Unipolar mania reconsidered evidence from a South African study

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Abstract

Objective: There is a lack of studies that examine prevalence and phenomenology of bipolar disorder in Africa. In literature, a unipolar manic course of illness in particular is reported to be rare. The purpose of this study was to investigate and describe the course of illness and clinical features for a cross-section of patients diagnosed with bipolar disorder attending public hospitals in Limpopo Province, South Africa and to determine the rate of a unipolar manic course in this sample of patients. Method: This was a descriptive, cross-sectional study of patients presenting with a history of mania between October 2009 and April 2010, to three hospitals in Limpopo Province. A purposeful sample of 103 patients was recruited and interviewed using the Affective Disorders Evaluation. Results: This study confirms that a unipolar manic course is indeed much more common than occurrences suggested in present day literature, with 57% of the study sample ever experiencing manic episodes. Patients presenting with a unipolar manic course of illness, as described in this study, may contribute to the search for an etiologically homogeneous sub-group, which presents a unique phenotype for genetic research and the search for genetic markers in mental illness. With a view to future research, a unipolar manic course therefore needs to be considered as a specifier in diagnostic systems in order to increase the awareness of such a course of illness in bipolar disorder. Conclusion: Fifty seven percent (57%) of study subjects had only ever experienced manic episodes, which is in keeping with findings from Africa and other non-Western countries. Identifying etiologically homogenous subgroups in psychiatry can also aid the profession in developing a reliable and valid nosology for psychiatric disorders. We need to consider a unipolar manic course at least a specifier in DSM and ICD.

Keywords: Mood disorders; Bipolar disorder; Recurrent; Mania; Unipolar mania

Introduction

There is a scarcity of studies examining prevalence and phenomenology of bipolar disorder in Africa1. In literature, a unipolar manic course of illness in particular is reported to be rare2. The purpose of this study was to investigate and describe the course of illness and the clinical features in patients diagnosed with bipolar disorder attending three public hospitals in Limpopo Province, South Africa and to determine the rate of a unipolar manic course in this sample.

The idea for studying bipolar disorder and in particular unipolar mania in South Africa came about in 2006 while the first author was working at Mokopane Hospital, a hospital in rural South Africa, where he noticed that the number of patients presenting with manic symptoms with a diagnosis of bipolar disorder, far outnumbered those presenting in the depressive phase of the illness. In fact, most patients seemed to have a recurrent unipolar manic course; the mania accompanied by severe psychotic symptoms of a schizophrenic nature from the onset of the illness. Furthermore, these patients seldom presented to hospital or out-patient clinics with symptoms of depression.

Unipolar mania

In 1986 Angst and Perris, were the first to report on the entity of unipolar mania. Both Angst and Perris claimed that unipolar depression and bipolar disorders were distinct entities3 and that unipolar mania was strongly related to bipolar disorder. In general, the occurrence of a manic only course in bipolar patients is estimated to be in the region of 10% to 20% 2, but rates have been found to vary substantially from a low of 1,1%4 to a high of 65,3%5.

Lee and Yu, in response to a study by Shulman and Tohen6, asserted in their letter to the British Journal of Psychiatry that there was sufficient evidence of a higher prevalence of unipolar mania in non-Western cultures such as Africa, China and India.

On separating the study findings of Western vs. non-Western countries, an interesting discrepancy emerges with regard to the rate of unipolar mania. Table 1 reflects findings from Western countries and Table 2 reflects results from studies from non-Western countries.

The studies from Africa in particular seems to point towards an increased occurrence of a unipolar manic course in bipolar patients7,23,28.

Bipolar disorder research in African, African-Caribbean and African-American patients in the UK and the USA

It would appear from studies of bipolar disorder in African, African-Caribbean and African-American patients in both
Table 1: Findings on unipolar mania for Western Countries

<table>
<thead>
<tr>
<th>Author</th>
<th>Country</th>
<th>Year</th>
<th>Definition</th>
<th>Rate of Unipolar Mania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perris [4]</td>
<td>Sweden</td>
<td>1966</td>
<td>≥ 1 manic episode, no depressive episodes</td>
<td>4.5%</td>
</tr>
<tr>
<td>Abrams &amp; Taylor [10]</td>
<td>USA</td>
<td>1974</td>
<td>“never had a depressive episode”</td>
<td>28%</td>
</tr>
<tr>
<td>Abrams et al. [11]</td>
<td>USA</td>
<td>1979</td>
<td>2 manic episodes with no depressive episodes</td>
<td>18%</td>
</tr>
<tr>
<td>Nurnberger et al. [12]</td>
<td>USA</td>
<td>1979</td>
<td>≥ 1 manic episode with no treatment for depression</td>
<td>15.7%</td>
</tr>
<tr>
<td>Perris [8]</td>
<td>Sweden</td>
<td>1982</td>
<td>≥ 1 manic episode, no depressive episodes</td>
<td>1.1%</td>
</tr>
<tr>
<td>Pfohl et al. [13]</td>
<td>USA</td>
<td>1982</td>
<td>≥ 1 manic episode, no depressive episodes</td>
<td>33.6%</td>
</tr>
<tr>
<td>Shulman &amp; Tohen [14]</td>
<td>Canada</td>
<td>1994</td>
<td>3 manic episodes with no depressive episodes and 10 years elapsed since hospitalisation for 1st manic episode</td>
<td>12%</td>
</tr>
<tr>
<td>Solomon et al. [15]</td>
<td>USA</td>
<td>2003</td>
<td>No depressive episode in 15-year prospective follow-up study of manic patients</td>
<td>16.5%</td>
</tr>
<tr>
<td>Perugi et al. [16]</td>
<td>Italy</td>
<td>2007</td>
<td>≥ 3 manic episode, 10 years of illness with no depressive episodes</td>
<td>21.8%</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>16.8%</strong></td>
</tr>
</tbody>
</table>

Table 2: Findings on unipolar mania for non-Western countries

<table>
<thead>
<tr>
<th>Author</th>
<th>Country</th>
<th>Year</th>
<th>Definition</th>
<th>Rate of Unipolar Mania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Srinivasan et al. [17]</td>
<td>India</td>
<td>1985</td>
<td>≥ 3 manic episode, no depressive episodes</td>
<td>40%</td>
</tr>
<tr>
<td>Makanjuola [18]</td>
<td>Nigeria</td>
<td>1985</td>
<td>≥ 2 manic episode, no depressive episodes</td>
<td>53%</td>
</tr>
<tr>
<td>Khanna et al. [19]</td>
<td>India</td>
<td>1992</td>
<td>≥ 4 manic episode, no depressive episodes</td>
<td>44%</td>
</tr>
<tr>
<td>Lee [20]</td>
<td>China</td>
<td>1992</td>
<td>≥ 2 manic episode, no depressive episodes</td>
<td>36%</td>
</tr>
<tr>
<td>Aghanwa [21]</td>
<td>Fiji Islands</td>
<td>2001</td>
<td>≥ 3 manic or hypomanic episodes, no depressive episodes and affective illness of at least 4 years</td>
<td>47.2%</td>
</tr>
<tr>
<td>Yazici et al. [22]</td>
<td>Turkey</td>
<td>2002</td>
<td>≥ 4 manic episode, no depressive episodes in 4 year follow-up</td>
<td>16.3%</td>
</tr>
<tr>
<td>Negash et al. [23]</td>
<td>Ethiopia</td>
<td>2005</td>
<td>Non report of depressive episode in a community-based study</td>
<td>59.6%</td>
</tr>
<tr>
<td>Dakhlaoui et al. [7]</td>
<td>Tunisia</td>
<td>2008</td>
<td>≥ 2 manic episodes without depression</td>
<td>65.3%</td>
</tr>
<tr>
<td>Andrade-Nascimento et al. [24]</td>
<td>Brazil</td>
<td>2011</td>
<td>Only manic episodes with no history of depression and duration of illness ≥ 15 years</td>
<td>5.4%</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>40.78%</strong></td>
</tr>
</tbody>
</table>

In the UK and the USA that they are less likely than Caucasian patients to experience depressive episodes before the onset of first mania, experience more severe psychotic symptoms at first mania, and are more likely to be misdiagnosed as having schizophrenia.

A number of studies have found that there seems to be an increased occurrence of psychosis among African-Caribbean people living in the UK as well as an increased occurrence of mania. Jeff et al. reported that the African-Caribbean population more often displayed mixed manic and schizophrenic symptoms. In fact, Van Os et al. calculated that the occurrence for mania among African-Caribbean people living in the UK seemed to spend far more time with depressive symptoms than with mania in the course of their illness as shown by Angst and Judd.

Kirov and Murray conclude from a South London study “there may be genuine differences between ethnic groups in the form of presentation of bipolar disorder”.

In contrast, Caucasian subjects in studies conducted in Europe and the USA seemed to spend far more time with depressive symptoms than with mania in the course of their illness as shown by Angst 33 and Judd et al.

Lloyd et al. found in the AESOP (Aetiology and Ethnicity of Schizophrenia and Other Psychoses) study in the UK, a multi-centre population-based study of first-episode psychosis, that the incidence of bipolar disorder was higher among black and minority ethnic groups than in the white population. Dean et al in the same study concluded that African-Caribbean ethnicity was independently associated with aggression and that aggression was associated with a diagnosis of mania.

There appears to be no doubt that bipolar disorder presents differently in patients of African descent.

**Genetic implications of unipolar mania and schizoaffective disorder**

To our knowledge, the genetics of unipolar mania has never been studied but considering the historical origins of the concept of schizoaffective psychosis and its pivotal position in nosology, the genetics involved deserves particular interest.

Unipolar mania in the African context can arguably be very similar to schizoaffective disorder. However, considering criterion B in the DSM-IV-TR criteria for schizoaffective disorder “During the same period of illness, there have been delusions or hallucinations for at least 2 weeks in the absence of prominent mood symptoms”, the bipolar patients with a unipolar manic course do not fulfill this particular criterion as the psychotic symptoms disappears with resolution of the mood symptoms.

Three studies during the 1970s and 1980s investigated the risk of psychosis in first-degree relatives of probands with schizoaffective illness. Angst found the risk of schizophrenia and affective disorder to be approximately equal in first-degree relatives of schizoaffective probands and the risk of schizoaffective illness less than that of either of the prototypical psychotic illnesses. In two other studies, one by Tsuang and the other by Baron, schizoaffective disorder was found to be more closely related to affective illness.
illness than schizophrenia, both authors concluding that schizoaffective illness is genetically not separate from the major psychoses.

These findings led to the continuum theory in the 1980s, which was strongly endorsed by several authors who argued that the psychoses are represented on a continuum from pure affective illness to deteriorating schizophrenia.41,42

Crow argues that schizoaffective disorder, schizophrenia and bipolar disorder represent a spectrum of variation at a single genetic locus that regulates severity of symptoms irrespective of diagnosis.43

Lake and Hurwitz take the continuum theory one step further, viewing the concept of a continuum as consistent with a single disease and arguing that this single disease is a mood disorder that can account for the symptoms typically assigned the diagnoses of schizoaffective disorder or schizophrenia.44

In the largest family study from a Swedish population of bipolar disorder and schizophrenia ever conducted, overlap in genetic susceptibility across bipolar and schizophrenia is shown.45 A genome-wide association study of European individuals provides compelling evidence that the aggregate polygenic contribution of many alleles of small effect adds to susceptibility for schizophrenia but also influences susceptibility to bipolar disorder.46

Recent studies of de novo copy-number variants (CNV’s) indicate that they may also have an influence on the risk for developing bipolar disorder albeit slightly less so than for schizophrenia.47

Hamshere maintains “cases with a rich mixture of clinical features of bipolar mood episodes and the psychotic symptoms typical of schizophrenia (a broadly defined schizoaffective illness) may be particularly useful for genetic studies.”48 Defining accurate phenotypes in psychiatric genetics is important for future research in disentangling the ethiopathogenesis of these illnesses.

Method
Purpose of the study
The purpose of this study was to investigate and describe the course of illness and clinical features in a cross-section of patients diagnosed with bipolar disorder and attending three public hospitals in Limpopo Province, South Africa. From this information, we wanted to determine the occurrence of a unipolar manic course in this specific sample. If unipolar mania is found to be as prevalent in South Africa as in the rest of Africa, it may have diagnostic and treatment implications, as well as implications for genetic research.

Study design
Descriptive, cross-sectional study.

Methodology
A purposeful sample of 103 patients presenting with a history of mania between October 2009 and April 2010, in three hospitals in the Limpopo Province was recruited and interviewed using the Affective Disorders Evaluation (ADE).49

Hospitals included in the study
Mankweng Hospital is part of the Polokwane-Mankweng Hospital Complex (PMHC) situated in the Capricorn District of Limpopo Province, Mokopane Hospital is a regional hospital in the Mokgalakwena Municipality of the Waterberg area of Limpopo Province and George Masebe Hospital is a district hospital in the Waterberg area and renders a service to the local community, which consists of Bakenberg and Rebone.

Ethical considerations
Ethical approval for the study (protocol number 136/2009) was obtained on 26/08/2009 from the University of Pretoria, Faculty of Health Sciences Research Ethics Committee. The Limpopo Department of Health and Social Development Research Ethics Committee granted permission on 04/11/2009 to continue with the study.

Patients admitted under the Mental Health Care Act as either assisted or involuntary patients were not requested to participate in the study until such time that they were deemed able to give informed consent and provide an adequate history. Personal information, names and file numbers of patients were handled with utmost confidentiality but were documented for future reference, follow up and verification of information.

For further information regarding the informed consent, see PhD dissertation with title “A Cross-Sectional Descriptive Study Of Clinical Features And Course Of Illness In A South African Population With Bipolar Disorder” at the following website; http://upetd.up.ac.za/UPeTD.htm.

Measuring instrument
The Affective Disorder Evaluation (ADE) was completed by the researcher for every study subject. The researcher was assisted by registered nurses fluent in Northern Sotho, who translated the questions to non-English-speaking participants.

The ADE is a standardised tool for initial clinical assessment of patients possibly suffering from bipolar disorder. Developed for the Systematic Treatment Enhancement Program for Bipolar Disorder (STEP-BD), the main objective of the ADE is to provide an efficient way of making a reliable current and lifetime diagnosis of bipolar disorder.50. The ADE uses an adaptation of the mood disorder modules from the Structured Clinical Interview for DSM-IV (SCID).51 These modules assess current mood episode and lifetime mood disorder diagnoses and flow in an orderly sequence designed to reflect the DSM-IV mood disorder classification.

Sample size
The sample size was calculated with the objective of prevalence of a unipolar manic only course in the study population is 35%, a sample size of 88 patients was considered to be able to estimate the prevalence to an accuracy of 10% with 95% confidence.

Data analysis
The data summary covered descriptive statistics like mean and standard deviation for continuous variables whilst for categorical variables (nominal and ordinal) use was made of proportion, percentages and cross-tables for subgroup, e.g. sex, age categories etc., employed hazard ratios. Testing was done at the 0.05 level of significance.

Definition of recurrent unipolar mania
One of the challenges in the research of recurrent bipolar
mania is the lack of consensus on the defining criteria. In the studies published during the last decade there appears to be some consensus on the presence of at least three manic episodes with no depressive episodes, but there is no consensus on the timeframe for the same.

Aghanwa defined “recurrent mania” as three previous episodes of mania or hypomania (ICD-10) and the presence of affective illness for at least four years. On the other hand, Yazici et al. defined recurrent mania by the occurrence of at least four episodes of mania (DSM-IV) and at least four years of follow up without any depressive episode.

For purposes of this study, a unipolar manic course was considered in all patients who had never experienced a major depressive episode. However, the occurrence of unipolar mania was also established for those in the sample who was diagnosed with bipolar disorder in particular and had three or more lifetime number of phases without the occurrence of any depressive episodes.

Results

A purposeful sample of 103 patients presenting with a history of mania between October 2009 and April 2010, to the three hospitals in the Limpopo Province was recruited. The mean age was 36.6 years with a standard deviation of 11.9. Sociodemographic characteristics of the sample are given in Table 3.

From the entire sample (n=103), fifty-seven reported ever having experienced only manic episodes. Excluding those with schizoaffective disorder, schizophrenia and substance induced psychotic disorder (n=7), fifty-six percent (53/94) reported ever having experienced only manic episodes. When considering those subjects with three or more episodes of affective illness as possibly having a unipolar manic course of illness, a substantial 44.68% (42/94) appears to have such a course of illness (Table 4).

Patients with a duration of illness of four years or longer and five or more episodes are considered as having a unipolar manic course of illness. 32% (30/94) would still qualify (Table 5). See Table 6 for a comparison of depressive and manic episodes (DAM) vs. manic episodes only (MO).

Discussion

Comparisons between unipolar manic and bipolar groups from studies as referred to earlier seems to yield inconclusive results as to significant differences. Some researchers have observed characteristics specific to patients with unipolar mania as opposed to bipolar disorder. Unipolar mania appears to be more common in men and had an earlier age at onset of illness. In the present study (as depicted in Table 5) the following differences appeared when comparing the Depressive and manic (DAM) group with the Manic only (MO) group.

The mean age of the MO group was 38.18 years vs. the DAM group at 34.66 years. There were more males in the MO group.

Table 3: Sociodemographic characteristics of the sample

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency (n = 103)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>46</td>
<td>44.66</td>
</tr>
<tr>
<td>Female</td>
<td>57</td>
<td>55.34</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>72</td>
<td>69.9</td>
</tr>
<tr>
<td>Married</td>
<td>24</td>
<td>23.3</td>
</tr>
<tr>
<td>Widowed</td>
<td>5</td>
<td>4.85</td>
</tr>
<tr>
<td>Divorced</td>
<td>2</td>
<td>1.95</td>
</tr>
<tr>
<td>Religious affiliation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zion Christian Church</td>
<td>65</td>
<td>63.11</td>
</tr>
<tr>
<td>Christian</td>
<td>26</td>
<td>25.24</td>
</tr>
<tr>
<td>None</td>
<td>8</td>
<td>7.77</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>3.88</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>8</td>
<td>7.77</td>
</tr>
<tr>
<td>Primary</td>
<td>14</td>
<td>13.59</td>
</tr>
<tr>
<td>Secondary</td>
<td>55</td>
<td>53.4</td>
</tr>
<tr>
<td>Tertiary</td>
<td>26</td>
<td>25.24</td>
</tr>
<tr>
<td>Employment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>12</td>
<td>11.65</td>
</tr>
<tr>
<td>Unemployed</td>
<td>72</td>
<td>69.9</td>
</tr>
<tr>
<td>Retired</td>
<td>5</td>
<td>4.85</td>
</tr>
<tr>
<td>Student</td>
<td>7</td>
<td>6.8</td>
</tr>
<tr>
<td>Self-employed</td>
<td>7</td>
<td>6.8</td>
</tr>
<tr>
<td>Financial support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>1</td>
<td>0.97</td>
</tr>
<tr>
<td>Pension</td>
<td>1</td>
<td>0.97</td>
</tr>
<tr>
<td>Part-time employment</td>
<td>3</td>
<td>2.91</td>
</tr>
<tr>
<td>Full-time employment</td>
<td>13</td>
<td>12.62</td>
</tr>
<tr>
<td>Family</td>
<td>31</td>
<td>30.1</td>
</tr>
<tr>
<td>Social Grant</td>
<td>54</td>
<td>52.43</td>
</tr>
<tr>
<td>Axis I diagnosis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bipolar Disorder</td>
<td>94</td>
<td>91.26</td>
</tr>
<tr>
<td>Schizoaffective disorder</td>
<td>7</td>
<td>6.8</td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>1</td>
<td>0.97</td>
</tr>
<tr>
<td>Substance induced psychotic disorder</td>
<td>1</td>
<td>0.97</td>
</tr>
</tbody>
</table>
group [54% (32/59) vs. 31% (14/44)], which was statistically significant [p=0.028]. This is in keeping with earlier studies showing that unipolar mania appears to be more common in men11,18 while some showed no statistical difference16-18 and in one study there were more females compared to males with unipolar mania but not statistically significant6.

No obvious difference appeared with regard to marital status with 22% (13/59) in the MO group being married vs. 25% (11/44) in the DAM group [p=0.818] and this was in keeping with findings in other studies21,22.

The rate of unemployment was slightly less in the MO group [67% (40/59)] vs. 72% (32/44) in the DAM group, which is still high for both groups. This is higher than the 33% found in the study by Aghanwa41. A possible explanation could be that employment in rural communities is very scarce in this part of South Africa considering that the average unemployment rate for South Africa is 25.53% and 32.46% for Limpopo in particular23. Unemployment is most probably related however to the fact that individuals with severe and enduring mental illness are less able to compete in the open labour market because of the nature of their illness as well as stigmatisation24. More patients received a disability grant in the MO group (57% (34/59)) vs. 45% (20/44) in the DAM group.

The MO group reported a family history of bipolar mood disorder [54% (32/59) vs. 61% (27/44)] [p=0.548], alcohol abuse [47% (28/59) vs. 52% (23/44) [p=0.692] and suicide [15% (9/59) vs. 18% (8/44)] [p=0.790] less frequently than the DAM group. Abrams and Taylor also found the unipolar manic group to have significantly fewer relatives with affective illness and alcoholism23. However, it seems that most other studies found no difference between the two groups with regard to family history of mental illness21,13,16,18,22.

The MO group also reported having attempted suicide significantly less than the DAM group [16% (10/59) vs. 40% (18/44)], a statistically significant difference [p=0.013] and similar to results from other studies16,22.

The MO group reported a history of violence more often [50% (30/59) vs. 47% (21/44)] [p=0.843] but had a lesser chance at having a forensic history [28% (17/59) vs. 34% (15/44)] [p=0.668].

Only 3% (2/59) in the MO compared to 15% (7/44) in the DAM group reported being HIV positive which was statistically significant [p=0.036]. Age of onset did not appear to differ dramatically between the two groups.

The MO group reported more psychotic symptoms [delusions: 89% (53/59) vs. 78% (36/44)] [p=0.166], [paranoid ideation: 88% (52/59) vs. 81% (27/44)] [p=0.002] and [hallucinations: 77% (46/59) vs. 63% (28/44)] [p=0.126]. The difference in paranoid ideation was statistically significant [p=0.002]. These findings are generally in keeping with results from other studies. Abrams et al. found their unipolar group to experience more grandiosity41. Pfohl also found that the unipolar group experienced significantly more delusions but less hallucinations23. In Makanja’s study, the unipolar group had more grandiose delusions but the difference was not statistically significant20. Yazici et al.24 found the unipolar group to have significantly more psychotic features compared to the bipolar group, as did Perugi et al.18.

In keeping with the above, it would appear that the MO group tended to be prescribed more anti-psychotics [haloperidol: 54% (32/59) vs. 43% (19/44)] [p=0.321], [zuclopenthixol depot: 49% (29/59) vs. 38% (17/44)] [p=0.321], [risperidone: 23% (14/59) vs. 20%(9/44)] [p=0.166] and fewer mood stabilisers [lithium: 18% (11/59) vs. 25% (11/44)] [p=0.002] and [valproate: 57% (34/59) vs. 59% (26/44)] [p=0.812].

None of the patients in the MO group were on antidepressants [0% (0/59) vs. 11% (5/44)], a statistically significant difference [p=0.012].

The MO group tended to abuse substances more than the DAM group both with regard to a history of abuse and current abuse:

- History of alcohol abuse [42% (25/59) vs. 36%(16/44)] [p=0.550]
- Current alcohol abuse [13% (8/59) vs. 4% (2/44)] [p=0.163]
- History of cannabis abuse [28% (15/59) vs. 9% (4/44)] was statistically significant [p=0.042]
- Current cannabis abuse [8% (5/59) vs. 2% (1/44)] [p=0.235]

Abrams found the bipolar group to abuse substances...
more than the unipolar group\textsuperscript{11} as did Dakhlaoui\textsuperscript{7}, however, Andrade-Nascimento\textsuperscript{24} found no difference between the two groups and Pfohl\textsuperscript{13} found the unipolar manic group were more likely to have a history of substance abuse particularly cannabis and amphetamines.

There appeared to be a significant difference between the two groups in terms of comorbidity with the DAM group twice as likely to have a comorbid anxiety disorder [20% (12/59) vs. 43% (19/44)], a statistically significant finding \[p=0.017\] and consistent with the results of Andrade-Nascimento et al.\textsuperscript{24}.

The MO group scored lower on the Bipolarity Index [“81-100”: 48% (21/88) vs. 56% (26/47)] \[p=0.321\] and [“71-80”: 33% (20/60) vs. 20% (9/44)] \[p=0.184\], in general than the DAM group.

There was a tendency for more subjects in the MO group to be scored ‘Markedly ill’ to ‘Severely ill’ [30% (18/59) vs. 20% (9/44)], compared with the DAM group \[p=0.058\].

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|c|c|}
\hline
\textbf{Diagnosis, Bipolarity index, CGI} & DAM (n = 44) & % & MO (n = 59) & % & \textbf{P value} \\
\hline
Comorbid anxiety disorder & Yes & 19 & 43.18 & 12 & 20.34 & 0.017 \\
Bipolarity index & 81-100 & 25 & 56.81 & 27 & 45.76 & 0.321 \\
& 71-80 & 9 & 20.45 & 20 & 33.90 & 0.184 \\
& 61-70 & 9 & 20.45 & 8 & 13.56 & 0.173 \\
CGI & Mild to Moderate & 28 & 63.64 & 35 & 59.32 & 0.343 \\
& Marked to Severe & 9 & 20.45 & 18 & 30.51 & 0.058 \\
\hline
\end{tabular}
\end{table}

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|c|}
\hline
\textbf{Demographics} & DAM (n = 44) & MO (n = 59) & \textbf{P value} \\
\hline
Mean age & 34.66 & NA & 38.18 & NA & 0.028 \\
Gender & Males & 14 & 31.82 & 32 & 54.24 & 0.692 \\
& Females & 30 & 68.18 & 27 & 45.76 & 0.692 \\
Marital status & Married & 11 & 25.00 & 13 & 22.03 & 0.815 \\
Education & Tertiary & 12 & 27.27 & 14 & 23.75 & 0.819 \\
Employment & Unemployed & 32 & 72.73 & 40 & 67.82 & 0.667 \\
Financial support & Social grant & 20 & 45.45 & 34 & 57.63 & 0.238 \\
\hline
\textbf{History} & & & & & \\
Family history of mental illness & Bipolar mood disorder & 27 & 61.36 & 32 & 54.24 & 0.548 \\
& Alcohol abuse & 23 & 52.27 & 28 & 47.45 & 0.692 \\
& Suicide & 8 & 18.19 & 9 & 15.25 & 0.790 \\
History of suicide attempt & Yes & 18 & 40.9 & 10 & 16.95 & 0.013 \\
History of violence & Yes & 21 & 47.72 & 30 & 50.82 & 0.843 \\
Forensic history & Yes & 15 & 31.82 & 17 & 28.8 & 0.668 \\
\hline
\textbf{Medical History} & & & & & \\
HIV status & Positive & 7 & 15.91 & 2 & 3.39 & 0.036 \\
\hline
\textbf{Course and clinical features} & & & & & \\
Age of onset for mania & ≤ 19 & 12 & 22.73 & 11 & 22.03 & 0.424 \\
& ≥ 20 & 34 & 77.23 & 46 & 77.97 & 0.413 \\
Mood elevation features & Paranoid ideation & 27 & 61.36 & 52 & 88.14 & 0.002 \\
& Hallucinations & 28 & 63.64 & 46 & 77.97 & 0.126 \\
& Delusions & 35 & 79.5 & 53 & 89.83 & 0.166 \\
& Increased energy & 14 & 31.82 & 10 & 16.95 & 0.100 \\
\hline
\textbf{Treatment} & & & & & \\
Attended Traditional Healer & Yes & 27 & 61.36 & 39 & 66.10 & 0.680 \\
Current medication & Valproate & 26 & 59.09 & 34 & 57.63 & 1.000 \\
& Lithium & 11 & 25.0 & 11 & 18.64 & 0.473 \\
& Haloperidol & 19 & 43.18 & 32 & 54.24 & 0.321 \\
& Zuclopenthixol depot & 17 & 38.64 & 29 & 49.15 & 0.321 \\
& Risperidone & 9 & 20.45 & 14 & 23.75 & 0.812 \\
& Clozapine & 5 & 11.36 & 6 & 10.17 & 1.000 \\
& SSRI’s & 5 & 11.36 & 0 & 0 & 0.012 \\
\hline
\textbf{Substances} & & & & & \\
Alcohol & Current abuse & 2 & 4.55 & 8 & 13.56 & 0.183 \\
& History of abuse & 16 & 36.36 & 25 & 42.37 & 0.550 \\
Cannabis & Current abuse & 1 & 2.27 & 5 & 8.47 & 0.235 \\
& History of abuse & 4 & 9.1 & 15 & 25.42 & 0.042 \\
\hline
\end{tabular}
\end{table}
Study Limitations
The limitations of this study need to be recognised before the implications of the findings are discussed. Language was probably the biggest obstacle in conducting this study and the fact that interpreters had to be used. The difficulties associated with explaining some concepts - particularly eliciting a history of depressive episodes - were also certainly a limitation. Eliciting a traditional African presentation of depression may be particularly challenging in South Africa. In more traditional societies the symptoms of depression are more likely to be delivered metaphorically or symbolically as idioms of distress, linguistic images, metaphors and associative phrases. However, the way the ADE is designed and the type of questions asked makes it improbable that depressive episodes were missed.

Interpreters were mostly registered nurses whose native language was Northern Sotho and who worked in the particular psychiatric unit providing care for psychiatric patients. When possible, use was made of registrars training to become psychiatrists, who were fluent in Northern Sotho.

A much more important limitation would be recall bias. As with most questionnaires, when history is being taken, patients might not be able to remember everything about their illness in detail and recall bias is therefore a definite limitation of this study. In order to avoid recall bias, information from clinical records in hospital files as well as collateral information from family members was obtained if available. The reasons Negash et al. considered explaining the high rate of non-reporting of depressive episodes deserves consideration in the present study as well, in that recall bias might lead to under reporting milder episodes of depression. Depressive symptoms may also be seen as part of normal life rather than as a psychiatric disorder.

Selection bias could be another very important limiting factor as this was a hospital-based sample which would favour inclusion of patients with manic as opposed to depressive episodes. The aggression and disruptivity associated with mania is more likely to result in referral to mental health care services. Not all patients with manic episodes may necessarily seek help at a hospital either but might go to either private practising doctors or traditional healers.

Another limitation may be the fact that the methodology could be criticised, as this was a purposeful sample with the majority of patients being recruited while hospitalised and all patients being interviewed only once. This precludes generalisation of the findings. In future, a prospective study with a control group may be considered as the cross-sectional nature of the study, without a prospective component, makes it impossible to accurately evaluate and predict the course and outcome of the illness.

Conclusion
The important finding of this current study is the fact that between the two groups and in the present study the Depressive and Manic (DAM) group were more likely to have a history of attempted suicide, be HIV positive, be prescribed antidepressants and have a comorbid anxiety disorder whereas the Manic Only (MO) group were more likely to be males, have more psychotic features, in particular paranoid ideation, and have a history of cannabis abuse.

Identifying etiologically homogenous subgroups in psychiatry can also aid the profession in developing a reliable and valid nosology for psychiatric disorders. The earlier view that bipolar disorder is a chronic illness with alternating phases of depression and mania together with euthymic intervals, has gradually been replaced by an understanding of the heterogeneity of this disease and the need to identify phenotypic markers associated with sub-forms. The “manic only” group as described in this article may contribute to the search for an etiologically homogeneous sub-group. As a unique phenotype, a manic only course of illness in bipolar disorder presents an opportunity for genetic research and the search for genetic markers in mental illness.

It would make sense therefore that we need to consider a unipolar manic course as at least a specifier in the DSM as well as ICD, in order to highlight the awareness of such a course of illness in bipolar disorder, with a view to research and in particular genetic research.

If the Kreapelinian dichotomy continues to survive for the time being and we continue to consider the psychotic disorders categorically, one could also postulate that a certain sub-group of patients currently being diagnosed as bipolar disorder in Africa may in fact have a completely different illness. They may in fact suffer from a psychotic-type illness that lies somewhere on the spectrum between what are currently described as bipolar mood disorder and schizoaffective disorder. An appropriate descriptive name for this illness that could be considered would be "Recurrent Manic Psychotic Illness".

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