

Patients Satisfaction Toward Dental Health Services Offered at Mnazi-Mmoja Dental Clinic in Dar Es Salaam, Tanzania

Benard Matofari, Ferdinand Mabula Machibya*, Matilda Mtaya-Mlangwa and Emil Namakuka Kikwilu

Department of Orthodontics, Pedodontics and Community Dentistry, Muhimbili University of Health and Allied Sciences, Tanzania.

*Correspondence:

Dr. Ferdinand Mabula Machibya, School of Dentistry, Muhimbili University of Health and Allied Sciences, P. O. Box 65014, Dar es salaam, Tanzania, Tel: +225683336048.

Received: 11 June 2021; Accepted: 30 June 2021

Citation: Matofari B, Machibya FM, Mtaya-Mlangwa M, et al. Patients Satisfaction Toward Dental Health Services Offered at Mnazi-Mmoja Dental Clinic in Dar Es Salaam, Tanzania. Oral Health Dental Sci. 2021; 5(2); 1-5.

ABSTRACT

Background: The success of an oral health service can be assessed by the degree of satisfaction/dissatisfaction of its patients. In Tanzania, patients' satisfaction with dental services has received only minor attention.

Objectives: To assess patient satisfaction with dental care among patients at Mnazi-Mmoja Dental clinic.

Methodology: A cross sectional study conducted at Mnazi-mmoja dental clinic for two months to determine patients' satisfaction with dental services offered at Mnazi-mmoja dental clinic. A total of 145 patients of different sex were the subjects during the time of study. The study included all the patients attended at Mnazi-mmoja dental clinic during the time of data collection who were aged from 18 to 65 years.

Results: There were more female respondents than male (53.1% versus 46.9%) and majority (62.1%) of the respondents were young adults (between 18 and 35 years). Most (93.4%) respondents showed overall satisfaction with service offered. The level of education influenced the participants satisfaction, showing higher satisfactions among patients with primary educations and those without formal education while low satisfaction was among participants with secondary or higher-level education (96.3% and 51.6% respectively) ($p \leq 0.05$). The rest of social-demographic characteristics did not significantly influence patients' satisfaction.

Conclusion: Patients were highly satisfied with dental services offered at Mnazi-mmoja Hospital. In addition, social-demographic factors were not associated with patients' satisfaction except level of education.

Keywords

Oral and dental services, Dental clinics, Healthcare.

Introduction

Patient satisfaction is the appraisal by an individual of the extent to which the care provided has met one's expectations and preferences. Today world's economy is largely a service-oriented one, and quality is the central issue for any kind of business, regardless of the service being rendered. Failure in attaining patient satisfaction with the provided oral and dental services develops fear among the

patients and their guardians attending dental clinic, and fear spread to the society they live with thus contributing to delayed dental treatment for some of community. Studying patient satisfaction is a very important tool in assessing aspects of care that needs to be improved in order to maintain quality of care [1,2]. It has been found those patients who are highly satisfied are likely to benefit more from the services than those who are unsatisfied [3]. Patient reports on the outcomes of care are increasingly used as a measure of quality of care and satisfaction is the commonly used indicator in measuring quality of healthcare [4] although in Tanzania patient satisfaction assessment has received only minor attention.

Among all variable related to patient satisfaction with health care, attitude and perception prior to receiving dental care plays a major role in determining satisfaction.

Several studies conducted worldwide on patient satisfaction shows that majority of dental patients are satisfied with dental care [5,6]. In Tanzania, however there have been contradicting findings on patient's satisfaction. The study done by Ntabaye et al. [7] found that patients were highly satisfied (92.7%) while Mattee et al. [8] reported moderate patient satisfaction.

Research done in different counties showed that many factors are involved in determining patients' level of satisfaction. In a study done by Mwela et al. and Mascarenhas [9,10] the factors related with patient satisfaction were organization, cost for treatment, time spent in the waiting room, a visit to a dental specialist. Also, a good relationship between care providers and the patient, good working atmosphere and absence of post treatment complication resulted into high level of satisfaction [8]. According to the response by patients who attended to a dental clinic more than ones, those who had no painful experience at the visit and who evaluated their oral conditions positively were more satisfied. It was also noted that information and communication (inter person interaction) between the patient and the dentist was the key factor in determining satisfaction with dental care. In addition, patient perception on waiting time in the dental clinic greatly affected their level of satisfaction [11].

Variables related to satisfaction with health care have been shown to influence health beliefs, compliance and utilization of care [12]. Hence, understanding these factors may have an effect on the delivery of care and interventions aimed at increasing utilization of care. Empirical studies support the idea that the concept of satisfaction with dental care is multidimensional, and that this concept has to be measured with multi term instruments [12,13] one of the few instruments of this kind is the Dental Satisfaction Questionnaire (DSQ). While there are a lot of medical satisfaction questionnaire, few of dental questionnaires have been reported in the literature. The DSQ is adapted from medical questionnaire by changing items from medical to dental terms and adding pain management items. The DSQ tool has been used in Tanzania in some unpublished researches. Thus, the present study utilized the DSQ in assessing patients' satisfaction at the Mnazi-Mmoja Dental clinic.

There are few studies done in Tanzania on patients' satisfaction with dental care: The current study therefore aimed at determining the proportion of patients satisfied with dental care as well as other satisfaction factors assessed at Mnazi-Mmoja Dental clinic.

Methodology

Ethical approval to conduct the study was obtained from the senate research and publications committee of MUHAS and permission to access information from the patients at Mnazi-mmoja dental clinic was granted by the Ilala District Medical officer.

This was a descriptive, Cross-sectional study done at Mnazi-mmoja dental clinic in Ilala District-Dar es salaam Region. The study included all patients' information aged 18 to 65 years and excluded patients with mental illness. A total of 145 subjects were recruited, based on previous reported 89.4 proportion of dental care satisfaction [8] with marginal error of 5%.

Data collection

The study was conducted using a structured self-administered questionnaire consisting of standardized pre coded and open-ended questions on patient satisfaction. The questionnaire explored the level of satisfaction with major service facets from patients seeking dental care at the Mnazi-mmoja dental clinic. The questionnaire included a total of 20 questions, whereby nine of them were satisfaction items.

The patients who were dissatisfied by 7 out of 9 satisfaction items questions were regarded as overall dissatisfied. Overall neutrality (neither satisfied nor dissatisfied) was scored to participants who were dissatisfied to 4, 5 or 6 questions, If the patient responded as being dissatisfied in 3 or less questions and responded as satisfied to 6 or more questions was regarded as overall satisfied.

Data analysis

Data processing and analysis was carried out using statistical package for social services (SPSS) Version 20.0. Percentage distribution of respondents over satisfaction scale was computed, and Chi- square test was used to determine the associations between two variables. P-value of 0.005 was used as a cut point to obtain the significance.

Results

A total of 145 participants completed the questionnaires, with more females responded than males (53.1% and 46.9% respectively). The respondents were between 18 and 65 years of age, with 62.1% being 18 to 35 years (young adult group). Majority of the respondents were unemployed 73.1% (Table 1).

Table 1: Distribution of respondents by Socio-demographic characteristics.

Variable	Categories	Total n (%)
Age	Young adult (18-35 yrs)	90 (62.1%)
	Middle aged (36-55 yrs)	41 (28.3%)
	Older adult (55-65 yrs)	14 (9.7%)
Sex	Male	68 (46.9%)
	Female	77 (53.1%)
Marital status	Married	75 (51.7%)
	single	64 (44.1%)
	divorced	6 (4.1%)
Level of education	No formal education	5 (3.4%)
	Formal education	140 (96.6%)
Occupation status	Employed	39 (26.9%)
	Unemployed	106 (73.1%)

Majority (93.4%) of patients showed satisfaction with service offered at Mnazi-mmoja Hospital with less than one percent of dissatisfaction. Patients' satisfaction was not attributed to age

difference; as all age groups showed high satisfaction (96.1% for young adult; 85.7% for middle aged and 93.4% for older adult). Additionally, sex did not affect participants' satisfaction; whereby 93.0% of male respondents reporting satisfaction, the rest were either neutral or satisfied: While 94.0% of female subjects were satisfied by the dental services offered.

With regard to the level of education and employment status, there was significant difference ($p \leq 0.05$) in satisfaction based on level of education with higher satisfaction (96.3%) being among patients with primary educations and those without formal education; while lower (51.6%) satisfaction was among participants with secondary or higher level of education. Among unemployed respondents, 88.6% were satisfied against 93.4% satisfaction of employed subjects ($p = 0.12$).

Considering specific aspects of dental care at Mnazi-mmoja hospital, majority (81.7%) of participants perceived dental treatment fees to be unreasonable and significant proportion of participants were either dissatisfied or very dissatisfied with treatment waiting time and cost (29.7% and 22.8% respectively) (Figure 1).

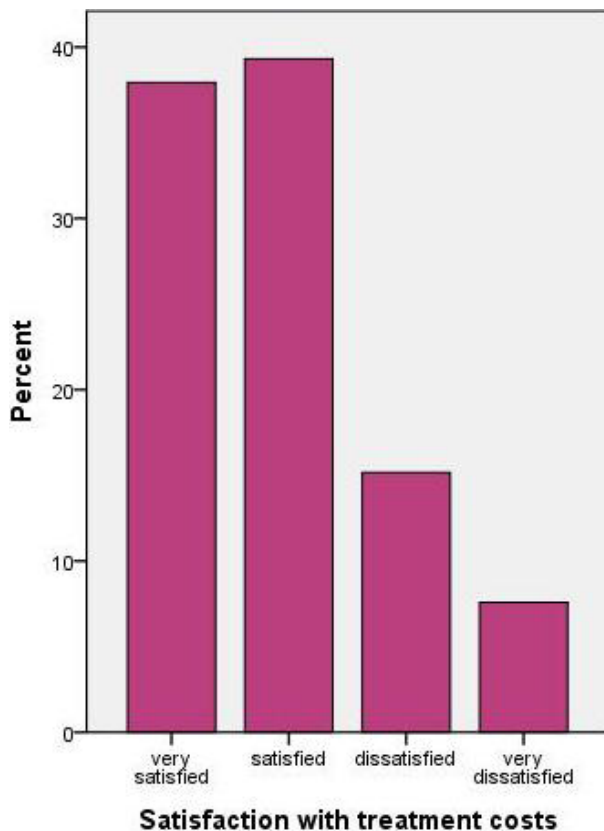


Figure 1: Bar chart displaying the percentage of patients' satisfaction with treatment cost.

The cleanliness in and around the clinic as well as dental clinic reception received poor rating by substantial proportion of participants; Whereby 10.3% of respondents were either dissatisfied

or very dissatisfied (Table 2 and Figure 2). The effectiveness of local anesthesia is another aspect of practitioners' competences assessed. The result showed that 8.1% of patients who received treatment involving anesthesia were either dissatisfied or very dissatisfied with the effectiveness of local anesthesia during treatment (Figure 3).

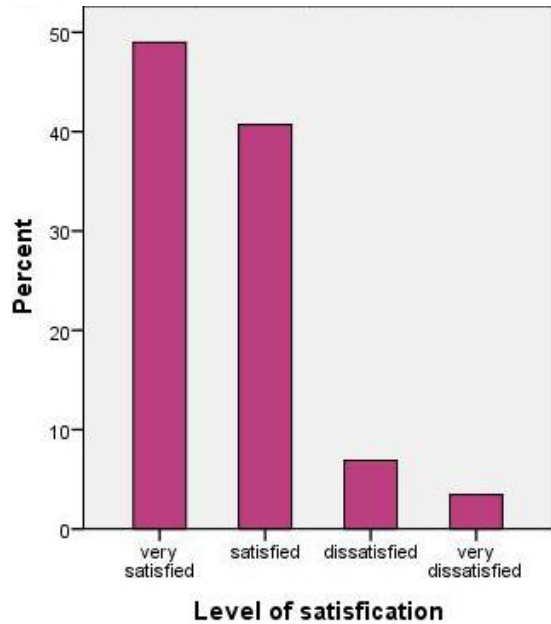


Figure 2: Bar chart displaying the percentage of patients' satisfaction with reception in dental clinic.

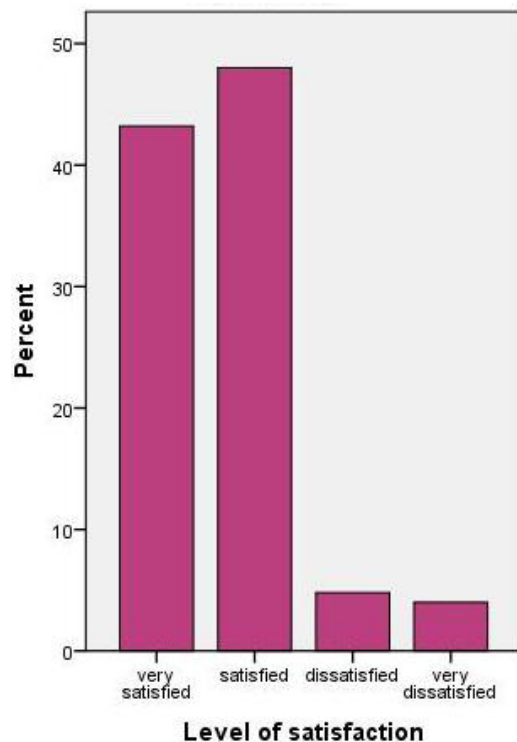


Figure 3: Bar chart displaying the percentage of patients' satisfaction with effectiveness of local anesthesia.

Table 2: Participants' satisfaction on specific dental clinic service.

	Very satisfied	Satisfied	Dissatisfied	Very dissatisfied	Total
	N (%)	N (%)	N (%)	N (%)	N (%)
Satisfaction with reception in dental clinic	71 (49.0)	59 (40.7)	10 (6.9)	5 (3.4)	145 (100.0)
Satisfaction with cleanliness in and around the clinic	76 (52.4)	54 (37.2)	11 (7.6)	4 (2.8)	145 (100.0)
Satisfaction with the waiting time	48 (33.1)	54 (37.2)	32 (22.1)	11 (7.6)	145 (100.0)
Satisfaction with effectiveness of local anesthesia	54 (37.2)	60 (41.4)	6 (4.1)	5 (3.4)	145 (100.0)

The reasons for dental visits (Toothache, dental fracture, dental abscess, periodontal disease) did not significantly influence the participants' satisfaction level. More than ninety percent of participants were satisfied with dental service, regardless of their reasons for seeking treatment.

Discussion

Patient satisfaction is an important component of quality of health care, and it can be used as a key factor in the formulation of health policies.

A review of the results from this study represents an overall high level of satisfaction on dental treatments in almost all oral health care facets.

In this study done among patients attending Mnazi-mmoja dental clinic, the most dominant respondent group was young adult (18-35 yrs) who were mostly in need for oral health care. This reflects the Tanzania Population which is composed of much (50%) young people (15 to 35 years) [15]. More than half of the respondents in this study were female 77(53.1%) which is a consistence result with other studies that have been conducted in different parts of the world.

Based on the results of this study, most patients had high satisfaction with oral healthcare services. Patient satisfaction was insignificantly related to social demographic factors (age, sex, marital status, education level and occupation of the patients) except level of education. In the study done by Ntabaye et al. [7] it was reported that patients were highly satisfied with dental service (92.7%) while Mattee et al. [8] reported moderate patient satisfaction. The differences may be due to the fact that Ntabaye et al. [7] studied patient satisfaction to emergency oral care in health centers from rural villages, while Mattee et al. [8] studied patients' satisfaction to all dental care provided in Dar es Salam city where people may have wide range of comparison.

The findings of the current study also indicated that patients with higher education were more sensitive to the type of treatment given and level of satisfaction was low. Similar to the present research findings one study Lee et al. [16] found a significant relationship between patients' education and their satisfaction. Another study [17] showed that patients with lower education had higher satisfaction than those with higher education. It is possible that greater degree of knowledge of their rights among educated patients may be the reason for the observed results. The high education seem to give a higher priority to a professional contact

and they see the dentist as an equal conversation partner [18]. The findings of the present research indicated that the patient's age does not affect their satisfaction with the studied domains, which is in line with the findings by Razmi et al [19]. In a study looking specifically at satisfaction of the older patient with dental care, Stege et al. [20] found that patients over the age of 60 years tended to be more satisfied with their dental care than younger patients, but were less satisfied with the communication process than younger patients [20,21]. On the other hand, found older patients to be less satisfied and explained their findings by the fact that the oral health status of the younger patient is usually better than that of older people, which may lead to better experiences [21].

Moreover, the results showed that patient's marital status did not influence patient satisfaction, high percent of divorced seems to be unsatisfied although it was statically insignificant.

Some specific aspects of dental care assessed highlight patients' dissatisfaction core features of service provision. Majority (81.7%) of participants perceived dental treatment fees to be unreasonable and significant proportion of participants were either dissatisfied or very dissatisfied with treatment waiting time and cost. In addition, the cleanliness in and around the clinic as well as dental clinic reception received poor rating by substantial proportion of participants. According to Ibrahim et al. [22], the major causes of satisfaction are friendly clinic staff, competent operator and low treatment cost. Any institution must strive to address the staffs' attitude and treatment cost to satisfy their patients. Being a public health facility, Mnazi-mmoja treatment fees are relatively lower compared to private owned health centers. Thus, it is surprising that many patients are dissatisfied with the cost. Lack of patients' awareness on dental service running cost may be a reason for such high dissatisfaction with treatment fees. In a qualitative study, Luo et al. [23] reported that patients mentioned cheap price to be the factor of satisfaction for service in public hospital. Comparative study would be much informative regarding satisfaction of dental service between private and public hospitals.

In the current study, about 8% of participants were either dissatisfied or very dissatisfied with effectiveness of local anesthesia (Table 2). Technical Competence is a key determinant of dental satisfaction [24] and the strategy of pain management in the process of treatment (e.g., intra-operative anesthesia) and the use of postoperative analgesics affected their satisfaction with the dentist [23].

Although the effectiveness of local anesthesia dissatisfaction was reported by less than 10% of respondents, its importance

in dental practice calls for action. To attain a consistent dentists' clinical competency the dental schools could contribute to patient satisfaction by emphasizing pain management during clinical skills training in their curricula as well as establishing regular professional development programs to update dental practitioners on important areas of clinical competencies.

Due to resources limitations, the study was conducted at one (Mnazi-mmoja) public dental clinic. Despite displaying similarity with previous studies [7,8], the results should not be comfortably inferred to the nationwide public dental clinic services due to some geographical and socioeconomically differences.

Conclusion

This study confirms that, patients are highly satisfied with dental services offered at Mnazi-mmoja Hospital. In addition, social-demographic factors are not associated with patients' satisfaction except level of education.

References

1. Shugars DA, DiMatteo MR, Hays RD, et al. Professional satisfaction among California general dentists. *J Dent Educ.* 1990; 54: 661-669.
2. O'Shea RM, Corah NL, Ayer WA. Why patients change dentists: practitioners' views. *J Am Dent Assoc.* 1986; 112: 851-854.
3. Bleich SN, Özaltın E, Murray CJ. How does satisfaction with the health-care system relate to patient experience? *Bulletin of the World Health Organization.* 2009; 87: 271-278.
4. Prakash B. Patient satisfaction. *J Cutan Aesthet Surg.* 2010; 3: 151-155.
5. Mahrous MS, Hifnawy T. Patient satisfaction from dental services provided by the College of Dentistry, Taibah University, Saudi Arabia. *J. Taibah Univ. Medical Sci.* 2012; 7: 104-109.
6. Dentistry facts, Harris poll commissioned by the BDA on how people feel about their dentist. *British Dental Association.* 2001.
7. Ntabaye MK, Scheutz F, Poulsen S. Patient satisfaction with emergency oral health care in rural Tanzania. *Community Dent Oral Epidemiol.* 1998; 26: 289-295.
8. Matee MI, Simon EN, Lembariti BS. Patients' satisfaction with dental care provided by public dental clinics in Dar es Salaam, Tanzania. *East Afr. Med. J.* 2006; 83: 98-104.
9. Mwela B, Kikwilu EN. Patient satisfaction with dental services rendered at School of Dentistry, Muhimbili University of Health and Allied Sciences, Tanzania. *Tanz. Dent. J.* 2012; 17: 38-44.
10. Mascarenhas AK. Patient satisfaction with the comprehensive care model of dental care delivery. *J Dent Educ.* 2001; 65: 1266-1271.
11. Motloba PD, Ncube O, Makwakwa LN, et al. Patient waiting time and satisfaction at a Tertiary Dental School. *S. Afr. Dent. J.* 2018; 73: 400-405.
12. Huang JA, Lai CS, Tsai WC, et al. Determining factors of patient satisfaction for frequent users of emergency services in a medical center. *J Chin Med Assoc.* 2004; 67: 403-410.
13. Song Y, Luzzi L, Chrisopoulos S, et al. Dentist-patient relationships and oral health impact in Australian adults. *Community Dent Oral Epidemiol.* 2020; 48: 309-316.
14. Song Y, Luzzi L, Brennan DS. Trust in dentist-patient relationships: mapping the relevant concepts. *Eur. J. Oral sci.* 2020; 128: 110-119.
15. The United Republic of Tanzania: Population and Housing Census General Report on Population Distribution by Age and Sex.
16. Lee KT, Chenb CM, Huang ST, et al. Patient satisfaction with the quality of dental treatment provided by interns. *J Dent Sci.* 2013; 8: 177-183.
17. Noorossana R, Rezaeian S, Saghaei A. Assessment of satisfaction of patients referring dental offices and identification of opportunities for improvements in Fasa, Iran in 2012. *J Isfahan Dent Sch.* 2014; 10: 251-261.
18. Goedhart H, Eijkman M, ter Horst G. Quality of dental care: the view of regular attenders. *Community Dent Oral Epidemiol.* 1996; 24: 28-31.
19. Razmi H, Jafari Talari M. Evaluation of patients' satisfaction referred to Dentistry Faculty, Tehran University of Medical Sciences in 2003. *J Islamic Dent Assoc.* 2005; 17: 82-89.
20. Stege P, Handelman S, Baric J, et al. Satisfaction of the older patient with dental care. *Gerodontology.* 1986; 2: 171-174.
21. Lahti S, Hausen H, Kääriäinen R. Patients' expectations of an ideal dentist and their views concerning the dentist they visited: Do the views conform to the expectations and what determines how well they conform? *Community Dent Oral Epidemiol.* 1996; 24: 240-244.
22. Ibrahim NB, Enn NR, Husein A. Patient's perceived Satisfaction towards Dental Treatment provided by Undergraduate Students. *Madridge J Dent Oral Surg.* 2017; 2: 59-64.
23. Luo JY, Liu PP, Wong MC. Patients' satisfaction with dental care: a qualitative study to develop a satisfaction instrument. *BMC oral health.* 2018; 18: 1-15.
24. Zeithaml VA, Bitner MJ, Gremler DD. *Services Marketing: Integrating Customer Focus across the Firm.* 1996.