A preliminary study of psychological pain among patients attending the dental clinic of a tertiary hospital

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Abstract

Objective: Dental practitioners frequently encounter individuals who suffer from psychological pain at the dental clinics. Most dentists do not have the training or the instrument to recognise and manage psychological pain associated with dental treatment. This study was carried out to determine the level of psychological pain among dental patients visiting the dental clinic of the Lagos State University Teaching Hospital, Ikeja, Lagos, Nigeria.
Method: One hundred and twenty five patients who attended the dental clinic of the Lagos State University Teaching Hospital, Ikeja, Lagos, Nigeria were invited to take part in the study. They completed a sociodemographic questionnaire, Psychache Scale (PAS) and the Hamilton Anxiety Rating Scale (HARS) in order to determine their levels of psychological pain and anxiety.
Result: Of the total respondents, 43% were males and 57% females, mean age 30.2 years (SD=10.7, ranging from 15-80), 74.2% were married and 22.5% single. With regards to psychological pain and anxiety, 31.9% scored high in the PAS, indicating probable psychological pain while 25.8%, 19.4% and 54.8% were detected to suffer from mild, moderate and severe anxiety as detected by HARS.
Conclusion: The finding from this study demonstrated that Nigerian dental patients also suffer from psychological pain and various degrees of dental anxiety. Therefore there is a need for Nigerian dental surgeons to acquire some knowledge of mental health in order to recognise these psychopathologies among their patients.

Key words: Psychological pain, anxiety, dental patients, Nigeria

Introduction

Dental surgeons frequently encounter patients who present at the dental clinics with various types of psychopathologies most especially pain and anxiety[1]. The pain experienced by dental patients has been reported as a universal human phenomenon[2]. Previous studies reported that 46% to 75% of the general population have dental anxiety[3] and a large percentage of those who would not see their dentist frequently believed that the reason was dental anxiety[4]. The prevalence of dental anxiety globally was reported to vary between 3% and 45%[5,6]. The identified emotional pain frequently encountered by dental surgeons include: atypical facial pain, psychological pain, dysaesthesis also referred to as burning mouth syndrome and dental anxiety[7-9]. It is also reported that the psychological management of patients with various psychological disorders in individuals attending various dental clinics have remained largely unmet especially in sub-Saharan countries [10], where very few studies have been carried out on psychological distress and dental anxiety. The available studies did not measure psychological pain among dental patients [11,12]. Arigbede et al[13] also noted that there is dearth of information on management of dental pain and anxiety in the Nigerian and African literature.

This study was carried out to provide more information and better understanding of psychological pain experienced by dental patients. Likewise, a study such as this one may encourage the development dental/psychological consultation-liaison departments where behavioural medicine (psychiatry) can contribute to the management of psychological disorders found in patients presenting to dental specialists. At the moment, such a department does not exist in Nigeria or any Sub-Saharan country although reports show they are growing rapidly in England and other European countries[1]. Therefore, the provision of information that can lead to early recognition of psychological pain in people who visit dental clinics will likely enhance quality oral health care which will be beneficial to both patients and dental health care services. The aim of this study was to determine the levels of psychological pain among patients attending the dental clinic of the Lagos State University Teaching Hospital, Ikeja, Lagos, Nigeria.

Materials and method

The study is a cross-sectional descriptive survey. It took place at the Department of Dentistry of the Lagos State University Teaching Hospital (LASUTH), Ikeja Lagos, Nigeria between January and June 2010. The permission to

carry out the study was obtained from the Research and Ethics Committee of the hospital and written informed consent was obtained from every patient that participated in this study. A questionnaire was used to collect data on sociodemographic details of the respondents which also included questions such as age, sex, marital status, occupation, diagnosis and use of medication before visiting the clinic. The respondents also completed Psychache Scale (PAS)[14] and Hamilton Anxiety Rating Scale (HARS)[15]. The Psychache Scale measures intense feelings of psychological pain; depression and tendency to commit suicide or chronic free floating, non-specific psychological pain. The psychometric norm is 30.66, scores higher than the norm indicates that the individual is suffering from psychache and suicidal ideation. The Hamilton Anxiety Rating Scale (HARS) is a 14-item inventory designed to measure anxiety in community and clinical settings. The cut-off mark; 0-5, no anxiety; 6-14, mild anxiety and scores above 15 indicates severe anxiety. Both instruments have been validated and previously used in university and community studies in Nigeria[16,17].

Data Analysis
Statistical analysis was performed with the aid of Statistical Package for Social Sciences (SPSS; version 17 Windows) using descriptive statistics. The results were reported with 95% confidence interval and P value<0.05 was considered significant.

Result

One hundred and twenty five consecutive patients were investigated in this study. Of the total respondents, 51 (40.8%) were males and 74 (59.2%) females, 38% of the respondents were within the age bracket 21-30, followed by 22% and 20.0% of age brackets 31-40 and 16-20 respectively. The mean age was 30.2 years (SD=10.7, range 15-80), 94 (75.2%) were married and 27 (21.6%) single. Among the respondents, 71 (56.8%) and 37 (29.6%) had tertiary and secondary education attained respectively. As regards occupational status, 40 (32.0%) were professionals, 30 (24.0%) civil servants and 25 (20.0%) students. The diagnoses of the dental patients varied from tooth ache 99 (79.2%), hole in tooth 17 (13.6), through gum inflammations 3 (2.4%) to broken dentures 3 (2.4%). The majority of the respondents 67 (53.6%) were seeing a dental practitioner for the first time as shown in **(Table 1). Table 2** showed that 31.9% of the respondents had psychological pain while 25.8%, 19.4% and 54.8% were detected to suffer from mild, moderate and severe anxiety respectively.

Table 1. Socio-demographic details of the respondents

Variable	Frequency	Percent (%)
Age		
15-20	25	20.0
21-30	48	38.4
31-40	28	22.4
41-50	9	7.2
51-60	12	9.6
61-70	2	1.6
71-80	1	0.8
Gender		
Male	51	40.8
Female	74	59.2
Education		
No formal education	5	4.0
Primary school	12	9.6
Secondary school	37	29.6
Higher institution	71	56.8
Marital status		
Married	94	75.2
Single	27	21.6
Separated	3	2.4
Divorced	1	.08
Occupation		
Unemployed	9	7.2
Student	25	20.0
Professional	40	32.0
Civil Servant	30	24.0
Trader	19	15.2
Retired	2	1.6
Type of Dental Illness (Diagnosis)		
Tooth ache	99	79.2
Hole in tooth	17	13.6
Gum inflammation	3	2.4
Broken denture	3	2.4
Others	3	2.4
Are you visiting this clinic For the first time?		
Yes	67	53.6
No	58	46.4

Discussion

The findings of this study indicated that 31.9% suffered from psychological pain while 19.4% and 58.8% had moderate and severe anxiety. The outcome of this study appears to be in consonance with the findings from studies from other countries. As regards psychological pain among dental patients in Poland, Magdalena et al[18] found 67.4% while in Spain, Trombelli et al[19] found 67% psychological pain among the dental patients investigated. In a similar vein, Lloyd-William et al[20] reported that 57% of dental patients with facial pain syndromes also had diagnosable mental health disorders. One probable reason why dental pain and anxiety why found to be high in this study was due to the faulty or negative perception that dental patients place on the mouth. This may be so because of the important psychosocial role the mouth plays. Therefore, any disturbing factor that affects the psychosocial role of the mouth might also cause psychological disturbance [5]. However, the perception of pain and differences in pain threshold has been demonstrated to vary from one individual to another and from one culture to another[5,9]. For example, on one hand, pain threshold in depressed dental patients may be low while dental patients who regularly abuse illicit substances may possess high pain

Table 2. Prevalence of anxiety and psychological distress of the respondents

Variable	Frequency	Percent (%)
HARS		
Mild	33	26.4
Moderate	24	19.4
Severe	68	54.8
PAS		
Scores below 33	87	69.6
Scores above 33	38	31.9

threshold[5,9]. For this reason, some workers have suggested that dentists should learn to recognise the pain threshold of their patients. In that light, dental patients with low pain threshold can easily benefit from psychotherapy[1,3,7]. Another important reason why we recorded a high prevalence of psychological pain and anxiety may be due to faulty oral hygiene of dental patients with high psychological morbidity which may prevent taking care of their daily oral hygiene procedures[1,11]. Previous studies also indicated that some dental patients may have pre-existing mental health disorders before visitation to the dentists which also explain high psychological morbidity in dental patients. In a related manner, neuroleptics used for treatment of psychiatric disorders can also lead to tardive dyskinesia which causes fissured or protruding tongue, gingival hypertrophy and xerostomia often encountered by dentists[6,21,22].

As regards anxiety, the findings of this study are similar to findings of other workers. For example, Kaako et al found 54%[21] and Malt et al[22] found 62% of dental anxiety American dental patients while Magdanela et al[18] found 63.1% anxiety rates among Polish dental patients. These high rates may be due to some reports that dentists do not provide necessary information or counsel their patients as regards painful procedures[13]. The immediate and remote implications of these high rates of pain and anxiety in dental patients are that; booked dental patients with dental anxiety are likely to skip appointments and those with new oral health conditions may refuse or prolong dental treatment[21-23]. From the findings of this study and the literature reviewed, dental patients with comorbid psychological disorders are not likely to be detected, even when detected; they may not be offered the necessary psychological assistance. It is in this light that dental surgeons are encouraged to acquire some mental health skills to make them recognise common signs and symptoms of common psychological disturbances to allow them to provide holistic dental health care services that will their patients' quality of life[1,5,20]. For these reason, the idea of inter-professional co-operation between general dental practitioners and mental health professionals are being suggested by some authors[1,5,20]. This study has its own limitations. The sample size is relatively small thus generalisability of the findings are limited. It is hoped that in future studies involving large multicentred studies should be carried out to identify other psychopathologies apart from psychological pain and anxiety among Nigerian dental patients. However, it has added to body of knowledge and may also facilitate the setting up of the new field of dental/ mental health consultation-liaison units such as the ones in Europe.

Conclusion

This study also demonstrated that Nigerian dental patients also experience various levels of psychological pain and anxiety. Therefore there may be a need for Nigerian dental surgeons to acquire mental health skills in order to recognise comorbid psychological disorders among their dental patients.

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