

ORIGINAL ARTICLE

Prevalence of Psychiatric Morbidity among Medical Practitioners in an Urban Town in Nigeria

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DISCLOSURE

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ABSTRACT

Background: Mental health problems can affect anybody including Doctors. It can be related to nature of our work and personal factors. Mental ill health includes a range of conditions like depression, bipolar disorder, anxiety and psychosis.

Objective: To determine the prevalence of psychiatric morbidity among Medical practitioners in Onitsha town.

Methodology: Questionnaires were distributed to 56 Medical practitioners who were present at Nigeria Medical Association (NMA) Onitsha zone organized Continuous Professional Development Programmes (CPD) lecture held at NMA secretariat building general hospital Onitsha on the 8th of March 2015. Self-administered semi-structured questionnaire designed by the authors, General Health Questionnaire version 12 (GHQ-12) and Depression, Anxiety and Stress Scale version 21 (DASS-21) were distributed to 56 participants via convenience method.

Results: Nearly all the Doctors that participated were males (98.1%), with age range of 26 - 71 years. Most of the respondents (n=43, 82.7%) were married. More than half (55.8%) were in private practice with nearly a third (30.8%) combining it with public service. Nearly half (42.3%) had worked for 31 - 40 years and almost half (48.1%) work for an average of 60 - 89 hours per week. Twenty one (40.4%) had work related problems but none ever sort psychiatric consultation. Less than one fifth (13.4%) screened positive on the DASS depression and stress scales while 32.6% screened positive on anxiety scale. No participant had the GHQ 12 threshold score of 3 and above.

Conclusion: Screening tools picked some cases of anxiety, depression and stress but no one ever presented to mental health service. The psychological wellbeing of doctors may need to be considered separately from mental health issues of the general population. Favourable conditions for truthful disclosure should be created so that those mentally unwell can seek appropriate care.

Keywords: Medical doctor, Stress, Anxiety, Depression

INTRODUCTION

Mental health conditions amongst doctors are not confined to one country but affect doctors all over the world.¹ Common mental health

disorders identified include depression, anxiety, addiction to drugs (this includes prescription drugs), burnout and suicidal thoughts.¹ Doctors at any level of their career

can be affected. Issues can arise during the foundation stage/residency, later on when they are newly qualified as consultants, or even when established in their profession for many years.^{1,2}

Doctors and medical students have been identified as a group at high risk of poor mental health.³ Research reports have highlighted consistently high rates of suicide, depression, anxiety disorders, substance use and self-prescribing.³ Doctors do not report these problems early enough as a result of stigma, the culture of "always coping", fear about damaging job prospect, and uncertainty about who to tell.^{4,5} They have been reported to neglect their own health, find it difficult to admit that work is stressful, have abnormal coping strategies such as drinking or drug-related problems and not to seek help for these problems.^{4,6}

The fear of labelling due to general suspicion, prejudice about psychiatric disorder within society and counter accusation for character defamation might possibly be the reasons for low level of mental health assessment of colleague doctors.⁷ Certain occupational and personal risk factors have been associated the mental health problems of doctors.^{1,2}

Work may generate emotional, mental and/or physical disturbances in some people. The quality and nature of these experiences may have major health implications. Demanding or frustrating work or an inability to cope with stressors at work can have various short and long-term effects.⁸ These effects could be physical, mental or physiological (e.g. increased blood pressure, cardiovascular diseases), psychological /emotional (e.g. tenseness, anxiety disorders) or behavioural (e.g. alcohol abuse).⁸

The modern medical workplace is stressful in outlook.⁹ Stress also arises from long hours, constantly caring for ill people, facing death of people they have come to know, and knowing that their occupation carries enormous responsibility and that people's lives depend on them.^{9,10,11} Stress and burnout among health care professionals, including doctors and nurses, are among the highest of

all professions.^{10,12} The prevalence of stress among the general working population is around 18%, while among doctors it is 28%.¹¹ Doctors caring for terminally and chronically ill patients seem to be worse off.¹³

The sources of stress among medical practitioners vary with the type of medical practice and specialty. Other potential factors include fatigue, high demands on time interfering with doctors' other responsibilities, work conflicting with doctors' personal lives, dealing with emergencies, uncertainty and fear of error, patient consumerism, increasing demands from patients, financial pressures, information overload, administrative work and personality.^{9,10,11} Such situations faced by Physicians can be compounded/complicated by factors present in the individual.¹⁴

Stigmatising attitudes of medical professionals towards colleagues with mental health conditions, lack of confidentiality/privacy, concerns about career progression, potential impacts on patients and colleagues, embarrassment and concerns regarding professional integrity have all been identified as barriers to disclosure.³ Also the reported negative attitude of many doctors towards fellow practitioners with depression, may prevent those with mental health symptoms from seeking help or support from colleagues.³

A Nigerian study reported that 4.1% of the study population of doctors were hazardous users of alcohol while 12.0% were moderate users.¹⁵ Aside drinking or drug-related problems, suicide rates, though under-reported, also appeared high among: female doctors, Anaesthetists, General Practitioners (GPs), Psychiatrists, Young medical graduates and those working in rural/remote areas.^{3,16,17}

Thus, job stress, burnout and mental ill health can lead to medical errors, poor judgement, poor interpersonal/inter-professional relationships and poor quality care.^{18,19,20,21}

The study Prevalence of psychiatric morbidity among medical practitioners in an urban town in Nigeria was embarked upon

considering the very important role Doctors play in the health sector.

METHODOLOGY

Onitsha is a metropolitan city, known for her river port and an economic hub strategically located on the eastern bank of the river Niger across the Niger Bridge, in Anambra State, South-Eastern region of Nigeria.

It has a rapidly growing population said to be approaching a million. Infrastructure has however not kept pace with urbanization and haphazard building practices without regulations has created a mainly chaotic and congested city.

Nigerian Medical Association (NMA) Onitsha zone presently has a total of 209 registered members comprising 199 males and 10 females. About 160 of these members are active and attend meetings/functions especially the clinical meetings and the continuous Professional Development Programmes. Many female doctors in Onitsha are not registered with NMA probably because they do not practice medicine.

This was a cross sectional study conducted among Medical Practitioners residing/working in Onitsha town. Questionnaires were distributed to 56 Medical practitioners who were present at Nigeria Medical Association (NMA) Onitsha zone organized Continuous Professional Development Programmes (CPD) lecture held at NMA secretariat building general hospital Onitsha on the 8th of March 2015. Permission for the study was granted by NMA Executive Onitsha zone and Doctors, who participated, gave consent.

Self-administered semi-structured questionnaire designed by the authors, General Health Questionnaire version 12 (GHQ-12) and Depression, Anxiety and Stress Scale version 21 (DASS-21) were distributed to 56 participants via convenience method.

The Semi structured questionnaire contained information on socio-demographic data such as age, sex, marital status and rank. Clinical parameters like history of prior visit to the psychiatrist, any form of work related

problem, number of years in practice, average number of hours spent weekly at work, ownership of hospital and type of practice.

General Health Questionnaire-12 (GHQ-12)

The General Health Questionnaire (GHQ) was introduced by Goldberg in 1978.²² It is widely used and has four versions based on the number of items; GHQ-60, GHQ-30, GHQ-28 and the shortest version GHQ-12. The 12-Item General Health Questionnaire (GHQ-12) is the most extensively used. It is a screening instrument for common mental disorders and general measure of psychiatric well-being. Its brevity makes it attractive for use in busy clinical settings, as well in settings in which patients need help to complete the questionnaire.²³

A Malaysian study by Ibrahim N, *et al.* identified three factor domains in GHQ-12 scale which were found to be reliable, with moderate to high internal consistency and Cronbach's coefficients of 0.82, 0.73 and 0.61, respectively.²⁴ The internal consistency of the original French translation of GHQ-12 was (0.78) and many research findings throughout the world show that it has satisfactory reliability.²⁵

The 12-Item General Health Questionnaire (GHQ-12) consists of 12 items, each one assessing the severity of a mental problem over the past few weeks.²² Each item is accompanied by four responses, typically being 'not at all', 'no more than usual', 'rather more than usual' and 'much more than usual'. There are two recommended methods for scoring the GHQ. The customary types of scores used are a bimodal/binary scale (0-0-1-1) and a 4-point Likert-type scale (0-1-2-3). Using the binary scoring method the 28 and 30 items versions classify any score exceeding the threshold of 4 as achieving 'caseness' while the threshold is 3 for the 12-item version.

Depression, Anxiety and Stress Scale - 21 Items (DASS-21)

Developed by Lovibond and Lovibond and has 42-items in addition to a short version, the DASS-21.²⁶ It is a self-report instrument with 3 scales designed to measure the emotional

states of depression, anxiety and stress. Each of the three DASS-21 scales contains 7 items, divided into subscales with similar content. The depression scale assesses dysphoria, hopelessness, devaluation of life, self-deprecation, lack of interest / involvement, anhedonia and inertia. The anxiety scale assesses autonomic arousal, skeletal muscle effects, situational anxiety, and subjective experience of anxious affect.

Reliability of the three scales is considered adequate and test-retest reliability is likewise considered adequate with .71 for depression, .79 for anxiety and .81 for stress.²⁷ Exploratory and confirmatory factor analyses have sustained the proposition of the three factors ($p < .05$).²⁷ The DASS anxiety scale correlates .81 with the Beck Anxiety Inventory (BAI), and the DASS Depression scale correlates .74 with the Beck Depression Scale (BDI).²⁷

The stress scale is sensitive to levels of chronic non-specific arousal. It assesses difficulty relaxing, nervous arousal, and being easily upset / agitated, irritable / over-reactive and impatient. Scores for depression, anxiety and stress are calculated by summing the scores for the relevant items and multiplying by 2 before totalling. Scoring is based on Likert scale 0, 1, 2 or 3 which indicates how much the statement applied to the person over the past week. The rating scale is as follows: 0- Did not apply to me at all, 1- Applied to me to some degree, or some of the time, 2- Applied to me to a considerable degree or a good part of time, 3- Applied to me very much or most of the time

Data obtained was checked for completeness, coded, entered into computer analytical software SPSS version 19 and presented using descriptive statistics.

RESULTS

Table 1: Age, gender, marital status, type of practice and rank (n = 52)

	N (%)
AGE (YEARS)	
25 - 34	4 (7.7)
35 - 44	8 (15.4)
45 - 54	8 (15.4)
55 - 64	29(55.8)
≥ 65	3 (5.8)
GENDER	
Male	51(98.1)
Female	1 (1.9)
MARITAL STATUS	
Married	43(82.7)
Single	6 (11.5)
Widowed	3 (5.8)
TYPE OF PRACTICE	
Private	29(55.8)
Public	7 (13.5)
Combination	16(30.8)
RANK	
Consultant	9 (17.3)
Registrar	2 (3.8)
Principal Medical Officer	10(19.2)
Medical Officer	9 (17.3)
Missing	22(42.3)

Table 2. Years of practice, hours of work, hospital ownership, work related problem and history of psychiatric visit (n = 52)

	N (%)
NUMBER OF WORK YEARS	
1 - 10	
11 - 20	
21 - 30	8 (15.4)
31 - 40	3 (5.8)
≥ 41	18 (34.6)
AVERAGE HOURS OF WORK PER WEEK	
30 - 59	22 (42.3)
60 - 89	1 (1.9)
90 - 119	23 (44.2)
≥ 120	25 (48.1)
OWNERSHIP OF HOSPITAL	
Yes	2 (3.8)
No	2 (3.8)
ANY WORK RELATED PROBLEM	
Yes	22 (42.3)
No	30 (57.7)
ANY HISTORY OF VISIT TO THE PSYCHIATRIST	
Yes	21 (40.4)
No	31 (59.6)
ANY HISTORY OF VISIT TO THE PSYCHIATRIST	
Yes	21 (40.4)
No	31 (59.6)
ANY HISTORY OF VISIT TO THE PSYCHIATRIST	
Yes	52 (100.0)
Nil	Nil

Table 3. DASS Depression Scale Scores (N = 52)

	N (%)
Normal (0 - 9)	45 (86.5)
Mild (10 - 13)	5 (9.6)
Moderate (14 - 20)	1 (1.9)
Severe (21 - 27)	1 (1.9)

Table 5. DASS Stress Scale Scores (N = 52)

	N (%)
Normal (0 - 14)	45 (86.5)
Mild (15 - 18)	2 (3.8)
Moderate (19 - 25)	4 (7.7)
Severe (26 - 33)	1 (1.9)

Table 4: DASS Anxiety Scale Scores (N = 52)

	N (%)
Normal (0 - 7)	35 (67.3)
Mild (8 - 9)	10 (19.2)
Moderate (10 - 14)	6 (11.5)
Severe (15 - 33)	1 (1.9)

Table 6: GHQ 12 Scores (N = 52)

	N (%)
Non case (less than 3)	52 (100.0)
Case (3 and above)	Nil

Table 7. Correlation between DASS scores and some variables

	DASS DEPRESSION SUBSCALE SCORE r-value, p-value	DASS ANXIETY SUBSCALE SCORE r-value, p-value	DASS STRESS SUBSCALE SCORE r-value, p-value
AGE	.068, .630	.056, .692	-.054, .705
GENDER	-.048, .733	-.087, .539	-.052, .715
NATURE OF PRACTICE	-.251, .073	-.132, .351	-.246, .079
RANK	-.036, .800	-.177, .210	-.128, .366
NUMBER OF YEARS IN PRACTISE	.041, .773	.091, .520	-.096, .500

DISCUSSIONS

Fifty two completed questionnaires were retrieved out of 56 giving a response rate of 92.9%. Nearly all the doctors that participated were males (98.1%). The mean age of the respondents was 53.65years \pm 11.48 with age range of 26 - 71 years. Most (82.7%) of the respondents (n=43) were married. More than half (55.8%) were in private practice with nearly a third (30.8%) combining it with public service. Nearly half (42.3%) had worked for 31 - 40years and a third (34.6%), 21 - 30years.

Almost half (48.1%) work for an average of 60 - 89 hours per week and 44.2%, 30 - 59 hours. Twenty two of the doctors (42.3%) own hospitals, twenty one (40.4%) had work related problems but none ever sort psychiatric consultation. Less than one fifth (13.4%) screened positive on DASS depression scale and stress scale with

varying severity while 32.6% screened positive on the anxiety scale. Co-relational analysis done did not show any statistical significance when some variables were compared to scores on the DASS subscale scores (Table 7).

A study carried out in Ilorin North-Central Nigeria using GHQ 12 reported a prevalence of 14.9% psychiatric morbidity among doctors.²⁸ This is higher than the Nigerian general population prevalence of 12.1%.²⁹ In the United Kingdom, the prevalence of psychiatric morbidity among doctors in the NHS was 18.1% compared with 17.8% of people in the general population.³⁰ Grassi and Magnani reported morbidity levels of 20.3% and 24.6% among Italian general practitioners and hospital physicians, respectively.³¹

Oridota, *et al.* reported that stress level among Doctors in their study was high as

nearly half of the respondents (48.7%) were stressed with 6% of the respondents severely stressed.³² A similar study conducted in Mafikeng health region in North West province of South Africa revealed prevalence of 50.7%.³³ However, some studies have also reported lower levels of stress among doctors.³⁴ The report by McManus that job stress was associated with emotional exhaustion and psychiatric morbidity, is in tandem with the view expressed in the interactional model of stress i.e. stress at work resulted in poor mental health.^{35,36,37}

The lifetime prevalence of depression among physicians is 13% in men and 20% in women; these rates are comparable to those of the general population.³⁸ A Nigerian study by Aguocho, *et al.* on the prevalence of depression among resident Doctors using depressive module of Mini-International Neuropsychiatric Interview (M.I.N.I) reported a rate of 17.3% and 1.3% among resident and non-resident doctors respectively.³⁹

Though no case (threshold 3 and above) was recorded on the GHQ 12 total score, there were pockets 1 and 2 total scores across different items. Six participants scored 1 each on the 5th item of GHQ 12 (felt constantly under strain?). Both GHQ 12 and DASS 21 are screening instruments and were self-administered. Reliability may be a concern, as some participants may lack insight, exaggerate or mask symptoms when completing such scales. Observer and self-rated scales could have been used together to minimize bias and identify symptoms that might have been missed/not addressed. Also consideration was only given to GHQ 12 total score unlike DASS 21 where the subscales stood separately.

Watts suggested that doctors tend to be secretive and reluctant to disclose mental health problems.⁴⁰ It may be that doctors are worried about confidentiality, with anxieties about this often leading to minimisation and even denial of symptoms.⁴¹ A study of doctors' attitudes to becoming mentally ill in which respondents were asked who they

would disclose to if they were to become mentally ill and factors that influence decision, reported that about 73.4% of 2462 respondents said they would disclose a mental illness to a friend or family member rather than a professional.⁴²

By implication, since doctors with mental health issues have difficulty disclosing their problems to others, other doctors are also uncertain of initiating assessment of fellow doctors for mental ill health.⁷ This has once necessitated why a study posed a question that "if we cannot overcome our own reluctance to face and accept the reality of psychological illness, what hope is there for the rest of the society?"⁷

Limitations

The study is limited by the small sample size, difficulty making direct comparisons to other works due to differences in methodology. Also this study being questionnaire based is subjective in nature. Self-reporting can sometimes give room to inaccurate information influenced by extent of respondent's willingness to give correct responses. Moreover, the questionnaires were distributed at a public occasion which lacked privacy and had a mixture of doctors from different work backgrounds.

CONCLUSION

There is likelihood of mental health/psychological ill health among some participants based on scores of the screening instruments. Anxiety, depression and stress appear to be more common morbidities in this study. Contradictory reports with varying figures about the prevalence of mental ill health among Doctors compared to general population exist in literatures. Serious attention should be given to proven work situations known to increase stress and other factors known to promote the risk of developing mental health problems among doctors. Truthful self-reporting may occur if conditions that encourage those mentally unwell to seek appropriate care are created.

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