Prevalence of Depression, Anxiety and Stress Among Orthodontics Patients Visiting a Tertiary Care Hospital, Pakistan

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ABSTRACT

Aims and objectives: To determine the prevalence of depression, anxiety and stress among orthodontics patients visiting a tertiary care hospital in Pakistan using DASS scale. Materials and method: A cross sectional study was conducted among randomly selected 72 patients undergoing orthodontics treatment at the dental out patient clinic of Karachi Medical and Dental College. A self administered questionnaire with 42 questions was distributed among the participants to assess depression, anxiety and stress. Informed consent was taken from all participants prior to the survey. Result: The mean age of the sample population was 21.70 years. This study shows that 31.64%(24) patients are depressed, 36.8%(28) are anxious and 41.1%(35) are in stress. Conclusion: In conclusion, orthodontic patients are susceptible to depression, anxiety and stress. Early diagnosis helps the patient to initiate the therapy if needed.

Key words: Anxiety; Depression; Orthodontics Patients; Stress

Introduction

Depression is one of a most common health problem, which is seen frequently in general medical settings.1,2 Depression contribute to a high proportion of the global burden of disease. Major depressive disorder (MDD) was labeled in 2001 by the World Health Organization (WHO) as the fourth leading cause of disability and premature death in the world. MDD would be second to ischemic heart disease by the year 2020 in regard to disease burden.1,3-5 A fact sheet in 2001 on mental and neurological disorders published by WHO media centre stated that 25% of individuals develop one or more mental or behavioral disorders at some stage in their lives, in both developed and developing countries.6 The symptoms of depression affect the patient’s capabilities for work and logical communication and can leads to suicide such symptoms includes poor concentration, low mood and lack of interest or pleasure. Depression ranges from a mild to severe. Milder condition bordering normal condition to severe depression which is accompanied by hallucinations and delusions.

Depression is extremely disabling condition and it is often not widely acknowledged, in part, because of the stigma associated with this illness. The negative attitudes of depression can reduce problem-solving capabilities of a person and can impair judgment. There is ever growing concern over the increasing rates of suicide due to depression particularly among adolescents and young adults in many developing countries. In Pakistan Psychiatric morbidity figures vary considerably; Akhund et al7 reported a prevalence of 12% while Mi et al quoted a much higher figure of 38.4%.8

Questionnaire-based symptom scales are well established as screening tools for determining the mental health of a community.9 In these questionnaires and inventories, anxiety and depression are considered reliable indicators of overall mental health of communities.10 Epidemiologic surveys have shown that distinction between these two conditions is unclear, that these conditions form the bulk of psychiatric morbidity in the community and the most clinicians prefer a single scale that screens both for anxiety and depression.11

Mostly orthodontics patients come to orthodontists with high expectations. Depress patients are difficult to treat. Incidence of missing appointment is high among them. Patient co-operation is less observed among depressed patients. It is important to reduce the anxiety of patients before starting treatment. This can be achieved by counseling. There was no study in Pakistan, which determines the prevalence of depression and anxiety in orthodontics patients. The purpose of this study was to determine the prevalence of depression, anxiety and stress among orthodontics patients visiting a tertiary care hospital in Pakistan using DASS scale.

Materials and Method

A cross sectional study was conducted among patients undergoing orthodontics treatment at dental out patient department of Karachi Medical and Dental College from Feb 2013 to July 2013. A 42 questionnaire DASS scale was used to assess depression, anxiety and stress. The DASS is a set of three self-report scales designed to measure the negative emotional states of depression, anxiety and stress.

All the adult orthodontics patients with 18 years or above visiting orthodontics department were given a self-administered questionnaire form to be filled. Exclusion criteria include mentally ill, illiterate patients and those patients who are unwilling to participate in this study. Same person distributed questionnaire forms to all patients and collected from them. He explained the purpose of research to respondents. Informed consent was taken from all respondents. They were given option not to take part in this study. A total of 76 patients took part in this study. The socio-demographic details include age, gender, education and occupation. Gender was compared with occupation, marital status, depression status, anxiety status, stress status by chi square test. Gender was compared with Scores of Depression, Anxiety, and Stress. Data collected was statically analyzed using SPSS 16.0.

Results

The study population consists of 76 patients. The mean age of the sample population was 21.70 ± 3.01 years. Considering the gender distribution females were 81.3%(62) and males
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Variables N %
Gender
Male 14 18.7%
Female 62 81.3%
Education of respondent
Matric or below 13 17.1%
Intermediate 35 46.1%
Graduation or above 28 36.8%
Occupation of respondent
Student 40 52.6%
Employed 20 26.3%
Unemployed 16 21.1%
Marital status of respondent
single 70 92.1%
marrried 6 7.9%
Depression status of respondent
Depressed 24 31.6%
Non depressed 52 68.4%
Anxiety status of respondent
Anxious 28 36.8%
Non anxious 48 63.2%
Stress status of respondent
Stress 35 46.1%
Non stress 41 53.9%

Table 1. Socio-Demographic Details

were of 18.7% (14). DASS scale shows that 31.6% (24) patients were depressed, 36.8% (28) anxious and 46.1% (35) were under stress. 76.8% of depressed patients were anxious and 65.7% of anxious patients were in stress. The socio-demographic details shows that 92.1% of the study populations were single and 7.9% married. Occupational status shows that 52.6% were students and 26.3% were employed and 21.1% unemployed. In total depressed 21.7% were males, 78.3% were females. Among totally anxious 22.2% were males and 77.8% were females. The stress was positive for 23.5% of males and 76.5% of females.

Discussion

Several studies from Pakistan reported depression and anxiety among medical students.1,2,13 patients seeking medical care,1,14 and general population.15 No attempt was done to assess the prevalence of depression and anxiety in dental or orthodontics patients. In Pakistan, the adjusted prevalence of depression among orthodontics patients is young and between 18-24 years it is alarming that such high prevalence of depression, anxiety and stress was found. An increased prevalence of depression in young orthodontics patients is mainly due to stress associated with unemployment, terrorism and socioeconomic status. If present condition remains un-noticied, un-checked and un-observed it would results in a big disaster in future. It is observed that patients diagnosed with myofacial pain and other somatization in patients with temporomandibular disorders.18 and treatment of depression easily cure the disease and decrease the burden on society.

Conclusion

In conclusion, dentist could notice the depression of his patients and motivate the patient for therapy and check for improvement during the orthodontic treatment. Early diagnosis and treatment of depression early cure the disease and decrease the burden on society.

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