Evaluation of correlations between socio-demographics and oral health seeking among patients

O.A. Akadiri, A.A. Olusanya and T.O. Aladelusi

Department of Oral and Maxillofacial Surgery, University College Hospital, Ibadan, PMB 5116, Ibadan, Nigeria.
Correspondence to: Dr Oladimeji Adeniyi Akadiri, Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, College of Health Sciences, University of Port Harcourt, PMB 1, Port Harcourt, (E-mail: oaakadiri@yahoo.com) Phone: 08087099694

Abstract

Background: It is commonly reported that individuals at higher socioeconomic class have greater health awareness culminating in better care-seeking from orthodox facilities. It is yet to be ascertained whether this reflect in attitudes of patients toward seeking oral health care.

Aim: This study was designed to evaluate the effect of certain socio-demographic indices on oral health care-seeking in an urban society where adequate facilities are available.

Methods: A one point observational study of the patients attending the Dental Clinic of the University College Hospital, Ibadan, was conducted using a questionnaire which sought to document the levels of education, income, marital status and the oral health seeking practice of the patients. The appropriate treatments for individual patients were also documented.

Results: One hundred and three patients participated in the study that spanned three months (1st April- 30th June, 2006). Fifty-six (54.4%) of the patients were males while 47(45.6%) were females with age range of 19-85 years and average of 39 years. Eighty-six (83.4%) patients had at least secondary school education of which 65 (63.1%) actually had tertiary education. There was no significant correlation between oral health seeking behaviour and level of education, level of income, and marital status.

Seventy-four (71.8%) of the patients had tooth extractions while the remaining patients had non-surgical treatments. The reasons for preponderance of surgical treatment needs were discussed.

Conclusion: Although a larger proportion of the dental patients were well educated and had better income, this did not reflect in their oral health seeking behaviour.

Keywords: Behaviour, Oral health care, Socio-demographics, Surgical treatments, Conservative treatments

Introduction

Oral health means more than good teeth; it is an integral of general health and essential for well being. It means being free from acute or chronic oro-facial pain, oro-pharyngeal cancer, other oral lesions, birth defects such as cleft lip and palate, other diseases and disorders that affect the oral and craniofacial tissues 1. This fact is often not so understood by the general population many of whom regard oral diseases as minor ailments which are either to be self-managed or coped with. The understanding is worse in developing countries where dental health awareness is still far less than desired compared to general health; hence there is a wide disparity in the health seeking behaviour for oral health and general health.

A review of the literature indicates that many factors determine whether or not a client will adopt appropriate oral health behaviour. These factors include demographics, socialization, emotional status, perceptions and dental beliefs 2. Studies have long established a gradient

Port Harcourt Medical Journal 2008; 2: 244-248
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relationship between socio-economic status and health, whereby individual of higher socio-economic class were found to patronize orthodox medical services better; these have largely been studies conducted in developed countries where dental health awareness is relatively better. The WHO World report on oral health affirmed that access to oral health is limited in developing countries and teeth are often left untreated or extracted because optimal intervention is not universally available or affordable because of escalating cost of treatment and limited resources at the people's disposal. Hence, individuals of higher socio-economic class were assumed to patronize oral health clinic more.

In this preliminary study, we evaluated the influence of some socio-demographic indices such as level of education, income and marital status on dental health seeking behaviour among an urban population in Nigeria. We also observed the clinical interventions or treatments mostly undertaken by the patients as this could also reflect their attitude to oral health.

Materials and Methods

Participants were selected among the patients attending the out-patient Dental Clinic of the University College Hospital, Ibadan over a three-month period (i.e. April 1-June 30, 2006). A questionnaire was administered to every consecutive consenting patient. Data were collected on age, sex, marital status, level of education, level of income, and the ultimate treatment plan for the presenting complaints. Level of income was classified arbitrarily such that earnings less than N20,000 per month was regarded as low, between N21,000-N40,000 per month was regarded as middle while above N40,000/month was regarded as high level income. Where there was more than one treatment options, the option preferred by the patient was recorded. Oral health care-seeking behaviour of individual patient was reported as to whether they routinely visit the dentists, visit every time they perceived problems or do so only when the perceived problems become unbearable.

Data analysis was done using the Statistical Package for Social Sciences (SPSS) version 11.0. Correlation of the socio-demographic indices and patients' oral health-seeking attitudes was tested.

Results

A total number of 103 patients participated in the study including 56 males and 47 females giving a M:F ratio of 1.2:1. The age range of patients was 19-85 years with average age of 39 years. Thirty-four patients (33%) were singles, 67 (65%) were married while 2 (1.9%) patients were widows. Sixty-five (63.1%) of the participants had tertiary education (i.e. a minimum of Bachelor degree), 9 (8.7%) had other forms of post-secondary school education and 12 (11.7%) had secondary school education while the remaining 15 (14.6%) patients had primary school education and 2 (1.9%) patients who had no formal education (Figure 1). Twenty-nine patients (28.2%) were of low income level, 43 (41.7%) of middle income level while 31 (30.1%) were of high income level (Figure 2). There was no statistically significant correlation between the level of education, income, marital status and the oral health seeking behaviour of the patients (Table 1).

Table 2 depicts the treatment options accepted by the patients with 72 patients (69.9%) of the population having tooth extractions, 10 (9.7%) each having restorations with amalgam/composite fillings and routine scaling and polishing respectively. The other treatments adopted which include root canal therapy (RCT), denture fabrication, reduction and immobilization of jaw fracture, oral health education/counselling and simple medication are indicated in the Table 2.
Table 1. Correlation of socio-demographic factors and oral health seeking behaviour Pearson’s correlations

<table>
<thead>
<tr>
<th></th>
<th>Correlation Coefficient</th>
<th>Sig. (2-tailed)</th>
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</thead>
<tbody>
<tr>
<td>Oral health seeking behaviour</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level of income</td>
<td>0.124</td>
<td>0.216</td>
</tr>
<tr>
<td>Level of education</td>
<td>0.014</td>
<td>0.886</td>
</tr>
<tr>
<td>Marital status</td>
<td>0.089</td>
<td>0.374</td>
</tr>
</tbody>
</table>

Table 2. Treatment administered to patients

<table>
<thead>
<tr>
<th>Treatment options</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tooth extraction</td>
<td>72</td>
<td>69.9%</td>
</tr>
<tr>
<td>Tooth restoration</td>
<td>10</td>
<td>9.7%</td>
</tr>
<tr>
<td>Scaling and polishing</td>
<td>10</td>
<td>9.7%</td>
</tr>
<tr>
<td>Root canal therapy</td>
<td>2</td>
<td>1.9%</td>
</tr>
<tr>
<td>Denture fabrication</td>
<td>1</td>
<td>1.0%</td>
</tr>
<tr>
<td>R &amp; I</td>
<td>1</td>
<td>1.0%</td>
</tr>
<tr>
<td>OHE/Counselling</td>
<td>3</td>
<td>2.9%</td>
</tr>
<tr>
<td>Simple medication</td>
<td>4</td>
<td>3.9%</td>
</tr>
<tr>
<td></td>
<td>103</td>
<td>100%</td>
</tr>
</tbody>
</table>

R & I = Reduction and immobilization
OHE = Oral health education

Figure 1. Distribution according to level of education

Figure 2. Distribution according to level of income
Discussion

This study is a preliminary evaluation of the influence of socio-demographic characteristics on the oral health care-seeking behaviour of a Nigerian population. One hundred and three patients were involved within the study period with a male preponderance. This finding contradicts the observation that females tend to seek medical attention more frequently than males. However, this may not be sufficient to debunk this belief as the study included only the patients who consented to participate among those seen at the clinic during the study period. There was no randomization of patient selection.

An outstanding majority of the patients had more than primary education and the level of education of the participants corresponds to their financial income. However, this did not appear to influence the oral health care-seeking behaviour of the participants as there was no difference between those who had higher education and income and those who ranked lower in these respects. This suggests that lack of formal education and low level of income may not be the most important factors responsible for the poor attitude to oral health care-seeking behaviour among the study population. This contrasts with observation in some developed countries where dental health awareness is high and dental clinic attendance was found to correlate positively with socioeconomic class. We thought that the influence of a spouse may affect oral health care-seeking as couples generally get more concerned about the health problems of each other; contrarily, our study showed that the marital status of the patients did not affect attitude to oral health care-seeking.

A previous study among a Jordanian population showed that there is no emphasis on dental health education in the primary, middle and high education curricula. This also appears to be the situation in Nigeria and it is reflected in this study where 65% of the population had tertiary education yet their health seeking attitude was not different from the less educated. This underscores the need to differentiate between general literacy and health literacy. The poor oral health literacy in our society may be responsible for the low level of health seeking behaviour. Some authors had reported irregular attendance at dental clinics among both adult and children population with majority attending the dentists only during emergency. Our study also corroborates this assertion showing that a vast majority attended dental clinic only when they perceived problems and more so when they are unable to manage the problems by themselves. Dental treatments are generally perceived to be expensive and this reason has been adduced for the poor attendance at the dental clinic among low income populations. It is our opinion from this study that this is not absolutely true rather, we think that the poor value placed on oral health, lack of knowledge on preventive dental health behaviour and inadequate primary oral health care programmes are largely responsible.

The profile of treatments undertaken by our population of patients is another reflection of their bad attitude to oral health. An overwhelming 69.9% had tooth extractions while only 9.7% had tooth conservation. This suggests that help was sought after significant disease progression. Prompt presentation of dental diseases could reduce surgical treatments to the barest minimum as most dental ailments are largely preventable or amenable to conservative treatments at the initial stage. However due to the high level of ignorance in dental treatment options some dental pathologies that could even have been amenable to root canal treatments were not so treated for reasons that patients considered root canal therapy as either more expensive or too rigorous and so opted for tooth extraction. In some other societies with better dental health awareness and where dental care is covered by insurance or supported by co-payers, dental extraction is currently only applicable to cases where any form of restorative procedures is not feasible.

It has been proposed that people's attitudes and behaviours towards health, in general and dental health in particular, is a culmination of life experiences and events. Influences from
childhood, through school and into adulthood have been shown to determine an individual’s health perceptions. This has been called a “health career”. Understanding how health behaviours evolve, develop and are modified with time could allow dental health professionals to appreciate the complexities involved when people attempt to modify their dental health care attitudes and behaviour. Some researchers have postulated that some underlying characteristics of populations such as culture and psycho-social exposures, rather than socio-demographic groupings are greater determinants of health behaviour; our findings seem to conform to this opinion. We therefore recommend that there should be early introduction of oral health education during pre-school age and incorporation of oral health education in the school curriculum. This will influence the development of the health attitude and behaviour during the formative period rather than attempting to change an already formed attitude.

References

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