Obsessive-compulsive (oc) symptoms in psychiatric in-patients at Mathari hospital, Kenya

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Abstract

Objective: To document the prevalence of obsessive-compulsive disorders (OCD) among patients admitted at Mathari Psychiatric Hospital, Nairobi, Kenya. **Method:** This was a descriptive cross-sectional study conducted at the Mathari Hospital. **Results:** Out of 691 patients interviewed, 84 (12.2%) had symptoms which met the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) criteria for OCD, which started early in life. The clinicians had not recognized the OC symptoms/disorder. There were high co-morbidities between OCD and other Structured Clinical Interview for DSM-IV (SCID) core syndromes as well as psychotic symptoms often associated with schizophrenia. **Conclusion:** OC symptoms are common in psychiatric patients admitted at Mathari Hospital although such symptoms were clinically undetected and therefore not managed. The high co-morbidities between OCD, other psychiatric disorders and other psychiatric symptoms pose clinical challenges in differentiating between psychotic symptoms perceived by the patients to have an external locus and OC symptoms perceived to have an internal locus. A more systematic clinical procedure for assessing all DSM-IV symptoms should be adapted as standard quality control practice in all patients, particularly those with psychotic symptoms.

Key words: Obsessive-compulsive symptoms; Psychiatric inpatients; Kenya

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Introduction

Obsessive-compulsive disorder (OCD) is classified according to the Diagnostic and Statistical Manual of Mental Disordersfourth edition (DSM-IV) as an anxiety disorder.¹ It is characterized by obsessions that provoke anxiety, and compulsions that reduce it.² It has been shown that most people with OCD experience both obsessions and compulsions and that in up to 90% of the cases, the compulsions are seen as functionally related to obsessions.³ Patients with obsessive-compulsive (OC) symptoms often meet the life time criteria for another anxiety disorder as OCD often co-exists with panic disorder, social phobia, simple phobia, and generalized anxiety disorder as well as depression, alcohol and drug use disorders.⁴⁻⁸

A number of studies based on both clinical and epidemiologic samples suggest that the rate of OC symptoms

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University of Nairobi & Director, Africa Mental Health Foundation PO Box 48423, 00100-GPO, Nairobi, Kenya email: dmndetei@mentalhealthafrica.com or dmndetei@mail.uonbi.ac. in schizophrenia may be as high as 10-25%.⁹ One such study of 77 patients with schizophrenia found that 7.8% met the DSM-III-R criteria for OCD, while another related study found that 25% of 102 patients diagnosed according to DSM-III-R criteria for schizophrenia had significant OC symptoms.^{10,11} The significance of these findings is validated by evidence showing that schizo-obsessive individuals have poorer outcomes, more severe impairment of social behaviour, and lower levels of functioning.^{12,13} Moreover, individuals with other co-existing psychiatric disorders are more likely to seek health care than individuals who only exhibit OC symptoms.¹⁴

There is only one study (as far as we were able to establish)¹⁵ on the prevalence of OC symptoms and disorders in psychiatric inpatients from Africa, creating a gap in the global pool of this particular type of data. This kind of information is required not only for cross-cultural comparisons, but also for clinical management of the patients in whom OCD may go unnoticed and therefore unmanaged. This has been reported in both Europe and the USA despite their apparently far better resourced psychiatric services.^{4,7}

The objective of this study was therefore to investigate and document the prevalence and co-morbidity of OCD among patients admitted with axis 1 disorders at Mathari Hospital.

Method Study site

This study was conducted at Mathari Psychiatric Hospital, which is the national referral and teaching psychiatric hospital based in Nairobi, the capital city of Kenya. It admits mainly those patients whose behavioural disturbances cannot be managed within the community or by their relatives and who are too poor to seek treatment in private facilities. In Kenya, public psychiatric services are poorly developed. Mathari Hospital has around 600 beds, and at the time of the study it was served by seven psychiatrists, two of who carry out administrative duties on a full-time basis.

Data Collection

Ethical clearance for the study was obtained from the Mathari Hospital Research and Ethics Committee. The research assistants, who were senior psychiatric charge nurses, were trained to use the Structured Clinical Interview for DSM-IV (SCID), a screening module for DSM-IV axis 1 disorders.¹⁶ Pilot testing was done with patients outside the study population until the research assistants were conversant with the use of the instrument.

The data was collected over a period of one month (June 2004) and all inpatients admitted prior to and during the study period were considered for inclusion. The consenting process took place when the patients were not too disturbed to participate, and the interviews were carried out in the same manner as a mental state examination, this time using the SCID. Those patients who scored positively for the SCID core syndromes of OCD were further interviewed for the specific symptoms of OCD. The patients benefited from an in-depth mental state examination. None of the patients declined participation. The socio-demographic data and clinical

diagnoses made by the clinicians were extracted from the patients' clinical notes.

Data analysis

Data analysis was done using SPSS version 11.5. The other SCID core syndromes in those patients with a positive SCID core syndrome of OCD were each analysed and correlated with obsessive thoughts and compulsive behaviour. Further correlation tests were done between OC symptoms and DSM-IV symptoms of schizophrenia.

Results

Socio-demographic characteristics, DSM-diagnoses and OC Symptoms

A total of 691 patients, participated in the study. Eighty-four (12.2%) respondents met the DSM-IV criteria for OCD (62.7% males and 37.3% females). The DSM-IV diagnoses for the entire sample included substance abuse disorders, major psychiatric disorders such as schizophrenia (n = 353, 51.1%), bipolar mood disorders (n = 295, 42.7%), and major depressive illness (n = 170, 24.6%), as well as anxiety disorders (n = 206, 29.8%), such as panic attack, specific and social phobia and generalised anxiety. (These diagnoses totalled up to more than 100% suggesting co-morbidity of disorders)

Frequency of OC symptoms

Seventy-five percent (n = 63) of the patients with OC symptoms were aged 40 years and below. More than half (59.5%) of the respondents were single and 13.1% had not attended any formal schooling (Table I). There was a wide spectrum of both obsessive and compulsive symptoms, with the prevalence ranging from 9.6%-15.5% (Table II).

Table I: Socio-demographic characteristics of the patients with DSM-IV OC Symptoms

| Variables (N = 84) | | | | | | | | |
|--|---|---|---|---|---|--|--|--|
| Age (years) | n (%) | Marital status | n (%) | Education level* | n (%) | | | |
| 11-20 21-30 31-40 41-50 > 50 | 8 (9.5) 32 (38.1) 23 (27.4) 11 (13.1) 10 (11.9) | Single Married Widowed Divorced Separated | 50 (59.5) 27 (32.1) 1 (1.2) 4 (4.8) 2 (2.4) | University College Secondary Primary No education | 4 (4.8) 2 (2.4) 44 (52.4) 23 (27.4) 11 (13.1) | | | |
| | | | | | | | | |

* Primary = 1-8 years of formal education

Secondary = upto 4 years of post-primary education

College = post-secondary/vocational training

| Table II: DSM-IV OC Symptoms | | | | | | |
|--|-------------------------|--|--|--|--|--|
| Symptoms (N=84) | Current Admission n (%) | | | | | |
| Obsessions: recurrent & persistent thoughts/impulses/images | 12 (14.3) | | | | | |
| Attempt to ignore/suppress such thoughts | 13 (15.5) | | | | | |
| Thoughts/images/impulses recognized as coming from own mind | 10 (11.9) | | | | | |
| Compulsions: repetitive behaviours (washing hands/counting/checking) | 11 (13.1) | | | | | |
| Behaviour aimed at preventing or reducing mental distress or preventing some dreaded event/situation | 8 (9.6) | | | | | |
| Excessive thoughts | 11 (13.1) | | | | | |
| Marked distress/time consuming | 10 (11.9) | | | | | |
| Not due to substance or medical condition | 7 (8.4) | | | | | |

Hospital diagnoses

Of the various hospital (clinician) diagnoses, schizophrenia had the highest prevalence rates of OC symptoms (33.3%); the lowest rates were found in schizoaffective disorder and epilepsy (3.6% each), while the prevalence rates for other diagnoses were in between (Table III).

Table III: Clinicians' working diagnoses of the patients with DSM-IV OC symptoms

| Clinicians' Working Diagnosis | Current Admission n (%) | | |
|-------------------------------|-------------------------|--|--|
| Bipolar mood disorder | 15 (17.9) | | |
| Depression | 4 (4.8) | | |
| Drug induced disorder | 14 (16.7) | | |
| Epilepsy | 3 (3.6) | | |
| Psychosis | 10 (11.9) | | |
| Schizoaffective | 3 (3.6) | | |
| Schizophrenia | 28 (33.3) | | |

Table V: Summary of significant (\leq 0.05) correlations of OC symptoms with DSM-IV symptoms of schizophrenia

Obsessive Thoughts:

Delusions of reference Running commentary hallucinations Third party hallucinations Visual hallucinations Commanding hallucinations that are obeyed

Compulsive Behaviour:

Thought broadcasting

Note: There were no significant correlations between OC symptoms and overall DSM-IV diagnosis of schizophrenia

Prevalence of and correlations between OC symptoms and various SCID core syndromes

OC symptoms were present in all the 17 core syndromes of SCID. Of these, 8 core syndromes had significant correlations ($p \le 0.05$) with obsessive thoughts while 10 core syndromes had significant correlations with compulsive disorders ($p \le 0.05$) (Table IV).

Summary of significant (P<0.05) correlations of OC symptoms with DSM-IV symptoms of schizophrenia

Fifteen out of the 84 patients (i.e. 17.8%) with OC symptoms had a DSM-IV diagnosis of schizophrenia. There were significant correlations (p<0.05) between DSM-IV symptoms of schizophrenia and DSM-IV symptoms of OC (Table V).

Discussion

This study has inherent limitations. The most important of these is the cultural relevance of DSM-IV and SCID symptom descriptions among African patients. It has been argued that the SCID can be used in different cultures.¹⁷ Conducting pre-data collection training of the data collectors, who were amongst the most experienced psychiatric charge nurses, mitigated against one of the other potential limitations of this study. This joint training, which was conducted by the principal investigator, was intended to enhance inter-rater interpretation of all the SCID symptoms. As the study involved psychiatric inpatients, admitted for disturbed behaviour, the findings cannot be generalized to outpatient or community populations. With these limitations in mind, this study reports the first attempt in Kenya to study OC symptoms in a psychiatric inpatient setting and to provide data for wider cross-cultural studies of OC symptoms amongst hospitalised psychiatric patients.

Whereas the age structure of the respondents reflects the generally young Kenyan population, it is apparent that OCD starts early in life. The prevalence rates given here reflect the ages of the respondents at the time of the interview and not the duration of the OC symptoms or the age at onset. The prevalence rates peaked

Table IV: Prevalence of OC symptoms and significant correlations between OCD and SCID core syndromes (N=84)

| SCID Core Syndromes | | Obsessive thoughts ¹ | | Compulsive behaviours | |
|-------------------------------|-----------|---------------------------------|---------|-----------------------|---------|
| | n (%) | Pearson correlation | ρ value | Pearson correlation | ρ value |
| Alcohol abuse | 26 (31.0) | 0.242 | 0.050* | 0.301 | 0.005* |
| Addiction | 30 (35.7) | 0.186 | 0.091 | 0.314 | 0.004* |
| Addiction to prescribed drugs | 17 (20.3) | 0.183 | 0.096 | 0.158 | 0.152 |
| Panic disorder | 40 (47.6) | 0.311 | 0.004* | 0.052 | 0.638 |
| Panic with Agoraphobia | 53 (63.1) | 0.528 | 0.000* | 0.086 | 0.435 |
| Social phobia | 64 (76.2) | 0.224 | 0.040* | 0.130 | 0.237 |
| Specific phobia | 52 (71.9) | 0.244 | 0.025* | 0.091 | 0.412 |
| Traumatic events | 75 (89.3) | 0.448 | 0.000* | 0.243 | 0.026* |
| Anxiety (Generalized) | 65 (77.4) | 0.447 | 0.000* | 0.059 | 0.596 |
| Depression | 54 (64.2) | 0.092 | 0.408 | 0.506 | 0.000* |
| Elated mood | 31 (36.9) | 0.030 | 0.797 | 0.711 | 0.000* |
| Overweight | 41 (48.8) | 0.047 | 0.649 | 0.383 | 0.000* |
| Over eating | 53 (63.1) | -0.050 | 0.649 | 0.370 | 0.001* |
| Racing thought | 52 (61.9) | 0.083 | 0.502 | 0.589 | 0.000* |
| Increased energy | 48 (57.1) | 0.158 | 0.199 | 0.562 | 0.000* |
| Delusions of grandeur | 35 (41.7) | 4.463 | 0.000* | 0.056 | 0.652 |
| Psychotic symptoms | 61 (72.6) | 0.056 | 0.642 | 0.234 | 0.048* |
| | | | | | |

¹Under obsessive thoughts, N values were 84 for all syndromes except 'elated mood' (N=77), 'racing thoughts' and 'increased energy' (N = 68), 'delusions of grandeur' (N = 67) and 'psychotic symptoms' (N = 72).

within the 21- to 30-year age group. The age of onset of OCD may be of particular relevance in patients who later present and are diagnosed with schizophrenia. One study suggests that OC symptoms may present as part of early prodromal symptoms, with age of onset being 14.5 +/- 2.4yrs.¹⁸ The finding that more than half (59.5%) of the respondents were single again reflects the youthful study population. In addition, the education levels of the respondents reflect the literacy rates amongst the young population in Kenya, given that over 87% were literate.

The various OC symptoms in the patients had not been recognised as OCD in the clinical setting. This may be explained by a clinical preoccupation with the disturbed behaviour that often necessitates admission into Mathari Psychiatric Hospital. Furthermore, the reliability and validity of the identification of OCD in disorders such as schizophrenia has been brought into question. Some studies have suggested that this uncertainty is accounted for by the existing overlap of obsessive-compulsive and delusional symptoms.¹⁹ Others have stated that the differentiation between OCD and schizophrenia is possible only by focusing on the single phenomenon of obsession.²⁰ An explicit investigation into OCD and other anxiety disorders may better elicit their prevalence.

Co-morbidity with schizophrenia, bipolar mood disorders, substance-induced disorders, psychosis, schizoaffective disorders and depression as reported in this study was somewhat similar to findings of other studies, which reported co-morbid existence of OCD with other axis 1 disorders.²¹⁻²⁴ This co-morbidity was also found between all the SCID core syndromes, more than half of which were significantly associated with OC symptoms. The recognition of this co-morbidity is important since it calls for the appropriate management of each of the co-morbid disorders.

The 33.3% prevalence rate of OC symptoms in the clinical diagnosis of schizophrenia and 61% prevalence rate of SCID core syndrome of psychosis are much higher than the 7.8% and 25% reported for DSM-III diagnosis of schizophrenia, as cited in the introduction. In a study conducted among participants recruited from inpatient and outpatient hospital services and community clinics in the Western and Eastern Cape provinces of South Africa, only 0.5% of the participants fulfilled the criteria for OCD.15 The authors of the South African study suggested that there may be protective environmental or genetic factors for OCD in certain ethnic groups. For the study reported in this paper, there is no explanation for the high prevalence rates although, as indicated below, it is possible that patients in the Kenyan socio-cultural context may have difficulties in differentiating between symptoms whose origin is perceived to be within or outside their own mind. Further research to clarify this will be needed. It should be noted that the interviewers asked questions strictly on the DSM-IV definitions of the symptoms. Of particular significance is the association between OC symptoms and passivity symptoms of schizophrenia. Whereas DSM-IV distinguishes between the clinical symptoms of OCD and passivity symptoms of schizophrenia, in clinical practice, the latter may camouflage the former.

Conclusion

The clinical implication is that there is a need to adopt routine clinical tools that systematically enquire for all symptoms, including OC symptoms. Overlooking such features and therefore not treating them will affect the overall prognosis of the patient. However, Fineberg et al.²⁵ have advanced evidence to the effect that in addition to DSM-IV clinical characteristics, the course of illness and pharmacological responses are other indicators of the nosological boundaries between OCD and schizophrenia. This is an area that requires further appraisal in the same context as the aforementioned study.

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