Patient’s Satisfaction about Dental Services during Pandemic COVID-19 at Riyadh Elm University: A Questionnaire Study

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Authors’ contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

Background: Health-care organizations all throughout the world are concerned about quality. Patients’ satisfaction has been studied at a number of dental clinics throughout the globe. Patient satisfaction is an important factor in assessing the relationship between the quality of health-care services delivered and the patients’ confidence. During the COVID-19 epidemic, the study's goal was to find out how satisfied patients were with the quality of dental treatment, as well as the preventative measures and precautions offered at Riyadh Elm University's dentistry clinics.

Materials and Methods: During the COVID-19 epidemic, a pre-validated questionnaire was issued to patients visiting Riyadh Elm University clinics. The research took place from March to September 2020. The questionnaire included questions about consultation provision, gratification with the receptionist's performance, satisfaction with your treating healthcare professional, treatment expenses, satisfaction with the level of housekeeping prevention strategies and preemptive provided, and eventually an overall assessment of the clinic's services.

Results: During the COVID-19 pandemic, 1313 questions were gathered from the Riyadh Elm University dentistry clinic’s electronic system. During the pandemic COVID-19, (92%) of the participants agreed that getting an appointment at the dental clinics was straightforward. (88.9%)

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were satisfied with treatments received at Riyadh Elm University’s Dental Clinic during the COVID-19 epidemic, and (66 percent) with treatment costs. During the pandemic COVID-19, the vast majority of participants (91 percent) were satisfied with their treatment provider, and the vast majority of participants were satisfied with the services offered by Riyadh Elm University’s dentistry clinic.

Conclusions: Riyadh Elm University’s dentistry clinics were successful in achieving participant satisfaction with services, staff, treatment, and fees during the COVID-19 outbreak.

Keywords: COVID-19; dental care; pandemic; satisfaction.

1. INTRODUCTION

Services of high-quality are associated to increasing marketplace share, profitability, and reserves, according to studies [1]. In general, service superiority is seen as a marketing and monetary performance force for businesses [2].

During the pandemic COVID19, improved treatment quality was a top priority for all healthcare systems throughout the world, regardless of cultural variations.

Unusual conditions, such as the recent COVID-19 pandemic, place enormous pressure on healthcare practitioners to modify hospital architecture and regulations in order to prevent the spread of dangerous viruses and guarantee that healthcare delivery runs smoothly. Only when suitable protocols are followed can the finest dental care be provided [3-5]. Dental Services is one example of a healthcare subject that requires careful modification of recommendations. There was a pandemic-preparedness strategy in place to help strike a delicate balance between providing dental treatment and minimizing the danger of nosocomial COVID-19 infection.

Patient satisfaction is thought to be significant in predicting patient conformity, their capability to pursue preventative advice, commitment to treatment and the future usage of dental care during pandemic COVID-19. This is why, during the pandemic COVID-19, patient contentment is becoming more and more crucial in evaluating the overall excellence of dental treatments and, as a result, in improving dental care.

In the world of healthcare, user contentment is a term which spans numerous proportions and has various meanings based on social psychology and marketing. Multiple writers primarily addressed the appraisal of patient fulfillment as a metric of health care in the 1970s and 1980s. While the 1970s study concentrated on identifying the variables that controlled the pleasure process, the 1980s study looked at the repercussions of that processing [6].

Koos and Donabedian were the first to use the phrase “patient satisfaction,” defining it as “a metric for the impact of a patient’s encounter with healthcare personnel” [7]. Patient satisfaction is a goal and an outcome that users of facilities of healthcare strive for. From this standpoint, it has been gradually become a constant problem of both public and private health services [8].

However, because of its intrinsic intangibility, heterogeneity, and inseparability, healthcare quality is difficult to assess [9]. Patients engaging According to Butler et al. [10], their actions, emotions, and dutifulness have an influence on quality assessments output, and performance [11]. Healthcare is changing rapidly, with significant client changes and more competition [12]. As a result of the scale, complexity, specialty, and competence of healthcare organizations, healthcare quality evaluations pose challenges [13].

In contemporary approaches for assessing dental care programmes, satisfaction with dental treatments during pandemic COVID 19 is a subject addressed. In this context, patient satisfaction may be seen of as an intermediate outcome of dental treatments that shows how well the dentist reacts to patients’ requirements, satisfies their expectations, and offers an good enough level of service during the COVID-19 epidemic. The patient’s contentment is based on his or her familiarity from the time they enter the clinic until they leave. This will, of course, be determined by the dental treatment and services obtained, as well as keeping confidentiality, appointment accuracy, staff appearance and attitude, and the surrounding environment.

2. MATERIALS AND METHODS

2.1 Participants

Female and male participants of all ages who attended Riyadh Elm University clinics during the
corona pandemic between March and September 2020 would be included in this study. During pandemic COVID-19, participants will be contacted to assess patient satisfaction with dental care.

2.2 Materials

A pre-validated questionnaire [14] about patient satisfaction that included consultation provision, gratification with the receptionist's performance, satisfaction with your treating healthcare professional, treatment expenses, satisfaction with the level of housekeeping prevention strategies and preemptive provided, and eventually an overall assessment of the clinic's services.

2.3 Data Analysis

All of the replies were gathered and placed into an Excel spreadsheet for analysis. Using SPSS statistical software 16, frequency distribution and the percentages in the form of descriptive statistics were generated and shown in the form of graphs.

3. RESULTS

During the COVID-19 pandemic, 1313 questions were gathered from the Riyadh Elm University dentistry clinic's electronic system. A total of 1209 (92.1%) of the participants agreed that getting an appointment in a dental clinic was simple during the COVID19 epidemic, 28 (2.1%) disagreed, and 76 (5.8%) stated yes to various degrees. [Fig. 1].

During the pandemic COVID-19, 1167 (88.9%) of those who visited the Dental Clinic at Riyadh Elm University were happy, 122 (9.3%) were dissatisfied, and 24 (1.8%) were unsatisfied [Fig. 2].

During pandemic COVID-19, about 1149 (87.5 percent) patients were happy with the cleanliness and sterilization at the clinic, 134 (10.2%) were extremely satisfied, and just 30 (2.3 percent) were dissatisfied. [Fig. 3].

Overall there were 1206 (91%) patients who approved that only 35 (2.7%) of the participants disputed that the healthcare professional and ancillary staff were thoughtful and empathetic, while 72 (5.5%) of the individuals replied yes to various extents. [Fig. 4].

434 individuals (33.1%) found treatment expenses to be too high, whereas 879 (66.9%) found them to be appropriate [Fig. 5].

Most of the subjects were happy with the treatment provider, with 1195 (91%) being extremely satisfied, 94 (7.2%) satisfied, and just 24 (1.8%) being dissatisfied [Fig. 6].

| Table 1. Was it easy to get an appointment during pandemic COVID-19? |
|---------------------------------------------------------------|
| Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|---------|---------------|-------------------|
| Valid    | 1 1209  | 92.1          | 92.1              |
|          | 2  28   | 2.1           | 2.1               |
|          | 3  76   | 5.8           | 5.8               |
| Total    | 1313    | 100.0         | 100.0             |

Fig. 1. Appointment%
Table 2. How do you evaluate the service you received in the clinics during pandemic COVID-19?

|       | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| Valid | 1         | 1167    | 88.9          | 88.9               |
|       | 2         | 24      | 1.8           | 90.7               |
|       | 3         | 122     | 9.3           | 100.0              |
| Total |           | 1313    | 100.0         | 100.0              |

**Fig. 2. Service received%**

Table 3. Were you satisfied with the level of cleanliness/sterilization during pandemic COVID-19?

|       | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| Valid | 1         | 1149    | 87.5          | 87.5               |
|       | 2         | 30      | 2.3           | 89.8               |
|       | 3         | 134     | 10.2          | 100.0              |
| Total |           | 1313    | 100.0         | 100.0              |

**Fig. 3. Cleanliness/Sterilization%**

Table 4. Were the treating practitioner and supporting staff compassionate and caring?

|       | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| Valid | 1         | 1206    | 91.9          | 91.9               |
|       | 2         | 35      | 2.7           | 94.5               |
|       | 3         | 72      | 5.5           | 100.0              |
| Total |           | 1313    | 100.0         | 100.0              |
Table 5. Were the treatment fees reasonable for you?

| Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------|---------|---------------|--------------------|
| Valid     |         |               |                    |
| 1         | 879     | 66.9          | 66.9               |
| 2         | 434     | 33.1          | 100.0              |
| Total     | 1313    | 100.0         | 100.0              |

Table 6. Were you satisfied with your treating practitioner?

| Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------|---------|---------------|--------------------|
| Valid     |         |               |                    |
| 1         | 1195    | 91.0          | 91.0               |
| 2         | 24      | 1.8           | 92.8               |
| 3         | 94      | 7.2           | 100.0              |
| Total     | 1313    | 100.0         | 100.0              |
Table 7. Were you satisfied with the performance of the reception?

|    | Frequency | Percent | Valid Percent | Cumulative Percent |
|----|-----------|---------|---------------|--------------------|
| 1  | 1193      | 90.9    | 90.9          | 90.9               |
| 2  | 21        | 1.6     | 1.6           | 92.5               |
| 3  | 99        | 7.5     | 7.5           | 100.0              |
| Total | 1313  | 100.0   | 100.0         |                    |

![Reception performance%](image)

**Fig. 7. Reception performance%**

In all, 1193 (90.9 percent) were extremely happy with the reception's performance, 99 (7.5 percent) were satisfied, and 21 (1.6 percent) were dissatisfied [Fig. 7].

4. DISCUSSION

Patient satisfaction during the COVID-19 epidemic is mostly determined by the treatment and services provided. During the COVID-19 epidemic, this research unearthed that up to what extent patients were satisfied with dental treatment they got at Riyadh Elm University Dental Clinic. Seven questions were asked from the Patients, including appointment availability during the pandemic COVID-19, appraisal of the services received within the clinics during the pandemic COVID-19, satisfaction with the level of cleanliness/sterilization during the pandemic COVID-19, Empathy and care shown by the support personnel and dental treatment provider, satisfaction with your treating practitioner, treatment prices, and overall satisfaction with the receptionist's performance.

The first question was about how simple it was to get an appointment at Riyadh Elm University during the epidemic COVID-19, and 92.1 percent said it was very easy. In our study, it was the most satisfying aspect of dental treatments. The degree of satisfaction with the receptionist's performance was 90.9 percent extremely happy, 7.5 percent satisfied, and (1.6 percent) displeased, which was in accordance to a research that analyzed patient contentment to the convenience of obtaining an appointment in Dental Healthcare Centers in Kuwait [15].

In broader sense, a good number of subjects were happy with COVID-19 services, with only 1.9 percent dissatisfied. This was analogous to a study that assessed contentment with the class of dental care provided to adult inhabitants in the United Kingdom, which found that with reference to (90 percent) of populace were contented with the dental care they acknowledged [16].

One of the most crucial aspects of a successful dental clinic during the COVID-19 epidemic is infection control and cleanliness, which patients trust. Patients’ main goal, according to Karydis et al [17], was adherence to antiseptic and sterilization requirements. During the pandemic COVID-19, 87.5 percent of patients were highly happy with the clinic's hygiene, according to the present survey. When compared to a previous research, the participants in this one were more satisfied as a result of the measures made to protect them from COVID-19 infection.

Dental illnesses are the fourth most expensive condition to treat in most developed nations, presenting a financial barrier for dental treatment during pandemics. COVID-19. In Saudi Arabia, dental services are accessible through a network of government-run and privately maintained dentistry clinics. Inequalities in oral health have arisen as the prevalence of oral illnesses such as dental caries has increased, as has the expense of treating such disorders. The dental services
given by the Riyadh Elm University Dental Clinic perhaps be able to help reduce these discrepancies, as instant access to dental care is contingent based on the number of students and equipment available in various clinics.

During the pandemic COVID-19, the most common reason for as reported by the patient was the low cost at the dental facility which seemed to be appealing. The treatment prices were not affordable for 33.1 percent of the participants in our survey, whereas 66.9% were happy with the fees.

Another essential consideration is the staff’s look and demeanour. In our study, 91 percent of participants were happy with the treating physician, and 91.9 percent felt that the treating physician and those who are assisting him/her personnel were empathetic and kind. This contrasts with Othman and Abdel Razzak [18], who reported a substantially inferior level of patient satisfaction.

5. CONCLUSIONS
During the pandemic COVID-19, the Dental Clinic of Riyadh Elm University was triumphant in obtaining subjects contentment with personnel, kind of services, therapeutics and prices. To determine patient contentment with dental care services during pandemic COVID-19, as well as to maintain a high percentage of satisfaction and for further improvement, patient satisfaction should be evaluated on a regular basis to investigate and better comprehend how consumers rate their contentment with dental treatment, as well as gather information from them in order to build dental services in the event of a pandemic. COVID-19.

6. LIMITATION
The generalization of these results is patient’s response was slow.

CONSENT AND ETHICAL APPROVAL
IRB sanction was obtained from REU research center. English and Arabic consent forms will be given to patient.

COMPETING INTERESTS
Authors have declared that no competing interests exist.

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