

ORIGINAL ARTICLE

Perception of patients attending a tertiary hospital in Nigeria about good dental practice: A pilot study

IO Oketade¹, O Osiro¹, ST Ibiyemi², O Ibiyemi³

Departments of ¹Preventive Dentistry and ²Oral and Maxillofacial Surgery, Dental Centre, University College Hospital, Ibadan, ³Periodontology and Community Dentistry, Faculty of Dentistry, University of Ibadan, Ibadan, Nigeria

Abstract

Background: Criteria for a good dental practice as expressed by patients have influence on their behavior in terms of compliance with clinical advice, less pain and anxiety and more utilization of dental care.

Objective: To assess the opinion of patients attending the dental clinic of a tertiary hospital Southwestern, Nigeria about their perception of a good dental practice.

Materials and Methods: A 16 item semi-structured bi-lingual interviewer-administered questionnaire comprising socio-demographic characteristics and 24 criteria of a good dental practice generated by clinicians and patients was administered to 156 patients who were blinded from knowing which criteria were clinicians' or patients' criteria. Patients were then asked to pick 12 criteria out of the 24 criteria that they considered of greater priority. Frequency of the most picked criteria in a descending order was determined. Student's *t*-test was used to compare mean scores at $P < 0.05$.

Results: The mean age of study participants was 36.7 ± 13.8 years. The majority 139 (89.1%) of the study participants ranked "clinician's procedure should be as painless as possible" as the most important clinician determined criteria of a good dental practice while 31 (19.9%) of them ranked hotlines available for emergencies as the least. The majority 133 (85.2%) of the study participants ranked "sterile procedure and proper handling of equipment" as the most important patient determined criteria of a good dental practice while 30 (19.2%) of them ranked patients being attended by just one clinician as the least. There was a statistically significant difference between mean scores of clinicians' criteria and patients' criteria ($P = 0.00001$), participants ranked more patients' criteria than clinicians' criteria.

Conclusion: In determining the criteria for a good dental practice, clinicians' perspective as well as patients' perspective should be considered.

Key words: Clinicians, dental house officers, good dental practice, patients

Date of Acceptance: 02-Jan-2013

Introduction

Criteria for a good dental practice as determined by patients are fast becoming a major interest in setting up a dental practice for improved oral health care delivery. In the past, the decision on what a good dental practice should be was seen as the dental surgeon's prerogative; however, in recent times there has been a shift in paradigm in that patient's opinion is as important as that of the dental practitioners.^[1-3] Newsome and Wolfe, in their study on value gaps in dental practice mentioned that as the practice of dentistry becomes

increasingly complex and certainly more competitive, the need for clearly defined, shared values becomes ever more important.^[4] Gaps can occur whenever there is a lack of fit between the values held by any of the parties involved in delivering and receiving dental care.^[4]

Sheiham *et al.*^[3] noted that laying undue emphasis on the technical aspects of needs precludes giving sufficient

Address for correspondence:

Dr. Olushola Ibiyemi,
Department of Periodontology and Community Dentistry,
Faculty of Dentistry, University of Ibadan, Ibadan, Nigeria.
E-mail: shola_ibiyemi@yahoo.com

Access this article online

Quick Response Code:



Website: www.njcponline.com

DOI: 10.4103/1119-3077.116893

PMID: *****

attention to the attitudes and behavior of patients and that any assessment of need should include their perceptions. Major differences in emphasis in the concepts of quality have been identified between the perspective expressed by the providers and users of oral health services.^[1] Studies^[5,6] have shown that patient's satisfaction with oral health care may also be influenced by the characteristics of the delivery system, outcome, availability and accessibility of care, financial aspects, continuity of care, interpersonal factors and pain associated with care. Other factors which may influence patient satisfaction or dissatisfaction with the oral health care received include patient's preference, treatment expectations; socio-demographic factors especially age group and level of education and oral health status.^[7,8] The sum of a patient's perceptions equates with and is therefore a measure of his or her overall satisfaction.^[9]

Criteria for a good dental practice as expressed by patients have influence on their behavior in terms of compliance with clinical advice, less pain and anxiety and more utilization of dental care. This should be given attention because it will ensure the early detection and management of dental diseases. The dental practitioner must ensure that patient's expectations are met in order to make them satisfied. Patient satisfaction with dental services has received minimal attention in Nigeria.^[10] Therefore, this study assessed the opinion of patients attending the dental clinic of a tertiary hospital Southwestern, Nigeria about their perception of a good dental practice. The information obtained will be considered when a dental practice is to be established since patient's core beliefs which will determine their behavior will be known. This will translate to effective utilization and growth of the dental practice.

Materials and Methods

This pilot study was a hospital based cross-sectional study carried out among adult patients who attended the Dental Centre of a Tertiary Hospital, Southwestern Nigeria for the

first time. A minimum sample size of 150 was calculated using the Kish Leslie formula^[11] for determining the sample size for the cross-sectional study. The proportion measured in this study to calculate the sample size was 11.0% which was the proportion of subjects from a previous report of dental patients' satisfaction with dental services at the Lagos University Teaching Hospital, Nigeria who expressed dissatisfaction with regards to being treated by unsupervised students.^[10] However, 156 patients consented to participate in the study. Firstly, criteria for a good dental practice were generated by 15 dental house officers being the clinicians and 15 patients through separate focus group discussion using a question guide. The dental house officers were asked to think like the patients about what a good dental practice is. The questions were centered on the clinic surroundings and location of the dental practice, the dental practice reception, dental surgery room and cost of treatment. A total of 43 criteria were generated out of which 24 were selected randomly by balloting. The 24 criteria comprise 12 patients' criteria and 12 dental house officers' criteria. Secondly, a 16 item semi-structured bi-lingual interviewer administered questionnaire comprising socio-demographic characteristics and the 24 criteria were developed. The bi-lingual languages were English and Yoruba. The questionnaire was pre-tested among 20 patients who attended the Dental Centre, University College Hospital Ibadan, Nigeria who were not part of the study participants. A good background of the study and question guide conceptualization was done before the focus group discussion. After the focus group discussion, the questionnaire was conceptualized and formatted before pre-testing. The questionnaire was modified after the pre-test was done to ensure that it was reliable and valid. A written informed consent was obtained from the patients before they completed the questionnaire. The study was carried out in strict compliance with Helsinki Declaration principles on studies involving human subjects. This questionnaire was then administered to 156 patients who were blinded from knowing which criteria were dental house officers' or patients' criteria by naming them criteria A and B, respectively, as shown in Table 1.

Table 1: Criteria generated by dentists and patients

Criteria A	Criteria B
Should not be located close to factories where there will be noise, air and water pollution	Grass around the clinic should be cut low
Attractive surrounding	Good electricity generating system for constant power supply
Easy accessibility	Dental practice should be disable friendly
Availability of television and music entertainment	Health talk to calm the patient's anxiety
Refreshments such as snacks and water in a water dispenser	Children corner in the reception and waiting area
Clean tiled floors and walls with bright colors	Oral educative posters should be on the walls
The receptionist should be smart, good looking, and have good inter-personal relationship	The receptionist should be punctual to the clinic
Hotlines available for emergencies before and after treatment	Prompt attendance to patients
Good disposable system	Spacious adequate cubicles with no congestion/crowding of people
Clinics should be quiet	Sterile procedure and proper handling of equipment
Clinicians' procedures should be as painless as possible	Patients should be attended to by just one clinician
As much as possible patients need should be met at first visit	Cost of treatment should be available to all without any discrimination

Patients were then asked to pick 12 criteria out of 24 criteria that they considered of greater priority from Table 1 by ticking in the relevant box and each one was given a score of 1. The frequency of the most picked criteria in a descending order was determined. The number of dental house officers' criteria that were picked and the number of patients' criteria that were picked were counted and their mean scores determined. Student *t*-test was used to compare means at 5% level of significance.

Results

The mean age of study participants was 36.7 ± 13.8 years. Table 2 shows the socio-demographic characteristics of study participants. One hundred and one (64.8%) of the participants were in age group 21 to 60 years, 91 (58.3%) were females and 98 (62.8%) had tertiary education and

Table 2: Socio-demographic characteristics of study participants

Socio-demographic characteristics	No	%
Age group (years)		
≤20	37	23.7
21-60	101	64.8
≥61	18	11.5
Total	156	100.0
Sex		
Male	65	41.7
Female	91	58.3
Total	156	100.0
Level of education		
≤Secondary school	58	37.2
Tertiary education and above	98	62.8
Total	156	100.0

Table 3: Distribution of dental house officers' criteria of a good dental practice by study participants

Rank	Clinicians' criteria	No (%)
1 st	Clinicians' procedure should be as painless as possible	139 (89.1)
2 nd	Clinic surrounding should not be located close to factories where there will be noise, air and water pollution	121 (77.6)
3 rd	The receptionist should be smart, good looking and have good inter- personal relationship	109 (69.9)
4 th	Easy accessibility of the clinic	98 (62.8)
5 th	As much as possible patients need should be met at first visit	72 (46.1)
6 th	Refreshments such as snacks and water in a water dispenser	58 (37.2)
7 th	Clean tiled floors and walls with bright colors	52 (33.3)
8 th	Attractive surrounding	39 (25.0)
8 th	Good disposable system	37 (23.7)
9 th	Television and music entertainment	35 (22.4)
10 th	Clinics should be quiet	33 (21.1)
10 th	Hotlines available for emergencies	31 (19.9)

above. The majority 139 (89.1%) of the study participants ranked "clinicians procedure should be as painless as possible" as the most important clinician determined criteria of a good dental practice while 31 (23.6%) of them ranked "hotlines available for emergencies" as the least [Table 3].

The majority 133 (85.2%) of the study participants ranked "sterile procedure and proper handling of equipment" as the most important patient determined criteria of a good dental practice while 30 (19.2%) of them ranked patients being attended by just one clinician as the least [Table 4].

There was a statistically significant difference between mean scores of criteria A and B ($P = 0.00001$), participants ranked more patients' criteria than clinicians' criteria [Table 5].

Discussion

Perception of a good dental practice may be determined by patients' experience with dental health care services and this has an impact on the success of the dental practice. Patients tend to compare their health care experience with a subjective standard. The dental practitioner values must align with those of patients and importantly must be shared

Table 4: Distribution of patients' criteria of a good dental practice by study participants

Rank	Patients' criteria	No (%)
1 st	Sterile procedure and proper handling of equipment	133 (85.2)
2 nd	Prompt attendance to patients	120 (77.0)
3 rd	Health talk to calm the patient's anxiety	118 (75.6)
4 th	Good generating system for constant power supply	111 (71.1)
5 th	Spacious adequate cubicles with no congestion or crowding of people	110 (70.5)
6 th	Oral educative posters should be on walls	97 (62.2)
7 th	Children corner in the reception and waiting area	95 (60.9)
8 th	Cost of treatment should be affordable to all without any discrimination	89 (57.0)
9 th	The clinic environment should be disable friendly	57 (36.5)
10 th	The receptionist should be punctual to the clinic	50 (32.0)
11 th	Grass of the clinic surrounding should be cut low	38 (24.3)
11 th	Patient should be attended to by just one clinician	30 (19.2)

Table 5: Relationship between mean scores of dental house officers' and patients' criteria

Criteria	N	Mean	P value
Criteria A (Dental house officers' criteria)	156	5.29 (± 2.14)	0.00001
Criteria B (Patients' criteria)	156	6.72 (± 2.14)	

and implemented by the staff members.^[4] Clearly, there is going to be a problem whenever dissonance exists between the values of those working in a dental practice and those of its patients. Values gaps tend to exist during the process of delivering dental care and to understand how this can arise, it is first necessary to understand the way in which patients evaluate the dental practice. Masson^[12] stated that more people want more say about their health services, the best care for themselves and their families and choice in that care. It is important for dental staff members to share the underlying caring values held by patients which determine how the patients will utilize the dental practice. The knowledge of patient expectations is important in that it helps dentists to change both the service delivery process and the service outcome to meet expectations and to actively manage patient expectations to ensure that they coincide with the service to be provided.^[12] Fishbein and Ajzen^[13] highlighted the important role that a person's core beliefs played in determining behavior. Newsome and Wolfe^[4] reported that failure to take into account the patients' perspective represents a basic marketing failure.

Technical competence of the dentist is a key determinant of dental satisfaction and it is placed at or near the top of contributory factors.^[9] Similarly, this was also observed in this present study where 89.1% of patients reported that clinicians' procedure should be as painless as possible, and 85.2% reported that procedure should be sterile and clinicians should handle equipment properly which is a reflection of their technical competence. Likewise, pain control, dentist puts you at ease and safety conscious were each rated as being very important by 73.0% of respondents in a study by Holt and McHugh.^[14] Abrams *et al.*^[15] concluded in a study on quality assessment of dental restorations: A comparison by dentists and patients that other less technical aspects of dental treatment are recognized as being barometers of quality of dental treatment. This might also be the reason why about 70.0% of the patients in this present study reported that the receptionist should be smart, good looking, and have good inter-personal relationship, thereby supporting the findings from a study^[16] among non-dental attendees that the communicative skills of dental personnel were seen as being more important. Similarly, a previous study^[10] on dental outpatients' satisfaction of dental services at the Lagos University Teaching Hospital reported that the overall high level of satisfaction was related to the communication skills and rapport of staff with the patients. In this study, few patients rated convenience-oriented attributes such as hotlines available for emergencies and this is also part of the four least important decision-forming factors for patients in the study by Holt and McHugh.^[14]

In this study, about 77.0% of patients reported prompt attendance to patients as a criterion for a good dental practice; this could determine their satisfaction with dentist

and reason for visiting the dentist again. If patients are not promptly attended to, it could make them not to be happy with the dentist and they may change their dentist. A previous study^[17] reported that 46.0% of dentists surveyed indicated that dissatisfaction with the way patients were handled by their dentist was very often or fairly often seen as reason for switching dentists. Similarly, another study^[14] reported lack of satisfaction with the dentist by patients as being the main reason for changing dentists. Another reason for changing dentist might be due to patients being attended to by different dentists. This might be the reason why about 19.0% of patients in this study reported that being attended to by just one clinician anytime they visit the dental practice as their criteria for a good dental practice.

Seventy-four percent of the patients surveyed reported health talk to calm the patient's anxiety as criterion for a good dental practice since it will establish good communication channel between them and the dentist. A study^[18] reported that the discrepancies found between ideal and actual dentist behavior fell mostly into the area of the communicative and informative factor i.e., the dentists often did not give information about preventive procedures. Clow *et al.*^[19] also found that patient image of the dentist has great influence on their expectations. They also reported that marketing variables such as price has no effect on patient's expectations. Barnes^[18] found cost to be the least important of the considerations involved in selecting a dentist. These findings are at variance with findings in this present study where about 57.0% of patients reported that cost of treatment should be affordable to all without any discrimination. This may be due to the fear of being exploited and probably their low socioeconomic power when compared to Americans who were surveyed in previous studies.^[19,20]

About 61.0% of patients in this present study reported that children corner in the reception and waiting area should be made available. This supports the finding by Barnes^[20] that dentist's sensitivity expressed toward children is an important criterion when patients select and evaluate their dentist. The dental practice facilities, for example the neatness, comfort of seating, magazine selection, and background music etc., has been shown to contribute to patient's satisfaction.^[21] Orenuga *et al.*^[10] reported that about 60.0% of dental outpatients expressed dissatisfaction with regards to the electricity/regular supply of water while about 86.0% of them were dissatisfied because of lack of infrastructure. In this present study, about 71.0% reported that a good electricity generating system should be available and the majority reported that treatment rooms should be adequate and spacious and oral educative posters should be on walls. Many reported that dental practice surrounding should be attractive, the floors should be tiled and cleaned, and the walls painted with bright colors. Many also reported that refreshments such as snacks and water in a water

dispenser and television and music entertainment should be available.

In this study, the two highest ranked criteria were clinicians' criteria whilst the two least ranked criteria were patients' criteria. This is at variance with findings from a previous study where patients' criteria and clinicians' criteria were the two highest and least criteria, respectively. However, overall the criteria proposed by patients scored significantly higher than those proposed by patients and this is similar to the findings by Burke and Croucher.^[1] This and other similar studies^[22,23] suggest that dentists believe they know what patients should want, rather than finding out what they do want.

The limitation of this pilot study is the convenient sampling nature of the population which is biased and skewed to females and tertiary educated. This might not be a typical population of Nigerian hospitals. A future bigger study across many hospitals in Nigeria will consider a large representative population of patients typical of Nigerian hospitals using a randomized sampling method.

Conclusions

The majority of the patients choose more of the patients' criteria for a good dental practice thereby showing that what they valued is different from clinicians' value. Therefore, there is a need for the establishment of regular meetings with patients so that their needs and expectations can be understood and met. This will ensure the viability of the dental practice and will better position the dental practitioners to identify patients' priorities thereby promoting their oral health care needs.

References

- Burke L, Croucher R. Criteria of good dental practice generated by general dental practitioners and patients. *Int Dent J* 1996;46:3-9.
- Smith CH, Armstrong D. Comparison of criteria derived by government and patients for evaluating general practitioner services. *Br Med J* 1989;299:494-6.
- Sheiham A, Maizels J, Cushing A. The concept of need in dentistry. *Int Dent J* 1992;32:265-8.
- Newsome P, Wolfe IS. Value gaps in dental practice. *JADA* 2003;134:1500-4.
- Unell L, Soderfeldt B, Halling A, Solen G, Paulander J, Birkhed D. Equality in satisfaction perceived need and utilization of dental care in a 50-year old Swedish population. *Community Dent Oral Epidemiol* 2001;29:390-8.
- Mascarenhas AK. Patient satisfaction with the comprehensive care model of dental care delivery. *J Dent Educ* 2001;65:1266-71.
- Butters JM, Willis DO. A comparison of patient satisfaction among current and former dental school patients. *J Dent Educ* 2000;64:409-15.
- Esa R, Rajah P, Abdul R. Satisfaction with oral health services. A qualitative study among Non-Commissioned officers in the Malaysian Armed Forces. *Community Dent Health* 2006;23:15-20.
- Newsome PR, Wright GH. A review of patient satisfaction: 2, Dental patient satisfaction: An appraisal of recent literature. *Br Dent J* 1999;186:166-70.
- Orenuga OO, Sofola OO, Uti OO. Patient satisfaction: A survey of dental outpatients at the Lagos University Teaching Hospital, Nigeria. *Nigerian J Hosp Med* 2009;19:47-52.
- Kirkwood B. Calculation of required sample size. London: Blackwells Science Limited; 1988
- Masson D. General dental practice – challenges and opportunities: A personal view. *Br Dent J* 1995;179:350-4.
- Fishbein M, Ajzen I. Belief, attitude, intention and behavior. Reading Mass: Addison-Wesley; 1975.
- Holt V, McHugh K. Factors influencing patient loyalty to dentist and dental practice. *Br Dent J* 1997;183:365-70.
- Abrams R, Ayers C, Vogt Petterson M. Quality assessment of dental restorations: A comparison by dentists and patients. *Community Dent Oral Epidemiol* 1986;14:317-9.
- Eijkman M, Visser A. Patientenvoorlichting en tandarts (Patient Education and Dentist). Utrecht: Bohn, Scheltema and Holkema; 1987.
- O'Shea R, Corah N, Ayer W. Why patients change dentists: Practitioners views. *J Am Dent Assoc* 1986;112:851-4.
- Lahti S, Tuuti H, Hausen H, Kaariainen R. Comparison of ideal and actual behavior of patients and dentists during dental treatment. *Community Dent Oral Epidemiol* 1995;23:374-8.
- Chow K, Fischer A, O'Bryan D. Patient expectations of dental services. *J Health Care Market* 1995;15:23-31.
- Barnes N. Open wide an examination of how patients select and evaluate their dentist. *Health Market Q* 1985;3:49-56.
- Andrus D, Buchheister J. Major factors affecting dental consumer satisfaction. *Health Market Q* 1985;3:57-68.
- Janda S, Wang Z, Rao C. Matching dental offerings with expectations. *J Health Care Market* 1996;16:38-44.
- Zimmerman R. The dental appointment and patient behavior: Differences in patient and practitioner preferences, patient satisfaction and adherence. *Med Care* 1988;26:403-14.

How to cite this article: Oketade IO, Osiro O, Ibiyemi ST, Ibiyemi O. Perception of patients attending a tertiary hospital in Nigeria about good dental practice: A pilot study. *Niger J Clin Pract* 2013;16:478-82.
Source of Support: Nil, **Conflict of Interest:** None declared.