



Assessing Sudanese patients' perspective with regards to quality of services in Khartoum dental teaching hospital, Sudan

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ABSTRACT

The objective of this study is to measure patient satisfaction level as well as satisfaction with waiting time at Khartoum dental teaching hospital. The study design is Descriptive, hospital based, cross sectional study. Data was collected by three questionnaires that were distributed to three hundred eighty four patients. All patients at the time of data collection were chosen. Data was analyzed by computer software. Ethical Approval was obtained from university of medical sciences and technology and informed consent was taken from all participants. There is no conflict of interest. Overall average of satisfaction is 73.4%. The main causes of dissatisfaction was long waiting time (42.7%) of the patients were waiting for more than 2 hours. The highest satisfaction level was found to be 55.2% and the waiting time for less than 30 minutes was 19% which reflects the lower rate of satisfaction (55.5% were not satisfied). Patients were highly satisfied by the services provided in Khartoum dental teaching hospital (average 73.4%) in spite of long waiting time.

Keywords: Patients, Satisfaction, Dental, Quality

INTRODUCTION

Patient satisfaction is now considered as an important outcome measure for health services; however, it designates efficiency that based on a number of concealed expectations about the nature and meaning of 'satisfaction'. Kotler defined satisfaction as: "a person's feeling of pleasure or disappointment resulting from comparing a product's perceived performance or outcome, in relation to his or her expectations."¹ Patient satisfaction is a main standard by which the quality of health care services is evaluated.^{2,3} It can be defined as a subjective evaluation of the service received against the individual's expectations.⁴ Patients' judgment of hospital service quality and their feedback are essential in quality of care monitoring and improvement.^{5,6}

In developing countries patient satisfaction is continuously

assessed for the purpose of quality improvement in healthcare settings.^{7,8} As well as in Asia the collection of data for the same purpose was observed.⁹⁻¹¹ But the case is different in many of the African countries in which the practice of assessing patients satisfaction as an indicator for quality assurance is very rare. Patient satisfaction is measured against various dimensions that embrace availability, accessibility and convenience of services, in addition to the professional skills and technical competence of health care providers as well as the physical environment of the health care settings.^{4, 12-14} In dentistry, several factors are considered related to patient satisfaction with dental care and dentists. The technical competence (include pain experience and

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dental anxiety), dentist - patient relationship, cost and location, accessibility and facilities have been found to be concomitant parameters to patient satisfaction with dental care.¹⁵

This study is to add to research on this important topic which is patients satisfaction with the objective of measuring the level of satisfaction of clients attending Khartoum Teaching Dental Hospital and to identify factors associated with general satisfaction. This will assist in knowing the quality of care from patients' perspective (QCPP) in order to define quality of care needed and to explore patients' perspectives with regards to the provision of care in dental clinics.

MATERIAL AND METHODS

This study is descriptive cross sectional hospital based conducted in Khartoum Dental Teaching Hospital, in Sudan. The Statistical power analysis of the sample size calculator was used to calculate representative sample of the study (Confidence interval=95%). The sample of this study was 384 clients who attended different departments of Khartoum Dental Teaching Hospital. All patients attending different departments at the time of data collection were included .

Information was collected through Dental Satisfaction Questionnaire (DSQ), Patient Visit Satisfaction Scale (PVSS), and Khartoum Ministry of Health/Patient Satisfaction Questionnaire these scales were administered to explore the patients' views and perspectives. Also, there was three subscales to assess the accessibility to the facility and communication of dental care providers that include

pain management and understanding of dental anxiety, technical competence of the dentist and cost of the services provided. Additional items such as attitudes toward continuity and general satisfaction .The individual item was rated on three-point Likert scales ranging from agree, neutral and disagree.¹⁶ A pretest was applied to measure the time needed to fill up the questionnaire which was found (5- 7 min), and to assess the effectiveness of the questions and whether the questions are acceptable and understandable.

Data was analyzed using Software Statistical Package for Social Sciences (SPSS). Analysis divided into descriptive statistics using the percentage (frequency) and Inferential statistics to measure the association between patient satisfaction and demographic factors and the determinants that affect the satisfaction through chi-square test for categorized variables.

All the ethical considerations were fulfilled prior to conducting the study. The ethical clearance was taken from the Ethical Review Board (ERB) of the University Of Medical Sciences & Technology in Khartoum/Sudan. A consent form was given to the subjects to obtain their willingness to participate in the study. Participants were assured about confidentiality of their information.

There is no conflict of interest .

RESULTS

Table 1 shows the average of overall satisfaction is 73.4%, which indicates the general satisfaction with the services.

Table 1 The Average of Overall Satisfaction with Dental Care in Hospital (n=384)

Parameters	Percent
Mean	73.3703
Median	77.4194
Mode	83.87
Standard Deviation	16.16436
Minimum	6.45
Maximum	100.00

Table 2 Satisfaction Rate of Clients (n=384)

Satisfaction Rate	Frequency	Percent
Less than 50	34	8.9
50 – 60	26	6.8
60 – 75	112	29.2
Highest thru 75	212	55.2
Total	384	100.0

The satisfaction rate was divided into highly satisfied (highest through 75), fair satisfaction (60-75), only satisfied (50-60), and poorly satisfied (less than 50). Data of this table reveals 55.2% of the patients were

highly satisfied with the overall services provided by the hospital, 29.2% were only satisfied, 6.8% were fairly satisfied and 8.9% were poorly satisfied.

Table 3 Length of Waiting Time for Clients to be seen by Dentist (n=384)

Waiting time	Frequency	Percent
Less than 30 min	75	19
30-60 min	73	19.5
1-2 hours	72	18.8
More than 2 hours	164	42.7
Total	383	100.0
Satisfaction with the waiting time		
Disagree	213	55.5
Neutral	6	1.6
Agree	165	43
Total	384	100.0

Forty-two percent (42.7%) of the patients were waiting for more than 2 hours to enter to the dentist. Fifty five and five percent (55.5%) of the patients were not satisfied by this long waiting time, while

43% of the patients were satisfied by the long waiting time because they have no other options and they have to tolerate this long waiting time to get a good treatment.

Table 4 Reasons for Choosing Khartoum Dental Teaching Hospital (n=384)

Reason for choosing the hospital	Frequency	Percent
Near to home	13	3.4
Freedom to choose a dentist	10	2.6
Provide cheaper prices	50	13.0
Not Eligible to be treated in	45	11.7
Others	266	69.3
Total	384	100%

Khartoum dental teaching hospital was chosen because it provides services in low price, 13%, large % states that they are not eligible to be treated in other hospitals. In Table 5 below, Sixty one percent (61%) of patients were satisfied from the overall services

that provided by the hospital. In spite of this considerable percentage of high satisfaction when the patients asked if they advise their relatives and friends to be treated in the hospital 76% said no. (Table 6).

Table 5 Client's Satisfaction with the Services Provided by the Hospital (n=384)

Satisfied with the Services Provided	Frequency	Percent
Disagree	61	15.9
Neutral	86	22.4
Agree	237	61.7
Total	384	100%

Table 6 Client's Advice their Relatives to be treated in this Hospital (n=384)

Would you advice your relatives to come	Frequency	Percent
Disagree	292	76.0
Neutral	87	22.7
Agree	5	1.3
Total	384	100%

DISCUSSION

This study has shown that the overall patients' satisfaction with the quality of care in Khartoum Dental Hospital that patients received was generally very good despite other domains of dissatisfaction. However, studies have shown that users of health facility differ in their satisfaction with the quality of care.¹⁷ This score is lower than the overall satisfaction score of 83% reported in Kano, Northern Nigeria,¹⁸ and excellent rating reported in Trinidad and Tobago.¹⁹ This finding of overall very good satisfaction score (73.4%) of this study; could be linked to the patient-provider relationship, patient-provider communication, accessibility, and the hospital environment. It always remains debatable whether patients' ratings reveal anything about technical quality or simply the interpersonal skills of the providers.¹³ Patient perceptions of quality are often influenced by their interaction with the health provider.

Sixty one percent (61%) of participants in this study were found satisfied with the overall services provided by the hospital (table 5) nevertheless, when the patients asked if they advise their relatives and friends to be treated in the hospital 76% said no (table 6). This is may be attributed to way clients think; if their friends and relatives are in good financial status then it will be better to be treated in a private clinic to avoid the crowd, the long waiting hours and the delay of appointments.

It was expected that satisfied patients who were the subjects of this study; are likely to recommend the hospital to others in their community, as it is known that information travels faster and are more believed by patients when coming from their relatives and friends than from the health worker who is considered part of the hospital.

The time that a patient spent waiting to be seen by a health care provider is considered an essential factor that affects utilization of healthcare services. This might be perceived as an obstacle that hinders patients to seek services.²⁰ The increase awareness of the consumers of healthcare services on the quality of care, therefore, should permit no opportunity for dissatisfaction because it is risky not to address the patients' dissatisfaction with service delivery, particularly if there are other alternative sources of care that can create competition among healthcare settings. If customers dissatisfaction successfully tackled it will consistently put the hospital in a strong position and will add for its future development.

Several studies have confirmed that waiting time was the least satisfactory issue²¹ dissatisfaction with waiting time in the clinic considered an essential issue that requires to be resolved, probably through restricting the number of patients to reduce the waiting time.²¹ But in such a hospital it will be difficult to control, as the number of patients in need of dental treatment is quite high. The likely possible solution is to increase the numbers of dental staff and to increase the needed equipment. Making a proper appointment with time schedule can minimize

dissatisfaction with an exception for emergency cases.

This study has proved that patients were not satisfied with the waiting time in the hospital. Waiting time refers to the time a patient waits in the clinic before being seen by one of the clinic medical staff.²² The long waiting time in the clinic could be attributed to the growing number of patients accessing care in the hospital. Khartoum Dental Teaching Hospital functions as primary, secondary, and tertiary healthcare provider and receives patients who could have been attended at the primary and secondary levels of care. In addition, to the strategic location of the hospital in the city centre of Khartoum State made it easy to be accessed and the rapid influx of patients from within and outside the state, lead to the increase in patient statistics. Although, patient waiting times are unavoidable in busy public governmental hospitals, their decrease should be a central strategy to increase the quality of healthcare services. The main problem in this hospital is the long waiting time for the surgical treatment. Which results in the persistent requests from doctors that patients have to repeat the lab investigations the thing that adds extra expenses to patients. In addition, most of the medications are not available in the in-hospital pharmacy. This practice is considered additional determinant of patients' dissatisfaction.

CONCLUSION

Despite these limitations, the conclusion of this study is that patients satisfaction in Sudan faces significant challenges, and the findings of this study have significant implications for further researches to be conducted to improve the quality of health care. It is also raised the significance of establishing a comprehensive quality assessment and improvement system in health care settings in Sudan. The existing situation in the Dental Hospital and in many other healthcare settings should include the quality improvements as an integral part of all aspects of primary care services. The Dental Hospital will be unable to fulfill the health care standards unless the challenges identified in this study are carefully addressed. It is the authors believe that quality improvement can be obtained by both internally through organized effort within the health care

system, and externally through public pressure. The community has yet to play a major role in developing the provision of the healthcare services and to make a positive change. Future research is needed to make more objective evaluation of the quality of clinical services, and to identify interventions that are effective in improving care.

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REFERENCES

1. Kotler P. Marketing Management. 11th ed. Upper Saddle River, Nj: Prentice Hall; 2003. p. 61.
2. Young GJ, Meterko M, Desai KR. Patient satisfaction with hospital care: effects of demographic and institutional characteristics. *Med Care* 2000;38:325–34.
3. Goldwag R, Berg A, Yuval D et al. Predictors of patient dissatisfaction with emergency care. *Isr Med Assoc J* 2002;4:603–6.
4. Sitzia J, Wood N. Patient satisfaction: a review of issues and concepts. *Soc Sci Med* 1997;45:1829–43. doi:10.1016/S0277-9536(97)00128-7.
5. Boyer L, Francois P, Doutre E et al. Perception and use of the results of patient satisfaction surveys by care providers in a French teaching hospital. *Int J Qual Health Care* 2006;18:359–64.
6. Hepner DL, Bader AM, Hurwitz S et al. Patient satisfaction with preoperative assessment in a preoperative assessment testing clinic. *Anesth Analg* 2004;98:1099–105
7. Donabedian A. The quality of care: how can it be assessed? *JAMA* 1988;260:1743–8.
8. Cleary PD, McNeil BJ. Patient satisfaction as an indicator of quality care. *Inquiry* 1988;25:25–36.
9. Peters DH, Noor AA, Singh LP et al. A balanced scorecard for health services in Afghanistan. *Bull World Health Organ* 2007;85:146–51.
10. Andaleeb SS, Siddiqui N, Khandakar S. Patient satisfaction with health services in Bangladesh. *Health Policy Plan* 2007;22:263–73.

11. Mendoza Aldana J, Piechulek H, al-Sabir A. Client satisfaction and quality of health care in rural Bangladesh. *Bull World Health Organ* 2001;79:512–7.
12. Grogan S, Conner M, Norman P et al. Validation of a questionnaire measuring patient satisfaction with general practitioner services. *Qual Healthc* 2000;9:210–5. 12.
13. Pascoe GC. Patient satisfaction in primary health care: a literature review and analysis. *Eval Program Plann* 1983;6:185–210.
14. Ware JE, Jr, Hays RD. Methods for measuring patient satisfaction with specific medical encounters. *Med Care* 1988;26:393–402.
15. Hakerberg M, Heidari E, Norinder M, Berggren U. A Swedish version of the Dental Visit Satisfaction Scale. *Acta Scand* 2000; 19-24. Oslo. ISSN 0001-6357.
16. Ståhltnacke K, Söderfeldt B, Unell L, Halling A, Axtelius B. Patient Satisfaction With Dental Care In One Swedish Age Cohort Part 2- what affects satisfaction, 2013-10-2.
17. Abdosh B. The quality of hospital services in eastern Ethiopia: Patients' perspective. *Ethiop J Health Dev* 2006;20:199-200.
18. Iliyasu Z, Abubakar IS, Abubakar S, Lawan UM, Gajida AU. Patients' satisfaction with services obtained from Aminu Kano Teaching Hospital, Kano, Northern Nigeria. *Niger J Clin Pract* 2010;13:371-8.
19. Singh H, Haqq ED, Mustapha N. Patients' perception and satisfaction with health care professionals at primary care facilities in Trinidad and Tobago. *Bull World Health Organ* 1999;77:356-60.
20. Maxwell RJ. Quality assessment in health. *Br Med J (Clin Res Ed)* 1984;288:1470–2. [PMC free article] [PubMed]
21. patient satisfaction with three dental speciality services: a centre-based study. Al-Mudaf BA,, etal . *Med Princ Pract.* 2003 Jan-Mar;12(1):39-43
22. Rossiter CE, Raynolds FA. Automatic monitoring of the time waited in an outpatient clinic. [Last accessed 2010 Oct 07];*Journal Storage: Med Care.* 1968 1:218