

Attendance Pattern amongst Patients at the Dental Clinic of the University of Nigeria Teaching Hospital, Enugu, Nigeria

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ABSTRACT

OBJECTIVE: Dental clinic attendance is one of the indicators of health behaviour which will ultimately impact on the oral health. This study aimed at determining the patients' attendance pattern and the reasons for attendance at the Dental clinic of the University of Nigeria Teaching Hospital (UNTH), Enugu.

METHODS: A retrospective study was done using the record book of the Oral Diagnosis unit of the Dental clinic in UNTH. Data on patients' age, gender, presenting complaint(s) at first visit were obtained from these books. Patients with incomplete records were omitted. The data were analysed statistically using Statistical Package for Social Sciences (version 15); frequencies of all relevant variables were generated and Chi-square test was used to compare categorical variables at $p < 0.05$.

RESULTS: Data of 1663 patients with mean age of 33.2 ± 18 years were obtained. Six hundred and eighty six (41.3%) were males while 977 (58.7%) were females; a statistically significant difference was found in the quarterly attendances of males and females ($p < 0.05$). The 20-29 and the 0-9 years age groups had 36.1% and 6.5% records respectively. Eight hundred and twenty five (49.2%) visited clinic because of pain, 7.6% for swellings in the mouth and 5.7% were without symptom but attended for routine check ups cum professional tooth cleaning.

CONCLUSION: Asymptomatic dental clinic attendance was not common in this report; attendances were mostly prompted by pain. More females than males attended clinic and the second quarter of the year witnessed the highest turn out of patients.

KEYWORDS: dental attendance, oral health, patient's complaints.

Several studies²⁻¹⁰ have been carried out on the pattern of clinic attendance especially on the factors which motivate dental visits. Anxiety, fear and cost of treatment were noted to affect the pattern of visits²⁻⁴. Anxiety was mostly exhibited in children who may have been sensitized by negative reports that dental treatment is associated with some degree of discomfort³. In the adult population, severe dental anxiety resulted in irregular attendance pattern with less improvement in oral health²; this anxiety was traceable to their childhood fear for dental treatment. The costs of dental treatments incurred by attendees to private centres were higher leading to irregular attendances as compared to public centre with lower fees hence more frequent attendances⁴.

In Australia, Brennan et al⁵ had reported that attendance for emergency treatment was commoner among socio-economically disadvantaged individuals. This pattern of attendance resulted in such individuals having more extractions than other restorative and preventive services^{5,6}. In addition, attendances to clinic by individuals with systemic conditions such as multiple sclerosis, diabetes mellitus, pregnancy and children with special needs were reported to have been inadequate. Dental care for these individuals was not well coordinated due to the low perceived dental needs by their care givers and the society at large⁷⁻¹⁰.

Most dental attendances are not without symptoms though better oral health outcomes have been associated with asymptomatic dental attendance^{11,12}. Pain is usually the most frequent reason for attending a dental clinic, however, bleeding gum, mouth odour, swelling and growth in the oro-facial region are other reasons why patients visit the dental clinic¹³⁻¹⁷. Whilst several studies have been carried out in some parts of Nigeria and beyond, virtually no documentation exist on the dental clinic attendance at the University of Nigeria Teaching Hospital (UNTH), a tertiary health institution in south eastern Nigeria. In this study, our aim was to determine the attendance pattern of patients at the dental clinic of UNTH and elicit the reasons for their visits. Findings from this study might serve as pointers to the health seeking behaviour and the dental needs of the people since their reasons for attendance could reflect the prevailing oral health conditions in the environment.

MATERIAL AND METHODS

The University of Nigeria Teaching Hospital, Ituku-

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INTRODUCTION

Despite great achievements in the oral health of populations globally, problems still remain in many communities around the world, particularly among underprivileged groups in developed and developing countries¹. Oral health could be maintained by certain health behaviours such as regular clinic attendance. The manner of patients' attendance to a dental clinic varies from place to place posing different challenges to oral health care givers.

Ozalla, Enugu, Nigeria is located along the Enugu-Port Harcourt express road away from the Enugu metropolis. It has a Dental clinic which has been operational in that site since 1997 though the Oral and Maxillofacial Unit had remained with the rest of the hospital at the old site within the metropolis till 2007 when the entire hospital officially moved to the permanent site at Ituku-Ozalla. A retrospective survey was done using the record book in the Oral Diagnosis clinic. The year 2008 was selected for the study as there were supervised entries of data of patients seen daily in the Oral Diagnosis clinic, with little or no strike action by health workers. Data on patient's age, gender, presenting complaint(s) at first visit were collected; patients with incomplete records were omitted. The presenting complaints now served as the reasons for attendance to clinic. The data were entered into a computer, and statistically analysed using the Statistical Package for Social Sciences for windows (SPSS version 15). The frequencies of relevant variables were generated; chi-square test was used to compare for categorical variables at $p < 0.05$.

RESULTS

A total of 1663 entries of patients aged 4 to 87 years (mean age of 33.2 ± 18 years) were recorded. Out of these, 58.7% were females while 41.3% were males; 20-29 and 0-9 years age groups had the highest (36.1%) and lowest (6.5%) number of records respectively. Also, patients aged 60 years and above made 10.8% of all attendances; these are shown in Table 1. Table 2 shows the quarterly attendances according to gender; females had higher records all through the year and a statistically significant difference was found between male and female attendances ($p < 0.05$). The reasons for attendance are shown on Table 3; 825 (49.2%) visits

Table 1: Patients demographic information

Parameter	Frequency (n)	Percentage (%)
Age (years)		
0 -9	109	6.5
10-19	199	12.0
20-29	600	36.1
30-39	245	14.7
40-49	159	9.6
50-59	171	10.3
60 and above	180	10.8
Total	1663	100
Gender		
Male	686	41.3
Female	977	58.7
Total	1663	100

Table 2: Quarterly attendance according to gender

Gender	Quarterly attendance in 2008				Total N(%)
	Q1 N (%)	Q2 N (%)	Q3 N (%)	Q4 N (%)	
Male	142 (20.7)	248 (36.2)	146 (21.2)	150 (21.9)	686 (100)
Female	196 (20.1)	346 (35.4)	278 (28.4)	157 (16.1)	977 (100)
Total	338 (20.3)	594 (35.7)	424 (25.5)	307 (18.5)	1663 (100)

$\chi^2 = 14.67$, $df = 3$, $p = 0.002$ (S)

S = statistically significant

Table 3: Reasons for attendance to clinic

Patients complaints	Frequency	%
Check up/To wash teeth	95	5.7
Pain	825	49.2
Hole in the mouth	116	7.0
Bleeding gum	29	1.7
Abscess from gum/teeth	14	0.8
Fractured teeth	68	4.1
Shaking teeth	33	2.0
Scattered teeth/crowding	68	4.1
Sensitive teeth	16	0.9
Mouth odour	26	1.6
Failed amalgam filling	28	1.7
Blisters/ulcers	4	0.2
Swelling in mouth/face	128	7.6
Fractured jaw bone	58	3.5
Retained milk teeth	12	0.7
Missing teeth	75	4.5
Discoloured teeth	36	2.1
Food packing	5	0.3
Extra tooth	1	0.1
Teeth fell off	4	0.2
Elongated teeth	7	0.4
Depression on tongue	3	0.2
Dry mouth	8	0.5
TMJ problems	6	0.3
Tongue tie	3	0.1
Tooth peeling off	3	0.1
Overgrown gum	7	0.4
Total	1678*	100

* Due to patients with more than 1 complaint

were due to pain, 128 (4.1%) for swellings in the mouth/face while 95 (5.7%) of patients attended asymptotically for routine check up.

DISCUSSION

Attendance pattern at the Dental clinic of University of Nigeria Teaching Hospital (UNTH) over a 1-year period in 2008 was studied; the reasons for attendance were also elicited. The total number of patients seen in the year was lower than the experience from a contemporary institution¹⁷, though different study designs were employed. The disparity may reflect the influence of the distance of UNTH from the city with its relocation to the permanent site at Ituku- Ozalla; as distance of a clinic from residential areas had been found to be inversely related to attendance to that clinic¹⁸. The second quarter of the year had the highest number of patients. This observation is somewhat surprising as the period (months of April, May and June) is usually characterized by rainfall, a factor also reported to pose as a barrier to seeking health care services¹⁸.

Females attended clinic more than males all through the year in the present study, and the finding was statistically significant. Bertakis et al¹⁹ reported some previous studies consistently showing that women use more health care services than men. Several explanations have been offered. These differences may be associated with reproductive biology and conditions specific to gender,

higher rates of morbidity in women than in men, differences in health perceptions and the reporting of symptoms and illnesses, or a greater likelihood that women seek help for prevention and illness. Across the different age groups, 20-29 years attended clinic the most (36.1%), an observation comparable with the report of Ukeje et al¹⁵. This age group forms the bulk of the youths so our finding may be a possible reflection of strength and vibrancy which characterize youthfulness hence able to attend clinic outside the city. It is also commendable that about 10% of all the attendances in the year were made by the aged (60 years and above); this finding suggests an appreciable demand for geriatric dental services and these should be made readily available to them. It is the authors' view that the provision of services such as professional advice, tooth cleaning, management of periodontal diseases and oral cancer, balancing occluso-vertical dimension, denture fabrication and such like be encouraged.

In this study, the most common reason prompting patients to attend clinic was pain (49.2%) and this corroborates with reports from similar studies^{12,14-17}. This pattern of attendance, most probably with the symptom of pain at or near its climax leaves room for neither preventive nor restorative interventions but encourages more extractions⁶. Routine check ups with or without request for a prophylactic procedure was made by 5.7% suggesting that asymptomatic attendances was not common in this research. It also highlights a deficiency in the demand for professional tooth cleaning which is a preventive tool for better oral health outcomes. More awareness should be created on this very important mode of prevention of oral diseases via community outreaches, media jingles and institutional/government health promotional programmes.

In conclusion, patient's attendance to dental clinic was mostly prompted by pain, while a fewer number visited for professional tooth cleaning. The second quarter of the year witnessed the highest turn out of patients with females attending clinic more than males all round. The Dental clinic of the University of Nigeria serves as a tertiary and referral centre in the south east of Nigeria so patients' attendances need to be improved. Factors which militate against clinic attendance in this environment should be studied; hence an epidemiological research to highlight these is strongly recommended.

Competing interest

The author(s) declare that they have no competing interests.

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REFERENCES

1. World Health Organization. The World Oral Health Report 2003. Continuous improvement of oral health in the 21st century the approach of the *WHO Global Oral Health Programme*. http://www.who.int/oral_health/media/en/orh_report03_en.pdf. Accessed 7th August 2010.
2. Hakeberg M, Berggren U, Carlsson S.G, Grondahl H.G. Long- Term Effects on Dental Behaviour and Dental Health after Treatment for Dental fear. *Anesth Prog* 40; 1993, 72-77.
3. Folayan M.O, Klingberg G, Aghaneva A, Idehen E: Aetiology of dental anxiety: A review of literature. *Nig J Med* 2001; 10: 106-111.
4. Suominen-Taipale A, Widstrom E. Effects of Dental Attendance frequency in Heavy and Low Private Care- Using young Adults. *Acta Odont Scandinavica* 2002; 60 (2): 87- 92.
5. Brennan D.S, Luzzi L, Roberts-Thomson K.F. The Dental Service Patterns Among Private and Public Adults in Australia. *BMC Health Service Research*, 2008; 8:1 doi:10.1186/1472-6963-8-1.
6. Richards W, Ameen J. Impact of Attendance Patterns on Oral Health in a General Dental Practice, *Br Dent J* 2002; 193: 697-702.
7. Baird W.O, McGrother C, Abrams K.R, Dugmore C, Jackson R.J. Factors that influence the dental attendance pattern and maintenance of oral health for people with multiple sclerosis. *BDJ* 2007; doi:10.1038/bdj.2006.125
8. Taiwo J.O, Noah M. Pattern of Dental Clinic Attendance of Registered Diabetic Patients in Ibadan. *Journal of Medicine and Biomedical Research*. 2006; 5 (1) : 36-43
9. Adeniyi A.A, Ogunbanjo B.O, Sorunke M.E, et al. Dental attendance in a sample of Nigerian pregnant women. *Nig Q J Hosp Med* 2010; 20(4) :186- 191
10. Oredugba F.A. Use of oral health care services and oral findings in children with special needs in Lagos, Nigeria. *Special Care Dentist* 2006; 26(2): 59-65.
11. Sote E.O. Attendance Patterns and Presenting Oral Problems of Children at the Lagos University Teaching Hospital Lagos, Nigeria. *Nig. Qt. J. Hosp. Med.* 1996; Vol 6 (2): 80-84.
12. Oginni A.O. Dental care needs and demands in patients attending the Dental Hospital in Obafemi Awolowo University Teaching Hospital complex, Ile-Ife, Nigeria. *Nig J Med* 2004; 13(4): 339-344.
13. Hawley G.M, Holloway P.J. Davies R.M. Dental health status associated with documented attendance patterns in adolescents. *Comm Dent Health*. 1997;14: 22-24
14. Akaji E.A, Oredugba F.A. and Jeboda S.O. Utilization of dental services among secondary school students in Lagos, Nigeria. *Nig. Dent. J* 2007; 15 (2):87-91.
15. Ukeje C.N, Agbelusi G.A, Jeboda S.O. Presenting complaints of patients at the oral diagnosis clinic of

Lagos University Teaching Hospital. *Nig. Qt. J Hosp. Med* 2000; 10 (2): 121-125

16. Varenne B, Msellatti P, Zoungrana C, Fournet F, Salem G. Reasons for attending dental-care services in Ouagadougou, Burkina Faso. WHO. Accessed at <http://www.who.int/bulletin/volumes/83/9/varenne0905abstract/en/print.html>
17. Omitola O.G, Arigbede A.O. Prevalence and pattern of pain presentation among patients attending a tertiary dental centre in a southern region of Nigeria. *J Dent Res Dent Clin Dent Prospect*, 2010 ; 4 (2) :42-46
18. Muller I, Smith T, Mellor S, Rare L, Genton B. The effect of distance from home on attendance at a small rural health centre in Papua, New Guinea. *Int. J Epidemiol.* 1998; 27: 878 -884.
19. Bertakis K.D, Azari R, Helms L.J, Callahan E.J, Robbins J.A. Gender Differences in the Utilization of Health Care Services. *Journal of Family Practice* 2000; 49 (2): 147-152.