Original Article

Patients' Preference in Selecting a Dental Practitioner based on Gender

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Abstract

Objective: To examine the prevalence of gender-based selection of dental practitioners among male and female patients in the Out Patient Department (OPD) of the Institute of Dentistry, CMH Lahore Medical College, and to identify factors influencing their choice.

Methodology: A descriptive cross-sectional study was carried out in the OPD of the Institute of Dentistry, CMH Lahore Medical College, from April to July, 2024. A total of 303 participants, aged between 16 and 70 years, were selected through non-probability convenience sampling. The exclusion of dentists, dental students, medical doctors, and MBBS students was aimed at minimizing biases that could affect the results and limit the study's generalizability. Data was collected using a validated questionnaire, assessed for reliability with Cronbach's Alpha ($\alpha = 0.832$), and analyzed using SPSS. Demographic information such as age, gender, marital status, and level of education was collected in the questionnaire to observe their effect on gender preference. The Chi-square test was used to assess the significance of differences between variables, with a P-value of less than 0.05 considered significant.

Results: The mean age of participants was 32.4 years, with a gender distribution of 38.9% male and 61.1% female. Over half of the respondents (54.8%) had no specific gender preference while choosing a dentist. Key factors influencing dentist choice included experience, qualification, communication style, and accessibility. Among the female patients, 51 out of 185 wore Hijab as a part of a religious obligation. Out of these participants 59.7% indicated that it did not prevent them from seeking treatment from a male dentist.

Conclusion: Overall, a majority (54.8%) of the patients did not have any gender preference. However, in general, female dentists were preferred for preventive and paediatric care, while male dentists were favoured for invasive procedures like extractions and prosthetics.

Keywords: Gender Preferences, Gender Identity, Dentists, Patient-Dentist Relationship

Introduction

Dentistry, like other medical fields, emphasizes effective communication between healthcare providers and patients, making it a deeply personal process. It's plausible to expect a heightened gender preference in situations where the personal nature or gravity of the presented condition becomes more pronounced.[1] With the increasing presence of female staff in dentistry,dentists should be attentive to the potential influence of gender stereotypes on patients' outlooks. Understanding how these perceptions relate to a patient's preference for either a male or female dentist is crucial.[2]

These false stereotypes can lead to certain generalizations being made about gender roles. For instance, females might be considered to be more emotional while expressing distress, joy and grief. According to a few studies, females are often perceived as more compassionate and empathetic, though they may be viewed as less competent than male dentists. In contrast, males are generally regarded as more skilled and are often associated with assertiveness and a more aggressive approach.[3]

Various studies have been carried out to explore the preferences patients have while selecting a health care provider.[4]Some of this literature has been written to show patients preference while selecting a dental practitioner.[5]

The preference for a dentist's gender appears to vary across different countries. In Sudan[6] and Turkey, two separate studies found that patients tended to prefer dentists of their own gender, particularly favouring female practitioners.[7]

Conversely, a study conducted in India discovered that half of the participants did not express any gender preferences when selecting a dentist.[8] Research in England revealed a preference for female dentists among partakers.[9] In Saudi Arabia, specifically in Riyadh, a previous study indicated that 40% of respondents had no gender preference, while 33% preferred a male dentist, and 26% preferred a female dentist.[10] Another study in Saudi Arabia revealed that nearly half of the participants had no preferences for a dentist's gender while seeking treatment, the other half preferred male dentists over female dentists especially for surgical procedures.[11]

While patient-centred care has gained prominence in modern-day healthcare, the influence of gender in the patient-provider relationship in Pakistan remains a relatively unexplored dimension, particularly

within the dental context. This study addresses this gap by investigating the extent to which a dental practitioner's gender affects patients' choices and the underlying factors that contribute to these preferences.

Methodology

This study employed a descriptive cross-sectional design and was conducted at the Outpatient Department (OPD) of the Institute of Dentistry, CMH Lahore Medical College, from April to July, 2024. Ethical approval was sought from the Ethical Review Committee of CMH Lahore Medical College and Institute of Dentistry, Lahore (ERC#.13/ERC/CMH/LMC). The target population consisted of patients visiting the dental OPD at the Institute of Dentistry, CMH Lahore Medical College. Open-Api software was used to calculate the sample size. Expected frequency of outcome factor was taken as 73.6% by using research conducted by Sara Zafar as reference.[12]The sample size was calculated to be 300 participants, however 303 participants were included in the study, owing to availability. The study included all patients presenting to the Dental OPD aged 16 to 70 years. Individuals with a background in the medical or dental fields, including MBBS doctors, BDS dentists, and current medical or dental students, were excluded. This exclusion was made to avoid any potential bias that could influence the results and limit the generalizability of the findings. A non-probability convenience sampling technique was used for participant selection.

Data collection was carried out using a self-designed questionnaire developed after a comprehensive review of various studies and questionnaires. The face and construct validity of the questionnaire had been evaluated by subject specialists from different fields of dentistry. Following necessary adjustments, a pilot study with 24 participants was conducted, and the reliability of the questionnaire was determined using Cronbach's Alpha, yielding a value of 0.832.

Section 1 of the questionnaire included a consent form, Section 2 gathered demographic information such as age, gender, marital status, and level of education, categorized as having no schooling, primary education, secondary education, bachelors, post-graduation, and Section 3 contained questions arranged in a matrix pattern to determine patients' preferences for dental practitioners based on gender across various fields of dentistry. Additionally, some questions addressed factors other than gender that may have influenced a patient's choice of dentist.

Data analysis was performed using the latest version of SPSS, with results presented as frequencies and percentages. The Chi-square test was used to assess the significance of differences between variables, with a P-value of less than 0.05 considered significant.

Results

The total number of participants for this study was 303. The questionnaire started with asking the participants about their age, gender, education and marital status. Table 1 shows the demographic data obtained by the sample population. The mean age was 32.4 years, where the minimum age was 16, and maximum was 76 years. The majority of participants were married, employed, and held a bachelor's degree.

Table 1: Demographic characteristics of participants (n=303)

Character	Variables	Frequency (%)
Gender	Male	118 (38.9)
	Female	185 (61.1)
Marital status	Single	145 (47.9)
	Married	147 (48.5)
	Divorced	3 (1)
	Widow/ er	8 (2.6)
Profession	Student	82 (27.1)
	Employed	108 (35.6)
	Unemployed	30 (9.9)
	Business	37 (12.2)
	Other	46 (15.2)
Highest level of education	No schooling	7 (2.3)
	Primary school	27 (8.9)
	Secondary school	55 (18.2)
	Bachelors	146 (48.2)
	Post-graduation	68 (22.4)
Mean Age + Standard deviation		32.4 + 13.34

Figure 1 shows the basic choice of dental practitioner based on gender selected by the participants. More than half of the sample (166 out of 303) had no specific preference, followed by a preference for female dentists (85 out of 303).
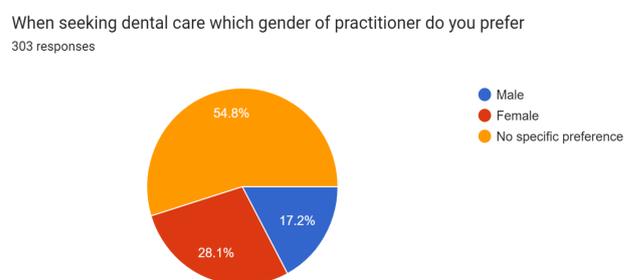
When seeking dental care which gender of practitioner do you prefer
303 responses

- Male
- Female
- No specific preference

54.8%
17.2%
28.1%

Figure 1: Gender preference when seeking dental care. (n=303)

Dentists were categorized by the types of procedures they conducted. The findings indicated that about half of the participants showed no specific gender preference across all procedures. Among those who did express a preference, female dentists were favoured for general check-ups (20.8 %), scaling (31.7%), fillings (25.4%), braces (23.8%), and paediatric procedures (27.4%), while male dentists were more preferred for extractions (27.7%) and prosthetic procedures (23.8%) like crowns and bridges. Root canals showed a nearly equal distribution between male and female dentists. Table 2 summarizes the patients' choice of dentist based on gender for various dental procedures. It was observed that there was significant difference in gender preference for general dental check-up, within various levels of education (p= 0.018). Similarly, different professions had a significant effect on gender choice, example, for the purpose of root canal treatment (p=0.044). However, marital status had no significant impact on the choice of practitioners according to their gender.

Table 2: Patients' choice of dentist based on gender for various dental procedures. (n= 303)

Procedure	Male Preference		Female Preference		Doesn't matter		P value
	n	%	n	%	N	%	
General Dental Check up	52	17.2	63	20.8	188	62	.000
Scaling (cleaning of your teeth)	49	16.2	96	31.7	158	52.1	.000
Filling	65	21.5	77	25.4	161	53.1	.000
Root Canal treatment	76	25.1	75	24.8	152	50.2	.000
Extraction (removal of your teeth)	84	27.7	69	22.8	150	49.5	.000
Crown / Bridge (capping of teeth)	72	23.8	69	22.	162	53.5	.000
Braces	64	21.1	72	23.8	167	55.1	.000
Treatment for your child's teeth	50	16.5	83	27.4	170	56.1	.213

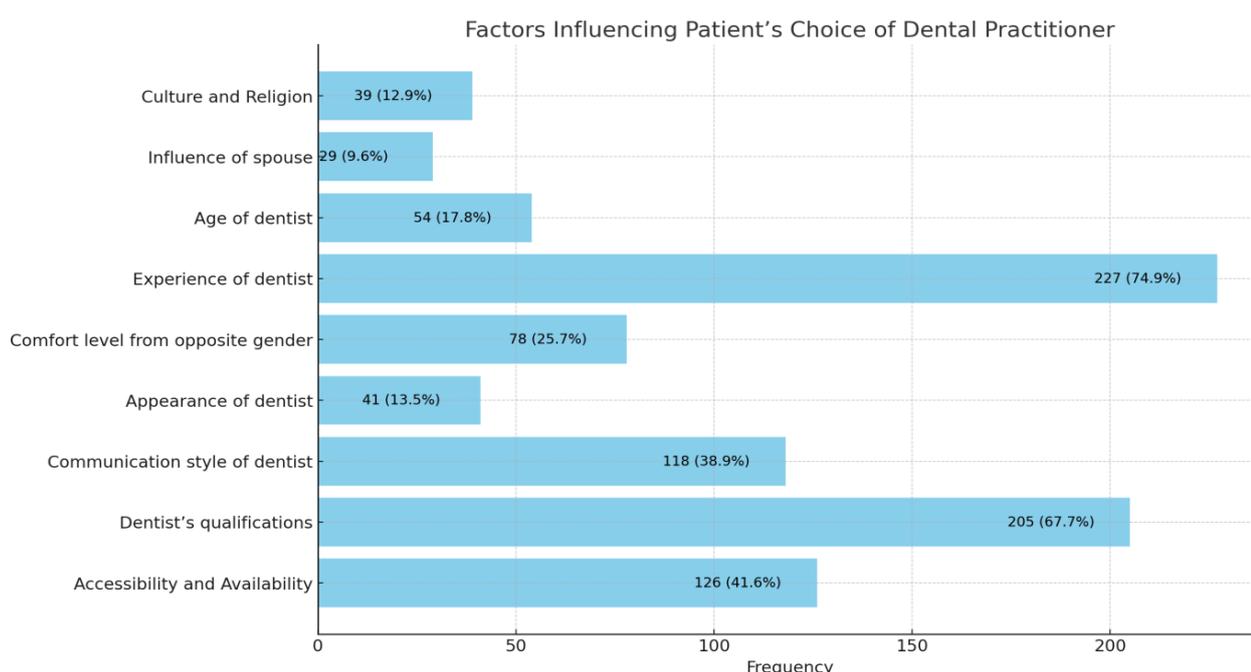*N: Total population, n:Frequency, %:Percentage*

Figure 2: Factors influencing patient's choice of dental practitioner

We also questioned the participants regarding factors other than the dentists' gender which may influence their choice of dentist. Participants could choose more than one option. Figure 2 summarizes these results as a bar graph. It is note-worthy that most participants chose the experience and qualification of the dentist as an important factor playing a part in their selection of a dentist, followed by communication style and accessibility of the dentist. The least chosen factor was influence of their spouses.

Among the female patients, 51 out of 185 observed hijab as part of their religious/cultural belief. Out of these participants, 59.7% indicated that it did not prevent them from seeking treatment from a male dentist.

Discussion

This study investigates factors influencing patients' preference for the gender of their dentist, focusing on the Lahore region. Despite an increasing emphasis on patient-centered care [13], research into the influence of a dentist's gender on patient choice remains limited in dental healthcare. Understanding these preferences is crucial for optimizing dental practice administration, improving patient satisfaction, and fostering a more positive healthcare experience. Gaining insight into the determinants influencing patient preferences is essential for optimising dental practice administration, improving patient contentment, and cultivating a more pleasant healthcare encounter. The study seeks to understand the complex relationship between patient preferences, societal viewpoints, and cultural influences, providing insight into the diverse impact of gender on interactions between patients and dentists in dental settings. [14]

According to our findings, over half of the participants (54.8%) expressed no specific preference for the gender of their dentist (Figure 1). These trends align with studies conducted in India, Saudi Arabia, and Nepal, where the majority showed no specific gender preference [8,10]. Among those with a preference, a larger portion favoured female dentists (28.1%) compared to male dentists (17.2%), especially for certain procedures like general check-ups, scaling, and pediatricdentistry as summarized in Table 2. These results reflect societal perceptions associating female dentists with compassion, especially in non-invasive

procedures. For instance, 32% of participants preferred female dentists for scaling, while only 16% favoured male dentists (Table-2)

Conversely, participants tended to prefer male dentists for more complex procedures like extractions and prosthetic treatments, potentially reflecting cultural norms and gender stereotypes that associate males with technical proficiency. Approximately 28% of participants preferred male dentists for extractions, while 23% preferred female dentists, whereas 32% preferred female dentists for scaling, compared to only 16% preferring male dentists (Table-2). The study explored how societal norms and gender stereotypes might influence patient preferences. Historically, stereotypes associating males with technical proficiency and females with compassion may shape patient expectations and preferences in dental care settings.

Beyond gender, factors that influenced dentist selection included the dentist's experience, qualifications, and communication style. A substantial 74.9% of participants ranked the experience of the dentist as the most crucial factor, followed by qualifications (67.7%) and communication style (38.9%) (Figure 2). This aligns with studies showing that clinical expertise and effective communication are vital in improving patient satisfaction and adherence to treatment plans.[15] The importance of communication style emphasizes that clinical knowledge alone is insufficient; patients benefit from a clear understanding and involvement in decision-making. As a result, patient-centered communication, including the use of visual aids and counselling, can improve treatment outcomes by increasing patient compliance.[16]

Effective, patient-centered communication significantly enhances adherence to dental and overall healthcare treatments, leading to improved outcomes and satisfaction. Clear information and shared decision-making boost patients' motivation to follow treatment plans.[17] Dental practices can counteract gender stereotypes influencing patient preferences by promoting diverse representation of dentists and staff, educating patients about the full range of skills possessed by both genders, fostering inclusive environments, ensuring transparent communication about provider qualifications, and continuously evaluating and improving their practices based on patient feedback and research on gender bias in healthcare. These strategies aim to create a more equitable and inclusive environment for all patients, ultimately leading to improved patient care and better health outcomes. The research aims to make a substantial contribution to the advancement of inclusive and patient-centered models of dental treatment by exploring these intricate interactions. Its goal is to foster equity in healthcare environments and enhance the overall quality of dental treatments.[18]This research aims to close the current gap in literature by offering valuable insights into how gender affects patient choices in dental practitioners. It provides a basis for enhancing dental care models and creating healthcare environments that meet the diverse needs of patients.

The study limitations include participant selection from a single institution, limiting generalizability. Future research could explore these dynamics across diverse healthcare settings and incorporate longitudinal or qualitative methods to delve deeper into patient perspectives. Even though the data was collected using Urdu and English Questionnaires to include a diverse sample, the exclusion of illiterate patients from the study due to their inability to complete questionnaires

presented a significant limitation. Future research should consider alternative data collection methods such as in-depth interviews, observations, focus groups, the use of visual aids, and collaboration with community health workers. These approaches will ensure the inclusion of illiterate patients and provide a more comprehensive understanding of their preferences and experiences in dental care.

Conclusion

At CMH Lahore Medical College, most patients had no gender preference for dentists. Female dentists were preferred for preventive and paediatric care, while male dentists were favoured for invasive procedures like extractions and prosthetics.

Author Contributions: AAB: Conceptualized, designed and interpreted the study; FW: Manuscript writing, draft work and data analysis; ZY & ZI: Data acquisition and interpretation; ARC: Critically revised the article for intellectual content; SZ: Supervised and approved the final version.

Conflict of Interest: The authors declare no conflict of interest.

Use of Generative AI and AI-Assisted Technologies: AI (ChatGPT 3.5) was used for grammatical accuracy and sentence structures along with linguistic clarity.

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