The Prevalence of Depression among patients and its detection by Primary Health Care Workers at Matawale Health Centre (Zomba)

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Abstract

Background

Little information is available on the prevalence of depression in Malawi in primary health care settings and yet there is increased number of cases of depression presenting at tertiary level in severe form.

Aim

The aim of the study was to determine the prevalence of depression among patients and its detection by health care workers at a primary health care clinic in Zomba.

Methods

A cross-sectional survey was done among patients attending outpatient department at Matawale Health Centre, in Zomba from 1st July 2009 through to 31st July 2009. A total of 350 adults were randomly selected using systematic sampling. The "Self Reporting Questionnaire", a questionnaire measuring social demographic factors and the Structured Clinical Interview for DSM-IV Axis I disorders Non-Patient Version (SCID-NP) were administered verbally to the participants.

Findings

The prevalence of depression among the patients attending the outpatients department was found to be 30.3% while detection rate of depression by clinician was 0%.

Conclusion

The results revealed the magnitude of depression which is prevalent in the primary health care clinic that goes undiagnosed and unmanaged. It is therefore recommended that primary health care providers do thorough assessments to address common mental disorders especially depression and they should be educated to recognise and manage depression appropriately at primary care level.

Introduction

Mental disorders are more common in clinical than in community settings, one study in Kenya found that up to 40% of the patients in general medical and surgical wards were depressed and required treatment[1]. Evidence indicates that mood disorders are among the most common problems that bring patients to doctors thus literature from high income country suggest that almost 20% of adults will have a mood disorder requiring treatment during their lifetime while about 8% of adults will have a major depressive disorder during their lives[2].

Despite this evidence that depression contribute a significant percentage of disease burden in the clinical setting there is also evidence which indicates that depression often goes unrecognized[3]. World Health Organization report on mental health suggest that undiagnosed depression places a significant socio-economic burden on individuals, families and communities, in terms of increased service needs, lost employment, reduced productivity, poor parental care with the risk of transgenerational effects and an increased burden on care givers[4]. Although depression-related health problems are estimated to be huge, a gap in the provision of services

has been highlighted by various studies[5]. The problem is said to be even more serious in settings that are already labouring under the burden of inadequate resources and shortage of health care personnel[6]. Delays, misdiagnosis and non-specific treatments have been typical pathways to care for people with depression[7]. It is evident that delays in seeking treatment, misdiagnosis and non-specific treatments have compromised appropriate care for people with depression hence depression is among the leading causes of disability in the world and cause of years of health lost to disease in both men and women[8]. The review of research evidence available indicated that the Primary Health Care (PHC) clinician's ability to detect depressive disorder is important in prevention of suicide and reduction of healthcare costs as patients with depression are more frequent users of medical services[9].

However the ability to detect depression by clinician is sometimes affected by comorbidity. Literature indicates that comorbidity between physical illnesses and depression often complicates patients' recognition, treatment and prognosis[10]. Given the workload at primary health care (PHC) setting level, little time is available to screen for mental disorders hence depression may go undiagnosed. There is a possibility that a significant proportion of the patients attending a primary health care facility may have a mental disorder especially depression. Little information is available on the prevalence of depression in Malawi and yet in primary health care settings there are increased numbers of cases of medically unexplained somatic symptoms like musculoskeletal pains seen in clinics[11].

Study Area

In Malawi most primary care services are provided by the outpatient departments of health centres and district hospitals. The study was conducted at the outpatient department of Matawale Health Centre in Zomba district from 1st July 2009 through 31stJuly 2009. Zomba district has a population of approximately 747,620 people. The basic catchment area of the Matawale Health Centre is the Zomba urban which has a catchment population of 36,819, but some patients come from surrounding rural areas in the district. Matawale Health Centre is among the busiest health facility with an average outpatient attendance of 400 patients per day. The facility has 6 clinicians including the health centre in charge.

Method

This cross-sectional study utilized structured questionnaires to collect data. The prevalence of depression was determined by a two-stage screening process using Self Reporting Questionnaire (SRQ-20) and Structured Clinical Interview for DSM-IV Axis I disorders (SCID) while the recognition rate of depression was assessed by reviewing clinicians' records of the visit.

Population

The participants included in this study were patients attending Matawale Health Centre services out-patient care

during the data collection period (1st July 2009 through 31st July 2009). As regard to selection and inclusion criteria the study population included patients aged 18 years and older (both males and females) who were attending the primary health care clinic for any medical complaint. The study excluded those suffering from an illness causing inability to talk and also patients with known history of mental illness. The study also excluded non-consenting patients and also those less than 18 years. The study further excluded those in an emergency condition needing urgent medical care or admission. A total of 350 patients were interviewed. No patient refused to participate in the study.

Sampling

Sample size was calculated based on prevalence estimates from recent epidemiological studies which were done in developed and developing countries. Therefore, a prevalence of depression of 30% was assumed among primary health care setting attendees. A margin of error of 5% and confidence level as 95% was used in sample calculation. Using the formula[12] for calculating sample size for a cross sectional survey, a total sample of 323 was determined. To give an allowance for refusal rate, 350 participants were selected. Participants for this study were randomly selected using systematic random sampling technique. The sampling technique was selected to provide an equal probability of the participants being selected. In this case every third patient attending the Matawale Health Centre was selected for screening with Self Reporting Questionnaire (SRQ-20) until the sample size was achieved.

Ethical Consideration

Ethical review was conducted by the Mzuzu University Ethics, Publication and Research Committee and also permission to conduct the study was obtained from Zomba District Health Officer as well as from the in charge of Matawale Health Centre . Furthermore informed consent was obtained from the study participants before the commencement of the interview. An information brochure was read to the participants in either Chichewa or English language. The participants were then asked to sign the document or thumb print that they consented to participate in the study. The participants were assured of confidentiality because only the researchers could access the data and that only codes would be recorded on the questionnaire. Furthermore, the participants were assured that their health care would not be affected by whether or not they participated. Interviews took place in a private room attached to the health centre.

Data Collection

Data were collected by using a set of questionnaires in one of the consultation rooms at the clinic. Prior to seeing the clinician patients were asked to provide written informed consent to participate in the study. If the patient agreed, some information was obtained using a self designed form of 7-items. There after the patient went into the clinician's room for general medical assessment and after leaving the clinician office those patients who scored 8 or above on the Self Reporting Questionnaire (SRQ) were administered the already validated and translated Structured Clinical Interview for DSM-IV-TR Axis 1 Disorders (SCID-NP)[13], by the research assistant to elicit the psychiatric symptoms itemized in the DSM-IV criteria for depression. If the SCID examination identified any type of depressive disorder, the patient's health passport (which is always in the patient's possession) was examined after the clinical interview to determine whether or not the clinician made a diagnosis of depression and/or prescribed antidepressant medication. The treating clinicians remained blind to the SRQ score so they did not change their assessment and management of patients during the study. Similarly the research assistant was blinded of the SRQ score so that the score could not influence SCID examination. Patients who were diagnosed with any current mental illness by the SCID examination but not identified by the treating clinician were informed of the diagnosis and were referred to appropriate professionals for management.

Statistical Analysis

Data were collated and processed using the SPSS 16.0 statistical package.

Results

All the 350 who were sampled for the study participated in the study (no patient declined to participate giving a 100% response rate and had complete data sets, without any missing data on the variables). The majority of participants were females thus 239 which represented 68.3%. None of the participants had prior antidepressant treatment.150 participants (43%) had a score of 8 or more and therefore underwent the second phase of SCID questionnaire. During the study period, the review of clinicians' record of visit indicated that primary health care clinicians recognized none of the patients who were detected as having a "probable" mental health problem by the SRQ questionnaire. Of the participants (150) who underwent second phase of SCID, 43.3% (65) met DSM IV, criteria for major depressive episode, 27.3 % (41) for minor depressive episode and 29.3% (44) for no depression, (Table 1). For statistical analyses, the classes were combined, minor depression and major depression, thus yielding a dichotomous variable "depression" and "no depression".

The prevalence of depression among the patients attending the outpatients department was found to be 30.3%. The detection rate of depression by primary health care clinician was 0%. A large number of patients were diagnosed as having physical conditions and treated as such however they had met the criteria of depression on the research tool, (Table 2). The proportion of depressed patients as detected by SCID and treated for clinically diagnosed malaria was 19.5% with minor depression and 20% with major depression. In the same vein the proportion of depressed patients as detected by SCID and treated for medically unexplained symptoms was 36.6% with minor depression and 40% with major depression, (Table 2).

Table 1: Distribution of SCID diagnoses for depression among primary health care attendees

		Frequency	Valid Percent	Cumulative Percent
SCID Diagnosis	Not Depressed	44	29.3%	29.3%
	Minor Depressive Episode	41	27.3%	56.7%
	Major Depressive Episode	65	43.3%	100.0%
Total		150	100%	

Table 2: Distribution of diagnoses by SCID category

SCID category	Diagnosis					P-Value
	Malaria	Medically unexplained	URTI	Others	Total	
						0.016
Not depressed	0 (.0%)	14 (31.8%)	12 (27.3%)	18 (40.9%)	44	
Minor depression	8 (19.5%)	15 (36.6%)	11 (26.8%)	7 (17.1%)	41	
Major depression	13 (20.0%)	26 (40.0%)	13 (20.0%)	13 (20.0%)	65	
Total	21	55	36	38	150	

Discussion

Prevalence of depression was 30.3%. Direct comparison of prevalence studies for depressive disorders is difficult because of a lack of uniformity as studies differ in terms of culture, patient population, socio-demographic factors, diagnostic instrument, and methodology[14]. Furthermore, some studies focus on a subset of depressive disorder while others include all forms of mental disorders. Given these limitations, the prevalence figures determined in this study are consistent with most findings reported elsewhere. The Prevalence of depression found in the present study (30.3%) was significant and in keeping with the results from both developed and developing countries. For instance, the results were congruous with the prevalence rate of 29.6% reported among Kuwait PHC patients[15]; the 29.2% reported in primary care setting in Thailand[16]; the 28.4% reported among primary care attendees in South India[17]. Interestingly the prevalence is somehow similar to that of the international study[18] where the prevalence was 33.5%, the 31.6% prevalence rate of current major depressive episode at PHC centres in Uganda[10], and also the 32% prevalence rate of depressive disorder at a Community Health Centre in South Africa[14].

The higher prevalence of depression among the primary health care attendees and the low detection rate of depression by primary health care clinician confirmed the idea that the majority of primary care patients with depression go undetected and untreated. Most of the patients diagnosed with depression by SCID during the study presented with a cluster of medically unexplained symptoms suggesting that primary health care clinicians are limited in their ability to diagnose depression particularly in its somatised form. The low detection however can be probably related to the heavy patient load at the clinic; willingness of the patients to report affective symptoms to their clinician or the clinician attitude and practice towards mental health problems especially depression.

Conclusion

The results revealed the magnitude of depression which is prevalent in the primary health care clinic that goes undiagnosed and unmanaged. Taking into consideration that the participants involved in this study had mainly sought help general medical condition, the helpfulness of asking screening questions about depression to patients with medically unexplained symptoms to assist in making diagnoses should be recommended.

Acknowledgements

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