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REASONS UNDERLYING FAILURE TO SEEK EARLY DENTAL TREATMENT AMONG PATIENTS PRESENTING IN A NIGERIA TERTIARY HOSPITAL

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Abstract
The objective of this study was to establish the reason(s) why patients suffering from common dental diseases like dental caries and periodontal disease present late in our centre. An open- ended questionnaire was administered to subjects attending the Dental Clinic of the University of Calabar Teaching Hospital for a period of 6 months. Majority of the subjects (n = 132, 31.5%) were in their third decade of life and the mean age was 33 ± 4.2 years. The male to female ratio was 1:1.5, and there was no gender difference with respect to age (p = 0.374). Majority (n = 249, 59.5%) were in the lower socio-economic class. Those who felt the symptoms will resolve on its own (32.8%), trying other medications (23.7%) and financial constraints (10.7%) were the major reasons for presenting late. There is need to strengthen the continuing oral health education programme, and the establishment of more dental clinics in this environment.

Introduction

Globally, studies have been carried out on dental clinic attendance with most of these studies focusing on the factors which motivated attendance. Anxiety, fear and cost were noted to adversely affect the pattern of deliberate dental consultation. [1-3] As modern dentistry requires that all possible measures be taken to preserve and maintain teeth in the oral cavity, this may not be possible if patients present late in the dental clinic. A study [4] in Australia showed that attendance for emergency dental treatment was frequently undertaken by socio-economically disadvantaged individuals who have delayed early consultation. This resulted in such individuals having more dental extractions than restorative and preventive treatments. Studies [5-8] done in different localities where dental extractions are relatively common showed that irregular attendance at the dental clinic was a contributor to high tooth mortality. No study, to the best of our knowledge has been carried out in Cross River state to determine the dental treatment needs of her people. Therefore, the purpose of this study was to establish the reason(s) why patients suffering from common dental diseases like dental caries and periodontal disease present late in our centre.

KEYWORD: Reasons, Failure, Early dental treatment, Tertiary hospital.

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Method

An open- ended questionnaire on the reasons underlying failure to seek early dental treatment among patients attending a Nigerian tertiary hospital was administered to subjects attending the Dental and Maxillofacial clinic of the University of Calabar Teaching Hospital (UCTH) from November 2010 to April 2011 by the authors with the assistance of professional colleagues. Training sessions were held with these research assistants (Resident dental surgeons) who gave consent to participate in the study. In order to ensure uniform criteria in recording relevant data, they were trained on data collection and questionnaire interpretation. The questionnaire was pre-tested before application to the population studied. Ethical approval was obtained from the Ethics Committee of UCTH, Calabar, and patients were also required to give informed consent before inclusion in the study. Also included in the survey were subjects whose duration of oral symptoms has lasted for one month or above from the time of presentation to extraction of tooth or teeth. Patients who were ten years and below and those suffering from chronic debilitating medical conditions like sickle cell disease, uncontrolled diabetes mellitus, malignant neoplasm and acute dental conditions such as tooth or teeth fracture following trauma were excluded from the study. Information was obtained using the examiner administered, semi-structured questionnaires. The seven- part questionnaires (Appendix 1) was the same. Patients' socio-economic status was classified using the Adedeji's classification of 1985.[9] Question 1 was designed to record the subjects' bio-data and socio-economic status. Questions 2 and 3 were designed to find out whether the subjects have attended dental hospital before and the treatment received. Reason(s) for coming late was addressed in questions 4 and 5 while question 6 was to find out if the previous chair-side experience contributed to the delay in presentation. Information obtained were analyzed using SPSS version 13. Results were presented as frequencies, percentages, mean and standard deviations. Comparative statistics were done using student t-test and a p value of < 0.05 was considered significant.

Results

The age distribution of patients is shown in Figure 1. The age of patients ranged from 13-85 years with a mean of 33 ± 4.2 years. Majority of patients were in their third decade of life. There were 168 (40.1%) males and 251 (59.9%) females, giving a male to female ratio of 1:1.5.There was no gender difference with respect to age ($p = 0.374$). However, majority of the subjects ($n = 249$, 59.5%) were in the lower socio-economic class (Table 1).

The study shows that 210 (50.1%) patients have visited a dental hospital prior to presentation while 209 (49.9%) patients did not visit any hospital. Also, 204 (48.7%) patients have received dental treatment before presentation while 215 (51.3%) were fresh attendees. Table 2 shows the reasons for late presentation. Those who thought that the symptoms will resolve on its own accounted for the majority ($n = 141$, 32.8%), while 7 (1.6%) gave no reason for presenting late. Table 3 shows the distribution of aetiology of fear. Fear inherent in subjects, ($n = 18$, 43.9%) was the most common reason. Also, 104 (48.8%) patients described their previous experience after visiting the dentist as pleasant while 109 (51.2 %) patients complained about their unpleasant experience after such visits (Table 4).

Figure 1: Age distribution of subjects

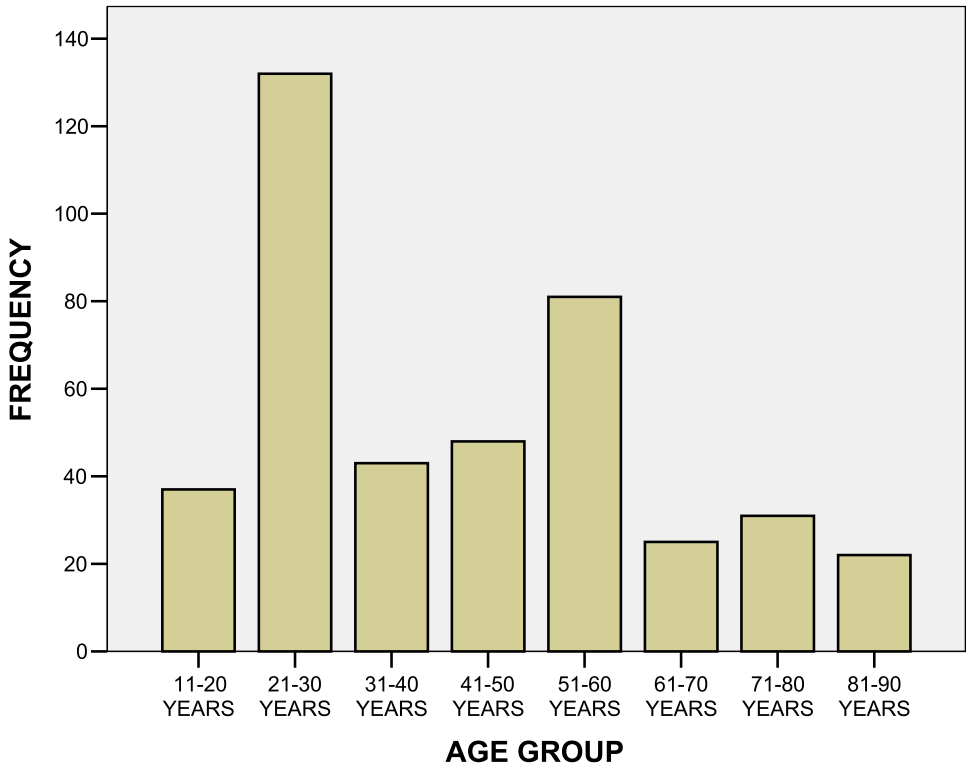

Table 1: Distribution of subjects by socio-economic class

Class	No.	%
1	44	10.5
11	69	16.5
111	57	13.6
1V	69	16.5
V	180	43.0
Total	419	100.1

Table 2: Reasons for late attendance

Reason	No.	%
Symptoms will resolve on its own	141	32.8
Tried other medications	102	23.7
Financial constraints	46	10.7
Fear	41	9.5
Distance to dental clinic is far	31	7.2
Limited time due to busy schedule	21	4.9
Lukewarm attitude to problem	11	2.6
Pregnancy	10	2.3
Pain not serious before now	9	2.1
None	7	1.6
Bad previous experience in dental treatment	6	1.4
Not aware of possible solution	5	1.2
Total	430	100.0

NB: Some subjects gave more than one reason.

Table 3: Aetiology of fear

Aetiology	No.	%
Inherent in me	18	43.9
Tired of teeth removal	7	17.1
Read about dental pain	5	12.2
Contracting disease during treatment	3	7.3
Negative impression by one who had no treatment	3	7.3
Negative impression by one who had treatment	2	4.9
Dentist	2	4.9
Previous dental treatment	1	2.4
Total	41	100.0

Table 4: Experience on previous visit(s) to dentist

Experience	No	%
Pleasant	104	48.8
Uncomfortable	30	14.1
Painful	25	11.7
Dentist was impersonal	21	9.9
Scaring	16	7.5
Expensive	14	6.6
Did not like the environment	3	1.4
Total	213	100.0

NB: Some subjects gave more than one response.

Appendix 1

Questionnaires on the reasons underlying failure to seek early dental treatment among patients attending a Nigerian Tertiary Hospital.

Write or tick as appropriate

1. Bio-data: a. Age b. Gender c. socio-economic status
2. Have you visited the Dental hospital before? Yes No
3. If yes, have you received Dental treatment before Yes No
4. What reason(s) do you have for coming late:
    a. Fear
    b. Tried other medication I thought will solve the problem
    c. Problem will resolve on its own
    d. Financial constraints
    e. Time constraints because of busy schedule
    f. Bad previous experience in Dental treatment
    g. Not aware of possible solution to the problem
    h. Distance to the Dental clinic is far
    i. Others(specify)
5. If the reason is fear, what do you think is the cause?
    a. Inherent in me.
    b. Fear of the dentist.
    c. Fear of contracting disease during treatment.
    d. Previous Dental treatment experience
    e. Negative impression created by someone who have had previous treatment
    f. Negative impression created by someone who have had no treatment before
    g. Others(specify)
6. How many types of Dental treatments do you know?
    a. Tooth removal
    b. Filling decayed teeth
    c. Cleaning of teeth
    d. Replacing lost teeth
    e. Correcting mal-positioned teeth
    f. Others(specify)
7. What was your experience when you visited the Dentist before?
    a. Pleasant
    b. Uncomfortable
    c. Dentist was impersonal
    d. Scaring experience
    e. Painful
    f. Expensive
    g. Did not like the environment
    h. Others(specify)

Discussion

The availability and accessibility of dental services are regarded as important for achieving population-level oral health and wellbeing. [10] Some variables affecting patients' utilization of oral health services include perception of dental treatment needs and availability of interventions that meet those needs. [11-13] In situations of availability of dental services, multiple variables still continue to impact on the utilization of the services. [14-16]

The peak age and gender distribution of patients in this study is similar to earlier report from Nigeria and other African countries [17-19]. Caries of the teeth with pulpal involvement is the commonest cause of oro-facial pain in this age group and more females tend to be more affected.[17, 20, 21] This study revealed that majority (59.5%) of the patients were in the lower socio-economic class. This agrees with earlier reports. [3, 7,] In these reports, researchers noted that household income and level of education were significantly associated with dental avoidance. On the contrary, Armfield [22] noted that the level of education was not related generally to avoiding going to the dentist.

This study shows that 50.1% of patients have visited a dental hospital prior to presentation, and that 48.7% received treatments while 48.8% described their experience as pleasant after previous visit(s). This observation is consistent with the idea that it is not negative experience from previous visit(s), but perception of the dentist and the dental profession that are the most important determinants of dental avoidance including non-utilization of dental services and delay in presentation. [22, 23] However, regarding the duration of symptoms before presentation at the clinic, our experience is not different from the report of earlier researchers who noted that patients delay their visit and only present when pain and other symptoms become unbearable. [18-20] The impact of this behaviour on the development of chronic irreversible pulpitis and periodontal disease cannot be overemphasized.

Gommerman [24] asserted that the main purpose of a patient visiting a dentist is not to seek relief from pain but to have their health or lack of it attended to. However, the present study shows that majority of the subjects (98.4%) had one reason or another to give for not seeking early dental treatment. The major reasons patients frequently gave for late attendance were that the symptoms would resolve on its own, trying other medications, financial constraints, fear and long distance to the clinics in that order. Although these reasons given by the patients had been documented by previous researchers, [6-8, 22] the frequency of each reason given is different from the previous reports. Armfield [22] documented cost of treatment while Malvania and Ajithkrishnan [23] recorded dental anxiety as the commonest reasons for late presentation in their separate studies. Also 1.6% of the subjects gave no reason for the delay. As reported earlier, this may be intentional because of the unseriousness attached to the problem by this group of patients. [22] In relation to these observations, two important considerations emerge, namely, that a gap exists between what the subjects know about oral health care and the importance of seeking early dental treatment. Attendance at clinics and hospitals worldwide is sometimes influenced by the religious and cultural adherence of the people under consideration. A study on Chinese population indicated that traditional Chinese beliefs and oral health attitude had some influence on the dental

clinic attendance of some individuals. [25] The dental health care system in most countries can be said to have high percentage of the general population that does not seek treatment on a regular basis. [1, 19]

Brand et al [26] and Sote and Sote [27] have been able to articulate the view that inherent fear of the dentist is especially expressed amongst young children. In the adult, those with severe dental anxiety and were treated under general anaesthesia were noted to have irregular attendance pattern, hence less improvement in oral health. It has been suggested that dentists should avoid labelling anxious patients by a single universal category, but rather to differentiate patient symptoms in order to devise treatment strategies. [28]

The dental professional should treat the patient with optimum care in order to minimize the adverse complaints which indirectly impact negatively on attendance at the clinic. Also, it should be noted that pregnancy is not a contraindication to dental clinic attendance. [29] Dental check-ups and some treatments are important during this period as it helps avoid long term dental conditions and their sequelae.

Although certain patients have been excluded from this study, some patients may have been missed out as reliability for recruitment was based on the response of patients. Furthermore, more patients would have been included if the study was community-based rather than clinic-based.

Conclusion

The major reasons for late attendance in this study were that the symptoms will resolve on its own, trying other medications, financial constraints, fear, and long distance to the clinics. There is need to strengthen the continuing oral health education programme, both in the clinics and at the community level and establishment of more dental clinics in this environment.

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