Detection and Management of Depression and/or Anxiety for People with Epilepsy in Primary Health Care Settings in Zambia

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Abstract

Purpose—Among the 50 million people with epilepsy (PWE) worldwide ~ 15 to 60% likely also suffer from depression and/or anxiety and 80% reside in low-income regions where human and technological resources for care are extremely limited.

Methods—In Zambia, we carried out a retrospective chart review of 200 randomly selected files of PWE using a structured abstraction form to systematically collect socio-demographic data and clinical details on the detection and treatment of depression and/or anxiety.

Results—Only 2 PWE (1%) had depression diagnosed and none were given a diagnosis of an anxiety disorder. Complaints suggestive of underlying depressive and/or anxiety disorders were documented in 120 (60%), but no diagnoses were made and no referrals, investigations or treatment were offered.

Conclusions—Further research is required to establish the prevalence of depression and anxiety among PWE in sub-Saharan Africa and efforts are needed to improve screening and treatment for common, treatable psychiatric comorbidities in PWE in resource limited settings.

Keywords

Epilepsy; Depression and/or Anxiety; Detection and treatment; Chart review

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Introduction

Of the 50 million people living with epilepsy (PWE) worldwide ~15 to 60% likely also suffer from depression and anxiety, and need treatment[1, 2]. Eighty percent of PWE reside in low-income regions where human and technological resources for care are extremely limited [3]. In Africa, these patients generally receive care in primary healthcare (PHC) settings from non-physician healthcare workers rather than psychiatrists or neurologists. Laudable efforts by the World Health Organization's Mental Health Gap Action Programme are presently underway to optimize the treatment of epilepsy and common psychiatric disorders by PHC workers in low income countries.

The specific objectives of this study were to identify randomly selected outpatient medical records for PWE attending two urban PHC clinics in Lusaka, Zambia and to review the records on each patient using a structured abstraction form designed to assess the detection, diagnosis and treatment frequency for depression and/or anxiety among PWE receiving routine care at PHC settings in Zambia.

Methods

Setting

The study was conducted in Zambia at Chainama and Kanyama clinics-first level, public PHC clinics. In the Zambian context, PHC includes all services which are regarded as basic in nature that can be offered at health post, health centre, and district hospital levels. Health care delivery at the PHC level is mainly provided by general clinical officers, registered nurses, psychiatric clinical officer, registered mental health nurses, and general physicians. A critical shortage of skilled human resources in Zambia has caused the redeployment of PHC workers to the secondary and tertiary levels of care [4; 5].

Significance

Data from developed settings indicate that comorbid depression and anxiety contribute substantially to medical morbidity among PWE[1]. Treatment for these common psychiatric conditions is typically affordable and available through the public health sector in low income, tropical settings but whether screening, detection and/or management of these disorders is routinely undertaken in resource limited settings is unknown.

Approach

This was a retrospective chart review of PWE attending a weekly clinic for epilepsy care who were registered as patients between 2000 and 2010. Two hundred (200) files of PWE aged 18 years and above, on antiepileptic drugs (AED), with an established diagnosis of epilepsy and no diagnosis of mental illness, were randomly selected and reviewed using a structured abstraction form containing: file number, sex, age, level of education, marital status, any reference in clinic notes addressing depression or anxiety or common signs and symptoms of these conditions, related treatment, any established diagnosis of depression and/or anxiety, and any other diagnoses or treatment. Potential depressive and /or anxiety symptoms abstracted included loss of sleep, loss of appetite, weight loss and body pains [for depression] and palpitations, dizziness, headache, confusion lack of concentration [for anxiety], [6].

Ethical approval was obtained from the appropriate ethics review boards at University of Kwazulu-Natal, University of Zambia and Michigan State University.

Results

Two hundred files were reviewed. One hundred and twenty-two (61.0%) of the PWE were male. Most patients were single with limited education. Twenty-one files (10.5%) included complaints potentially related to depressive signs and symptoms (loss of sleep, loss of appetite, weight loss and body pains). In 42 files (21.0%), there were complaints potentially related to anxiety: palpitations, dizziness, headache, confusion, and/or lack of concentration.

Only 2 files (1.0%) had the explicit diagnoses of depression documented and none of the 200 reviewed explicitly diagnosed an anxiety disorder. Antidepressants were prescribed in 8 (4.0%) files without an explicit diagnosis. Other diagnoses given to PWE included acute psychotic disorders, cerebral malaria, alcohol abuse, brain damage, severe rash all, and epitasis. Carbamazepine and phenobarbital were the most frequently prescribed antiepileptic drugs (AEDs). Of the files reviewed, 20% had diazepam prescribed in combination with AEDs. It is not unclear from documentation whether benzodiazepines were intended for their antiseizure effects, anxiolytics effects, or both. Vitamin supplements were also commonly prescribed with folic acid (37.5%) being the most common. In 27(13.5%) of files, other drugs were prescribed including antibiotics, analgesics, antimalarial agents, and neuroleptics.

Discussion

In this retrospective chart review of routine epilepsy care in the public health sector in Zambia, depression was diagnosed in only 1% of patients compared with >20% in developed setting studies [1]; [7–9]. Anxiety was never explicitly diagnosed. Either depression and anxiety among PWE in Zambian is extremely uncommon, or more likely, the condition is grossly under-recognized in the PHC settings despite the availability of affordable treatment for these common psychiatric conditions in the PHC setting. Under-diagnosis may be related to a lack of awareness among Zambian PHC workers regarding the common nature of anxiety and depression in PWE. Depression not only seriously affects PWE's health-related quality of life [10], but is also potentially life threatening by contributing to high suicide rates among PWE compared to the general population.

The findings of this study are not unique to Zambia as a developing and low resource nation. Data from more developed countries have also identified gaps in the diagnosis and treatment of common mental health conditions among PWE[1,8,10]. This could be due to a focus upon the delivery of epilepsy care with subsequent neglect of the mental health aspects of PWE in whom suicide is higher than the ordinary population[10]. In the Zambian situation we suspect the problem is primarily related to the fact that primary health care workers have limited education in mental health care provision.

The limitations of the retrospective chart review included lack of follow up of PWE. For instance, it was not possible to establish the temporal relationship between epilepsy and the comorbid depression and/or anxiety. Clinical notes in the clinics involved were often quite abbreviated—but drug prescribing would have been captured regardless. This study was also limited to urban areas.

If the prevalence of depression and/or anxiety among PWE in Zambia are similar to reports from developed regions, educational activities aimed at sensitizing PHC workersregarding the need to evaluate PWE for common psychiatric disorders are needed. A valid screening tool appropriate for use by PHC workers in busy clinics could also improve care for this vulnerable and often neglected population.

Acknowledgments

Abbreviations

AED   Antiepileptic drug

PHC   Primary healthcare

PWE   People with epilepsy

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