University [Ref no.: 501(6-11) E2,78/79] for conducting the study.

A total of 358 patients referred to the department of prosthodontics were enrolled in the study from May 2022 to July 2022 by convenience sampling technique. Sample size was calculated using the

following formula, using the prevalence of patient preferences for female prosthodontists in a study done by Huraib et al. in the Saudi population.

 $N = Z^2 pq/d^2$ , Where, Z = 1.96, n = minimum desired sample size, p = prevalence of no preference for the gender of the dentist (35.8% = 0.358), q = 1-p = 0.56, d = least estimated difference in prevalence = 0.642. From the above formula, the minimum desired sample size was estimated to be 353.

The patients with at least one missing tooth and those willing to have missing teeth replaced with prosthetics were included in the study. The vulnerable members of the population were not included in this research. The answers to the questionnaires were kept anonymous, and the researcher ensured that the information about the participants was strictly confidential. Informed consent was received from the study participants. The study population had the right to refuse and/or withdraw from the study at any time without the need for any kind of explanation on their behalf.

The questionnaire consisted of two sections. The first section included the demographic profile of patients and their previous treatment experiences with the prosthodontist. The second part of the questionnaire consisted of the demographic profile of the prosthodontist and the patient's preferences. The age of the prosthodontist was categorized into 3 groups: less than 44 years, 44–60 years, and more than 60 years. These age categories have been divided according to WHO standards.

During the first visit, an oral examination was done in the dental chair using a mouth mirror and probe. The clinical examination was done by the principal investigator himself to avoid any examiner bias. The patients were informed about the different phases of prosthodontic rehabilitation of the missing dentition. They were also informed about the cost of the treatment, and the estimated time for the procedure. The principal investigator himself filled up the self-administered questionnaire for assessment of the patient's preferences regarding the gender and age of the prosthodontist. The collected information was summarized, organized, and accordingly tabulated for clear demonstration. Data was analyzed using the Statistical Package for Social Science Version 16 (SPSS Ver. 16). Descriptive statistics were calculated. The association between variables was estimated using the Chi square test.

#### **RESULTS**

The mean age of the study participants was 41.71±13.87 years. Out of 358 individuals studied, 174 (48.6%) were males and 184 (51.4%) were females. Among them, 157 (43.9%) had received formal education, 125 (34.9%) were literate without formal education, and 76 (21.2%) were illiterate.

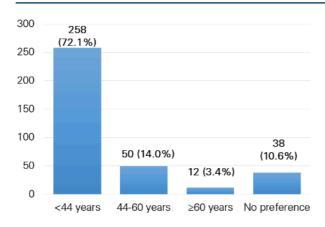


Figure 1. Patients' preference of age of prosthodontists

Only 15 (4.2%) had a prosthodontist among their family and/or friends, and 46 (12.8%) had undergone a previous prosthodontic procedure.

The majority (258, 76.1%) of the study participants preferred treatment by a prosthodontist belonging to the age group of <44 years. However, 50 (14%) of them preferred prosthodontists aged 44–60 years (Figure 1). Most of them (165, 46.1%) had no sex preference for having their treatment done (Figure 2).

There was a significant association seen between the demographic profile of the individuals studied, like age, sex, and educational status, and the age preference of prosthodontists (p-values = <0.001, 0.005, <0.001,) respectively). However,

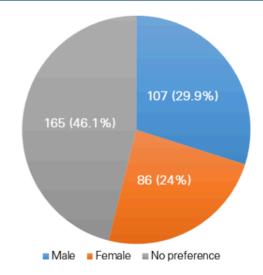


Figure 2. Patients' preference of sex of prosthodontists

no association was seen between prosthodontists among family/friends and previous prosthodontic procedures and age preference for prosthodontists (p-values = 0.46, 0.09, respectively, in Table 1).

Significant association was seen between their sex, educational status, and prosthodontist present in the family with sex preference of the prosthodontist (p-value = 0.002, <0.001, 0.009, respectively), but no association was seen between age and previous prosthodontic procedure with sex preference of the prosthodontist (p-value = 0.68, 0.38, respectively, Table 1).

Table 1. Association of patients' demographic characteristics with age preference of prosthodontist

|  | Age p                 |                                       |          |           |         |
|--|-----------------------|---------------------------------------|----------|-----------|---------|
| Characteristics                        | <44                   | p-value<br>14 44-60 ≥60 No preference |          |           |         |
| Age in years                           |                       |                                       |          |           | <0.001* |
| <44                                    | 167 (82.3)            | 15 (7.4)                              | 6 (3.0)  | 15 (7.4)  |         |
| 44-60                                  | 69 (62.7)             | 20 (18.2)                             | 6 (5.5)  | 15 (13.6) |         |
| ≥60                                    | 22 (48.9)             | 15 (33.3)                             | -        | 8 (17.8)  |         |
| Sex                                    |                       |                                       |          |           | 0.005** |
| Male                                   | 117 (67.2)            | 24 (13.8)                             | 11 (6.3) | 22 (12.6) |         |
| Female                                 | 141 (76.6)            | 26 (14.1)                             | 1 (0.5)  | 16 (8.7)  |         |
| Educational status                     |                       |                                       |          |           | <0.001* |
| Illiterate                             | 41 (53.9)             | 16 (21.1)                             | 5 (6.6)  | 14 (18.4) |         |
| Literate                               | 106 (84.8)            | 7 (5.6)                               | -        | 12 (9.6)  |         |
| Formal education                       | 111 (70.7)            | 27 (17.2)                             | 7 (4.5)  | 12 (7.6)  |         |
| Prosthodontist among family or friends |                       |                                       |          |           | 0.46**  |
| Yes                                    | 14 (93.3)             | 1 (6.7)                               | -        | -         |         |
| No                                     | 244 (71.1)            | 49 (14.3)                             | 12 (3.5) | 38 (11.1) |         |
| Previous prosthodontic procedure       |                       |                                       |          |           | 0.09*   |
| Yes                                    | 37 (80.4)             | 2 (4.3)                               | 3 (6.5)  | 4 (8.7)   |         |
| No                                     | 221 (70.8)            | 48 (15.4)                             | 9 (2.9)  | 34 (10.9) |         |
| *Chi square test                       | **Fisher's exact test |                                       |          |           |         |

Table 2. Association of patients' demographic characteristics with sex preference of prosthodontist

| Characteristics –                      | Sex prefere | p-value   |                    |         |
|--|-------------|-----------|--------------------|---------|
|  | Male        | Female    | nale No preference |         |
| Age in years                           |             |           |                    |         |
| <44                                    | 59 (29.1)   | 46 (22.7) | 98 (48.3)          | 0.69*   |
| 44-60                                  | 37 (33.6)   | 27 (24.5) | 46 (41.8)          |         |
| ≥60                                    | 11 (24.4)   | 13 (28.9) | 21 (46.7)          |         |
| Sex                                    |             |           |                    |         |
| Male                                   | 67 (38.5)   | 39 (22.4) | 68 (39.1)          | 0.002*  |
| Female                                 | 40 (21.7)   | 47 (25.5) | 97 (52.7)          |         |
| Educational status                     |             |           |                    |         |
| Illiterate                             | 6 (7.9)     | 12 (15.8) | 58 (76.3)          | <0.001* |
| Literate                               | 31 (24.8)   | 48 (38.4) | 46 (36.8)          |         |
| Formal education                       | 70 (44.6)   | 26 (16.6) | 61 (38.9)          |         |
| Prosthodontist among family or friends |             |           |                    |         |
| Yes                                    | 9 (60.0)    | -         | 6 (40.0)           | 0.009** |
| No                                     | 98 (28.6)   | 86 (25.1) | 159 (46.4)         |         |
| Previous prosthodontic procedure       |             |           |                    |         |
| Yes                                    | 12 (26.1)   | 15 (32.6) | 19 (41.3)          | 0.38*   |
| No                                     | 95 (30.4)   | 71 (22.8) | 146 (46.8)         |         |

<sup>\*</sup>Chi square test

#### DISCUSSION

There are only a few studies done to explore the patient's preferences based on the age and sex of the prosthodontist. The result of this study indicated that participants had a general preference for younger prosthodontists (82.3%) and showed a statistically insignificant result for preference based on the sex of the prosthodontist.

The selection of younger dentists may be explained on the basis that they are more updated about their work and have better communication skills compared to their older counterparts. The lack of any preferences based on the gender of the practitioner may be explained on the basis that dentistry is perceived as less intrusive and less embarrassing than other medical fields.

There is a lack of general consensus regarding the age preferences of practitioners. Some studies show no preference based on the age of the practitioner<sup>9</sup> while others show preferences for older practitioners.<sup>12</sup> as they tend to have better interpersonal skills and are more thorough in their approach. However, this study was in agreement with previous surveys<sup>5,13</sup> which also showed a general preference for younger dentists. Furthermore, this study showed that female patients, literate patients, and patients with formal education preferred a younger prosthodontist compared to male and illiterate patients. Further research needs to be done to analyze this association more comprehensively.

The lack of sex preferences in the present study

is in agreement with previous studies.<sup>6,10,14,15</sup> However, one study showed preferences for male prosthodontists compared to female prosthodontists.<sup>11</sup> A study showed female patients had no sexual preferences for prosthodontists, which is in agreement with the present study.<sup>11</sup>

One of the major limitations of this study is the inclusion of only a small sample, due to which its results cannot be generalized to the whole population. Also, we only considered the age and sex of the prosthodontists but there are other factors such as race, attire, dental fees, waiting time and attractiveness of the prosthodontist which may also influence patients choice.

#### CONCLUSION

There was a preference for younger prosthodontists among the study participants, but they had no gender preference for having their treatment done. The selection of prosthodontists may be dependent upon various demographic and other systemic characteristics of both participants and prosthodontists. Further research should be conducted incorporating those characteristics to have a broader understanding of patient choice in our community.

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<sup>\*\*</sup>Fisher's exact test

#### **CONFLICT OF INTEREST**

The author(s) declare that they do not have any conflicts of interest with respect to the research, authorship, and/or publication of this article.

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