Psychosomatics 2013:54:472–478

Original Research Reports

Panic Disorder Prevalence Among Patients Referred for an Electrocardiogram in a Nigerian Teaching Hospital

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Background: *Panic disorder is a common chronic illness that is often unrecognized, misdiagnosed, and untreated because it often presents to the physicians with symptoms that are similar to those of emergency medical conditions. One study of the prevalence of panic disorder in the general population in Nigeria has been published, but no studies have examined the prevalence of panic disorder in a sample of Nigerian patients with cardiac symptoms. This study investigated the 12-month prevalence of panic disorder among patients who were referred for an electrocardiogram in a Nigerian teaching hospital.* **Methods:** *Three hundred consecutive patients who were referred for an electrocardiogram were assessed for panic disorder using the Structured Clinical Interview for DSM-IV (SCID).* **Results:** *The prevalence of panic attacks and panic disorder were 10.0% and 7.0%, respectively. Age was associated with the presence of both panic attacks and panic disorder.* **Conclusions:** *This study suggests that panic disorder is common among patients who are referred for an electrocardiogram. It is recommended that patients whose cardiovascular or respiratory symptoms are not well explained by the diseases of such systems be evaluated for mental illness.*

(Psychosomatics 2013; 54:472–478)

Panic disorder is a common, chronic illness, associated with considerable morbidity and social costs.[1–3] In 1990, panic disorder was the 27th leading cause of nonfatal burden of disease in the world. At that time, it accounted for 1.0% of the total global years living with disability (YLD), with the same percentage as ischemic heart disease.[4]

The lifetime prevalence of panic disorder has been put at 1.5% to 5%.[5–9] In hospital settings, the prevalence rises to as high as 50%, especially when patients with cardiac pathology and patients with endocrine pathology are studied.[10,11] Although several effective treatments are now available, as many as half the number of the sufferers are either undiagnosed, misdiagnosed, or untreated.[12–14] One reason for the under-diagnosis is that most of the patients suffering from the disorder are initially seen at presentation by general practitioners, internal medicine specialists, or emergency room physicians. Their complaints, which include palpitations, chest pain, dizziness, and breathlessness often mimic those of emergency medical conditions, such as myocardial infarction, cardiac arrhythmias, cardiac failure, and other myocardial diseases. However, a significant number of such patients who present to medical clinics with these panic-like symptoms have no organic basis for their complaints.[15] Unfortunately, in current medical practice, many persons with panic disorder often undergo elaborate, expensive, but often inconclusive medical workups such as electrocardiograms, chest X-rays, and echocardiography. Such patients are thus offered ineffective treatment, while others are treated for nonspecific anxiety.[13]

In Nigeria, very few studies on panic disorder are available. Among these, the reported prevalences include

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3% in a psychiatric outpatient clinic of a teaching hospital,[16] and lifetime and 12-month prevalences of 0.2% and 0.1% in the community.[17]

There is no study in Nigeria that has addressed patients who are at a high risk for panic disorder, such as patients referred for cardiac or respiratory investigation. Such studies are particularly important since reports from Europe and the United States show that the prevalence of panic disorder is high among such patients.[10,12,18,19] Improving the recognition and treatment of panic disorder either alone or as a comorbid illness in Nigeria could reduce the burden, social costs, and economic costs attributable to under-diagnosis, misdiagnosis, and under-treatment of this condition.[2,20]

The aim of the present study was to estimate the prevalence of panic disorder among patients that have been referred for an electrocardiogram and the sociodemographic factors associated with such patients in a Nigerian teaching hospital.

METHODS

Study Setting

The study was carried out in the electrocardiogram room of the University College Hospital (UCH), Ibadan. This is an 812-bed teaching hospital located in southwest Nigeria. All patients (this included outpatients as well as inpatients who could leave their ward beds) for whom an electrocardiogram was requested at UCH come to this room except patients who are too ill to leave their ward beds. The electrocardiograms are done between 8 am and 5 pm daily on each working day.

Subjects

The inclusion criteria were (1) referral for an electrocardiogram, (2) age between 18 and 65 years, and (3) signed informed consent. The first 300 patients that met the criteria were included in the study.

Study Instrument

The study instrument was administered in two parts. The first part was devised to obtain socio-demographic information on age, sex, marital status, educational status, reasons for which the patient might have been referred and the diagnosis made by the referring doctor.

The second part was derived from the panic disorder module of the Structured Clinical Interview for DSM-IV.[21] SCID-IV is a semi-structured clinical interview that yields a current and lifetime DSM-IV Axis I disorders. It also has specific questions that rule out organic conditions. The instrument was translated into Yoruba (the local language) and back-translated.

Diagnosis

The diagnosis of panic disorder in this study was based on DSM-IV diagnostic criteria. Diagnostic assessment was made with the use of the Structured Clinical Interview for DSM-IV (SCID). One of the authors (O.B.E.) was trained in the use of the SCID prior to the commencement of the study. Panic disorder was defined according to the DSM-IV criteria for panic disorder (i.e., the presence of recurrent unexpected panic attacks in which at least one of the attacks has been followed by 1 month [or more] of one or more of either a persistent concern about having additional attacks, worry about the implications of the attack or its consequences or a significant change in behavior related to the attacks). Also, the attack should not be due to the direct physiological effects of substance or general medical condition and the attacks should not be accounted for by another mental disorder.

Patients' case notes were later examined to record the diagnoses made in the medical units that referred them. All the units in the medical departments were headed by consultants. The diagnoses made by the referring physicians were grouped according to the International Statistical Classification of Diseases and Related Health Problems, 10th Revision Version for 2006 (ICD-10). The University of Ibadan/University College Hospital Institutional Review Board approved the study protocol. Signed informed consent was obtained from the participants after the aims and objectives of the study were explained to them.

Data Collection

The reasons for referral for an electrocardiogram were sometimes different from the diagnoses made by the physicians in some cases, so the reasons for referral for electrocardiogram were analyzed separately. The reasons for referral for electrocardiogram were grouped into six categories. These are (1) cardiac disease and hypertension; (2) cardio-respiratory symptoms, this comprises those who were referred on account of symptoms and signs that are referable to the cardiac or respiratory system. These symp-