

Patient Satisfaction Survey at Wad Medani Dental Teaching Hospital, Gezira State, Sudan

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Abstract

This study is a descriptive cross-sectional conducted at Wad Medani, Dental Teaching Hospital, Sudan.

Aim: The study aims to estimate the level of patient satisfaction of available services and facilities at Wad Medani dental teaching hospital

Methods: The sample size was 100 patients. A structured questionnaire obtained the information; all the respondents agreed to participate in this study, giving a response rate of 100%. Most of the patients who underwent the study were women (56%).

Results: The overall patients' satisfaction rate was (61%), and the dissatisfaction rate was (39%). The areas for satisfaction were the residents', doctors (79%), respect for what the patients said (85%), getting approval before treatment (77%), explain the treatment plan in a clear way and the explanations that residents provided (70%). The areas behind the dissatisfaction were with cleanliness in the hospital (59%), evaluating the waiting time after registering to enter the clinic (44%), evaluating pharmacy services and providing medicines (51%), assessing of the radiology service (35%).

Conclusion: Assessment of patient satisfaction and the impact of collecting patient information is essential to build up strategic quality improvement plans. The resulted report provides the opportunity for the Dental Teaching Hospital managers and policymakers to yield a better understanding of patient views and perceptions, and the extent of their involvement in enhancing the quality of dental healthcare services. Furthermore, managers should implement effective changes by unfreezing old behaviours, introducing new ones, and re-freezing them for better dental healthcare delivery.

Key Words: Patient satisfaction, Standard of clinical care, Dental hospital cleanliness, Dentistry

Introduction

Patient satisfaction is the pleasant reflection of how patients are happy with their treatment outcome, both inside and outside of the dental office. It is the measure of the quality of the dental healthcare provided, including the effectiveness of their dental care and their level of empathy and sympathy and the outcome of the treatment. For delivering the services in dental healthcare, patient satisfaction has been considered as an essential factor. Therefore, the patient-centered healthcare system has gained substantial importance as the patients are now seeking a high standard of clinical healthcare services from the healthcare providers.

Patient satisfaction can be a feeling of pleasure or disappointment that results from a service's perceived performance or outcome pertaining to patients' expectations. The patients' satisfaction or dissatisfaction totally relies on the fulfillment of their expectation in terms of performance following their treatment [1]. Importantly, the patient satisfaction reflects as a positive emotional response derived from cognitive processes where a patient compares his/her individual experience to the already laid set of subjective standards [2].

The word Satisfaction is derived from two words: Satis='enough' and faction='to do' or 'make'. Therefore, satisfaction is a fulfilment response [3].

To assess the patient satisfaction, a recent study was conducted on 389 patients at Wad Medani General Teaching Hospital by Sudanese doctors and they reported the overall satisfaction rate of 66% [4]. An another study aimed to propose a conceptual framework for identifying the key drivers and provide guidance for enhancing dental care service quality was conducted in the dentistry department of a typical Taiwanese hospital and showed satisfaction rate of

76% (303 out of 400 patients) [5]. Moreover, a study was designed to evaluate the patients' satisfaction during the last follow-up date post-dental treatment and thereby, determined the possible factors that affects the dental health services in intermediate women in a school of Riyadh city [6]. In an another report from Aminu Kano Teaching Hospital, Northern Nigeria, patients' satisfaction was found to be 83% with the services received [7]. Similarly, overall satisfaction rate of 77% was reported from a study aimed to assess the patient satisfaction in medical and surgical wards of tertiary care hospital in Pakistan [8].

Satisfaction surveys from the patients are the primary sources of feedback about the health care services and such surveys help in reframing purchasing decisions, restructuring of services delivery which, in turn, can be used to evaluate the outcome of policy change [9].

Among the concerning factors, the high cost of dental care deemed responsible for discontinuation of students' chosen dental services, especially in the private clinics [6]. Therefore, such findings necessitate the need of revising the cost of dental services in the hospitals to make treatment more affordable to the patients [10-14].

The major hindrances for the efficient utilization of services in public hospitals was observed in a Bangladeshi study which revealed doctors and nurses unavailability along with their negative attitude and behaviour, lack of medicines, long travelling distances, and waiting long for the treatment [15].

Earlier research done in Switzerland revealed that most crucial factor for measuring patient satisfaction is patient-doctor communication [16].

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Various other studies indicated that the patient's dissatisfaction includes many factors which include cost of treatment; overcrowding; long waiting hours; limitation on the availability of essential medical supplies and drugs, privacy maintenance, no proper directions mentioned to locate different sections, no proper cleaning and sanitization of the toilets and examination rooms (Physical environment), provision of information about hospital services, procedures done in laboratory and re-visiting Doctor for evaluation after receiving the results from laboratory [17-19]

Ethiopian research on patients' satisfaction and its determinants in Outpatient Department of Debre Birhan Referral Hospital, North Shoa, Ethiopia, has shown that patient satisfaction was higher than those of studies conducted at Nekemte Referral Hospital, East Wellega, Ethiopia, both regular and private wing OPDs (58.2 and 68.8%), Hawassa University Teaching Hospital (80.1%), Jimma University Specialized Hospital (77.0%), Bahir Dar Felege Hiwot Referral Hospital (57.8%), Debre Birhan Referral Hospital (57.7%), Tigray Zonal Hospital (43.6%), Wolaita Sodo University Teaching Hospital (54.2%), University of Calabar Teaching Hospital Nigeria (59.3%), and Chitwan Medical College Teaching Hospital in Nepal (75.9%) [20].

The study aims to estimate the level of patient satisfaction of the available services and facilities at Wad Medani Dental Teaching Hospital.

Materials and Methods

This study was a descriptive-analytic cross-sectional type, held at Wad Medani Dental Teaching Hospital, Sudan, between December 2019 January 2020.

The survey was conducted at the Outpatient Department (OPD) of Wad Medani Dental Teaching Hospital at Gezira State, Sudan. A sample of 100 patients was randomly selected in the survey from the (OPD) of Wad Medani Dental Teaching Hospital, Gezira State, Sudan.

Twenty questions were taken from both males (44) and females (56). Informed consent was taken from the patient who had undergone the survey.

The questionnaire-based study was designed in Arabic and divided into two parts. The first part contained questions relating to socio-demographic data of the patients and the second part intended to measure the patient's perception, satisfaction, and expectation.

The study period is a timeframe between December 2019 January 2020.

The sample size is calculated using the following formula. We can estimate the proportion with 5% discrepancy with a 95% confidence interval. Then the:

$$n = \frac{Z^2 pq}{d^2}$$

n=the desired sample size

z=the standard normal deviate, usually set at 1.96, corresponds to the 95% confidence level.

p=the proportion in the target population estimated to have a characteristic and desire accuracy at 50%

$$d=p-ps=5\%$$

q=the remaining proportion from p, which is a minimal size at 50%.

So, the sample size could be 400. But due to some constraint of the investigator (lack of time, uncooperativeness of patient etc.), we made n star modified sample size (adjusted) as the below equation.

$$n^* = \frac{n}{n - \frac{n}{N}} \sqrt{((N - n)/(N - 1))}$$

n=population of patients attending in the past three months

$$\frac{400}{400 - \frac{400}{9700}} \sqrt{\frac{9700 - 400}{9700 - 1}}$$

Sample=97.9315 approximately=100 patient will be taken in this study

A simple random sampling of 100 patients was selected for the study.

Inclusion criteria

Patients attending the OPD of Wad Medani Dental Hospital, Gezira State, Sudan, and agree to undergo the survey. Both patients' genders were selected, their age range from 11-65 years.

Exclusion criteria

Patient not coming for treatment at OPD of Wad Medani Dental Hospital was not selected; disabled children; patients that were physically challenged and mentally disabled; patients with terminal disease and psychosis were also excluded from the study

The surveyed data was converted into frequencies and percentage forms. After collecting information from the primary source, data were processed and analyzed by the following steps: a review of the collected data and information; sorting of revised data and information and analyze for easy explanation.

Data were analyzed using Microsoft Office Excel 2013. Necessary charts and diagrams were drawn for summarizing and easy visual presentation of data.

All the study participants signed an informed consent prior to participating in the study from all selected respondents after explaining the purpose and procedure of the study.

The study was conducted on an anonymous basis. Proper permission was taken from the Wad Medani Dental Teaching Hospital authorities before starting the study.

The limitation of the study could show that the results of the survey may represent some satisfaction of dental college patients.

The study may not have been representative of the whole country since it was conducted in one Dental Teaching

Hospital in Gezira State, Sudan. It is the Gezira State referral dental hospital.

cross-sectional study conducted on Wad Medani, Dental Teaching Hospital, 200 Km south of Khartoum, Sudan, from December 2019 to January 2020.

Results

The study comprises of 100 patients (44 male and 56 female). The age range between 11-65 years. The study is a descriptive

A survey of 20 questionnaires are presented in four graphs *Figures 1-5* (each contains four questions result).

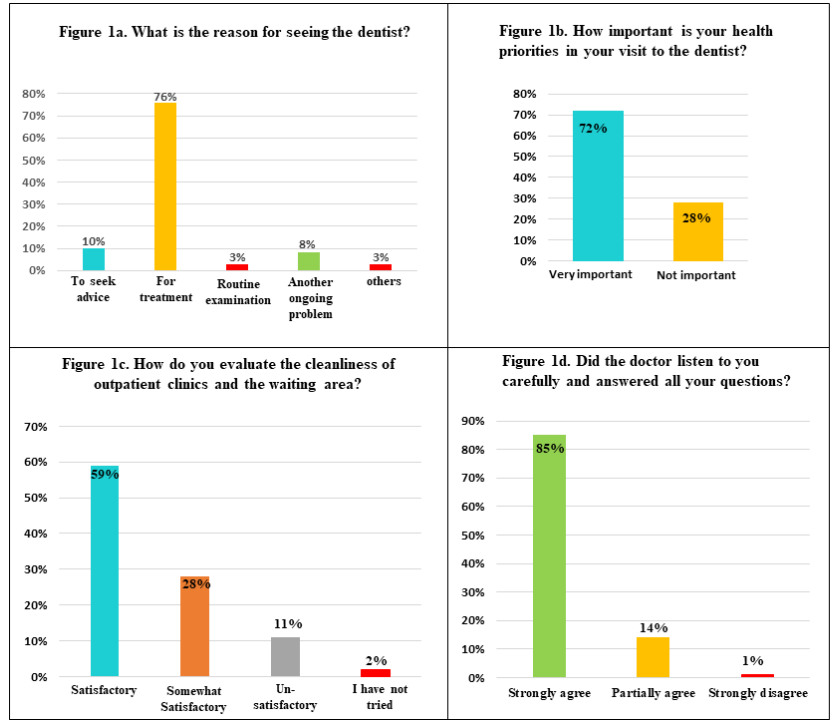


Figure 1. The first group of questions.

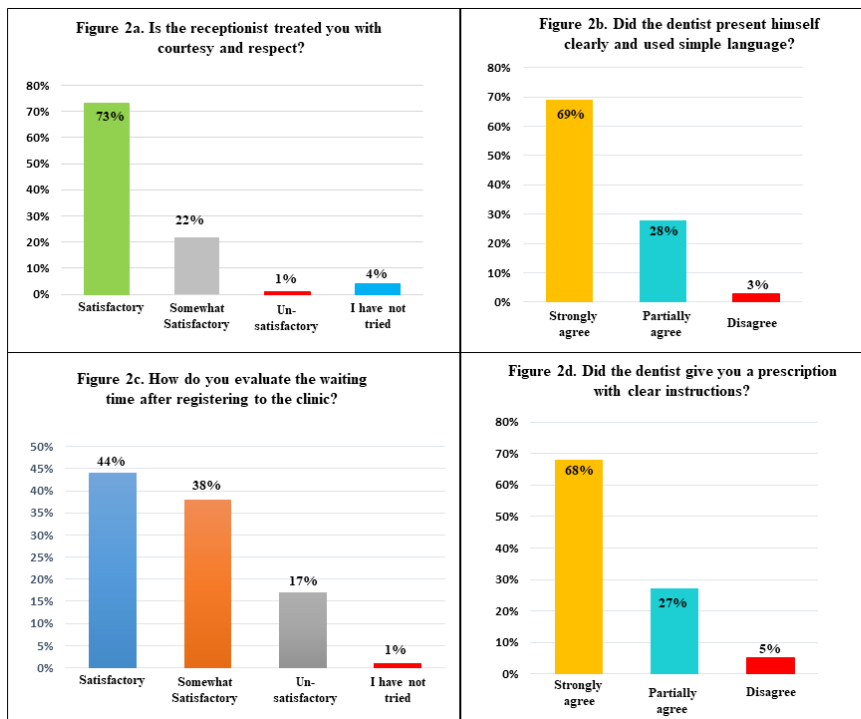


Figure 2. The second group of questions.

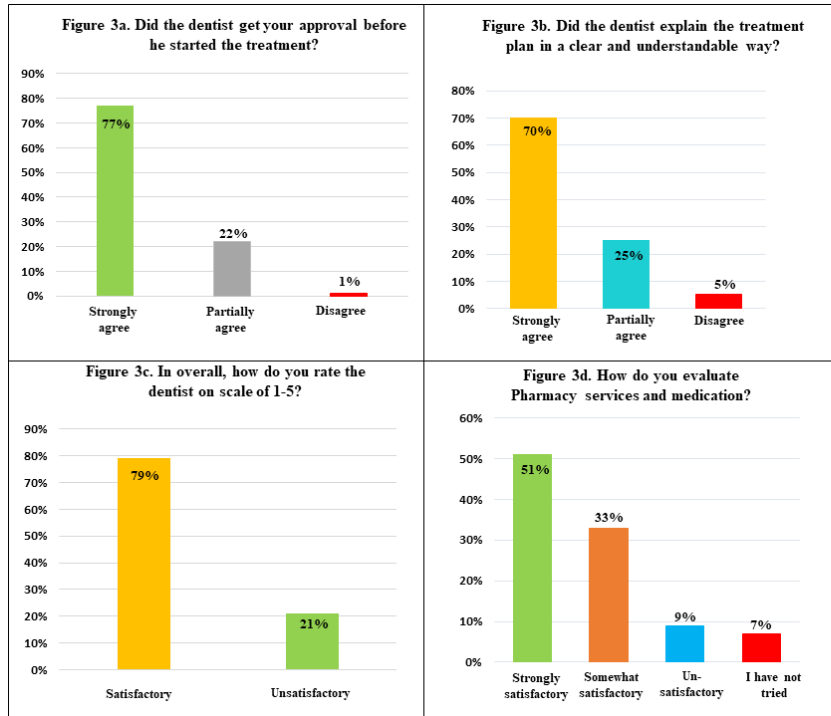


Figure 3. The third group of questions.

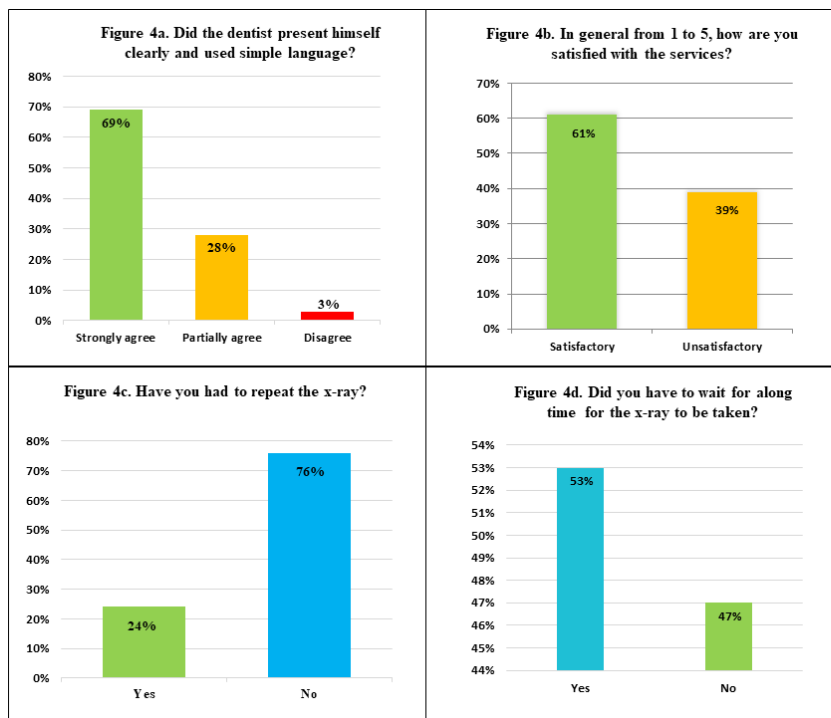


Figure 4. The fourth group of questions.

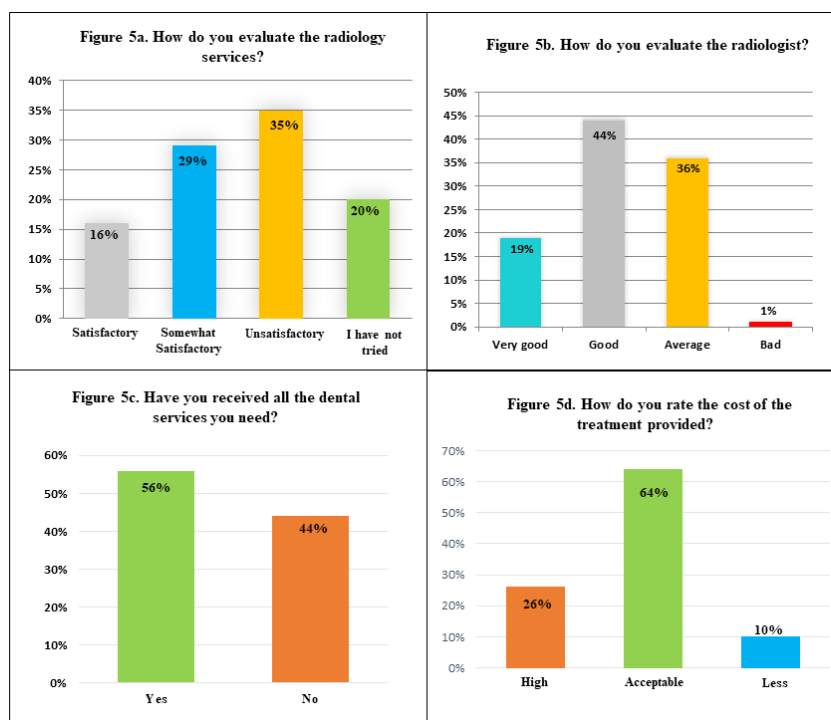


Figure 5. The fifth group of questions.

Discussion

The views, desires, opinions, and satisfaction with dental healthcare provides useful information to those who are interested in understanding or predicting patients' behaviour and opinion about dental healthcare services. The current study encompassing five essential domains viz. accessibility, availability or convenience, cost, pain, and quality, and these represents the primary sources of satisfaction or dissatisfaction to patients with dental services. The study participants were evaluated to reveal the associated the factors in terms of encouragement/discouragement and satisfaction with use of dental services.

Through this study, an attempt was made to assess the level of satisfaction among the patients in response to dental healthcare services being provided in Wad Medani Dental Teaching Hospital. In this study, the most crucial factor to encourage continuous utilization of services in respective clinic was found to be the quality of dental care i.e. competences of the operators is the most critical factor for the patients who seek best outcome following a dental treatment.

In this study, based on patients' opinion, study demonstrated reasonable satisfaction in terms of registration services, doctor and nurse services, lab services, and pharmacy staff services. Moreover, the cleanliness of the waiting area and the radiology services led to a sort of dissatisfaction among the patients.

The dental clinics are generally operated by general dentists or dental students guided by their respective faculty members. The specialists do interfere only in certain complicated cases. Therefore, in concordance with the previous study, the present study observed low quality of dental care which deemed as the essential cause for lost to follow-up cases/samples in the

study [21,22]. However, in contrast to other studies, the primary reason for the participants to showed up in dental colleges was up-to-date care provided to the participants [23]. Efforts are demanding further advancements in current delivery systems in these centres to ensure a high quality of dental care and reduction in any adverse outcome of treatment.

Further, this study observed that the concerning factor for the patients was quality of dental care in those who visited clinic for routine check-ups as compared to those who visits due to pain. Moreover, these findings are consistent with the previous studies where the frequent visit of regular attendants in the clinic sought a high quality of dental care in comparison to those who visited clinic due to pain since they had treated with pain-killers [10,13,24].

Patient's satisfaction level in this survey was found to be directly proportional to the quality of dental care that the patient received after visiting modern equipped dental clinics, apart from friendly staff, recommendations from friends/relatives, receiving of convenient dates for the appointment added in patient satisfaction level, while in other studied non-availability of these factors was the main issue that caused dissatisfaction [23,25,26].

In order to increase the utilization and level of compliance with dental regimen, it is important to know adolescent's views and concern on the available dental services and their satisfaction with the dental care received, which will help to promote desired dental care among Sudanese population.

Alma Ata declaration on primary health care stated that dental service accessibility is one of the crucial factors for all the patients. The considerable catchment area of the tertiary health facilities makes it less accessible, but in order to

receive specialized dental care at these dental hospital people do travel more than an hour by using automated public transport. For the accessibility and travelling time the finding were compared with a study which was conducted in lower and upper Egypt and the finding of the work were consistent [27].

An affordable/cost effective treatment in dental hospital prepares the patients mentally to invest in transportation. For continuing treatment of the patient without causing any hindrance in his/her work the demand for evening outpatient department services can be breakthrough to make health services more users friendly.

Conclusion

- Patient evaluation of care is an important tool for the improvement of the quality of dental healthcare services
- The overall patient satisfaction and collection of patient information help to build-up strategic quality improvement plans
- It provides an opportunity for any organizational managers and policymakers to yield a better understanding of patient prospects and perceptions, and the extent of their involvement in improving the quality of care and services
- Implement effective change by unfreezing old behaviours, introducing new ones, and re-freezing them for better healthcare delivery

Recommendations

This study identified some areas, which can be revised in order to improve the healthcare services and the quality of care.

- To overcome the low satisfaction rate with conventional x-ray, the hospital authority should take action to purchase digital periapical and dental pantographic x-ray machines
- The waiting time before seeing the dentist was one of the important factors affecting patient satisfaction. It could be reduced by starting an appointment system at least for nonemergency cases
- The waiting time for drugs dispatch could be reduced by introducing a token system at the pharmacy counter
- Availability of drugs was one of the important factors determining patient satisfaction. Therefore, the policy and procedure guidelines for drug prescription should be revised regularly, and the most prescribed drugs should be made available
- An audit of patient satisfaction assessment should be conducted regularly every six months
- Suggestion and complaint boxes should be kept so that patients can freely put their suggestions and complaints about improvement in services and openness of the system. So, we can learn from the complaint

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