

Depression in primary care: the knowledge, attitudes and practice of general practitioners in Benin City, Nigeria

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Abstract

Background: Depression contributes significantly to the global burden of disease in developing countries. Poor case detection and inadequate numbers of mental health staff have been associated with increased morbidity among individuals with depression presenting to primary care. In Nigeria, as in most developing countries, general practitioners (GPs) may fill this treatment gap. The knowledge of and attitudes towards depression among GPs have not been surveyed, hence the need for this study.

Method: A cross-sectional survey of 72 GPs was undertaken in Benin City, Nigeria. The 20-item Depression Attitude Questionnaire was used to determine their knowledge and attitude towards depression and its treatment in primary care settings.

Results: GPs had a limited knowledge of depression, with the majority (77.8%) expressing difficulty working with depressed patients. They exhibited moderately stigmatising attitudes towards individuals with depression. GPs were conservative in their use of antidepressants and believed that psychotherapeutic approaches were useful.

Conclusions: Training programs and awareness campaigns for GPs concerning depression are needed in order to improve attitudes towards people with depression, increase case detection and increase the proportion of people treated.

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Introduction

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%. Consequently, with the current population estimates for the country, about five million Nigerians would have experienced a major depressive episode in their lifetime.¹ In Africans, atypical patterns of presentation may make the detection of depression in primary care difficult.^{2,3} Diseases commonly seen in primary care such as musculoskeletal disorders, chronic pain and ulcers are highly comorbid with depression.⁴ As a result, individuals suffering from depression are more likely to present to primary care or general practice clinics than to psychiatric services.⁵

As part of the nation's health policy, mental health has been integrated as a component of primary health care delivery in Nigeria.⁶ However, a sizeable proportion of individuals who suffer from depression are unable to access care at this level as services are poorly organised with a dearth of mental

health professionals and poor funding for the adequate training of primary health care workers in the detection and management of the disorder.⁷

Knowledge among general practitioners (GPs) about mental disorders may vary from country to country and depends on the amount and quality of training received both at under- and postgraduate levels. Earlier reports showed that GPs held poorer knowledge and attitudes towards depression when compared with psychiatrists.^{8,9} In Brazil, GPs expressed little confidence in managing depression. They also reported that managing depressed patients was unrewarding.¹⁰ The lack of effective mental health training has been found to limit the effectiveness of GPs in managing depression in Australia.¹¹ In Kenya and Tanzania, the attitudes of primary health workers towards depression was recently surveyed and showed that though they held high levels of knowledge, they perceived working with depressed patients as difficult.^{12,13}

In most urban areas in Nigeria, public primary care clinics as well as privately run clinics and hospitals provide primary- and secondary-level care to a sizeable proportion of the population. Depression has been reported to be more prevalent in urban regions compared to rural areas.⁶ Though surveys on attitudes towards mental illness have been conducted among health care workers,¹⁴⁻¹⁷ these have focused largely on attitudes towards psychotic illnesses.

No survey that specifically examines the knowledge, attitudes and practice towards depression of GPs in primary health care settings in Nigeria has been conducted, hence the need for this study. We aimed to determine the knowledge and attitudes of GPs in Benin City towards depression and hope that our findings will inform their future training.

Method

Sample size

A power analysis was conducted that showed that with a minimum sample of 70, the study would have a power of 98.5% to yield a statistically significant result. It was assumed that the population would have a mean of 0.5 and a standard deviation of 1.0. The criterion for significance (α) was set at 0.05 with the tests being two tailed.

Study population

The study population comprised all medical doctors working in public and privately-run general practice clinics/hospitals in Benin City, Nigeria. There are no official or reliable data about the total number of GPs working in the country in general or the city in particular. The total number of GPs working in private practice in Benin City was obtained from the state's branch of the Association of General and Private Medical Practitioners of Nigeria (AGPMPN). The number of GPs working in the two large public hospitals in the city was also obtained from the respective heads of departments. In order to increase representativeness, GPs working in the city and known to some of the authors whose names were not on the lists obtained were approached at the hospitals where they work. We estimated, based on the data obtained from the aforementioned sources, that approximately 90 GPs would be working in the Benin City area.

Instrument

A socio-demographic questionnaire was designed for the study. This captured relevant socio-demographic data such as age, sex and length of professional experience.

The Depression Attitudes Questionnaire (DAQ) was also administered. The DAQ was first used in the United Kingdom¹⁸ and has since been used in other developed and developing countries.^{8,10,12,13} Research suggests that the DAQ may prove to be a useful instrument to guide

educational efforts and measure change over time. The DAQ was slightly modified to adapt it to this environment and improve the clarity of the statements. Modification was undertaken in a focus group session of psychiatrists and GPs, with the rephrasing of some statements on the DAQ to improve clarity and understanding. In item No. 5, the phrase "in my practice" was inserted before the original statement to personalise the question. It was agreed that in item No. 6, the word "mechanisms" be replaced by the word "abnormalities" for better conveyance of the question being asked. The phrase "compared to" replaced the word "than" in item No. 8. Item No. 9 was reworded to read "I feel comfortable dealing with the needs of depressed patients" instead of "I feel comfortable dealing with depressed patients' needs." In item 11, the phrase "being old" was replaced with the phrase "natural part of old age". In item No. 12, "practice nurses" was replaced by the term "staff nurse", which GPs in Benin City are more familiar with. In item No. 13, the phrase "heavy going" was replaced with the phrase "can be difficult" for clarity. Item No. 15 was rephrased to personalise the question by adding the phrase "I find it rewarding." In item No. 16, the word "unsuccessful" was replaced by the phrase "of little help".

Procedure

GPs working in private practice in the city were sampled as a captive audience at the monthly meeting of their association (AGPMPN). Members who were not present at the meeting were further approached through the association's chairperson at their respective hospitals. GPs working in government-owned primary care settings were approached through their heads of department. Each questionnaire detailed the objectives of the study, participants were assured of anonymity and GPs signed a written consent form to participate. Completed forms were returned within one week to the association's office (for GPs in private practice) and heads of department (for GPs working in government hospitals). For GPs approached directly by the authors, questionnaires were retrieved within one week at their respective hospitals or clinics.

Ethical clearance

Ethics approval for the study was requested and granted by the Ethics Committee of the Federal Psychiatric Hospital, Benin City.

Data analysis

Data were analysed using the SPSS® version 16. For ease of analysis, the responses of "strongly agree" and "tend to agree" were summarised as "agree" and the responses of "tend to disagree" and "strongly disagree" were summarised as "disagree". "Neither agree nor disagree" and "don't know" were grouped together. Data were summarised in frequency tables and comparisons between categorical

and continuous data were conducted using the chi-square (exact tests where necessary) and Student's t-test where appropriate. Level of significance was set at $P < 0.05$.

Results

Based on the estimate of GPs currently working in public and private clinics in the city, a total of 90 questionnaires were distributed by two of the authors. Of these, 72 were returned (80% response rate).

may probably have a comorbid depressive illness ($P < 0.03$; Table I).

Rates of depression and antidepressant use

The majority (83.3%) of respondents agreed with the statement that there had been an increase in the number of patients presenting with depression in the last five years. An equal proportion of respondents (36.1%) reported that depression was a significant part of the clinical picture in

Table I: Comparison of some socio-demographic characteristics of general practitioners and some attitude statements on the Depression Attitudes Questionnaire

	Gender: n (%)		Work type: n (%)		Duration of practice: n (%)	
	Male	Female	Full time	Part time	≤ 5 years	> 5 years
Increase in depression in the last five years						
Agree	42 (85.7)	16 (69.6)	52 (82.5)	8 (72.7)	34 (87.2)	26 (78.8)
Disagree	2 (4.1)	2 (8.7)	4 (6.35)	-	3 (7.7)	1 (3.0)
Neutral/don't know	5 (10.2)	5 (21.7)	5 (7.94)	3 (27.3)	2 (5.1)	6 (18.2)
	$\chi^2 = 2.60, P = 0.25$		$\chi^2 = 13.95, P = 0.19$		$\chi^2 = 3.59, P = 0.18$	
Difficult to differentiate happiness from depression that needs treatment						
Agree	14 (28.6)	9 (39.1)	18 (29.5)	5 (45.5)	15 (38.5)	8 (24.3)
Disagree	28 (57.2)	12 (52.2)	36 (59.0)	4 (36.4)	21 (58.9)	19 (57.6)
Neutral/don't know	7 (14.2)	2 (8.7)	7 (11.5)	2 (18.1)	3 (7.6)	6 (18.1)
	$\chi^2 = 1.00, P = 0.61$		$\chi^2 = 1.94, P = 0.33$		$\chi^2 = 2.75, P = 0.27$	
Percentage of cases seen with comorbid depression						
> 5%	18 (36.7)	8 (34.8)	20 (32.9)	6 (54.6)	9 (23.1)	17 (51.5)
5-30%	22 (44.9)	11 (47.8)	31 (50.8)	2 (18.1)	20 (51.3)	13 (39.4)
> 30%	9 (18.4)	4 (17.4)	10 (16.3)	3 (27.3)	10 (25.7)	3 (9.1)
	$\chi^2 = 0.05, P = 0.97$		$\chi^2 = 3.99, P = 0.11$		$\chi^2 = 7.27, P < 0.03$	

Socio-demographic characteristics

The majority of the sample were men (68.1%), while the age range of the whole group was between 28 and 68 years, with a mean (standard deviation, SD) age of 38.4 (9.5) years. Male GPs were significantly older than their female counterparts ($t = 4.34, P < 0.001$). GPs in this sample had an average duration since graduating from medical school of 11.4 (9.8) years. Most GPs (84.7%) sampled worked in primary care full time. Over a third (37.5%) had been working in primary care between one and five years.

The socio-demographic variables of gender, work type and duration of practice was compared to some attitude statements on the DAQ (percentage of cases seen with comorbid depression, increase in number of cases of depression in the last five years and difficulty differentiating unhappiness from depression that requires treatment). No significant differences were observed when the selected statements were compared by gender and work type. GPs with less than five years' experience were significantly more likely to estimate correctly that over a third of patients seen

a small number of patients they saw within the last three months. Furthermore, over a third (38.9%) reported that less than 5% of the depressed patients they saw were prescribed antidepressants (Table II).

Table II: Perceived prevalence of depression and antidepressant prescription patterns among general practitioners

Variables	n (%)
Percentage of cases seen with comorbid depression in the last three months	
< 5%	26 (36.1)
5-30%	33 (45.8)
> 30%	13 (18.1)
Percentage of depressed patients seen that would require antidepressants	
< 5%	28 (38.9)
5-20%	16 (22.2)
21-40%	12 (16.5)
41-60%	21 (22.4)
During the last five years, I have seen an increase in the number of patients with depressive symptoms.	
Agree	60 (83.3)
Disagree	4 (5.6)
Neutral/don't know	8 (11.1)

Stigmatising attitudes towards and prognosis of depressive illness

Curiously, slightly over half (52.8%) of the respondents endorsed the statement that depression afflicts individuals with poor stamina. However, most (66.7%) were not of the opinion that depression was a natural part of old age. Nearly two-thirds (63.9%) disagreed with the statement that depression represents a characteristic response that is not amenable to change. Furthermore, a similar proportion (62.5%) of GPs believed that antidepressants produce a satisfactory result in the treatment of depressed patients in general practice (Table III).

Diagnosis, classification and aetiology of depression

The majority (61.1%) of GPs agreed that a biochemical abnormality could explain the aetiology of depression. An almost similar proportion (55.6%) disagreed with the statement that it would be difficult to differentiate unhappiness from a clinical depressive disorder that required treatment. The majority (75%) reported that recent misfortune accounted for most of the depressed cases seen. Most (65.3%) also believed that depressed patients were more likely to have experienced deprivation early in their lives, with slightly over half endorsing the statement that a biochemical abnormality is the underlying cause of depression (Table IV).

Attitudes to depression care and treatment modalities

Just over half (56.9%) of the respondents were comfortable dealing with the needs of depressed patients, with a higher proportion (77.8%) reporting that working with depressed patients can be difficult. Furthermore, less than half (43.8%) reported having a rewarding experience while managing an individual with depression. Almost two-thirds disagreed with the statement that there was little to be offered to patients who do not respond to what GPs do, while the vast majority (95.8%) agreed that nursing staff can be

Table III: Stigmatising attitudes and perceived prognosis of depression among general practitioners

No.	Statement	Agree: n (%)	Disagree: n (%)	Neutral/don't know: n (%)
1	Becoming depressed is a way that people with poor stamina deal with life's difficulties	38 (52.8)	23 (31.9)	11 (15.3)
2	Becoming depressed is a natural part of old age	13 (18.1)	48 (66.7)	11 (15.2)
3	Depression reflects a characteristic response that is not amenable to change	9 (12.5)	46 (63.9)	17 (23.6)
4	Antidepressants usually produce a satisfactory result in the treatment of depressed patients in general practice	45 (62.5)	7 (9.7)	20 (27.8)

Table IV: General practitioners' views about the aetiology, diagnosis and classification of depression

No.	Statement	Agree: n (%)	Disagree: n (%)	Neutral/don't know: n (%)
5	In my practice, it is difficult to differentiate whether patients are presenting with unhappiness or a clinical depressive disorder that needs treatment	23 (31.9)	40 (55.6)	9 (12.5)
6	It is possible to distinguish two main groups of depression: one psychological in origin and the other caused by biochemical abnormalities	44 (61.1)	11 (15.3)	17 (23.6)
7	The majority of depression seen in general practice originates from patients' recent misfortunes	54 (75.0)	9 (12.5)	9 (12.5)
8	Depressed patients are more likely to have experienced deprivation early in their lives compared to other people	47 (65.3)	7 (9.7)	18 (25.0)
9	An underlying biochemical abnormality forms the basis of severe cases of depression	41 (56.9)	16 (22.2)	15 (20.9)

Table V: General practitioners' attitudes towards depression care and treatment modalities

No.	Statement	Agree: n (%)	Disagree: n (%)	Neutral/don't know: n (%)
10	I feel comfortable dealing with the needs of depressed patients	41 (56.9)	16 (22.2)	15 (20.9)
11	Nursing staff could be useful in supporting depressed patients	69 (95.8)	3 (4.2)	-
12	Working with depressed patients can be difficult	56 (77.8)	9 (12.5)	7 (9.7)
13	There is little to be offered to those depressed patients who do not respond to what general practitioners do	12 (16.7)	47 (65.3)	13 (18.0)
14	I find it rewarding to look after depressed patients	35 (48.6)	14 (19.4)	23 (32.0)
15	If psychotherapy were freely available, this would be more beneficial than antidepressants for most depressed patients	42 (58.3)	7 (9.7)	23 (32.0)
16	Psychotherapy is of little help for depressed patients	3 (4.2)	56 (77.8)	13 (18.1)
17	If depressed patients need antidepressants, they are better off with a psychiatrist than with a general practitioner	34 (47.2)	25 (34.7)	13 (18.1)
18	Psychotherapy for depressed patients should be left to a specialist	27 (37.5)	31 (43.1)	14 (19.5)
19	Most depressive disorders seen in general practice improve without medication	27 (37.5)	27 (37.5)	18 (25.0)

useful in supporting depressed patients. Over two-thirds disagreed with the statement that psychotherapy was of little help for depressed patients, while slightly over half of GPs believed psychotherapy to be more beneficial than antidepressants for most depressed patients. Over a third believed that depression requiring medication is best left to a psychiatrist. Opinions were nearly evenly split concerning the statement that most depression in general practice improves without medication. Less than half (43.1%) disagreed that psychotherapy is best left to a specialist, though a slightly higher proportion (47.2%) believed that if depressed patients required antidepressants, they are better off with a psychiatrist (Table V).

Discussion

Globally, depression is ranked fourth in terms of disease burden and is expected to be the second most burdensome disease by 2020.¹⁹ In developed economies, most individuals with a depressive illness are managed by primary care specialists.²⁰ There is an increasing awareness that in developing countries, mental health professionals alone cannot fill the treatment gap for several mental health disorders.²¹ GPs may play a role in meeting the mental health needs of the populace.

This study found that among GPs working in Benin City, Nigeria, there were gaps in their knowledge about depression. For most of the DAQ statements concerning the assessment of their knowledge about depression, between 12% and 25% of responses were “neutral” or “don’t know”. In particular, over a third of participants expressed difficulty differentiating unhappiness from depression that requires treatment. Poor case detection by primary care doctors for depressive disorders has similarly been reported and attributed to poor knowledge and diagnostic skills.^{8,10} In Nigeria, though continuing professional development (CPD) and/or continuing medical education (CME) courses for GPs exist, these have not been mandatory until recently. The body that regulates professional practice for doctors has instituted the acquisition of minimum course points from CPD/CME courses as a prerequisite for obtaining a renewal of annual practising licenses. It is currently not known what proportion of these courses are devoted to mental disorders, as these courses could become an avenue to improve the knowledge base of GPs in mental health disorders if properly implemented. A more aggressive approach could incorporate the suggestions of the World Psychiatric Association that 20% of the curriculum at the undergraduate level be devoted to psychiatric education.²² Furthermore, depression awareness programs have produced encouraging results in the United Kingdom and Australia and may be implemented in the Nigerian setting.^{23,24}

Though the majority of GPs agreed that cases of depression were on the increase in the last five years, paradoxically, only a small proportion reported that depression accounted for a third of cases they see. It is possible that most GPs only recognise depression when it presents with the classic features of low mood and reduced energy and may miss atypical or masked types that present with somatising features, as is common in this environment.^{2,25,26} It is still debatable whether there is a true increase in the prevalence of depression or whether there is merely an increasing recognition of this disorder.¹² A cause for some concern was the fact that a third of GPs surveyed reported that antidepressants were needed in less than 5% of the patients they see. A recent observational survey in Scotland showed that aside from the underdiagnosing of individuals with depression, those diagnosed were rated much lower in severity compared to an objective index and were not prescribed antidepressants.²⁷ Similarly, GPs in Australia were more likely to prescribe antidepressants at lower doses compared to psychiatrists.²⁸

Though GPs in this survey reported that psychotherapeutic approaches would be of benefit in the management of depression, the majority indicated that working with depressed patients can be difficult. This was further buttressed by the observation that less than half of GPs believed that working with depressed individuals was a rewarding experience. A similar scenario was reported among health workers in Kenya¹³ and GPs in Brazil.¹⁰ In future, training programs for GPs on depression care in developing countries should place emphasis on the acquisition of basic psychotherapeutic skills such as counselling and cognitive behavioural therapy that have shown proven benefit, especially in mild to moderate depression.²⁹

GPs held moderately stigmatising attitudes towards depression. This is in contrast with a survey from southwest Nigeria where doctors exhibited a high degree of stigmatising attitudes towards the mentally ill.¹³ In addition, over half of GPs believed that depression was a condition amenable to change. Medical practitioners may hold dual views about the behavioural tendencies and prognoses of individuals with psychotic illness on the one hand and depression on the other. Advocacy for increased depression detection and care among GPs in Nigeria as seen in other countries may record impressive results because GPs in this survey appear enthusiastic towards depression care.

This study has some limitations. The DAQ has been reported to have an unstable factor structure across cultures,³⁰ however, the small size of the sample surveyed limited our desire to conduct a principal components analysis of the

20-item instrument. Furthermore, it is not certain whether the characteristics of doctors in Benin City are similar to those of other GPs in other parts of the country, thus we are unable to generalise our findings. The possibility of a sample bias affecting the reliability of the results obtained cannot be ruled out. Furthermore, some respondents were directly approached by the authors and a "halo effect" may also have biased their responses.

Conclusion

The current ratio of trained mental health professionals relative to the number of people with depression in Nigeria means that, as elsewhere, it is impossible for specialists alone to meet the needs of the majority of individuals with depression. There were deficiencies in the knowledge base among GPs surveyed concerning depression, with the majority perceiving the management of depressed patients as difficult. GPs were more likely to be conservative about antidepressant use and though believed psychotherapy to be of benefit, they were more comfortable leaving these interventions to specialists. Regular training courses and awareness programs are urgently needed to improve the skills of GPs in this setting.

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