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Screening for psychiatric symptoms in a general outpatient clinic in Lagos, Nigeria: The need for a psychiatric evaluation

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ABSTRACT

Background: This study was aimed at determining the levels of anxiety, depression and psychological distress among patients presenting for the first time to the general outpatient department at a teaching hospital in Lagos, Nigeria. **Methods:** Participants were randomly selected while waiting to see the medical officers at the general outpatient department of Lagos University Teaching Hospital, Ikeja, Lagos, Nigeria. They were screened with twelth version of the General Health Questionnaire (GHQ-12), Self-rating Depression Scale (SDS) and State-Trait Anxiety Inventory (STAI). **Results:** There were more female participants 178 (53.4%) and about half of them were single 179 (57.9%). The age of the participants ranged from 12 - 92 years with a mean of 32.2 + 13.6. Of the total participants, 210 (67.9%) manifested with probable psychological distress, 145 (46.9%) manifested with anxiety and 49 (15.7%), 10 (3.2%0 and 19 (6.1%) suffered from mild, moderate and severe depression respectively. Psychological distress among participants was significantly associated with anxiety ($P < 0.05$). Anxiety was statistically significantly associated with depression ($P < 0.05$). Thus, participants who had anxiety were more at risk of being depressed. **Conclusions:** There is a need for active collaboration between the mental health team and the medical officers working at the general outpatients' department and primary healthcare settings due to the high levels of psychopathology seen at these settings. We therefore suggest that medical officers working at these setting acquire the skills of mental health screening and evaluation.

KEY WORDS: Anxiety, department, depression, general outpatients, Nigeria, psychological distress, screening

INTRODUCTION

Previous empirical studies indicated that a significant number of patients seen at the general outpatients department (GOPD) present with various types of common mental disorders. The comorbidity between psychopathologies such as anxiety, depression, psychological distress, and physical disorders have also been published previously [1,2]. These mental health conditions have been reported to make significant contribution to the burden of disease and disability in the low and middle-income countries and were observed to be responsible for about 13% of total global disease burden [3,4]. Published evidence showed that 20-45% of visitations to the primary care clinics were attributed to mental health disorders [5,6]. However, the inabilities and difficulties encountered by medical officers and family physicians at the GOPD and primary healthcare settings in recognizing these psychopathologies have also been documented [7,8]. The identified factors found to be responsible for the inability of primary healthcare clinicians

to recognize psychopathologies include inadequate training in psychiatry while in medical schools and limited exposure of residents in internal and family medicine departments to psychiatry during postgraduate training [9]. In the light of this, one study recently demonstrated that only 24% of psychiatric cases were detected in a primary care clinic as compared to 69% found by psychiatrists in the same setting [10]. The possible risk factors that may increase the likelihood of comorbidity between physical conditions and mental health disorders include the female gender, low socio-economic status, low capital, hypertension, diabetes, low back pain, low education, unemployment, substance use and chronic physical conditions [2,6,11]. In the likelihood of comorbidity between physical conditions and mental health disorder, such comorbidity could worsen the physical illness, make it chronic, delay recovery time, and possibly prolong hospital stay [7]. In the Western countries, the primary care settings were reported to use simple screening instruments such as the general health questionnaire (GHQ) to screen for common psychopathologies in busy clinics and since previous studies indicated global increase in psychiatric disorders at the primary care levels, it can be hypothesized that Nigerians presenting at the GOPD of a teaching hospital in Lagos State with a population of about 18 million people will also manifest with various degrees of psychopathologies. Published papers on psychopathologies at the primary health care centers in Nigeria are scanty, and the ones available were carried out many decades ago [9,31]. The need to carry out a more recent study on the psychiatric morbidity among patients attending the GOPD of the Lagos State University Teaching Hospital, (LASUTH), Ikeja, Lagos, that serves as a primary, secondary and tertiary levels of care cannot be over justified. This study was therefore aimed at determining the levels of anxiety, depression and psychological distress among patients presenting for the first time to the GOPD at a teaching hospital in Lagos, Nigeria.

METHODS

Study Location

The study was a cross-sectional descriptive survey. It was carried out at the general outpatient department (GOPD) of the LASUTH, Ikeja, Lagos, Nigeria. The hospital is one of the two teaching hospitals in Lagos. It receives an average of 10,000 patients daily due to its location at the capital of Lagos State. The average estimate of 150 patients is seen at the outpatient department daily. The permission to carry out this study was sought from the Research and Ethics committee of LASUTH. Written consent was also obtained from each participant who took part in the study. Consenting participants were invited into an adjoining room close to the consulting room to fill the instruments while waiting for their turn to see the medical officers at the GOPD. The participants that were recruited for this study were randomly selected while waiting to see the medical officers at the GOPD of LASUTH. The inclusion criteria were patients who were not too ill and able to complete the instruments.

Measures

The participants were asked to complete a set of psychometric instruments that consisted of a proforma form that collected their sociodemographic details, twelfth version of the GHQ-12 [12], state-trait anxiety inventory (STAI) [13], and the self-rating depression scale (SDS) [14].

GHQ-12

The twelfth version of the GHQ-12 is a self-administered questionnaire noted for identifying non-psychotic and minor psychotic disorders to help inform further intervention. It is a measure of current mental health and sensitive to short term psychiatric disorders. It focuses on two major areas - The inability to carry out normal functions and the appearance of new and distressing experiences. Each item is rated on a 4 point scale, and it takes an average of 5 min to complete. Scoring is done using the bi-modal (i.e. 0-0-1-1) answer responses. The bimodal scoring gives a range of 0-12. The GHQ-12 has been validated as a good screening tool in Nigeria in various clinical settings. It has a cut-off Score 2 [15]. Thus, a score of three and above is indicative of probable psychiatric morbidity.

STAI

The STAI Y-1 was designed to measure state anxiety which is a momentary or transitory or situation specific emotion characterized by feelings of tension, apprehension and autonomic nervous system arousal. The norm for STAI Y-1 is 33.59. Scores above this norm signify anxiety in the individual. The STAI Y-1, has been validated and previously used in hospital and community-based studies in Nigeria [16].

SDS

The SDS is a 20-item inventory designed to assess the cognitive, affective, psychomotor, somatic and social, interpersonal dimensions of depression. The normative cut-off scores are 50-59, mild depression, 60-69 moderate depression and 70-80 severe depression. This tool has also been validated and used extensively in Nigeria [17].

Statistical Analysis

The Statistical Package for Social Sciences version-16 (SPSS, Chicago, IL, USA) was used to analyze the data collected. Continuous variables were expressed as means, standard deviation and range while categorical variables as proportions. Comparisons of categorical variables were done using chi-square and the means using the Student's *t*-test. $P < 0.05$ was considered to be statistically significant (confidence level = 95%).

RESULTS

The results showed that there were more female participants 178 (53.4%) and about half of them were single 179 (57.9%). The age of the participants ranged from 12 to 92 years with a

mean of 32.2 ± 13.6. While more than half of the participants 183 (59.2%) had attained tertiary education, majority of them 138 (63.1%) were also employed. A large majority of the participants 263 (85.1%) were Christians. About one-third of them 113 (36.5%) reported that they were receiving treatment for other medical conditions. However, 106 (34.3%), 99 (32.0%) and 89 (28.8%) were within the <N15,000, N16,000-N39,999 and N40,000 and N69,000 monthly income respectively as reflected in Table 1. Table 2 shows that 210 (67.9%) manifested with probable psychological distress as assessed with the GHQ-12. The assessment by STAI showed that 145 (46.9%) of the participants manifested with anxiety while the SDS revealed that 20 (6.4%), 10 (3.2%) and 19 (6.1%) suffered from mild, moderate and severe depression respectively. Psychological distress among participants was significantly associated with anxiety ($P < 0.05$). Thus, those who were psychologically distressed were more likely also to develop anxiety symptoms. The binary logistic models that predicted anxiety, depression and psychological distress in relation to sociodemographic characteristics showed that anxiety was statistically significantly associated with psychological distress (odd's ratio [OR] = 0.17, $P < 0.001$) and depression (OR = 0.32, $P = 0.004$). Similarly, psychological distress was statistically significantly associated with anxiety (OR = 0.17, $P < 0.001$). Depression was also found to be statistically significantly associated with anxiety (OR = 0.34, $P = 0.005$) as reflected in Table 3.

Table 1: Socio demographic characteristics of patients

Characteristic	Frequency (n=309)	Percentage
Gender		
Male	131	42.4
Female	178	57.6
Education		
None	6	1.9
Primary	27	8.7
Secondary	93	30.1
Tertiary	183	59.2
Marital status		
Single	179	57.9
Married	118	38.2
Divorced	5	1.6
Separated	3	1.0
Widowed	4	1.3
Employment status		
Unemployed	101	32.7
Employed	195	63.1
Retired	13	4.2
Religion		
Christianity	263	85.1
Islam	46	14.9
Income		
<N15,000	106	34.3
N16,000-N39,999	99	32.0
N40,000-N69,000	89	28.8
N70,000-N99,999	9	2.9
≥N100,000	6	1.9
Treatment for other medical conditions		
Yes	113	36.5
No	196	63.4

Table 2: Rates of psychiatric morbidity among the participants

Psychological status	Frequency	Percentage
Psychological distress >2		
Yes	210	67.9
No	99	32.1
Anxiety		
Yes	145	46.9
No	164	53.1
Depression		
None	260	84.1
Mild	20	6.4
Moderate	10	3.2
High	19	6.1

DISCUSSION

This study sought out to determine the rates of psychiatric morbidity among first-time attendees of general outpatient clinic of a teaching hospital in Lagos, Nigeria. The findings of this study revealed that 210 (67.9%) suffered from probable psychological distress, 145 (46.9%) manifested with anxiety and 49 (15.7%) suffered from mild, moderate and severe depression respectively. These findings appear to be similar to findings from other countries. With regards to the finding on psychological distress, a rate of 17.1% was reported in South Africa [1], 51% in India [18], 41.2% among Jews and 70.8% among the Arabs [19]. In the same vein, similar findings were reported with regards to anxiety a prevalence of 29% was found in Lesotho [20], 38.1% in China [21], and 51% in the USA [22]. With regards to depression, a rate of 15.7% was detected among the participants of this study. This rate can also be compared with results from other low and middle-income countries. For example 17.6% was recorded in China [21], 23% was found in Lesotho [20], a significant high rate of 80% in Pakistan [23], 23.1% in Italy [24], and 71.4% in Japan [25]. One probable reason why the findings in these countries were found to be high could be due to the explanations by Kroenke [7] and Simon *et al.* [26], noted that between 70% and 90% of patients who report at various GOPD and primary care settings with anxiety or depression complain of somatic symptoms such as muscle tension, poor sleep, general debility of the body rather than psychological symptoms such as "I am feeling depressed," or "I am feeling anxious." These authors, therefore, concluded that regardless of culture, somatization is one modal way patients with anxiety and depression often present at the primary care settings. Patients were also found to deny symptoms that justify psychiatric diagnoses most especially that of depression [2,6]. This was reported to make the recognition; detection and diagnosis of psychiatric morbidity to be lower than expected [26,27]. Likewise, these varying degrees of observed psychiatric morbidities and symptoms from various countries could also be due to differences in race, tradition, culture and possibly the different types of psychometric instruments, material and methods used in assessing the prevalence of psychopathologies in study groups.

Despite these high figures, it was also observed that medical officers at various GOPD and primary health care settings do

Table 3: Binary logistic model predicting depression, anxiety and psychological distress by socio-demographic characteristics, depression, anxiety and psychological distress

Variable	OR			Confidence interval (95%)			*P* value		
	Depression	Anxiety	Psychological distress	Depression	Anxiety	Psychological distress	Depression	Anxiety	Psychological distress
Age	0.99	0.99	0.99	0.96-1.03	0.97-1.03	0.96-1.02	0.960	0.956	0.324
Male	072	1.34	1.76	0.36-1.46	0.77-2.33	0.97-3.17	0.367	0.303	0.062
Education									
None	0.12	2.16	2.98	0.02-0.82	0.28-16.53	0.33-27.04	0.031	0.458	0.333
Primary	0.51	1.41	2.08	0.14-1.90	0.43-4.62	0.59-7.40	0.313	0.572	0.257
Secondary	1.38	1.62	1.30	0.54-3.56	0.78-3.35	0.59-2.89	0.505	0.196	0.520
Marriage									
Single	0.87	0.22	7×10^{8}	0.04-17.87	0.02-3.02	0-∼	0.927	0.26	0.99
Married	0.59	0.33	8×10^{8}	0.04-9.93	0.03-3.95	0-∼	0.711	0.38	0.99
Divorced	0.40	0.05	4×10^{9}	0.01-15.43	0.01-1.67	0-∼	0.621	0.09	0.99
Separated	0.25	0.31	5×10^{9}	0.01-11.69	0.01-17.13	0-∼	0.481	0.56	0.99
Employment									
Unemployed	0.28	1.61	1.46	0.03-3.02	0.32-8.11	0.20-10.73	0.292	0.561	0.707
Employed	0.25	1.26	2.31	0.03-2.59	0.27-5.89	0.33-15.97	0.247	0.770	0.397
Christianity	0.54	2.21	1.80	0.19-1.52	1.03-4.75	0.75-4.32	0.239	0.052	0.185
Income (000)									
<15	0.68	3.26	1.32	0.07-6.90	0.45-23.64	0.12-15.03	0.741	0.24	0.823
15-40	0.87	1.48	1.71	0.09-8.73	0.21-10.58	0.15-18.99	0.905	0.70	0.662
40-70	0.81	2.75	1.66	0.08-8.14	0.38-20.09	0.15-17.98	0.859	0.31	0.678
70-100	1.06	0.89	12.14	0.05-24.50	0.07-11.20	0.64-229.16	0.970	0.93	0.096
Receiving medical treatment	0.73	1.02	0.92	0.37-1.47	0.58-1.81	0.50-1.70	0.381	0.941	0.794
Depression	-	0.32	0.98	-	0.15-0.69	0.42-2.29	-	0.004	0.956
Anxiety	0.34	-	0.17	0.16-0.72	-	0.09-0.33	0.005	-	<0.001
Psychological distress	0.95	0.17	-	0.42-2.18	0.09-0.32	-	0.909	<0.001	-

OR: Odds ratio

not recognize these psychopathologies. For example, Asibong *et al.* [2] noted that despite the findings of high prevalence of psychopathological morbidity of 46.6% in their study center, only 6.8% of comorbidity were recognized by the attending physicians. In view of these aforementioned discussions, the comorbidity of physical disorders and psychiatric disorders or symptoms were reported to significantly reduce quality of life of patients, worsen prognosis, increase medical cost, decrease response to treatment and may also lead to chronicity [1,3,4]. Due to the observed high rates of psychopathology at these settings, it has been suggested that there should be periodic screening of psychiatric symptoms or disorders with simple psychometric instruments in order to monitor and manage physical disorders of patients with psychiatric comorbidity [11,30]. In the light of this, early detection of psychopathology could be cost effective, prevent expensive diagnostic laboratory investigations and procedures often prescribed for patients with unrecognized comorbidity [7,28-30]. Some other reported factors that contribute to high prevalence of psychopathology at the GOPD and primary health care settings include lower economic status [11], poor psychosocial resources and poverty [19]. However, the cultural nature of Nigerians in their pathway to care and care-seeking behavior may prevent them from visiting the orthodox hospitals unless when severely disturbed physically and emotionally [27].

The implications of the study include its ability to show that symptoms of anxiety, depression and psychological distress are common findings at the general outpatients departments and primary healthcare settings especially among first time visitors to these settings. It has also been recommended in earlier studies that in situations where anxiety, depression and psychiatric distress are detected as comorbidity in individuals with physical disorders, anxiolytics, antidepressants and psychotherapy should be commenced alone or in combination to augment the applied physical therapy [7]. This observation was reported that it could lead to clinician satisfaction, reduced medical cost and patients' satisfaction with healthcare services [7]. Nonetheless, as far back as two decades ago, it was suggested that due to the commonness of psychiatric symptoms and disorders at the general outpatients departments and primary care settings, the period of undergraduate psychiatric postings in medical schools should be increased. Likewise, residents in training at the family and internal medicine departments should also spend some months of training at the psychiatry department [9].

CONCLUSION

Given the high prevalence of psychiatric morbidity in patients presenting for the first time at the general outpatient clinic, mental health screening and evaluation with simple psychometric screening instruments such as the GHQ and center for epidemiologic studies depression scale short form are suggested. There should be active collaboration between the family physicians and the mental health team in order to apply brief psychological therapies for identified patients with psychiatric symptoms at the general outpatients' clinic. There is a need for family physicians, medical officers and general practitioners to acquire the skills of recognizing and managing common mental health disorders.

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