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Public Awareness and Attitude Towards Depression: A Community Based Study Among an Adult Population in Ile-Ife South-Western Nigeria

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Abstract
Depression has become a global health priority due to its associated burden. However, there is dearth of information regarding the public awareness and attitude towards depression in Nigeria. This study aimed to assess the level of public awareness and attitude towards depression in a semi-urban Nigerian community. A cross-sectional study conducted among 240 respondents with mean age of 34.7 years (± 1.2 years). A questionnaire assessed socio-demographic characteristics, level of awareness and attitude of people towards depression. While most respondents (72.5%) had heard about depression, it was less recognized as a major mental health problem. Also, most respondents (58.6%) had negative attitudes toward depression. There is low level of awareness of depression as a major health problem among community dwellers in South-western Nigeria and negative attitudes towards the illness also appear prevalent. Therefore, awareness should be improved through public health enlightenment programmes.

Keywords Awareness · Public · Attitude · Depression · Nigeria

Introduction

Public attitude towards mental illness and mentally ill people has been the subject of scientific investigation for decades. Generally attitudes are formed through a process of individual subjective evaluation, involving a rational assessment of costs and benefits, but also influenced by affective and emotional responses and related beliefs. Limited knowledge and inaccurate beliefs about mental illness have been found to sustain ingrained negative attitudes towards the mentally ill (Gureje et al. 2006). On the other hand, better knowledge has been shown to be associated with improved attitudes towards people with mental illness (Stuart and Arboleda-Florez 2001).

Public attitude data can be used to identify individual differences within target groups in the community which can be used to provide different interventions for different groups in that community. Studies from Western Europe and Northern America have reported that stigmatizing attitude towards individuals with mental health problem is prevalent (Crisp et al. 2000; Jorm et al. 1999; Salter and Byrne 2000; Thiru and Yad 2005). Similarly in Africa, the attitude towards mental illness is generally negative (Ndetei et al. 2011, St. Louis and Roberts 2013). Studies conducted in Nigeria concerning knowledge and attitude towards mental illness reported that poor knowledge and negative attitudes about mental illness pervade all segments of the community (Adewuya and Makanjuola 2009; Collins et al. 2011; Gureje et al. 2005; Kabir et al. 2004; Moussavi et al. 2007; Ukpong and Abasiubong 2010). Despite the pervasive nature of negative attitudes toward mental illness, there is evidence that public perceptions vary across the different psychiatric diagnoses (Parle 2012). Hence, exploring the public attitudes toward specific mental illness such as depression in Nigeria would be beneficial in order to provide appropriate intervention. However, review of literature revealed that there is dearth of information on the awareness and attitudes of the Nigerian general public toward individuals with depression.

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Depression is a poorly understood condition by the general public (Aromaa et al. 2011). Patients with depression are often treated with stigma in society and as a result, individuals at-risk often refrain from seeking proper medical care. Some studies have shown that about half of the general public perceive people with depression as weak, responsible for their own condition and unpredictable, and about a quarter consider them to be dangerous (Aromaa et al. 2011; Wang and Lai 2008). Factors associated with negative attitudes toward depression are older age, low literacy or familiarity with mental illness, male gender and lower educational level (Aromaa et al. 2011; Connery and Davidson 2006; Griffiths et al. 2008).

Increasing public awareness of depression as a preventable and treatable illness is an essential element of increasing the number of individuals with depression who seek and receive treatment. Erroneous beliefs about causation and lack of adequate knowledge about depression have important consequences for prevention of depression (Gureje et al. 2006). It can lead to delays in help seeking, hinder acceptance of evidence based interventions and eventually leading to depressed people not receiving appropriate support from others in the community (Parslow and Jorm 2002).

In the developed countries, different programmes have been initiated to change false assumptions, improve public awareness and increase the public's knowledge about depression. Among them are the Defeat Depression Campaign in the United Kingdom (Dietrich et al. 2010); the 'beyond blue' initiative in Australia (Aromaa et al. 2011) and the 'Nuremberg Alliance against Depression' in Germany (Wang and Lai 2008). However, there is no such program to alter public attitudes toward depression in Nigeria. To develop such program that will help in reducing negative public attitudes toward depression in Nigeria, a baseline community survey is expedient. Our study aimed at evaluating the level of public awareness and attitudes toward people with depression in adults living in Ile-Ife, South-western Nigeria.

Ethical Clearance

Ethical approval for the study was requested and granted by the Ethical and Research Committee of Obafemi Awolowo University Teaching Hospitals Complex, Ile-Ife and permission was also obtained from the Ife Central Local Government Authority. Consent was obtained from the subjects after the aim of the study had been explained to them.

Materials and Methods

Study Design

The study used a descriptive cross-sectional design.

Study Area

The study was conducted in Ife Central Local Government Area (LGA) of Ile-Ife, Osun State, Nigeria. Ile-Ife is an ancient city in south-west Nigeria with a population of approximately 167,204 which is further divided into 11 smaller districts referred to as 'wards' (National Population Commission 2009). Ile-Ife is considered the ancestral home of the Yorubas of south-western Nigeria. Though the city is in the Yoruba-speaking part of Nigeria, it is home to people from different ethnic groups, many of whom were attracted by the educational, medical, commercial and farming activities.

Sample Size Estimation

The sample size for this study was estimated based on the previous study conducted in Nigeria with similar methodology (Kabir et al. 2004). This figure (250) was increased to 275 (10% added to make up for possible incomplete data).

Study Population

Inclusion criteria were individuals aged between 18 and 64 and must have been residing in the study area for more than 6 months. Exclusion criteria were presence of organic brain diseases (such as epilepsy and mental retardation) and inability to understand the questionnaire due to language problem.

Sampling Method

The study location, Ife Central LGA, was purposively selected among the 30 LGAs in the state. All of the 11 wards within the LGA were selected and each ward contains between 6 and 8 communities. One community was randomly selected from each of the ward by balloting. 25 adults were randomly selected from each community. House selection was done by systematic random sampling in which the first house was selected from the streets through a random sampling technique and every other third house was selected subsequently. In the houses, only one individual who met the inclusion criteria and was interested in the survey was selected.

Study Questionnaire

A 22-item questionnaire was extracted from the questionnaire employed in the International Depression Literacy

Survey (IDLS) (Hickie et al. 2007). The IDLS was developed by the Brain and Mind Research Institute and has been used in several projects (Hickie et al. 2007). It has seven parts which assesses: demographics; major health problems of Australia; help and treatment; information-seeking about depression; perceived need; attitudes towards depression and some standardised questions such as the Kessler Psychological Distress Scale (K10) which assesses participants' levels of distress. Since the IDLS was originally designed for use in the countries and cultures of the Asia Pacific Region, we modified it to meet the Nigerian context. The 22-item questionnaire was translated from English into Yoruba language, reviewed by a group of health professionals for appropriateness of language and back translated into English for verification. The questionnaire was pretested among ten respondents (five males and five females; age range between 20 and 45 years) who were randomly selected from the community but were excluded from the main study. They were asked for their views on the simplicity and understanding of each question and to identify which question they would like to be removed. The questionnaire was interviewer administered and consisted of two parts: the first part consist of demographic information while the second part evaluated the respondent's awareness and knowledge about depression and attitude towards people with depression. The demographic variables considered were age, sex, marital status, religion, ethnicity, highest level of formal education and current occupational status. The second part was further subdivided into two sections: (i) awareness of depression and knowledge of symptoms of depression; (ii) Attitude towards people with depression.

The first section assessed the awareness of depression and knowledge about symptoms of depression using five questions such as open ended questions like what do you consider to be the major health problems and major mental health problems in Nigeria? Also, respondents were asked if they have heard about depression, the sources of the information and to list symptoms of depression. The second section evaluated respondents' attitudes toward people with depression using ten item attitude to people with depression scale. Four questions were positively worded (e.g. "people with depression are often artistic or creative people when they are well") while six questions were negatively worded (e.g. "people with depression are dangerous to others"). It measures the extent to which respondents agree or disagree to statements and rate each question on a five point likert scale ranging from "strongly disagree", "disagree", "agree", "strongly agree" and don't know. The attitude towards people with depression scale internal consistency score in this study was good with Cronbach's α of 0.865 and corrected item-total correlation ranges from 0.515 to 0.659.

Data Collection

Respondents were interviewed using the questionnaire. All interviews were conducted by four trained researchers with satisfactory proficiency in English and Yoruba languages. Privacy was also ensured during the interview as much as possible.

Data Analysis

Data entry and analysis was done using the Statistical Package for Social Sciences software (SPSS) version 20. Descriptive statistics such as percentage and frequencies were computed for categorical data while means and standard deviations for continuous data. Chi square test was used to compare for possible significant differences between respondents with positive and negative attitude towards depression. The ten questions assessing respondents' attitude does not yield a total score. For the purpose of this study, the scale was administered as recommended but a total score indicating the respondents' attitude to people with depression was calculated. "Strongly disagree" and "disagree" were collapsed to "disagree" while "strongly agree" and "agree" were collapsed to "agree". For the positively worded questions, disagree was coded as 0, agree as 2 and don't know as 1 while for the negatively worded questions, disagree was coded as 2, agree as 0 and don't know as 1 (where 0 indicated most negative attitude and 2 indicated most positive attitude). Total attitude score was then calculated by summing scores for the individual questions answered and dividing by the maximum score attainable score attainable from the questions answered. This gives a continuous scale ranging from 0 to 1 with 0 indicating negative attitude to patients with depression and 1 indicating a positive attitude. The total score was categorized into positive and negative attitudes using the median score as the cutoff point. Values greater than the median were regarded as positive attitudes whereas values equal to or less than median were regarded as negative attitudes (Qureshi et al. 2002). The Fishers Exact Test was utilized as a form of correction for tables with small cell frequencies. A p-value of less than 0.05 was regarded as statistically significant.

Result

Of the 275 respondents approached, 240 (87.3% response rate) participated in this survey. Most of the respondents were less than 45 years (75.0%) with mean age of 34.7 years (SD 1.2) and 58.3% were males. Majority of the subjects (51.2%) were married and 79.2% were Christians. Most

Table 1 Demographic characteristics of respondents

Demographic characteristics	Frequency n = 240	Percentage
Age group (years)		
19–24	53	22.1
25–34	90	37.5
35–44	37	15.4
45–54	37	15.4
55–64	23	9.6
Sex		
Male	140	58.3
Female	100	41.7
Marital status		
Single	105	43.8
Married	123	51.2
Separated/divorced	9	3.8
Widowed	3	1.2
Religion		
Christianity	190	79.2
Islam	50	20.8
Ethnicity		
Yoruba	204	85.0
Igbo	28	11.7
Hausa	5	2.1
Others	3	1.2
Educational level		
Primary	29	12.1
Secondary	83	34.6
Non University Tertiary	61	25.4
University Tertiary	67	27.9
Occupational status		
Paid work	39	16.2
Self-employed	109	45.4
Retired	5	2.1
Student	47	19.6
Unemployed	40	16.7

respondents (85.0%) were Yoruba and 87.9% had at least secondary education. Most of the respondents (45.4%) were self employed (Table 1).

Table 2 shows the health problems in Nigeria as reported by respondents. Infectious diseases (88.8%) such as HIV/AIDS, Malaria were the most reported major health problem in Nigeria. The other four most reported health problems were cardiovascular disorders (30.0%), gastrointestinal diseases (24.6%), endocrine disorders (18.8%) and Lung and chest diseases (17.9%). The last three reported health problems were accidental injuries (2.5%), mental health disorders (2.5%) and obstetrics and gynaecological disorders (2.1%). Drug abuse was the most reported major mental health problems in Nigeria. The other three most reported mental health problems were schizophrenia and other psychoses (10.4%), Dementia (6.2%) and depression (5.4%).

Table 3 shows awareness of depression, sources of information and symptoms of depression as reported by respondents. Most of the respondents (72.5%) reported that they have heard about depression. The most reported source of information about depression was the family and friends (31.2%) followed by television and radio (22.9%). The most reported psychological symptom was depressed mood (54.0%), followed by social withdrawal (29.3%) and loss of interest (25.3%). While the least reported psychological symptoms were hopelessness (0.6%) and worthlessness (0.6%). The most reported somatic symptom was appetite problems (31.6%), followed by loss of energy (28.7%) and sleep problems (18.4%). While the least reported somatic symptoms were pains and body aches (2.3%) and loss of libido (2.3%). The extent of agreement with statements regarding attitude of respondents to people with depression was summarized in Table 4 in which four statements were positively stated and six were negatively stated. Regarding the positively stated sentences, most of the respondents (75.3–79.9%) agreed with the statements. Whereas concerning the negatively stated sentences, 70 respondents (40.2%) agreed with the statement that people with depression "are dangerous to others"; 83 respondents (47.7%) agreed with "they are difficult to talk to"; 37 respondents (21.3) agreed with "they will often make good employees when they are well"; about a third (32.2%) agreed with "they often try even harder to contribute to their families or work when they are well". Also, most of the respondents (86.8%) agreed with the statement "they should pull themselves together" while only a few (2.9) agreed with "they should not have children in case they pass on the illness". The overall positive attitude towards depression was 41.4% while the overall negative attitude was 58.6%. Table 5 showed the relationship between socio-demographic characteristic and respondent's attitude to patient with depression. Age ($p = 0.018$) and occupational status ($p = 0.025$) have significant bivariate relationships with attitudes toward people with depression.

Discussion

This study assessed public awareness and attitude towards people with depression among adults residing in Ile- Ife, Nigeria. To our knowledge, this is the first study on public awareness and attitudes toward people with depression in Nigeria. This study showed that the Nigerian community had a poor perception regarding mental disorders as major health challenges. A finding replicated from previous studies (Jafri et al. 2011; Zafar et al. 2009). Infectious diseases such as HIV/AIDS attracted the greatest recognition followed by cardiovascular disorders and gastrointestinal disorders. This

Table 2 Health problems in Nigeria reported by respondents

Variables	Frequency n = 240	Percentage
Major health problems[a]		
Infectious diseases (e.g. HIV/AIDS, malaria)	213	88.8
Cardiovascular disorders (e.g. hypertension)	72	30.0
Gastrointestinal diseases (e.g. PUD, liver cirrhosis)	59	24.6
Endocrine disorders (e.g. diabetes)	45	18.8
Lung and chest diseases (e.g. TB, asthma)	43	17.9
Cancer	30	12.5
Muscle and Joint diseases (e.g. arthritis)	23	9.6
Neurological disorders (e.g. stroke)	8	3.3
Vision and hearing problem	7	2.9
Accidental injuries (e.g. RTA)	6	2.5
Mental health disorders (e.g. dementia)	6	2.5
Obstetrics and gynaecological disorders	5	2.1
Major mental health problems[a]		
Drug abuse	88	36.7
Schizophrenia and other psychoses	25	10.4
Dementia	15	6.2
Depression	13	5.4
Mania	7	2.9
Anxiety disorder	6	2.5
Childhood and adolescent disorders	2	0.8

PUD Peptic ulcer disease, *TB* tuberculosis, *RTA* road traffic accidents

[a]n is not equal to 240 on account of multiple responses

may be due to the widespread public campaign against HIV/AIDS in Nigeria which has raised public awareness of the disease. Although the 1991 Nigeria National Mental Health Policy (Federal Ministry of Health 1991) advocated the integration of mental health promotion, treatment and rehabilitation into the Primary Health Care (PHC) services, there is little or no evidence of community recognition of this concept. Therefore, a key goal for mental health initiatives will be to present mental disorders as health problems that can be treated in the primary health care setting. Similarly, the recent programme of action by the World Health Organisation is geared towards providing affordable and accessible community-based mental health services for priority mental disorders such as depression in low and middle-income countries (Abdulmalik et al. 2013). Key to the success of this programme will be the attitudes held toward depression by members of the community. If the community members are not aware of depression as a treatable illness then efforts to scale up services may likely fail.

Drug abuse was the most reported major mental health problem by the respondents in this study. This may be due to the disruptive and dramatic presentation of the disorder which makes it easy for the public to recognize it as a mental disorder. However, depression was less recognized as a major mental health problem by the respondents in this study. One possible reason for this finding is cultural factors, which may have played an important role as depression is often considered to be spiritual attack or problem rather than a mental illness. The causation of mental health problems is generally attributed to supernatural phenomena such as witchcraft and possession by evil spirits in the non-Western cultures (Razali et al. 1996). In addition, most Africans regardless of their educational background subscribe in varying degrees of belief in supernatural causation of illness or disease (Odejide et al. 1989; Ukpong and Abasiubong 2010). An alternative explanation is that the subtle presentation of the symptoms of depression makes it difficult to be recognized as a major mental illness. Some respondents in this study thought that depression is a personal failing rather than being viewed as a mental illness. While the majority of the respondents in this study reported that they have heard about depression, only a few cited depression as a major mental health problem. The implication of this is that probably members of the public do not really regard depression to be a mental disorder. Therefore, there is an urgent need to improve the community knowledge about depression. Knowledge and attitude of family and friends have strong effects on the experience of people with depression (Albarracin et al. 2005) and this study has shown that most people heard about depression from their family or friends as well as television or radio. The mass media has been used to increase the community knowledge about

Table 3 Awareness of depression, sources of information and symptoms of depression reported by respondents

Variables	Frequency n = 240	Percentage
Heard about depression		
Yes	174	72.5
No	66	27.5
Sources of information[a]		
Family members/friend	75	43.1
Television/radio	55	31.6
Health education (school)	36	20.7
Doctor/nurse	28	16.1
Books	20	11.5
Internet	3	1.7
Others	2	1.2
Symptoms of depression[a]		
Psychological symptoms		
Depressed mood	94	54.0
Social withdrawal	51	29.3
Loss of interest	44	25.3
Poor concentration	16	9.2
Suicidal ideation	14	8.0
Guilt feelings	7	4.0
Pessimistic view of future	2	1.1
Loss of self-esteem	2	1.1
Hopelessness	1	0.6
Worthlessness	1	0.6
Somatic symptoms		
Appetite problem	55	31.6
Loss of energy	50	28.7
Sleep problem	32	18.4
Weight problem	25	14.4
Pains and body aches	4	2.3
Loss of libido	4	2.3

[a]n is not equal to 174 on account of multiple responses

mental illness (Wakefield et al. 2010) and from our result, it appears that a fair number of the respondents derived their knowledge through the mass media. Therefore, educating the public about depression through the mass media will be very helpful in reducing negative stereotypes in this environment. Also, educating workers in the mass media about depression can help reduce misconceptions about the disorder. Furthermore, public education about depression may lead to early identification of the symptoms of depression and willingness to seek mental health care. Contact of the general public with individuals with mental illness has been demonstrated to reduce stigma (Corrigan and Watson 2002). Therefore, improving diagnosis and management patients with depression in our primary health centers may probably increases the chances for general public to come into contact with somebody who has depression. This can be achieved by using global initiatives such as the WHO's mental health gap action program (mhGAP) to training more health workers to improve recognition and management of depression in the primary health center.

Depression is described by a set of directly recognizable symptoms, which allow the general public to identify the illness. In this study, it was quite clear that the respondents were able to report somatic and psychological symptoms of depression. However, most of the respondents reported more psychological symptoms than somatic symptoms of depression. If depression is to be recognized early in the community and appropriate intervention sought, the level of depression literacy needs to be raised. Depression literacy is a specific type of mental health literacy and is defined as the ability to recognize depression and make informed decisions about treatments for depression (Wang et al. 2007). The components of depression literacy include the ability to recognize depression; the beliefs and the perceptions about its causes, symptoms and its treatments; knowledge and beliefs about self help and professional help interventions; and attitudes to collaborate in treatment. Therefore, educational initiatives by the government that raise depression literacy in the community would be of immense benefit.

Depression is associated with negative attitude and in this study, 40% of the respondents agreed to the statements that people with depression are "dangerous to others" and almost half agreed to been "difficult to talk to". A few agreed that they "should have themselves to blame" but majority agreed that they "should pull themselves together". In a study conducted among adults in the United Kingdom, 22.9% of the respondents rated people with depression as dangerous, 62.1% responded hard to talk to, 12.8% responded selves to blame and 18.6% responded that they pull themselves together (Stuart and Arboleda-Florez 2001). Noteworthy is that public attitudes towards depression were negative with more than half of the respondent (58.6%) reported negative attitudes toward individuals with depression. This is in line with earlier studies that reported negative attitudes toward individuals with depression (Angermeyer and Dietrich 2006; Stuart and Arboleda-Florez 2001). In this study, some sociodemographic characteristics were significantly associated with attitudes towards people with depression. Older age and being retired or student were related to more negative attitude towards people with depression, which is in line with earlier findings (Aromaa et al. 2011; Wang and Lai 2008). However, in countries such as Germany where there are public campaign about depression, the public attitude tend to be more positive (Angermeyer and Dietrich 2006; Mann and Himelein 2004). Therefore, there is an urgent need for a national public awareness campaign about depression in Nigeria with the involvement of the government and non-governmental organisations. Such campaign should aim

Table 4 Respondents attitude toward people with depression

People with depression	Agree		Disagree		Don't know n = 174	
	n	%	n	%	n	%
Are dangerous to others	70	40.2	91	52.3	13	7.5
Are difficult to talk to	83	47.7	90	51.7	1	0.6
Are often artistic or creative people when they are well[a]	135	77.6	20	11.5	19	10.9
Are often very productive people when they are well[a]	135	77.6	19	10.9	20	11.5
Should have themselves to blame	37	21.3	132	75.9	5	2.9
Often make good employees when they are well[a]	139	79.9	21	12.1	14	8.0
Often perform poorly as parents	56	32.2	106	60.96	12	6.9
Often try even harder to contribute to their families or work when they are well[a]	131	75.3	19	10.9	24	13.8
Should not have children in case they pass on the illness	5	2.9	155	89.1	14	8.0
Should pull themselves together	151	86.8	17	9.8	6	3.4
Overall positive attitude: 72 (41.4%)						
Overall negative attitude: 102 (58.6%)						

[a]Positively stated statements

Table 5 Association between attitude towards people with depression and sociodemographic characteristics

Variable	Positive attitude n = 72 (41.4%)	Negative attitude n = 102 (58.6%)	χ^2	df	p-value
Age group					
< 45 years	59 (46.8)	67 (53.2)	5.585	1	0.018
≥ 45 years	13 (27.1)	35 (72.9)			
Sex					
Male	37 (38.5)	59 (61.5)	0.711	1	0.399
Female	35 (44.9)	43 (55.1)			
Marital status					
Single	33 (41.8)	46 (58.2)	0.358	3	0.949
Married	34 (40.5)	50 (59.5)			
Separated/divorced	4 (50.0)	4 (50.0)			
Widowed	1 (33.3)	2 (66.7)			
Religion					
Christianity	58 (40.8)	84 (59.2)	0.091	1	0.763
Islam	14 (43.8)	18 (56.3)			
Ethnicity					
Yoruba	62 (86.1)	90 (88.2)	0.172	1	0.678
Others	10 (13.9)	12 (11.8)			
Educational level					
Primary	6 (30.0)	14 (70.0)	1.612	1	0.447
Secondary	25 (46.3)	29 (53.7)			
Tertiary	41 (41.0)	59 (59.0)			
Occupational status					
Employed	46 (43.4)	60 (56.6)	10.91*	3	0.012
Retired	0 (0)	5 (100.0)			
Student	11 (28.2)	28 (71.8)			
Unemployed	15 (62.5)	9 (37.5)			

*Fishers exact test applied

at increasing depression literacy in the community. These campaigns may be more effective if the education is directed to target specific population groups.

There are limitations of this study that must be addressed. First, in the survey, questions were asked about depression without providing information about depression. Therefore, people's responses were based on their ideas about depression. Results might have been different if we had asked what the respondents would do if they felt gloomy, had suicidal thoughts or could not sleep well at night, for instance. Second, the survey relied on self-report, which may have resulted in recall or report bias. Self-report data may also be affected by social desirability bias, in particular when investigating attitudes. Third, the sample size is relatively small and sample selection limits generalizability to the whole of Nigerian community dwellers. Despite limitations, this study being a community study provides insight and a more understanding of public attitudes toward depression from which prevention and treatment interventions for depression can be developed for the Nigerian population.

Conclusion

This is the first study to examine the public awareness and attitude to depression in Nigeria. This study provides unique understanding into the awareness and attitudes toward depression among a semi-urban population in south western Nigeria. There is low level of awareness of depression as a major health problem and negative attitudes toward people with depression. Therefore, there is a need for public awareness and educational programs about the nature and symptoms of depression. Such programs conducted by the government ministry of health, supplemented by non-governmental organizations should take into account cultural misconceptions about depression and emphasis that it can be treated in the hospital. The mass media can be used as an important and effective tool for disseminating correct information about depression in our environment. More cross-cultural research is needed on public awareness and attitudes toward depression in Nigeria.

Compliance with Ethical Standards

Conflict of interest All authors declare no conflicts of interest regarding the work presented in this paper.

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