Original Research Article

Determinants of knowledge and attitude towards depression among university academic staff in Benin City, Edo State

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Abstract

Introduction: This study assessed determinants of knowledge and attitude towards depression among academic staff in a tertiary education institution in Nigeria to create awareness among relevant stakeholders on need to address this growing public health problem.
Methods: A descriptive cross-sectional study was conducted involving 330 consenting academic staff of the University of Benin, Edo State, using a multistage sampling technique. Data was collected using self-administered structured questionnaire adapted from Depression Literacy Questionnaire, Mental Health Knowledge Schedule and Depression Stigma Scale. Knowledge of depression was classified into good or poor knowledge while attitude towards depression was classified as positive or negative.
Results: A large proportion of the participants studied had good knowledge (74.2%) of depression and positive attitude (63.6%) towards them. Respondents in the medical sciences were 6.937 (95% CI = 1.626 – 29.598, p = 0.009) times likely to have good knowledge and 2.528 (95% CI = 1.069 – 5.978, p = 0.035) times more likely to have positive attitude towards persons with depression compared to the non-medicals, while the junior staff category were 0.462 (95% CI = 0.247 –0.866, p = 0.016) times less likely to have good knowledge compared to the senior staff category. Respondents with good knowledge had more positive attitude towards persons with depression (OR= 2.949, 95% CI= 1.757-4.950, p < 0.001).
Conclusion: Majority of respondents had good knowledge of depression and positive attitude towards people with depression. The level of education and category of staff can significantly influence knowledge of depression among academic staff while knowledge of depression was can significantly influence the attitude towards people with depression.

Keywords: Academic Staff, Benin City, Depression, University of Benin

Introduction

Good mental health is crucial to the overall well-being of individuals, societies and countries and must be universally regarded as an important health issue. Unfortunately, in most parts of the world, mental health and mental disorders are not regarded with the same importance as physical health.[1] Depression, often called the 'common cold of mental illness', is a disorder of major public health importance in terms of its prevalence and the suffering, dysfunction, morbidity and economic burden.[2] It is a common psychiatric disorder estimated to affect about 1 out of 5 people in their lifetime and more common in women than men.

Depression contributes extensively to the global burden of diseases in developing countries.[3] However, public knowledge about mental disorders (mental health literacy) in developing countries is considerably low.[4] People tend to have strong belief about mental illness, and many of their concepts are based on prevailing local systems of belief.[5,6] Most of the society's perception and attitude towards mental

illness are far from the scientific view and this may negatively affect treatment seeking and adherence to treatment.[5,6] It has been shown that people's belief regarding depression is also the main factor which leads to stigmatization and labeling.[7,8] Stigma against people with mental illness remains a significant barrier to positive outcomes across all cultures and nations, related to the threat value of mental symptoms, intolerance for diversity and inaccurate conceptions of mental disorder.[7,8] Unfortunately, developing countries are likely to see a disproportionately large increase in the burden attributable to mental disorder in the coming decades. This is because the social risk factors for developing mental disorder are rife in developing nations, and specialized facilities and medical personnel for treatment and care are limited.[9]

The lifetime prevalence rate of a major depressive episode among adults aged 18 years and over in Nigeria has been reported to be 3.1%.[10] Consequently, with the current population estimates for the country, about 5 million Nigerians would have experienced a major depressive episode in their lifetime.[10] In Nigeria, poor knowledge about the causes and nature of mental illness/depression is common in the community.[7] Negative attitudes towards persons with mental illness/depression are widespread and may impair the social integration of those with mental illness.[7] Also among people suffering from depression, self-stigma may greatly interfere with the individual's decision to seek treatment, resulting in treatment delay or avoidance. Nigeria's mental health policy was first formulated in 1991[11] and recently, a bill for the establishment of Mental Health Act was introduced to the National Assembly on March 20th, 2013. Mental health has been incorporated into of primary health care delivery in Nigeria.

Research is an essential component of strategies to improve mental health literacy in any population. It is well documented in industrialized countries that have an abundance of research that psychosocial hazards have the capacity to affect the physical, mental and social well-being of workers and that there are a number of real risks involved.[12] However, paucity of coherent research in developing countries to provide insight into the nature of work-related stress and psychosocial working conditions that may cause depression.[12] Therefore there is an urgent need for more studies on depression in the Nigerian population, particularly among public servants who constitute a very significant and strategic segment of the Nigerian population. This study will bridge the gap in knowledge of depression and its influence on attitude towards people with depression. It will also will help to raise awareness and correct the negative perception towards people with depression with the aim of reducing the negative health consequence caused by depression.

Methods

This is a cross-sectional study carried out in the University of Benin, Benin City from April 2017 to April 2018. The institution was established in 1970 and has two campuses; the Ugbowo Campus and the Ekenwan Campus. The campuses comprise 15 Faculties, 14 of them are located at the Ugbowo Campus. The University has an estimated 7000 academic and non-academic staff population with an estimated 75,000 student population comprising both full-time and part-time Student.[14]

Study population involved only Academic staff. A sample size of 330 was calculated using the Cochran formula based on prevalence of 14.9% from a previous study.[13] Multistage random sampling was used to select study participants by campus, faculty and departments based on proportional allocation to the calculated minimum sample size for study.

Self-administered structured questionnaires adapted from the Depression Literacy Questionnaire (D-Lit)[15] and the Mental Health Knowledge Schedule (MAKS).[16] was used for data collection. Knowledge was assessed using 17 questions including one question on the definition of depression, 5 questions on features, 6 questions on causes of depression and 5 questions on treatment of depression. Respondents were expected to select one of three preferred items: "True", "False", and "I don't know". The total number of questions were 17 with each given a score of 1. The minimum score attainable was 0 while the maximum score attainable was 17. Respondents' scores were computed into percentages. Respondents scoring 50% and above had good knowledge while respondents scoring below 50% had poor knowledge. The questions used in scoring knowledge were internally consistent with a Cronbach's alpha value of 0.680.

Attitude was assessed with 11 questions using the Likert-type scale using "Agree", "Disagree" and "I don't know". This section dealt with the views/opinions of respondents with respect to people with depression. It was adapted from the Depression Stigma Scale.[17] Respondents were expected to select one of three preferred items above. Each question was given a score of 1. The minimum score attainable was 0 while the maximum score attainable was 11. Respondents' scores were computed into percentages. Respondents scoring 50% and above had positive attitude while respondents scoring below 50% had negative attitude. The questions used in scoring attitude were internally consistent with a Cronbach's alpha value of 0.695. Thirty-three questionnaires were pretested at Benson Idahosa University, Benin City, Edo State, a privately owned tertiary institution located in the study area and sharing similarities with respect to staffing.

Data analysis

Data collected were analyzed using IBM SPSS Version 22.0 statistical software. Univariate analysis was done to assess the distribution of variables and bivariate analysis carried out using Chi-square test to examine associations between variables. Multivariate analysis was done to identify determinants of the outcome variable. All statistical significance was set at $p<0.050$ and at 95% confidence interval.

Ethical considerations

Ethical clearance and approval were gotten from the University of Benin Teaching Hospital before starting the study and individual informed consent was also obtained from respondents that participated in the study.

Results

Three hundred and thirty respondents (mean age: 42.9±10.0 years) participated in the study. Socio-demographic characteristics as shown in Table 1.

All respondents studied had heard about depression, 54.5% got their information from health workers followed by electronic media (35.2%) and internet (34.4%) while 28.5% got their information from friends (Table 2).

In relation to knowledge of depression, 265 (80.3%) of respondents studied had correct knowledge of definition of depression, 258 (78.2%) identified being more tired than usual as a feature of depression, 270 (81.8%) identified stress as a cause of depression while 286 986.7%) identified counselling as a major treatment for depression. Other related factors are shown in Table 3.

Two hundred and forty-five (74.2%) respondents studied had good knowledge of depression while 85 (25.8%) respondents had poor knowledge.

Respondents in the medical sciences were 6.937 (95% CI = 1.626 – 29.598, p = 0.009) times likely to have good knowledge when compared with respondents in the non-medical sciences. Respondents belonging to the junior staff category were 0.462 (95% CI = 0.247 –0.866, p = 0.016) times likely to have good knowledge than respondents in the senior staff category (Table 4).

In relation to attitude towards depression among academic staff 241 (73.0%) agreed that depressed people can live a healthy life if they seek treatment, 129 (39.1%) respondents agreed that they could marry a depressed person and finally 281 (85.2%) agreed that depressed people require treatment. Other related factors are shown in Table 5.

Some respondents (63.3%) studied had positive attitude towards people with depression compared to 121 (36.7%) with negative attitude

Table 1: Socio-demographic characteristics of academic staff

Variable	Frequency (%) n = 330
Age (years)	
21-30	42 (12.7)
31-40	114 (34.5)
41-50	92 (27.9)
51-60	67 (20.3)
61-70	15 (4.5)
Mean age (S.D)	42.9 (10.0)
Sex	
Male	193 (58.5)
Female	137 (41.5)
Ethnicity	
Benin	150 (45.5)
Esan	61 (18.5)
Ibo	41 (12.4)
Yoruba	38 (11.5)
Estako	19 (5.8)
Urhobo	8 (2.4)
Hausa	4 (1.2)
Others*	9 (2.7)
Religion	
Christian	303 (91.8)
Islam	16 (4.8)
African traditional religion	11 (3.3)
Marital status	
Never married	52 (15.8)
Ever married	278 (84.2)
Family type	
Nuclear	297 (90.0)
Extended	33 (10.0)
Family structure	
Monogamous	295 (89.4)
Polygamous	35 (10.6)
Household size	
≤6	257 (77.9)
>6	73 (22.1)
Level of education	
Tertiary complete	32 (9.7)
Post graduate (masters)	116 (35.2)
Post graduate (Ph.D)	182 (55.2)
Faculty	
Medical sciences**	42 (12.7)
Non-medical Sciences***	288 (87.3)
Category of academic staff	
Junior staff****	230 (69.7)
Senior staff*****	100 (30.3)

*Others- Ijaw 2 (0.6%), Ibibio 5 (1.5%), Efik 1 (0.3%), Isoko 1 (0.3%). **Medical sciences- Basic medical sciences 25 (7.6%) and Pharmacy 17 (5.2%). ***Non-medical sciences- Agricultural science 25 (7.6%), Engineering 50 (15.2%), Education 36 (10.9%), Law 15 (4.5%), Life science 55 (16.7%), Physical science 37 (11.2%), Management science 35 (10.6%), Social science 35 (10.6%). ****Junior staff- graduate assistant 45 (13.6%), assistant lecturer 60 (18.2%), lecturer 2 66 (20.0%), lecturer 1 59 (17.9%). *****Senior staff- Senior lecturer 36 (10.9%), Associate professor 25 (7.6%), Professor 39 (11.4%).

Respondents in the medical sciences were 2.528 (95% CI = 1.069 – 5.978, p = 0.035) times likely to have positive attitude when compared with respondents in

the non-medical sciences. Respondents who had a good knowledge were 2.949 (95% CI = 1.757 – 4.950, p = <0.001) times likely to have positive attitude when compared with respondents that had poor knowledge (Table 6).

Table 2: Source of information among academic staff (n =330)

Variable	Frequency (%)
Internet	107 (34.4)
Health workers	180 (54.5)
Friends	94 (28.5)
Electronic media	116 (35.2)

*Multiple response

Table 3: Knowledge of depression among academic staff

Variable	Frequency (n = 330)	
	Correct (%)	Incorrect (%)
Definition	265 (80.3)	65 (19.7)
Features of depression		
Speak in rambling and disjointed ways	129 (39.1)	201 (60.9)
More tired than usual	258 (78.2)	72 (21.8)
Irritable	252 (76.4)	78 (23.6)
Difficulty making decisions	255 (77.3)	75 (22.7)
Hear voices	92 (27.9)	238 (72.1)
Causes of depression		
Alcohol and drug misuse	243 (73.6)	87 (26.4)
Evil spirit	143 (43.3)	187 (56.7)
Stress	270 (81.8)	60 (18.2)
Genetic inheritance	167 (50.6)	163 (49.4)
Curse	136 (46.4)	177 (53.6)
Brain disease	244 (73.9)	86 (26.1)
Treatment of depression		
Hospitalization	141 (42.7)	189 (57.3)
No antidepressants when they feel better	99 (30.0)	231 (70.0)
Traditional medicine	133 (40.3)	197 (59.7)
Counseling	290 (89.9)	40 (12.1)
Social support	286 (86.7)	44 (13.3)

Discussion

The mean age of respondents studied in this work is in contrast with a study carried out in Fako division, Cameroon[18] where mean age of 33.3 years and most of the respondents were females. The predominant tribe of the respondents was Benin which is in keeping with the location of the study similar to Edo State Demographic Data[19]. The prevalent family type was nuclear family while the prevalent family structure was monogamy, this in keeping with the predominant religion (Christianity) practiced in the study area, who are more likely to be monogamous. This finding is similar to a study carried out in Southwest Ethiopia[20] where about two-third of the respondents were Christians. Majority of the respondents had been married at one time, this is similar to a study carried out in South Africa.[21] This may be because the

respondents were working and settled financially and older, so they had the financial strength with psychologically and biologically maturity to raise a family, this may explain the reason the family size of less than or equal to six among majority of the respondents studied. More than half of the respondents had post graduate (Ph.D) degree, this is in contrast with a study carried out in South Africa[21]. About one-tenth of the respondents were from the medical sciences while a majority were from the social sciences. About two-third of the respondents belonged to the junior staff category while one-third belonged to the senior staff category

The results of this study showed that majority of academic staff of the University had good knowledge of depression in relation to its features, common causes and methods of treatment of depression. This is similar to a study carried out in Mekelle City, Ethiopia[22] where more than half of the participants had a good knowledge of depression. Respondents belonging to the medical sciences were significantly more knowledgeable, this may be because their training as medical personnel could have exposed them to better and more information on depression compared with other respondents studied. Respondents in the senior staff category had more knowledge of depression, this may be because the senior staff had higher level of education and this finding was statistically significant. Adequate knowledge about depression may stem from the fact that the study recruited academic staff of the University, all of whom have received some form of tertiary education with majority having a masters' or doctoral degree. Increased knowledge base about depression can help improve positive outcome and health seeking behavior among people dealing with depression.

The results of this study revealed that about two-third respondents studied had higher positive attitude towards people with depression, this is in contrast to a study carried out in India,[23] where considerable stigma and misinformation was found. Respondents in the medical sciences had a better attitude towards people with depression, this may be due to the fact that good knowledge of depression promotes positive attitude towards depressed individuals. This finding was statistically significant. Respondents who had good knowledge of depression were also found to have better attitude towards depressed persons than those with poor knowledge, this finding was statistically significant. This is similar to a study carried out in Kenya[24] where attitude was found to be better in respondents with good knowledge. This may be because majority of the respondents had a good knowledge of depression and good knowledge of depression helps individuals understand the causes and progression of depression and therefore, they can empathize better with people living with depression. Literacy status and occupation seem to significantly affect the type of feeling exhibited towards people with

Table 4: Logistic regression for determinants of knowledge of depression among respondents

Predictors	B (regression co-efficient)	Odds Ratio	95% CI for OR		p-value
			Lower	Upper	
Age					
21–30	0.790	2.204	0.399	12.176	0.365
31-40	-0.158	0.854	0.190	3.884	0.837
41-50	-0.062	0.940	0.219	4.027	0.933
51-60	-0.027	0.973	0.224	4.225	0.971
61–70		1			
Sex					
Male	-0.038	0.963	0.563	1.647	0.890
Female		1			
Marital status					
Never married		1			
Ever married	0.093	1.097	0.531	2.265	0.802
Family type					
Nuclear	-0.088	0.916	0.243	3.459	0.897
Extended		1			
Family structure					
Monogamous	-0.369	0.691	0.277	1.725	0.429
Polygamous		1			
Household size					
≤6	0.310	1.364	0.754	2.467	0.305
>6		1			
Level of education					
Tertiary		1			
Above tertiary	0.371	1.448	0.654	3.207	0.361
Faculty					
Medical sciences	1.937	6.937	1.626	29.598	0.009*
Non-medical science		1			
Category of staff					
Junior	-0.772	0.462	0.247	0.866	0.016*
Senior		1			
Constant	1.493				

R^2 = 6.1% - 9.0%, CI = Confidence interval, OR = Odds Ratio*Statistically significant ($p<0.050$)

Table 5: Attitude of academic staff towards depression (n = 330)

Variable	Response Frequency (%)		
	Agree	Disagree	I do not know
Depressed people can live a healthy life if they seek treatment	241 (73.0)	62 (18.8)	27 (8.2)
I can be friends with someone with depression	241 (73.0)	59 (17.9)	30 (9.1)
I feel confident to socialize with a depressed person	237 (71.8)	60 (18.2)	33 (10.0)
I can marry someone with depression	129 (39.1)	136 (41.2)	65 (19.7)
Depressed people can work regular job	188 (57.0)	104 (31.5)	38 (11.5)
Depressed people are mentally retarded	101 (30.6)	153 (46.4)	76 (23.0)
Depressed people are a public nuisance	66 (20.0)	181 (54.8)	83 (25.2)
Live with someone with depression	219 (66.4)	77 (23.3)	34 (10.3)
Upset working with someone with depression	102 (30.9)	185 (56.1)	43 (13.0)
Ashamed of a family member with depression	86 (26.1)	215 (65.2)	29 (8.8)
Depressed people require medical attention	281 (85.2)	29 (8.8)	20 (6.1)

mental illness or depression, with literate, highly trained and skilled professionals being more likely to exhibit positive feelings towards the mentally ill as compared to non-literate subjects.[25,26] Positive attitude towards people with depression is associated with reduced stigmatization and better health seeking behavior.

Limitation of study

The questionnaire was self-administered thus some information given could not be verified at the point of study.

Conclusion

Majority of respondents had good knowledge of depression and positive attitude towards people with depression. The level of education and category of staff significantly influence knowledge of depression among academic staff while knowledge of depression was can significantly influence the attitude towards people with depression.

Table 6: Logistic regression for determinants of attitude towards depression among academic staff

Predictors	B (regression co-efficient)	Odds Ratio	95% CI for OR		p-value
			Lower	Upper	
Age					
21- 30	-1.327	0.265	0.067	1.052	0.059
31-40	-0.550	0.577	0.165	2.012	0.388
41-50	-0.471	0.625	0.177	2.207	0.465
51-60	-0.228	0.796	0.215	2.944	0.732
61-70		1			
Sex					
Male	0.215	1.239	0.756	2.033	0.395
Female		1			
Marital status					
Never married		1			
Ever married	-0.448	0.639	0.299	1.365	0.248
Family type					
Nuclear	0.472	1.602	0.740	3.468	0.231
Extended		1			
Family structure					
Monogamous	0.074	1.077	0.337	3.441	0.900
Polygamous		1			
Household size					
≤6	0.169	1.184	0.618	2.268	0.610
>6		1			
Level of education					
Tertiary		1			
Below tertiary	-0.470	0.625	0.275	1.420	0.262
Faculty					
Medical sciences	0.928	2.528	1.069	5.978	0.035*
Non-medical sciences		1			
Category of staff					
junior	0.087	1.091	0.570	2.087	0.792
senior		1			
Knowledge of depression					
Poor knowledge	1.082	2.949	1.757	4.950	<0.001*
Poor knowledge		1			
Constant	-0.330				

$R^2 = 7.7\% - 10.5\%$, CI = Confidence interval, OR = Odds Ratio *Statistically significant ($p<0.050$)

List of abbreviations

CI, Confidence interval; OR, Odds ratio

Declarations

Ethics approval and consent to participate

Institutional approval was obtained from the University of Benin, Benin City before commencement of the study while individual consent was obtained from respondents who participated in the study.

Consent for publication

Not applicable

Availability of data and materials

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Competing interests

No conflict of interest associated with this work.

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Contribution of Authors

We declare that this work was done by the authors named in this article and all liabilities pertaining to claims relating to the content of this article will be borne by the authors.

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