

# Clients' criteria for dental services selection and assessment of service quality and satisfaction in Cebu, Philippines

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## ABSTRACT

This study examines the factors that dental patients consider when selecting dental services and evaluates the service quality of care given. The findings from the investigation show that clients with insurance and those without insurance have significantly different satisfaction levels. Higher satisfaction rates were observed by insured clients, especially regarding clinic amenities and appointment convenience. Word-of-mouth recommendations and convenience are the two main factors affecting the choice of dental care, highlighting the significance of individualized care and flexible scheduling alternatives. Furthermore, the financial analysis highlights the necessity for dental practices to provide a variety of payment choices by demonstrating a wide range of income levels and a significant reliance on insurance to cover dental expenditures. The reasons why patients seek dental care, such as pain management, dental treatment, and routine checkups, were also investigated. The comprehensive evaluation of patient satisfaction took into account both clinical and non-clinical factors, including staff professionalism, treatment justifications, and the general clinic atmosphere. The statistical analysis highlights how important it is to comprehend the demands and preferences of your clients to properly provide specialized dental treatments. From a practical standpoint, these results indicate that dental offices can improve their long-term profitability by lowering obstacles to care, raising standards of care, and promoting patient-centered care. This study adds to the body of knowledge on dental service quality and patient happiness by offering practical advice for enhancing customer satisfaction and strategic decision-making in dental offices.

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## 1. Introduction

All health professionals now recognize that patient-centered care is the primary strategy for providing high-quality healthcare. According to Syngelakis et al. (2023), when it comes to dental care services, quality is a key component that influences decision-making, developing health strategies and policies, determining the cost of medical care, and determining the value of medical treatment. It is difficult to assess the quality of dental services using the same assessment methodologies used in other aspects of primary care.

In recent years, there has been an increased focus on the quality of dental care services. Patient satisfaction is widely used to assess healthcare service quality. The purpose of this study was to present a conceptual framework for identifying key drivers and providing recommendations

for improving dental care service quality (Chang & Chang, 2013). Dental clinics are also seeing the emergence of new back-office technologies for supply buying and patient communication which also becoming more prevalent in dental practices. Business models have emerged as an important means for firms to ‘commercialize new ideas and technologies’ (Chesbrough, 2010).

According to Ungureanu and Mocean (2015), factors like dentists’ competence, quality of dental services, and recommendations from friends are considered by patients in choosing the right dental clinics. Of their 724 respondents, 22.22% mentioned the dentist’s competence as one consideration in choosing the right clinics to do dental services for them. 20.56 % consider the recommendation from someone, it could be their relatives and friends, as important in deciding which clinic to go to. Other factors with high scores include the dentist’s patience, distance from home to the dental office, and the dentist’s respect for patients. Surprisingly, dentist’s notoriety or reputation ranked 8th with only 4.44% as compared to the second in rank which is recommendation by someone they know. This means that the perception of the patients in terms of the quality of services can either increase or decrease the number of patients who will visit that doctor or clinic.

The measurement of service quality plays a significant part in controlling service delivery, detecting problems, and evaluating performance. Patient happiness is an important measure of quality in healthcare institutions (Dopeykar et al., 2018).

The concern for quality services cannot be underestimated, companies need to pay attention to their clients, in the dental field, patient satisfaction can aid in identifying the strengths and weaknesses of dental centers, thereby assisting in improving treatment quality and future planning (Ali, 2016). In today’s time, competition among businesses is tough and many businesses work hard to stay in the game, the need to innovate to improve products and services, in a competitive environment, firms must not only detect changes to identify opportunities but also effectively seize them through Business Model Innovation.

Every decision, initiative, and measurement provide valuable feedback when managers operate consciously from a model of how the entire business system will work. Profits are important not only for their own sake but also to determine whether or not your model is working. Business modeling is the managerial equivalent of the scientific method: you start with a hypothesis, test it in action, and revise it as needed (Magretta, 2014).

Business models and systems do not exist for their own sake. Rather, they are designed to help your practice achieve its goals. Before you adopt any new system for any aspect of your practice, define the goals and write down the specific objectives you expect the system to achieve. Bear in mind that systems need to be easily understood by team members and by those who join the practice later on. It is important to understand that economic changes, governmental mandates, and other factors beyond your control may make it necessary to reassess the way each system operates regularly (Levin, 2003).

The study looks into providing input to improve the business operation of the dental clinic by proposing a new business model based on the results of the study, this model will provide new value propositions and marketing strategies that can be implemented by the proprietor of the dental clinic. Furthermore, this study presents the variables that affect patients’ awareness of dentists, how they choose dentists based on those criteria, and the infrastructure, technology, and interpersonal aspects of dental offices that are significant to patients.

*Aim of the Study.* This study aims to examine the criteria for the selection and assessment of the services provided by a selected dental clinic in Cebu City. Specifically, this addressed the

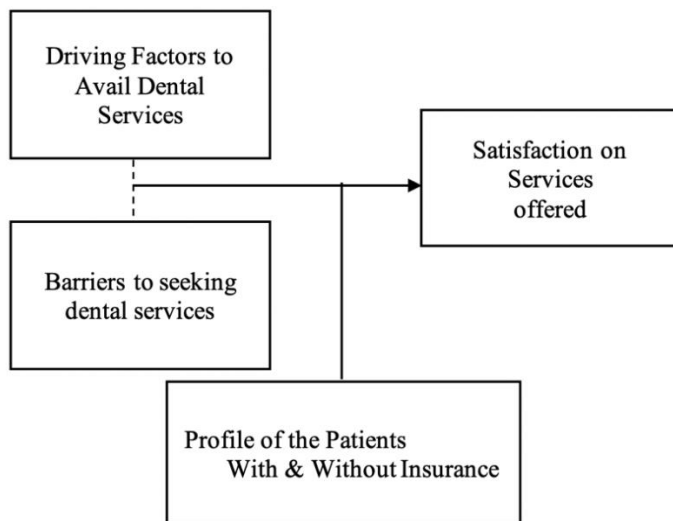
following: (a) describe the profile of the clients (patients) (occupation, working schedule, income), and source of funds for dental services, (b) assess the factors that drive clients (patients) to avail of dental services, (c) measure the clients’ satisfaction with the dental services provided by the selected dental clinic, (d) determine the barriers to seeking dental treatment.

*H1: There is no significant difference in the level of satisfaction of the clients on the dental services when grouped according to source of funding (with and without insurance)*

**2. Theoretical basis**

**Figure 1**

*Framework of The Study*



Source. The researcher’s data analysis

Figure 1 presents the conceptual framework of the study; it shows the relationship between the variables and the expected output of the study. The study will look into the driving factors to avail dental services and the barriers to seeking dental treatment or service. The researcher will then look into the satisfaction of the services provided by the dental clinic.

*Service Quality in Dental Services.* One of the most crucial factors in evaluating an organization’s performance and the caliber of services offered by dental care centers is access to patient satisfaction (Merican & bin Yon, 2002). According to Bahadori et al. (2015), the item “confidence in the treating dentist’s skills” showed the most negative gap in terms of assurance. Therefore, to boost patients’ faith in staff members and doctors, the research clinic management ought to make an effort to educate patients about the skills and knowledge of their staff. This points to a crucial area where better communication and transparency regarding the credentials and abilities of dental practitioners might improve the quality of services.

*Issues in Dental Services.* Customer complaints and satisfaction have been the subject of several studies. According to Bedi et al. (2005), complaints and unhappiness might cause patients to switch dentists, which can affect how their friends and family view the dental profession. This emphasizes how crucial it is to handle patient complaints as soon as possible to keep a good reputation and keep customers.

*Customer Satisfaction in Healthcare.* Several research works highlight the significance of customer satisfaction since consumers’ viewpoints are seen to be important when making decisions about their care and receiving medical services (Joosten et al., 2008). Achieving high levels of patient satisfaction has made improving patient care a major focus for all healthcare

practitioners (Lee & Yom, 2007). According to Li et al. (2012), while a healthcare delivery system is being improved, the patient's viewpoint is becoming more and more crucial.

The contentment that patients have when utilizing a health service is referred to as patient satisfaction. Therefore, the primary responsibility of all healthcare providers is to offer patient care. One of the most crucial elements in assessing the effectiveness of a healthcare facility is patient satisfaction (Manzoor et al., 2019). While numerous studies stress the value of patient happiness, there is a lack of focus on the particular elements of dental care that contribute to satisfaction, indicating a knowledge vacuum that this study attempts to fill.

*Factors Influencing Dental Service Selection.* The popular Health Maintenance Organization (HMO) payment plan includes dental procedures, which may affect how satisfied customers are with specific aspects of the service, such as availability. However, using an HMO is not without its issues. Gray (2021, as cited in Mohammed et al., 2013) claims that because HMOs don't have any substantial sources of income other than delivering services, their primary source of funding for operating expenses is service fees. As competition increases, non-profits' ability to use service sales money to finance unprofitable, mission-oriented projects may decline (Mohammed et al., 2013). This illustrates the complexity of financing mechanisms for dental services and how they may affect patient satisfaction and service quality.

*Business Models in Dental Practices.* Kopp (2024) asserts that profitable companies employ business structures that let them satisfy client demands at a price that is both competitive and long-term. To adapt to shifting market needs and economic conditions, many companies frequently modify their business models. Dentists who prioritize patient comfort and satisfaction strive to establish an environment that emphasizes regular check-ups, preventive care, restorative operations, and cosmetic dentistry, among other services. Universities still haven't created the best software and models for managing dental practices profitably, according to Levin (2003). Because of this, the majority of dental company management strategies were developed by professionals in the field. There isn't one model that works for all dentists because their practices are different and have different goals. All dental offices, however, can employ general practice management strategies to help them achieve their objectives. This suggests that more standardized yet flexible business models that can adjust to the specific requirements of each practice are required.

There is a need for more focused research on dental services despite the abundance of literature on the value of patient satisfaction and service quality in the healthcare industry. The majority of research covers healthcare in general terms without going into detail on the particulars of dental care. Furthermore, not enough research has been done on how HMOs affect dental patients' happiness. By investigating the precise standards for choosing and evaluating dental services, the elements influencing patient happiness, and the efficacy of different business models in dental practices, this study seeks to close these gaps.

### **3. Methodology**

*Research Design.* The present study employed a descriptive-comparative design to determine the factors that motivate patients to seek dental care and assess their level of satisfaction with the care they receive from a specific clinic. It compared how satisfied people with and without insurance were.

*Research Setting.* The study was conducted in a selected dental clinic in Cebu City, Philippines. The clinic has been in operation for 13 years now and aims to improve its services hence conducting this study will provide management insights.

*Study Participants.* The participants of the study are current patients (clients) of the selected dental clinic. They are the best to evaluate the service of the clinic as they have

experience of the services provided. The *inclusion criteria are*, must be a registered patient of the clinic, and have availed the services of the clinic on several occasions.

*Sample.* An online sample calculator was used to determine the sample size based on a population of about 500 active patients. With a 95% confidence level and a 5% margin of error, 218 was the ideal sample size. However, the sample size obtained 205 was smaller than the target. Despite these limitations, the sample size of 205 is nearly ideal, which mitigates some of these issues.

*Research Instrument.* A researcher-made questionnaire was used in this study to collect relevant data. The study instrument is divided into four main sections: the respondent profile, the factors that motivate patients to use the clinic's services, the patient's satisfaction with the clinic's offerings, and the barriers that prevent patients from seeking dental care. To guarantee the coherence and pertinence of the items incorporated, the research tool underwent a content validation procedure. Four subject-matter experts validated the questionnaire by comparing it to predetermined standards including comprehensiveness, relevance, and clarity. After that, the reliability of the instrument was assessed, and the results showed an adequate Cronbach's Alpha score of 0.721, indicating trustworthy internal consistency.

*Data Gathering Procedures.* Before the conduct of the study, the study was submitted to an accredited research ethics committee for approval of the research protocol. Participation in this study was voluntary and the participants were free to withdraw from the study at any time without bias. The data gathering was done by the researcher with the help of an assistant so as not to influence the participants in answering the questionnaires. The instrument was handed out to the patients in waiting and were given ample time to answer the questionnaire.

*Analysis of Data.* To facilitate the analysis of data, the following statistical treatments was utilized. To get the profile of the patients (clients) frequency count and percentages were used. To get the factors that drive the participants to avail dental services frequency count and percentages were used. Finally, to measure the satisfaction of the patients with the services provided by the clinic, the weighted means with its corresponding equivalent description.

To compare the satisfaction of the two groups of clients on their level of satisfaction, a Mann-Whitney U- test, a non-parametric test was used to analyze the data, appropriately, since the sample of the participants did not satisfy the normality condition. When comparing differences between two independent groups, the Mann-Whitney U- test is employed if the dependent variable is not normally distributed (Laerd Statistics, 2018).

*Ethical considerations.* The study was submitted to an accredited Research Ethics Committee, and ethical approval was obtained from the University of the Visayas Institutional Review Board, under REC Agreement Code NP2023DM-008.

## **4. Result and discussion**

This section presents the discussions of the results based on the analysis of the study.

### **4.1. Result**

#### *4.1.1. Clients' profile*

The information provides important insights into the scheduling and occupational makeup of the dental clinic's patients, and this data can help develop better service delivery strategies. Given that 42.1 percent of the clients work in office environments, the clinic should give priority to being available throughout regular business hours to serve these clients who usually work all day. To better catch this section, extending hours or providing early morning and evening appointments would be helpful. Students (19.0% of clients) and home-based

workers (20.4% of clients) are likely to value flexible scheduling choices. Offering appointments outside of regular business hours, like late evenings or weekends, could meet their demands and boost appointment reservations given their somewhat more erratic schedules.

The same is true for field workers (19.0%), whose unpredictable schedules may require them to plan weekend or nighttime visits to continue receiving regular dental care. Since 62.5% of the clientele are day workers, the clinic needs to make sure there is enough availability during these hours. Flexible meeting times are necessary, nevertheless, because night workers (21.8%) and clients with erratic schedules (10.6%) are among them. Making dental care more accessible to these populations through scheduling alternatives that go beyond regular business hours may increase client retention and satisfaction. According to income data, a considerable proportion of clients (28.2%) are in the \$21,000 - \$30,000 category.

**Table 1**

*Profile of The Clients*

<i>Occupation</i>	<i>f</i>
Student	29
Office	91
Field	41
Homebase	41
<i>Working schedule/shift</i>	
Irregular	23
Nighttime	47
Day time	135
<i>Income range (monthly)</i>	
₱ 40,000 - above	37
₱ 31,000 - 40,000	34
₱ 21,000 - 30,000	61
₱ 10,000 - 20,000	45
₱ 10,000 below	12
None	16
<i>Source of Funds</i>	
Insurance	134
Out of the Pocket	71

*Source.* Researchers' survey

Dental care can be made more inexpensive for patients with lower incomes by providing incentives, payment plans, and economical treatment alternatives. On the other hand, premium services and elective procedures may draw in patients with higher incomes (28.2% of whom make \$31,000 or more annually). The fact that insurance accounts for the majority of dental payments (62.0%) highlights how crucial it is to expedite the billing procedure and guarantee effective communication with different insurance companies. Financial incentives, bundled service packages, and transparent pricing may appeal to the 32.9% of clients who pay out of

pocket. Comprehending the funding sources facilitates the creation of customized payment plans that cater to the various demands of the clients and improve their clinic experience as a whole.

In general, the dental clinic may better serve its client’s needs and preferences by matching service offers, scheduling, and pricing to their financial, occupational, and schedule characteristics. This will increase client retention and satisfaction.

4.1.2. *Factors that drive clients to avail of dental services*

**Table 2**

*Drivers to Dental Services Uptake*

<b>Indicators</b>	<b><i>f</i></b>	<b><i>Rank</i></b>
Regular dental visit	105	1
In pain	100	2

*Source.* Researchers’ survey

The primary drivers of dental service use are displayed in the table, with “Regular dental visits” ranking highest in frequency (105) and “In pain” following closely behind (100). This data has important business implications for dental practices. The high frequency of regular dental visits emphasizes the value of promoting preventative care services, indicating that marketing campaigns should emphasize the advantages of routine check-ups for maintaining dental health and averting costly future issues. On the other hand, a significant portion of patients seek care when they are in pain, indicating that emergency services are also a vital aspect of the practice’s operations. Dental clinics may create focused marketing campaigns, and service offers that promote routine exams and prompt dental care by knowing these important factors, which will eventually improve patient outcomes and spur business expansion.

**Table 3**

*Influence The Choice of Dental Clinic*

<b>Indicators</b>	<b><i>f</i></b>	<b><i>Rank</i></b>
Word of mouth	100	1
Convenient location	83	2
Convenient schedule	22	3

*Source.* Researchers’ survey

The most important factor of dental clinic choice is word-of-mouth recommendations, which are ranked highest in Table 3, along with scheduling possibilities and geographical convenience.

With a frequency of 100, word-of-mouth is the most influential influencer, highlighting the vital importance that patient happiness and reputation play in drawing in new business. According to this research, dental offices should put a high priority on providing excellent patient care and customer service to boost good referrals. Patients who are content and happy with the clinic are more inclined to refer friends, family, and coworkers, which can greatly increase the number of new patients the clinic receives. Utilizing the power of word-of-mouth marketing to increase the clinic’s clientele can be further amplified by putting referral programs into place and actively searching out excellent online evaluations.

The clinic's location is convenient, ranking second in terms of influence with a frequency of 83. This emphasizes how crucial it is to choose a location, carefully whether starting a new clinic or assessing the effectiveness of an existing one. Clinics that are conveniently situated near places of employment, residences, or public transit have a higher chance of drawing and keeping patients. Furthermore, providing plenty of parking or being in a walking neighborhood might raise the clinic's convenience level and entice new patients to choose it.

Convenient scheduling influences customer choice significantly, even though it ranks third with a frequency of 22. This suggests that dental clinics might set themselves apart by offering flexible appointment schedules. Adding early morning, evening, and weekend hours to the office can accommodate patients with different schedules, such as those who have full-time jobs or other daytime obligations. Clinics can improve accessibility and patient satisfaction by accommodating a wider spectrum of patients through the provision of flexible scheduling choices.

In general, Table 3's data offers insightful information to dental practices looking to increase their appeal to prospective patients. A patient's choice of dental clinic can be greatly influenced by important methods such as providing flexible scheduling options, convenient locations, and a focus on providing high-quality patient care to encourage positive word-of-mouth. Dental offices may enhance customer happiness, boost referrals, and eventually propel business expansion and success by concentrating on these areas.

#### 4.1.3. Satisfaction with the services provided by the dental clinic

**Table 4**

#### *Clinical Dental Services*

<b>Treatment</b>	<b>Mean</b>	<b>Descriptive Response</b>
The dentist explains my proposed dental treatment properly	3.96	Strongly Agree
I was given a chance to ask questions, and they were answered	3.89	Strongly Agree
The dental treatment was completed efficiently	3.97	Strongly Agree
The dental service given to me was satisfying	3.93	Strongly Agree
The dentists make sure that I am comfortable during the dental treatment	3.99	Strongly Agree
<b>Mean</b>	<b>3.96</b>	<b>Very Satisfied</b>
<b>Staff</b>	<b>Mean</b>	<b>Descriptive Response</b>
The dental assistant was professional and courteous	3.91	Strongly Agree
The dentist was considerate and sensitive to my needs	3.88	Strongly Agree
The dental assistant makes sure the I am comfortable while waiting for my turn	3.87	Strongly Agree
The dentist was able to explain to me the procedures with expertise	3.90	Strongly Agree
The dental assistant was professional and courteous	3.89	Strongly Agree
<b>Mean</b>	<b>3.88</b>	<b>Very Satisfied</b>
<b>Aggregate Mean</b>	<b>3.92</b>	<b>Very Satisfied</b>

Note. 3.26 - 4.00 - Strongly agree; 2.51 - 3.25 - Agree; 1.76 - 2.50 - Disagree; 1.00 - 1.75 - Strongly disagree  
Source. Researchers' survey

4.1.4. *Dental clinic services*

The data shows that patients are generally satisfied with their experiences at the dental clinic, with mean scores in the “Strongly Agree” category for each assessed item. This shows that the clinic thrives inpatient service as well as clinical care, supported by efficient and effective communication, patient-centered care, and a supportive environment. The high degree of satisfaction with the dentist’s capacity to explain procedures (Mean: 3.96) and respond to inquiries (Mean: 3.89) is probably due to the cultural focus on patient-centered care, which lowers anxiety and fosters trust. Treatment efficiency (Mean: 3.97) is cost-effective, providing prompt care and cutting expenses, making it desirable to patients with hectic schedules.

The influence of good communication and prompt service is reflected in overall satisfaction (mean: 3.93), and favorable word-of-mouth improves the clinic’s reputation. In a society that values holistic health, it is critical to ensure patient comfort during treatments (Mean: 3.99), which addresses both physical and psychological components. A pleasant experience is mostly attributed to the staff’s professionalism and kindness (Mean: 3.91) and the dentist’s attentiveness to the needs of the patient (Mean: 3.88), which promote trust and return visits. Comfort during the waiting process (Mean: 3.87) shows consideration for the patient’s whole experience, which raises satisfaction levels. Patients are reassured of the quality of service, which encourages agreement to prescribed treatments and boosts revenue. They appreciate the dentist’s expertise in explaining treatments (Mean: 3.90).

**Table 5**

*Non-Clinical Dental Services*

<b>Appointment Services</b>	<b>Mean</b>	<b>Descriptive Response</b>
The appointment is easy to make	3.80	Strongly agree
The appointment inquiry is promptly responded	1.19	Strongly disagree
The appointment schedule options suited my schedule	3.68	Strongly agree
The communication channel (social media, phone number) was responsive	3.70	Strongly agree
The staff informs me whenever there are changes or delays in my schedule	3.62	Strongly agree
<b>Mean</b>	<b>3.20</b>	<b>Satisfied</b>
<b>Facilities</b>	<b>Mean</b>	<b>Interpretation</b>
The clinic location and parking are convenient	3.48	Strongly agree
The reception area is neat and clean	3.79	Strongly agree
The temperature in the clinic is comfortable	3.71	Strongly agree
The equipment was clean and presentable	3.72	Strongly agree
The lighting in the clinic was sufficient and comfortable	3.72	Strongly agree
<b>Mean</b>	<b>3.68</b>	<b>Very Satisfied</b>
<b>Aggregate Mean</b>	<b>3.44</b>	<b>Very Satisfied</b>

Note. 3.26 - 4.00 - Strongly agree; 2.51 - 3.25 - Agree; 1.76 - 2.50 - Disagree; 1.00 - 1.75 - Strongly disagree  
 Source. Researchers’ survey

The high aggregate mean score (3.92) indicates that social influences of reputation, economic considerations of efficiency, and cultural trends toward patient involvement all play significant roles in these positive outcomes. Consistent excellence is essential for preserving satisfaction and loyalty. The clinic will be able to maintain and improve patient happiness, which will encourage loyalty and propel business growth if these factors are given continued priority. According to Ungureanu and Mocean (2015), there are several considerations in how patients choose their dentists. These factors can be divided into factors related to dentists only (ability to communicate, express empathy, and manage pain), factors related to the dental office where the dentists are providing the dental services (geographical situation and cleanliness), and characteristics of the service delivered (timeliness, correspondence with the most recent scientific achievements).

Patients strongly agree that scheduling an appointment is easy and uncomplicated (Mean: 3.80), emphasizing their satisfaction with the clinic's appointment scheduling procedure. On the other hand, a vital area for improvement in communication efficiency is the clinic's reaction to appointment requests, with a mean score of 1.19 (strongly disagree). Despite this, people are satisfied with the flexibility offered and firmly agree that the clinic provides easy ways to schedule appointments (Mean: 3.68). Furthermore, patients perceive the clinic's communication channels to be responsive (Mean: 3.70), indicating that contacting them by phone or social media is simple and convenient overall. Additionally, patients value the staff's proactive communication (Mean: 3.62) on schedule modifications or delays since it promotes openness and reduces inconvenience. These results highlight how crucial effective communication and accommodating scheduling is to raise patient happiness and clinic reputation. Resolving responsiveness concerns can greatly enhance the general patient experience and support societal trends that support smooth, patient-centered healthcare delivery. In terms of interpersonal rapport and communication, patients appear to base their decision for a physician on how they wish to feel, that is, whether the affective states (high or low positive) promoted by a physician match what patients ideally like (Sims et al., 2014).

### Table 6

*Difference in The Level of Satisfaction Between Clients with Insurance and without Insurance*

		Statistic	p-value
Level of satisfaction	Mann- Whitney U	4,466	0.387

Note. Significance level of 0.05

Source. Researchers' survey

Using the Mann-Whitney U- test, an appropriate non-parametric tool for independent group comparisons, the investigation sought to assess the satisfaction levels of clients with and without insurance coverage. The test produced a p-value of 0.387 and a computed Mann-Whitney U value of 4,466, with a significance level of 0.05 to establish statistical significance. There is not enough data to reject the null hypothesis because the p-value is greater than 0.05, suggesting that there is no discernible difference in client satisfaction between those with and those without insurance. The lack of significant satisfaction variations based on insurance status implies that the clinic's operations and policies should take this finding into account. To guarantee comprehensive patient care and satisfaction across the board, it suggests that efforts to improve overall patient satisfaction should be applied consistently across all clientele, regardless of insurance coverage. These efforts should concentrate on areas like service quality, communication effectiveness, and appointment scheduling.

**Table 7***Barriers to Seeking Dental Treatment*

<b>Barriers</b>	<b><i>f</i></b>	<b>%</b>	<b>Rank</b>
High Cost	115	56	1
Fear/Anxiety	51	25	2
Time of work/schedule	39	19	3
<b>Total</b>	<b>205</b>	<b>100</b>	

*Source.* Researchers' survey

The survey also gathered responses from the clients on what they think are the barriers to seeking dental treatment. It can be observed that the high cost at 56% was the number one barrier to seeking dental treatment, followed by fear and anxiety at 25%, and time of work/schedule came third. Looking at the data presented, despite the majority of the participants having insurance, high cost still ranked number one, it is important to note that the response is based on the perception of clients as dental care can be expensive; however, it is also important to understand this perception is based on the sampled clients from the dental clinics' records. Gray et al. (2021) findings presented that the major obstacle to accessing dental services among the research group was the perceived cost of service, indicating that an economic model prioritizing maintenance of oral health above essential care is required.

#### **4.2. Discussion**

The presented data offers valuable insights into various aspects of the dental clinic's operations and patient preferences. This discussion interprets the findings to elucidate their implications for service delivery and patient satisfaction.

The data illustrates different occupational categories that comprise the clinic's clientele: 42.1% of the population are office workers, 19.0% are students, 20.4% are home-based workers, and 19.0% are field workers. These groups demonstrate a range of scheduling requirements, highlighting the significance of accommodating appointment requests outside of usual business hours. Most office workers must be available during regular business hours. Thus, longer clinic hours or early morning/evening appointments could improve accessibility. Flexible scheduling, on the other hand, is advantageous for field workers, home-based employees, and students because it allows for late-night and weekend appointments, effectively meeting their diverse schedules.

The income distribution of the patients indicates that a sizable percentage (28.2%) are in the \$21,000 - \$30,000 range, indicating worries about dental treatment affordability. The suggested approaches to deal with this are to offer payment options, encourage lower-cost procedures, and have clear pricing. On the other hand, clients who make more money (28.2% make \$31,000 or more) would be more interested in elective surgeries and high-end treatments. Tailored payment arrangements and financial incentives could maximize service accessibility and client satisfaction across socioeconomic levels, as 32.9% of patients pay out of pocket.

The primary drivers of dental service utilization are "regular dental visits" and "seeking care in pain," highlighting the need for both preventive care and emergency services. Accordingly, marketing strategies should emphasize the advantages of routine check-ups for

maintaining oral health as well as the prompt availability of care for urgent dental issues. This dual approach can improve patient outcomes and support clinic operations.

The most important element (frequency 100) is word-of-mouth recommendations, highlighting the critical role that patient satisfaction has in drawing in new customers. This means that to foster favorable recommendations, an emphasis on providing excellent patient care and service quality is necessary. Additionally, clinic selection is highly influenced by convenient location (frequency 83) and flexible schedule (frequency 22). These factors indicate the potential to maximize clinic accessibility and patient convenience.

Overall satisfaction ratings show strong patient satisfaction with a range of clinic services, such as staff professionalism, clear and effective communication, and explanations of treatments. Patient expectations are met and loyalty is fostered by the clinic, as evidenced by the high satisfaction levels (mean score of 3.92). To further improve the overall patient experience and satisfaction, areas that require improvement, such as promptness in scheduling appointments, should be given careful consideration.

The Mann-Whitney U- test analysis shows that there is no discernible difference in client satisfaction between those who have insurance coverage and those who do not ( $p = 0.387$ ). This result emphasizes how well the clinic consistently ensures high levels of satisfaction regardless of insurance status. Therefore, to retain overall satisfaction levels, efforts to maintain service quality, good communication, and accessible scheduling should be implemented consistently for all clients. According to the report, the top three reasons people put off getting dental care are expense (56%), fear/anxiety (25%), and schedule issues (19%). The majority of people have insurance coverage, but perceived high prices continue to be a key barrier. As a result, proactive actions to address affordability perceptions through open pricing and flexible payment alternatives are required.

The dental clinic should expand its hours to accommodate the 42.1% of office workers who require appointments outside of usual business hours. Additionally, it should provide flexible scheduling for students, field workers, and home-based workers to improve patient satisfaction and service delivery. By offering high-end operations for more affluent patients and addressing affordability issues for the 28.2% of workers making between \$21,000 and \$30,000 yearly, practices can draw in a larger patient base. Clear pricing, flexible payment options, and lower-cost procedures can also help.

Patient outcomes will be enhanced by marketing tactics that prioritize emergency services and preventive care. Fostering word-of-mouth referrals requires maintaining high service quality and effective communication. Removing obstacles like cost, fear, and scheduling conflicts with clear pricing, anxiety-reduction strategies, and better appointment scheduling will also improve patient experience and satisfaction.

## **5. Conclusions and recommendations**

In conclusion, the information offers thorough insights into patient demographics, preferences, and satisfaction factors - all of which are essential for maximizing dental clinic operations. Prioritizing service quality and accessibility while adjusting service offers to suit a range of patient preferences, income categories, and work schedules is essential. Clinics can maintain business development in the cutthroat healthcare market, improve patient happiness, and encourage positive word-of-mouth by utilizing this information.

The study recommends the following: (a) Improve services by addressing the concerns on the appointment services making sure that all inquiries are promptly attended. (b) Create a business model with a new value proposition that can be implemented in the operations. (c) Further study can be done using a different research design that will provide a wider insight.

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