



## Psychological distress and job involvement among dental surgeons in Lagos, Nigeria

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### Abstract

**Objective:** Studies on job involvement and mental health have mainly been carried out among Caucasian populations. Similar studies are lacking in Nigeria. This study was aimed at investigating psychological distress and job involvement among dental surgeons working in Lagos, Nigeria.

**Method:** Thirty-eight dental surgeons working at the two teaching hospitals in Lagos State, Nigeria were invited to participate in this study. The dental surgeons completed three self-administered questionnaires, a questionnaire on demographics, Job Involvement Inventory (JII) and the 12<sup>th</sup> version of the General Health Questionnaire (GHQ-12)

**Results:** Among the dental surgeons surveyed, 18.42% had a GHQ score of 4 and above which indicated that they were at increased likelihood of having a psychological disorder. As regards job involvement, 66.67% of the dental surgeons scored high on the JII; this shows that the dental surgeons were poorly involved emotionally in their jobs.

**Conclusion:** The findings of this study showed that dental surgeons working in Lagos State manifest with certain degrees of psychopathology and majority of them were poorly emotionally involved in their job. There is a need for dental surgeons to acquire management science training and stress management skills to enhance service delivery.

**Key words:** Psychological distress, Job involvement, dentists

### Introduction

Dentistry is a profession of social interaction influenced by specific demands of the clinical practice, with exposure to an intimate and very sensitive area of the human body<sup>(1)</sup>. Dental surgeons have been reported to experience psychological and occupational distress and these have been widely documented<sup>(2,3)</sup>. The literature shows that dental surgeons encounter professional stress and psychological distress from dental school and are subject to a variety of psychological and physical disorders at the work place<sup>(4)</sup>. The position of occupational stress and psychological distress in the dynamics of mental health disorders have also been documented in the literature<sup>(5)</sup>. The psychological distress of workers has been associated with how involved they are at the work place. Job involvement has been described as an individual's psychological identification or commitment to his job<sup>(6)</sup>, a degree to which one is cognitively preoccupied with one's job. Thus, workers who experience negative job involvement were observed to experience absenteeism, high turnover or intent to leave. The identified stressors experienced by dental surgeons that could bring about negative job involvement include financial issues, time and scheduling pressures, patients' unfavourable perception of dentists as inflictors of pain, standing for too long, frequent backaches, working with children and coping with difficult and uncooperative patients<sup>(6,7)</sup>. The reported psychological consequences of long-term professional stress suffered by dental surgeons include anxiety, mild depression,

substance misuse and burnout<sup>(7)</sup>. Rada and Johnson-Leong<sup>(7)</sup> observed that 38% of 3,500 dentists surveyed were frequently worried or anxious, 34% felt physically or emotionally exhausted and 26% said they always had headaches or backaches. The surveyed dental surgeons also believed that the psychological distress that they experience at work could also explain the observed physical and psychological symptoms. The literature also shows that dental surgeons are at higher risk of committing suicide more than other health professionals<sup>(8,9)</sup>. Myer and Myer<sup>(10)</sup> reported that 32% of British dentists surveyed had high psychiatric symptoms, over one third were overweight or obese, 68% had frequent backache and 60% reported being anxious or depressed and increased alcohol use. Another propounded reason why dental surgeons further psychological distress is because of the social stigma attached to mental health disorders despite significant advances in scientific understanding of mental illnesses<sup>(1)</sup>. For this reason, if a dental surgeon suffers from a psychological disorder and if undetected, it may pose serious threats to the dental surgeon's physical and mental health well-being, quality of life and provision of quality service delivery to his clients and also to his hospital. Therefore, this study is aimed at high determining psychological distress and job involvement among a group of hospital-based dental professionals under to provide baseline, information and suggestions to improve effectiveness, productivity and reduction of work stress and eventually enhance quality of lives of these professionals.

**Method**

The study was conducted at the dental departments of the two teaching hospitals in Lagos, Nigeria. Dental surgeons including residents and consultants working at the Lagos State University Teaching Hospital (LASUTH), Ikeja Lagos and Lagos University Teaching Hospital (LUTH), Idiara, Lagos were invited to take part in the study. Permissions to carry out the study were taken from the Research and Ethics Committee of both hospitals and informed consents were also sought from the respondents. The instruments administered to the respondents consist of a questionnaire to elicit demographic variables like age, sex and marital status alcohol and tobacco use. The respondents also completed the 12item General Health Questionnaire (GHQ-12)<sup>(11)</sup> to measure psychological distress among the subjects and the Job Involvement Inventory (JII)<sup>(12)</sup>, to assess job involvement and satisfaction among the respondents. The GHQ-12 is a short version of the GHQ which was designed as a self-administered screening instrument aimed at distinguishing between psychological ill-health and well-being. The GHQ enjoys a worldwide appeal in the screening of psychiatric morbidity and the psychometric attributes of this instrument are well known. It assesses the symptoms of anxiety, depression and social dysfunction. It has been used in this environment in both academic and field studies<sup>(13)</sup>. The cut-off point of 3 was used and respondents with scores less than three were regarded as having no psychological morbidity while those that scored 4 and above were considered as having psychological morbidity. Job Involvement Inventory (JII) is a 20-item inventory designed to measure the extent to which an individuals' work performance affects his/her self-esteem. It also measures the extent to which a person is attached and engrossed in his/her general employment circumstances that the authors differentiated from job satisfaction or job motivation. Each item was measured on a five-point scale where a value of one corresponded to "Strongly Disagree" and a value of 5 corresponded to "Strongly Agree". The scores obtained on each of the 20 items were averaged to produce a single score for job involvement. Scores above 45 are considered to be poorly involved in their jobs. This has also been used in this environment in both academic and field studies<sup>(14)</sup>.

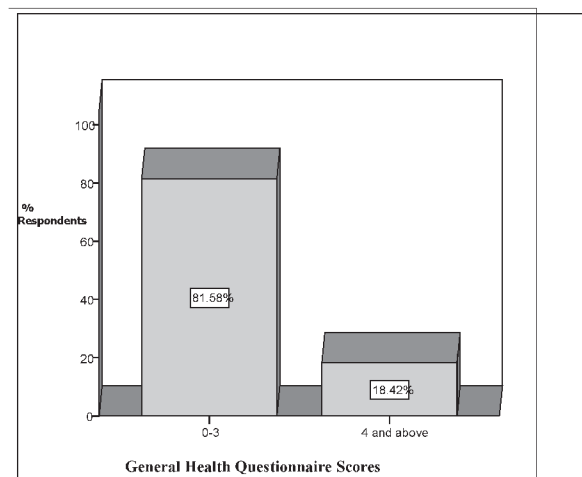
**Data Analysis**

The 11<sup>th</sup> edition of the statistical package for social sciences (SPSS-11) was used for the analysis of the data. Descriptive statistics such as frequency distribution tables, means and standard deviations were used in summarising the data.

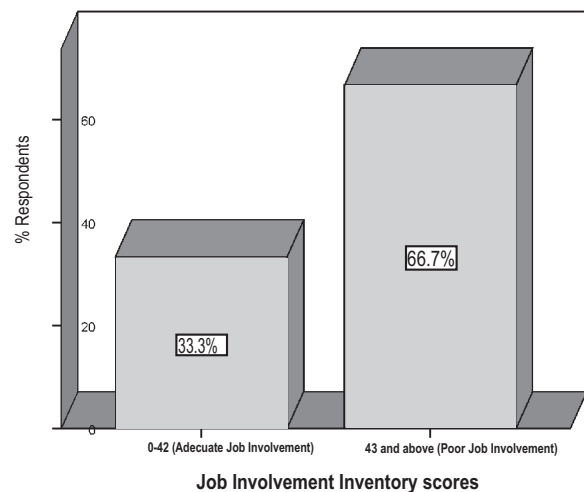
**Results**

Out of the 50 dental surgeons invited to take part in this study, 38 responded, with a response rate of 76%. The majority of the respondents were between the ages 21 and 40 years (63.2%); the mean age of professional practice was 11.22 SD 8.436. Females were 66.7% and males 33.3%; 70.3% were married while 29% were single. Majority of the respondents fully agree that their job at the department was stressful (78.9%); however, 88.6% believed that they were coping with their occupational stress. 75% of the respondents said the perceived stress was moderate,

14.29% said it was severe while 10.71 said he stress was mild. The respondents believed that work load pressure (54%) gave them stress followed by inadequate equipment (25.8%) and inadequate staff (19.4%) respectively. The respondent said they do not have enough medical personnel in their department (68.4%) while 31.6% claimed they have enough staff. The subjects claimed that the authorities were aware of the stressful nature of their jobs (68.6%). Figures I and II shows that seven (18.42%) out of the subjects surveyed had GHQ scores of 4 and above while majority of the dentists scored 43 and above (66.7%) in the JII.16



**Figure 1.** Scores of respondents on General Health Questionnaire



**Figure 2.** Scores of respondents on Job Involvement Inventory (JII)

**Discussion**

This study showed that our sample of dental surgeons working in teaching hospitals in Lagos that was studied experienced certain degree of psychological distress as regards the results of the GHQ assessment. This finding indicated an increased likelihood of psychological distress among the dentists surveyed. This finding is in agreement with the findings from other workers from other countries<sup>(15-17)</sup>. Rada and Johnson-Leong<sup>(7)</sup> in their study reported that less than half of dentists surveyed were satisfied with their



profession; 7.4% had reached significant levels of job dissatisfaction and 83.0% perceived dentistry as being a stressful profession. When the dental surgeons were asked whether their job was stressful, majority of the dental surgeons surveyed (78.9%) agreed that their work was stressful. In a more recent study from Lithuania, Puriene et al.<sup>(1)</sup> observed that overall majority of Lithuanian dentists experienced tension at work, a factor which also made them to be nervous at home which led to impaired relationships with family members. Moller and Spangenberg<sup>(18)</sup> found that 40% of dentists in their study reported high level of psychological distress which also affected their marital lives, inter-personal relationships with their children and limited social interactions. They further claimed that 14.9% of the subjects surveyed reported suicidal ideation. In another study, 32% of dentists working in the United Kingdom reported minor psychiatric symptoms, 60% said they were nervy, tense or depressed most times, 60% claimed they had sleeping difficulty, 59% reported backaches and most of them were overweight or obese; the authors also noted an increase in the use of alcohol<sup>(19)</sup>. It was also observed that dentists who take teaching roles in addition to their clinical role were reported to experience significant amount of psychological distress<sup>(20)</sup>.

The findings of this study also show that the dentists surveyed (66.6%) were poorly involved in their jobs. This findings is in line with those of previous studies on job satisfaction and job involvement. Roth, Vernhagen and Major<sup>(21)</sup> indicated the importance of occupational stress and job satisfaction; in their study, they observed that Canadian orthodontists who reported lower occupational stress had significantly higher job satisfaction. Job involvement and satisfaction occur when the possession of certain needs, values or personal characteristics predispose individuals to become more or less involved in their jobs<sup>(6)</sup>. The job characteristics associated with job involvement include task autonomy, task significance, skill variety and participatory decision-making. It is however possible that the subjects in this study did not have the opportunities to show task autonomy, task identity or even partake in decision-making processes of their respective hospitals. This study also affirms that job involvement as a potentially important determinant of organisational productivity of workers effective service delivery. Thus, the findings of this study is in agreement with the belief that highly involved workers tend to perform at higher levels because they tend to be motivated and thus put in more efforts into their jobs. In this wise, workers with high job involvement are more productive and effective than their less-involved colleagues<sup>(22)</sup>.

However, Kay and Lowe<sup>(19)</sup> compared their 1996 and 2005 findings, they reported that the claim that dentistry is dangerously stressful occupation was not justified and dentists seem to be as well and happy as other professional groups. They however observed an increase in the use of alcohol by dentists. Nonetheless, psychological distress among Nigerian dentists should not be overlooked; but should be regarded as an occupational hazard. The contributing factors that may also explain psychological distress among Nigerian dentists might include work overload, poor infrastructure, frequent power outages during work hours thus making dentists to work in dark

surgical environments, financial issues and standing for long hours thereby precipitating backaches. If these contributing factors are not addressed by the management, it may further bring about job dissatisfaction and poor emotional job involvement. It is believed that further studies on Nigerian dental surgeons will explore these noted aspects of this study. Nonetheless, this study adds to literature by empirically showing that job involvement can be associated with psychopathology among Nigerian dentists.

### Conclusion

The dentists examined in this study showed certain degrees of psychopathology and significant percentage of them were not emotionally involved in their jobs. It is suggested that stress management, personal development and professional awareness training should be acquired by Nigerian dentists to be able to manage threats to their physical and mental well-being at the work place. However, the findings of this study cannot be generalised because of its small sample size, the sample bias and its limitations to only two tertiary hospitals in Lagos. Further studies on psychological distress and job satisfaction on residents and consultant dental surgeons are suggested.

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