



## Knowledge and Awareness of Depression and its Management among Residents of Surulere Local Government Area (LGA), Lagos State, Nigeria

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### ABSTRACT

**Background:** Depression is a common mental disorder and the leading cause of disability for both males and females. It is projected to become the second most burdensome disease and the largest contributor to disease burden by 2020 and 2030 respectively. When depression is understood and identified early by the society, every individual developing the condition can seek timely intervention.

**Objective:** To determine the knowledge, awareness and management of depression among residents of Surulere Local Government Area (LGA).

**Methods:** A descriptive cross-sectional study was carried out among residents of Surulere LGA. A pretested 4-part questionnaire was administered to 423 residents of the LGA using a multi-stage sampling technique to elicit responses on their knowledge, awareness and management of depression. Data was collected over a period of 8 weeks and analysed using EPI INFO Version 7

**Results:** Response rate for this study was 86.1% and majority accurately identified the symptoms of depression (89.3%). About 95.0% and 97.8% of the respondents agreed that seeking professional care and talking to someone, respectively can help in the management of depression. More importantly, over 90.0% of all respondents exhibited good knowledge of depression and its management. A statistically significant association exists between respondents' age, marital status, ethnic group, level of education and the overall level of knowledge and management of depression ( $p < 0.01$ ).

**Conclusion:** Overall knowledge of depression and its management was good among the respondents. However, knowledge and attitude gaps still exist and interventions need to be made.

**Keywords:** Knowledge, Awareness, Depression, Mental disorder, Management, Surulere

### INTRODUCTION

Depression is a potentially life-threatening disorder and affects hundreds of millions of people all over the world. It can occur at any age from childhood to late life and is a tremendous cost to society as this disorder causes severe distress and disruption of life and, if left untreated, can be fatal<sup>1</sup>.

Depression contributes significantly to the global burden of diseases in developing countries<sup>2</sup> and a highly prevalent psychiatric disorder that tends to be recurrent and chronic<sup>3</sup>. It is a common mental disorder, characterized by sadness, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, feelings of tiredness, and poor

concentration<sup>4</sup>. Symptoms must last at least two weeks for a diagnosis of depression to be made<sup>5</sup>. Medical conditions (e.g. thyroid problems, a brain tumour or vitamin deficiency) can mimic symptoms of depression so it is important to rule out general medical causes<sup>6</sup>.

An estimated 20%–30% of Nigerians are believed to suffer from mental disorders<sup>7</sup>. Out of the foregoing, about 7 million people are suffering from depression which represents 3.9 percent of the entire population<sup>8</sup>.

A DSM (Diagnostic and Statistical Manual of Mental Disorders) diagnosis distinguishes an episode (or 'state') of depression from the habitual (or 'trait') depressive symptoms someone can experience as part of their personality<sup>9</sup>. The two distinct types of depressive syndrome are Unipolar depression and Bipolar Affective Disorder<sup>10</sup>. The Guideline Development Group (GDG) has adopted a classificatory system for depression based on DSM–IV criteria<sup>5</sup>. When assessing an individual, it is important to assess three dimensions to diagnose a depressive disorder<sup>5</sup> which includes severity (i.e. symptomatology and social impairment), duration and course of the condition. Depression can be due to a number of factors including stresses which can range from mild to severe, combined with vulnerability or predisposition to depression that can result from biological, genetic or psychological factors<sup>11</sup>.

Treatment of depression can be non-pharmacological and pharmacological. Pharmacological treatment involves the use of different classes of anti-depressants such as Selective Serotonin Re-Uptake Inhibitors (SSRIs), Tricyclic Antidepressants (TCAs) etc<sup>12</sup>. Non-pharmacological treatment includes psychotherapeutic interventions, psycho-education, exercise, problem solving therapy, guided self-help, phototherapy, repetitive trans-cranial magnetic stimulation (rTMS) and acupuncture among others<sup>13</sup>.

Globally, there is a huge treatment gap for mental disorders such as depression<sup>14</sup>. Over 80% of the people that have symptoms of clinical depression are not receiving any treatment<sup>15</sup>. Patients' beliefs about the cause of their depression can affect their help-seeking behavior<sup>16</sup>.

In Nigeria, the subject of mental health is often culturally evaded; as many people are not usually inclined to discuss it openly<sup>17</sup>. Some Nigerians are ignorant about depression and have different beliefs about depression. Supernatural beings or powers (God, gods, good and evil spirits, witches) coupled with their activities are believed to be sources of mental health problems as well as part of the cultural asset that is usually mobilized to cure mental health problems<sup>18,19</sup>. It is more likely that treatment of mental illness will be obtained from diviners and traditional healers who subscribe to the view of supernatural causation<sup>20,21</sup>. The rate of suicide in Nigeria is 15.1%, ranking Nigeria as the 30<sup>th</sup> in the world<sup>22</sup>. About 50% of individuals who have committed suicide carried a primary diagnosis of depression<sup>23</sup>.

WHO declared 'depression' as the theme for the World Health Day, 2017 in order to raise awareness thus helping people understand the disease, its causes and available treatments. Awareness can help in overcoming the stigma often associated with depression which should result in more people seeking help<sup>24</sup>.

Various studies have been carried out both within and outside Nigeria to determine knowledge and awareness of depression as well as knowledge about the management of depression<sup>25-32</sup>. The aim of this study was to determine the awareness of depression and knowledge about the management of depression in a particular local government area in Lagos state, Nigeria.

## METHODS

### Study Area

This study was conducted in Surulere Local Government Area (LGA) which is one of

the 20 LGAs in Lagos State, South-West, Nigeria. It comprises of 9 wards with a population density of 21,864 inhabitants per square kilometers<sup>33</sup>.

### **Study Design**

The study was a descriptive cross-sectional study designed to assess the awareness and knowledge of depression and its management among residents in 3 out of the 12 wards in Surulere LGA of Lagos State within 8 weeks. The study was conducted as a survey where the researcher administered pre-tested structured questionnaires to residents in the selected wards. Informed consent was obtained from the respondents after explaining to them the nature, purpose and extent of the study; and assuring them that confidentiality will be maintained. Names and addresses of the respondents were not required and participation was totally voluntary.

### **Data collection tool**

The structured questionnaire was divided into 4 sections which included questions on: Socio-demographic characteristics of the respondents (Section A); Awareness of depression (Section B); Knowledge about management of depression (Section C); and Respondent's attitude towards help-seeking for depression (Section D):

#### ***Socio-demographic characteristics of the respondents (Section A)***

Patients' socio-demographic information were obtained using 7-item formulated questions including questions about age, gender, religion, occupation, marital status, ethnic group as well as level of education

#### ***Knowledge and Awareness of depression (Section B)***

The awareness of depression section was a 15-item section and was self-adapted. It assessed if the participant had heard about depression and the source. The options for the symptoms, myths, facts about depression were agree, disagree and don't

know. This assesses participant's knowledge about depression

#### ***Knowledge about management of depression (Section C)***

This section was a 10-item section. This was used to assess the participants' knowledge about the different ways of treating/managing depression both pharmacologically or non-pharmacologically. The options for the knowledge about management of depression were yes, no and don't know.

#### ***Respondent's attitude towards help-seeking for depression (Section D)***

This section was adapted to assess help-seeking attitude of the participants.

Accompanying sub-questions were constructed in simple English to encourage understanding and participation of the respondents. However, for patients who could not read or write, the questionnaire was interpreted into the local language.

The questionnaire was pre-tested in Mushin LGA (Lagos State) among 20 respondents in order to identify and amend difficult or ambiguous questions in the questionnaire of the study. The results from the pre-test helped in modifying the questionnaires to a more suitable and straightforward format for the respondents to answer.

### **Study population**

The study was carried out amongst adult residents of Surulere LGA of Lagos State, Nigeria. The study population includes both males and females.

#### ***Inclusion criteria***

All healthy male and female residents that have been residing in Surulere Local Government for over 1 year are eligible for this study. Participants must be 18 years and above.

#### ***Exclusion criteria***

Residents who just relocated (less than 1 year), unhealthy and residents who are less than 18 years were exempted from this study.

*Sample size*

Sample size calculated was 384 plus 10% non-response rate, the sample size eventually was 423

**Sampling method**

The multi stage sampling technique was adapted as the most appropriate to select respondents. The selection of respondents for this study was in a three-stage selection process.

There are 9 wards (Ward E, E1, F1, F2, F3, G, G1, G2 and G3) in Surulere Local Government<sup>33</sup>. Stage 1: Simple random sampling method together with table of random numbers were used to select three wards (Ward E1, F1 and G2) from the nine wards in Surulere LGA

The minimum sample size was divided in equal numbers among the 3 wards to determine the number of questionnaires to be administered in each ward.

Stage 2: The wards chosen had more than one street. Ten streets were chosen by balloting to represent each ward. The sample size was divided in equal numbers among the selected streets.

Stage 3: Convenience sampling was then used to select the residents from each street. Respondents were thereafter recruited consecutively on a daily basis until the sample size was attained for a period of 8 weeks between July and September 2017.

**Data Analysis**

Data collected was double checked manually for correctness and completeness immediately after collection and thereafter coded for data entry. The data collated was analyzed using Epi Info Version 7.1.5 (Centre for Disease Control, Atlanta, Georgia). The data generated was analyzed using descriptive frequency tables, percentages and cross tabulations and presented in form of tables and charts.

Scoring and grading was done electronically and manually. Knowledge levels of depression were categorized into good or poor based on the responses to all 21 different knowledge questions. Every

correct answer was scored one mark and every incorrect and non-response was scored zero and maximum obtainable score was 21. Knowledge was scored on a scale of 0-21. The total score for each respondent was converted to percentages and graded as good ( $\geq 50\%$ ) that is 11-21 and poor ( $< 50\%$ ) which is 0-10.

The attitude towards depression were also categorized as positive or negative depending on respondents answer to all the 5 questions for attitude towards depression in the questionnaire. Responses to agree were awarded 3 marks, undecided 2 marks, and disagree 1 mark. Maximum score obtainable was 15marks. The total score for each respondent was converted to percentages and graded as good ( $\geq 50\%$ ) that is 8-15 and poor ( $< 50\%$ ) which is 5-7. Chi-square and Fisher's exact tests were carried out where appropriate to see if there were any statistically significant relationships or associations of each independent variable with the dependent variables at p-value of  $< 0.05$ .

**Ethical Consideration**

Ethical approval for the study was obtained from the Lagos University Teaching Hospital Health Research Ethics Committee. The Assigned Number for the study was ADM/DCST/HREC/APP/1815. Permission was also sought from Surulere LGA Council authority, and confidentiality of all information was maintained by keeping all administered questionnaires private and non-accessible to the public.

**RESULTS**

A total of 423 questionnaires were administered but 364 were completely answered giving a response rate of 86.05%.

***Socio-demographic Characteristics***

Majority of the respondents (32.14%) were in the age range of 26-35 years while respondents within the age range of  $> 60$  years were the least (1.92%). More than half of the respondents were female

(55.49%) while less than half were married (48.63%). Majority of the respondents were Christians (76.92%). There were more respondents from the Yoruba tribe than other tribes (54.40%). Almost all the respondents had had some form of education (98.63%) and slightly more than half of the respondents were graduates (51.10%). Most of the respondents were self-employed compared to other occupation options (31.04%) (Table 1).

### ***Knowledge and Awareness of depression***

All the respondents were aware of depression and their most common source of information is mass media (63.19%) followed by the print media 191 (52.47%). Health workers were one of the least utilized sources of information (20.33%).

Most of the respondents (76.37%) agreed that *depression is a mental problem* and 88.46% of the respondents agreed that *depression is curable*. Only 29% agreed that *depression is not serious, so does not need to be treated*. One hundred and nineteen respondents (32.69%) wrongly think *children cannot suffer from depression*. Depression was agreed by majority (71.43%) to be common so could happen to them.

Majority of the respondents (89.29%) were able to correctly identify symptoms of depression.

Almost half of the respondents (46.98%) answered incorrectly that *depression is as a result of weakness* however only 72 respondents (19.78%) answered correctly that *depression can be passed from parent to children*.

With regards to complications, most of the respondents (90.38%) correctly identified that *depressed patients are prone to suicide*. Based on the total knowledge scores, Figure 1 below shows the overall knowledge distribution of respondents. The knowledge grade was either poor knowledge (<50%) or

good knowledge ( $\geq 50\%$ ). Three hundred and thirty-four (92.00 %) of the respondents had good knowledge of depression while 8% had poor knowledge (Figure 1).

### ***Knowledge about Management of depression***

The most agreed upon way of managing depression was talking to someone (97.80%), followed by seeking professional help (e.g. a doctor, pharmacist, nurse, etc.) (95.33%) and only 8.24% said seeking professional help is an embarrassing thing to do (Table 2)

Three hundred and thirty-four (93.00 %) of respondents have good knowledge and 7% of the respondents have poor knowledge about management (Figure 2)

### ***Health seeking behaviour***

Majority of the respondents, 81.59% agreed to seek for help for themselves or others who they think are depressed, 6.32% disagreed and 12.09% did not know.

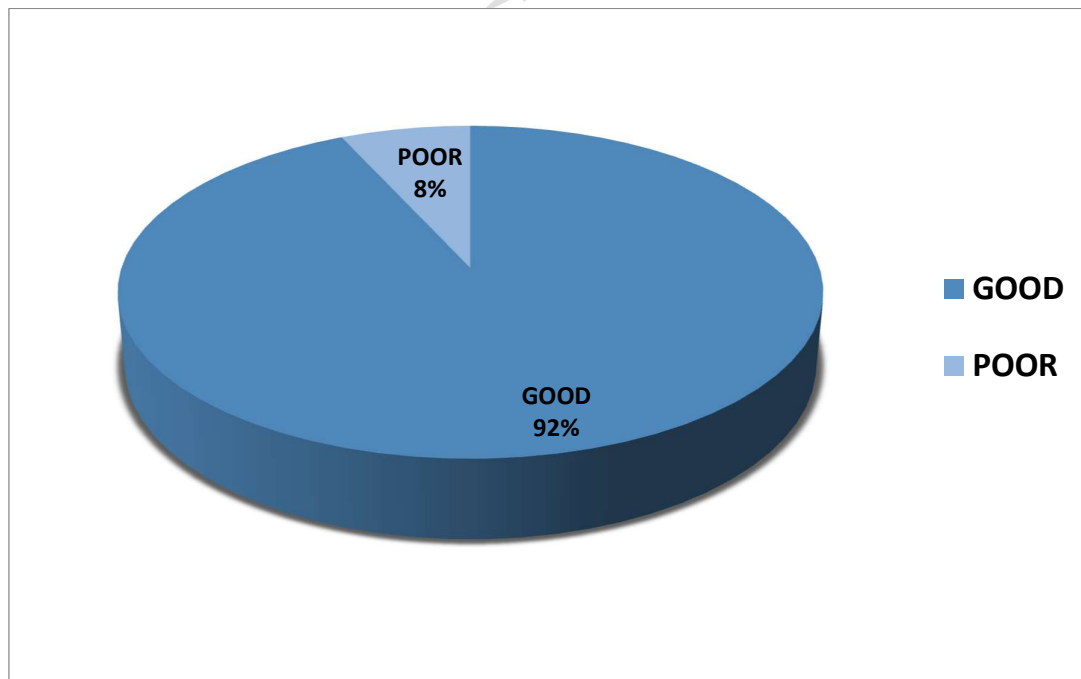
### ***Relationship between socio demographic variables and knowledge of depression, knowledge of management of depression and attitude towards depression***

There was statistically significant association between age, marital status, ethnicity and educational status and overall knowledge of depression while all the socio demographic variables except religion were statistically significantly associated with knowledge of management. There were statistically significant associations between attitude towards depression and all the socio demographic variables except gender (Table 3).

There was statistically significant association between knowledge of depression and attitude towards depression (Table 4).

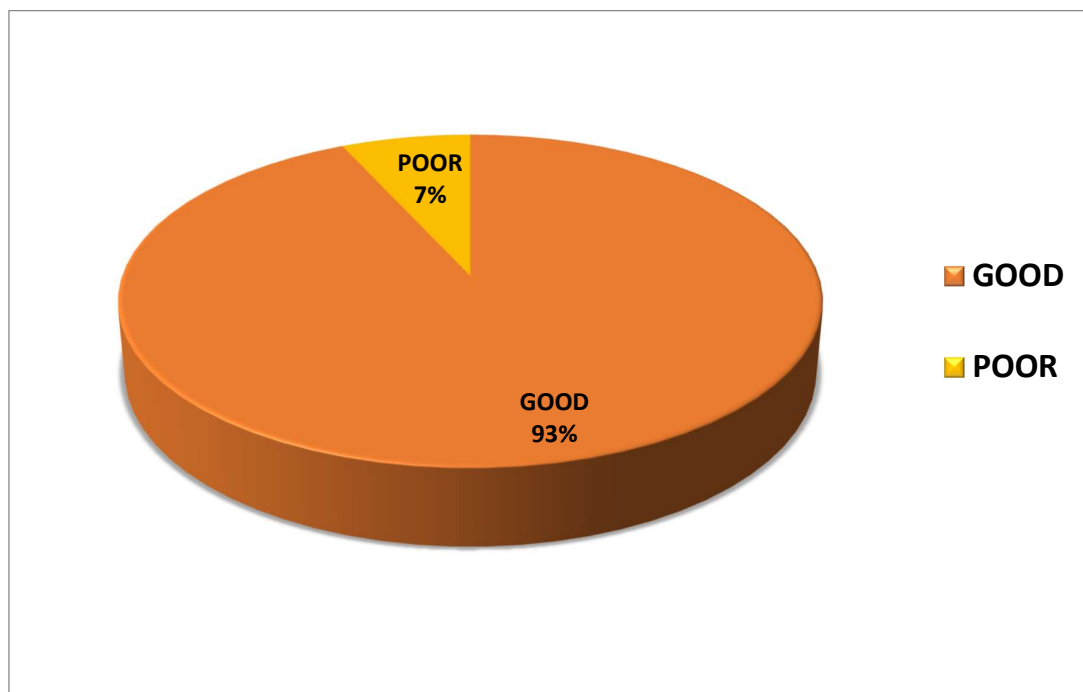
**Table 1: Socio-demographic characteristics of the respondents**

<b>VARIABLE</b>	<b>FREQUENCY (n = 364) (%)</b>		
<b>Age (years)</b>		<b>Ethnic group</b>	
18-25	110 (30.2)	Igbo	112 (30.8)
26-35	117 (32.1)	Yoruba	198 (54.4)
36-45	75 (20.6)	Hausa	17 (4.7)
46-60	55 (15.1)	Others	37 (10.2)
>60	7 (1.9)	<b>Level of Education</b>	
<b>Gender</b>		No Formal	5 (1.37)
Male	162 (44.5)	Education	
Female	202 (55.5)	Primary School	13 (3.6)
<b>Marital status</b>		Secondary school	46 (12.6)
Single	172 (47.3)	Under-graduate	55 (15.1)
Married	177 (48.6)	Diploma/NCE	32 (8.8)
Separated	2 (0.6)	Graduate/HND	154 (42.3)
Divorced	2 (0.6)	Postgraduate	59 (16.2)
Widow	11 (3.0)	(MSc/PHD)	
<b>Religion</b>		<b>Occupation</b>	
Christianity	280 (76.9)	Civil servant	77 (21.2)
Islam	81 (22.3)	Employed	80 (22.0)
Traditional	2 (0.6)	Self-Employed	113 (31.0)
Others	0 (0.0)	Retired	6 (1.7)
		Student	77 (21.2)
		Unemployed	11 (3.0)

**Figure 1: Overall knowledge of depression among respondents**

**Table 2: Knowledge about management of depression**

VARIABLE	Yes n (%)	No n (%)	Don't know n (%)
Taking medications (antidepressants) is a good way of treating depression	219 (60.16)	98 (26.92)	47 (12.91)
Talking to someone can help in the management of depression	356 (97.80)	4 (1.10)	4 (1.10)
Seeking professional help (e.g. a doctor, pharmacist, nurse, etc.) can aid in the management of depression	347 (95.33)	7 (1.92)	10 (2.75)
Seeking professional help (e.g. a doctor) is an embarrassing thing to do	30 (8.24)	329 (90.38)	5 (1.37)
Passing electric current to the brain is an effective treatment for depression	19 (5.22)	226 (62.09)	119 (32.69)
Depression disappears immediately treatment starts	26 (7.14)	275 (75.55)	63 (17.31)
Prayer is more efficient for the treatment of depression	128 (35.16)	160 (43.96)	76 (20.88)
Exercise is effective in reducing symptoms of depression	214 (58.79)	71 (19.51)	79 (21.70)
Medications (antidepressants) are the only things that can cure depression	54 (14.84)	274 (75.27)	36 (9.89)
Music is useful in the care of depression	294 (80.77)	22 (6.04)	48 (13.19)

**Figure 2: Overall knowledge on management of depression among respondents**

**Table 3: Relationship between socio-demographic variables and knowledge of depression, knowledge of management of depression and Attitude towards depression**

Socio- demographic variables	Overall Knowledge of depression ( <i>p</i> -values)	Knowledge of management of depression( <i>p</i> -values)	Attitude towards depression( <i>p</i> -values)
Age	0.003	0.001	0.002
Gender	0.075	0.004	0.3401
Religion	0.864*	1*	0.008*
Marital Status	0.005*	0.001*	0.000*
Ethnic group	0.000*	0.001*	0.0001
Educational Status	0.000	0.00	0.000

\*Fisher Exact

**Table 4: Relationship between respondents' overall knowledge about depression and attitude towards depression**

Overall level of knowledge about depression	Level of Attitude towards depression			X <sup>2</sup>	Df	<i>p</i> -value
	Good (%)	Poor (%)	Total (%)			
Good (%)	301 (90.12)	33 (9.88)	334 (100.00)	3.1781	1	0.0000
Poor (%)	18 (60.00)	12 (40.00)	30 (100.00)			
Total (%)	319 (87.64)	45 (12.36)	364 (100.00)			

## DISCUSSION

The results obtained in this study show that the overall knowledge of depression and its management was good among the respondents. Majority agreed on the importance of seeking help in the event of signs of depression in any individual. Awareness level was extremely high as all the respondents had heard about depression and this was majorly through the mass media.

The results show that majority of respondents had above secondary school education while only very few had no formal education. Similar to another study assessing beliefs and attitudes toward depression in Italy, majority of the respondents had above secondary school education and very few with no formal education<sup>34</sup>. This might be due to the fact that the studies were done in urban cities where most people are educated. Almost half of the respondents were married unlike the study carried out in Malaysia where majority were single<sup>35</sup>. Most of the respondents were female and a similar

result was observed in a study done in secondary schools in Lagos, Nigeria with females being more than males<sup>30</sup>. This might be due to the fact that females are more approachable than males.

The most common source of the information about depression in this study was through the mass media, which included radio and television. This is in agreement with another study where 69.0% reported that they had seen, read or heard something in the media<sup>36</sup>. This confirms that over the years, the mass media has been a very useful source in educating people about depression. In a survey done in the UK, only about one-third cited the media as their main source of information about depression contrary to the result of this study<sup>37</sup>. This might be due to difference in health care provision and advancement between Nigeria and UK. However, the least common source of the information about depression was through healthcare workers. There is need for health care

workers to assist in educating the public about depression.

Over three-quarter of the respondents in this study knew that depression is a mental problem which is in contrast to an earlier study done in Italy where only about half of the respondents agreed that depression is a mental illness<sup>34</sup>. Almost half of the respondents in this study wrongly responded that depression is a sign of weakness. In a study by Melas *et al.*, it was found that participants perceived depression as reaction to a personal problem that the person was too weak to handle successfully<sup>27</sup>. In this study, 9 out of 10 of the respondents knew people suffering from depression are prone to suicide unlike in a study done among non-medical students in a Malaysian University where a lower percentage (62.20%) recognized that suicidal thoughts and self-harming thoughts is associated with depressed patients<sup>38</sup>. The difference might be due to the fact that the non-medical students are not as informed as the respondents in our study who were mostly workers and more than half were graduates. In this study four-fifth responded that depression is serious, so needs treatment but in the study by Khan *et al.*, barely more than one-third of the respondents perceived depression subsides automatically and does not need treatment<sup>35</sup>. Also, majority of the respondents believed that depression can happen to them. This is in contrast to the study done among Nigerian-immigrants who believed depression is something that affects others and not them<sup>31</sup>.

In this study, most of the respondents were graded to have good knowledge while few had poor knowledge about depression; this was contrary to a study done on adolescents in Sweden where the results showed that adolescents lack knowledge of depression<sup>27</sup>. This might be due to the fact that majority of our respondents are adults who will be expected to have more knowledge than the adolescents.

Based on the results, the most agreed method of treating depression were non-

pharmacological methods like talking to someone followed by seeking professional help from doctors, pharmacist, nurses, etc. This is in contrast to a study by Adeosun where only few endorsed seeking help from mental health professionals<sup>30</sup>. Although about 8.0% of the respondents believed seeking professional help is an embarrassing thing to do this is less than the over 58.0% of the respondents in another study who reported that people suffering from depression would feel quite embarrassed in discussing their problem with a primary care physician<sup>39</sup>. A study in the UK also revealed that majority of the public will be embarrassed to consult a general practitioner because they will see them as unbalanced and neurotic<sup>40</sup>. This reveals that though the respondents may have a good knowledge about depression, feelings of shame may hinder some of the respondents from seeking professional help even when they know it is helpful.

Only about 60% of the respondents answered correctly that the pharmacological method (i.e. use of antidepressants) is a good way of treating depression. However, a study done in Australia indicated that more than half the respondents expressed negative or equivocal views regarding the helpfulness of recommended pharmacological treatment<sup>41</sup>. Prayer was believed to be more efficient for the treatment of depression by about one third of the respondents. This value was higher than that obtained in a previous study done in Malaysia where only 7.2% of the participants believed prayer or finding a religion was the best treatment for depression<sup>42</sup> and similar to another survey done among Nigerian-immigrants where spirituality and religion were identified as the main sources of treatment for depression<sup>31</sup>. This shows how the spirituality of the respondents influences their health decisions and may be an issue with Nigerians.

As regards knowledge on management of depression, majority of the respondents had a good knowledge grade on the

management of depression and only very few had a poor knowledge grade. Low knowledge or negative beliefs about management of depression may lead to failure to seek medical help and lack of compliance with any management recommended.

A statistically significant association was found between age and knowledge of depression and management of depression ( $p=0.003$  and  $0.001$ ) respectively. The highest level of good knowledge was found among respondents within the age range of 18-25 while the highest level of poor knowledge about depression was found among respondents above 60 years. It may be inferred that few elderly people have formal educations and therefore had restrictions to information from the mass media (newspaper, television, radio) which is the largest source of information to create awareness of depression among the respondents.

Majority of the patients agreed to seek help for themselves or someone who showed signs of depression while a few either disagreed or were indifferent. This finding was contrary to a study in the USA where many members of the public reported an unwillingness to seek treatment for depression because they feared a negative impact on their employment situation<sup>43</sup>.

In this study, the association between knowledge of depression and attitude towards depression was found to be statistically significant. It revealed that 90.12% of respondents with good knowledge had good attitude towards depression. This may be due to the fact that the more enlightened one is about depression, the better the attitude to the disorder will be.

#### ***Limitations of this study***

This study is a cross-sectional study and may not be generalized beyond the study population. However, the study findings are transferable to a population with similar characteristics to this sample. Also, it is a self-reported questionnaire which is prone to some level of bias as it relies on the

honesty of those reporting. There was poor attitude of respondents towards the study due to fear of using the information obtained against them or fear of robbery or pessimism from the side of the residents, therefore, participants were really uncooperative.

#### **CONCLUSION**

This study has given an insight into the knowledge, attitude of depression and knowledge about management of depression among residents in Surulere local government area, Lagos. Awareness level was extremely high as all the respondents had heard about depression and this was mainly through mass media. The overall knowledge of depression and its management was good. Majority agreed to seek for help for themselves or anyone who exhibited signs of depression. However, knowledge and attitude gaps still exist and interventions need to be made.

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IN COLLABORATION WITH  
PHARMACEUTICAL SOCIETY OF GHANA

**32<sup>ND</sup> ANNUAL GENERAL MEETING  
& SCIENTIFIC SYMPOSIUM**

**THEME**

**UNIVERSAL HEALTH COVERAGE:  
THE ROLE OF DIGITAL AND COLLABORATIVE  
SERVICES**

• THE GAMBIA • GHANA • LIBERIA  
• NIGERIA • SIERRA LEONE

**Date:** Monday, 23rd - Friday, 27th March, 2020  
**Venue:** Ghana Academy of Arts and Sciences  
Conference Centre, Accra, Ghana

**Formal Opening/Investiture of Fellows**

**Tuesday, 24th March, 2020**