# Bipolar disorder: Prevalence, help-seeking and access to care in the 2014 Adult Psychiatric Morbidity Survey

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## Abstract

## Background

The prevalence of bipolar disorder (BD) and access to mental health care for people with BD in England has not been systematically studied.

## Aims

To describe the prevalence of BD in the general community population in England and to assess factors associated with help-seeking behaviours and access to care.

## Method

We used data from the Adult Psychiatric Morbidity Survey 2014 (N=7546). The Mood Disorders Questionnaire was used to screen for the presence of probable BD in the community. Univariate tests with weights were used to investigate associations between sociodemographic and clinical variables, and use of mental health services. Multivariate regression modelling was completed to establish the factors associated with being in receipt of any treatment for mental health problems over the last year.

# Results

The prevalence of BD in the community in England is 1.7%. Approximately 40% did not receive any kind of mental or emotional healthcare in the community in the last year. Only 16.9% had received treatment in the last year specifically targeting BD, whereas approximately 15% had asked for help but not received it. Levels of psychopathology differed significantly between individuals who successfully sought care and those who did not. Female gender (p<0001, odds ratio (OR):4.65 (Confidence Interval (CI) :2.18-10.30), unemployment (p=0.02, OR: 2.65 (C.I: 1.23-5.88) and suicidal ideation (p=0.04, OR: 3.36, (C.I: 1.04-10.89) were independently associated with receiving care in the regression modelling analysis.

# Conclusions

The prevalence of BD in England is similar to worldwide rates. The vast majority of people with BD have not received any specific treatment for the condition, in the last year, and 1 in 7 request but do not receive help. English secondary mental health services are unlikely to be providing optimal and accessible care for adults with bipolar disorder.

#### Introduction

Bipolar disorder (BD) is a relatively common yet highly complex mental illness<sup>1</sup>. Although the frequency of episodes and severity of symptoms vary both between and within individuals, it can be a debilitating and lifelong disorder contributing to significant personal suffering, functional impairment and disease burden. The World Health Organisation ranks BD as the sixth leading cause of disability worldwide<sup>2</sup>, and people with BD are impacted by significant rates of unemployment<sup>3</sup>, comorbidities, and early mortality due to suicide or cardiovascular disorders <sup>4, 5</sup>. The annual NHS cost of BD was estimated to be £342 million at 2009/2010 prices <sup>6</sup> and the full economic cost of BD was £5.2 billion in 2007<sup>7</sup>.

Depending on which part of the bipolar spectrum is considered, results from the World Mental Health Surveys suggest a point prevalence of around 1-2% in adult populations <sup>8, 9</sup>. It may take 6-10 years after the initial onset of BD symptoms for patients to receive an accurate diagnosis and start treatment <sup>10, 11</sup>. Moreover, around 1 in 4 individuals with BD have never sought treatment of any kind<sup>12</sup>. These findings may reflect a failure to present for help, a lack of access to treatment or treatment refusal. Whatever the cause, they represent a missed opportunity to ameliorate the associated suicidal thinking <sup>13, 14</sup>, substance misuse, and comorbidity with other mental health problems (e.g. borderline personality disorder) and physical health problems that are common in people with BD.

To our knowledge, the prevalence of BD in the community in England and access and use of mental health services has not been previously reported. It is critical to understand how far people with bipolar disorder use mental health services, and to identify the factors linked to help-seeking, access to care, and refusal of care in people with BD, so that accessible and efficient services can be planned and delivered. The aims of this study are therefore 1) to describe the prevalence of likely bipolar disorder in the community in England; 2) to quantify the proportion of people with likely BD in the community in contact with statutory and non-statutory mental health services and

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those requesting help who were refused care, and 3) to identify the factors associated with accessing care.

#### Method

## Data collection and sample

We used data from the Adult Psychiatric Morbidity Survey (APMS) 2014, a general population survey of adults living in private households in England. It was designed to be representative of the whole national population, and full details of survey methodology can be found in Byron et al.<sup>15</sup>. In brief, APMS 2014 adopted a multi-stage stratified probability sampling design based on primary sampling units derived from postcode sectors (a postal sector contains about 2,550 delivery points), This was followed by the sampling of addresses within these units. One adult aged 16 or over was randomly selected for interview in each eligible household, and the final dataset consisted of a comprehensive list of measures (over 1,000 variables) from 7,546 individuals.

We identified factors from the literature that might be linked to help-seeking in this population and used them to develop our analytic strategy. These included both demographic and clinical factors <sup>16-18</sup>.

#### Bipolar disorder assessments

The Mood Disorder Questionnaire <sup>19</sup> (MDQ), a 13 item (yes/no) assessment scale designed for self-completion, was used to identify bipolar spectrum disorders (i.e. BD types I, II, not otherwise specified and cyclothymia) by the assessment of lifetime manic symptoms. In order to screen positive for BD, at least 7 items on mania / hypomania must be endorsed, together with affirmative answers to symptoms occurring at the same time and moderate to severe functional impairment. Originally developed and validated using a psychiatric outpatient sample, the MDQ has a sensitivity in the general population of 0.28 and a specificity of 0.97<sup>20</sup> to identify bipolar disorder. This means that individuals screening positive on the MDQ are very likely to have the disorder. We therefore use the term "probable BD' in this study. Clinical diagnostic assessments for BD were not carried out in the APMS 2014 survey.

Pre-existing diagnosis of BD: Participants were asked whether they had received a professional diagnosis of BD in the past year.

Current medication for BD: This was obtained by showing participants cards listing the names of relevant medications.

## Help-seeking and access to care

Receipt of care: The binary variable 'anyhlca' was selected as the key indicator of care and treatment received for mental and emotional problems in the last 12 months. This was defined as attending hospital, either as an inpatient or outpatient, for a mental health reason, or discussing a mental health problem with a GP.

Requested care but not receiving it: This was assessed by the binary variable 'CC3Y1': 'asked for but did not get treatment', where treatment was defined as psychological therapy and / or psychotropic medication in the last 12 months.

Community service use: Participants were asked whether they had seen a psychiatrist, a psychologist, a community psychiatric nurse (CPN) or used mental health-related self-support groups in the last 12 months.

# Explanatory clinical measures

Psychotic symptoms in the past year: These were determined by asking about paranoid ideation, hallucinatory experiences and first-rank symptoms (e.g. thought insertion) using the Psychosis Screening Questionnaire (PSQ; <sup>21</sup>). Narrowly defined psychotic symptoms were chosen and those who reported 'unsure' were grouped with those who reported 'no'.

Borderline personality disorder symptoms: Participants answered questions regarding lifetime personality disorder using the self-completion Structured Clinical Interview for Diagnostic and Statistical Manual for Mental Disorders, Version IV (DSM-IV) Personality Disorders (SCID-II): we used borderline personality disorder symptoms on a continuous scale.

Depressed mood: This was measured by the composite score for a depressive episode variable using the Clinical Interview Schedule-Revised (CIS-R)<sup>22</sup>.

Suicidal ideation in the past year: measured by asking participants directly if they had contemplated suicide, and whether or not they had acted on these thoughts ('Have you ever thought of taking your life, even though you would not actually do it?').

## Socio-demographic assessment

Age group (in increments of 10 years), sex (male / female), education level (higher education / secondary school / other), employment status (employed / unemployed / economically inactive), living condition (living alone or as a couple) and ethnic group (white vs non-white) were included as confounding variables in the statistical analyses.

## Statistical analysis

All data analyses were performed using the -survey- packages in the programming language R (Version 3.6.0 in a Microsoft Window environment). We divided individuals who screened positive for BD into those who had received some form of treatment for mental health problems in the last 12 months (including current treatments) and those who had not. Analyses were weighted to account for selection probabilities and non-response, and to ensure results were representative of the general population.

Descriptive statistics were obtained in relation to all sociodemographic and clinical variables, and appropriate t-tests/Chi-squared tests with weights were carried out between the categories. We also derived descriptive statistics and weighted t-tests relating to mood symptom severity, borderline personality disorder symptoms, psychotic symptoms (narrowly defined paranoid delusions and auditory hallucinations) and suicide ideation in the last year.

Multi-variate regression modelling was then completed to establish the demographic and clinical factors associated with being in receipt of any treatment for mental health problems over the last 12 months in people with probable BD. We adopted a two-stage logistic regression modelling process, providing odds ratios (OR) for ease of understanding. Sociodemographic variables shown from the univariate analyses to differ significantly between those with and without care (weighted Chi-squared tests) were entered as explanatory variables in Model 1, whereas in Model 2, the explanatory variables comprised clinical symptom scores. The outcome variable in both models was the receipt of treatment for mental health problems in the past 12 months.

#### Results

#### Sample characteristics

1.72% (N = 130) of all participants in APMS 2014 screened positive for BD. Of those with probable BD, there was a higher proportion of women (55.4%), younger adults (60% below the age of 45) and people of white ethnicity (87.7%). Most of the group had above-secondary school levels of education (76.9%) and were mostly living alone (70.0%). Almost half (48.5%) were employed. However, only 8.5% of individuals identifying themselves as 'unemployed' at the time of the survey while 43.1% were classed as 'economically inactive'. Of those screening positive for BD, 59.2% (77/130) reported receiving care for mental or emotional problems in the last year. Table 1 shows a summary of wider service use in individuals screening positive for BD, while Figure 1 provides a graphical representation of the sociodemographic factors.

#### Insert table 1 about here

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Our analyses show that, of 130 participants screening positive for BD, approximately 4 out of 10 did not receive any kind of mental or emotional healthcare in the community in the last 12 months. Approximately 15% had asked for help for their BD, but had not received it. The same proportions (4 out of 10) of participants who screened positive for BD had spoken with their GP in the last 12 months; however, in the same period only 14% had seen a CPN, 13% a psychiatrist, and 4.6% a psychologist, and 16.9% had received treatment specifically targeting BD (medication and/or psychotherapy) in the preceding year. A small percentage (9.2%) had attended self-support groups.

Table 2 shows the sociodemographic and clinical factors stratified by whether the individual received care in the last year. Of those screening positive for BD, 38% had

experienced paranoid ideation, 11% had auditory hallucinations in the last year, and nearly 30% had symptoms of borderline personality disorder. Approximately 31% reported having had suicidal thoughts in the previous 12 months. It was striking that 52% (53/101) of people who had received a professional diagnosis of BD had not received any mental health care in the last year.

#### Symptom severity

Table 2 shows the clinical characteristics of those screening positive for BD and associated Chi-squared statistics. Participants screening positive for BD who received care in the last 12 months had a significantly higher proportion of being diagnosed as having had depression as measured by the CIS-R previous depressive episode variable, and higher borderline personality symptoms than those who screened positive for BD but did not receive care. People who received care reported high levels of persecutory delusions and significantly higher levels of auditory hallucinations. Finally, those who successfully accessed care had significantly higher levels of suicidal ideation than those without care.

#### Factors linked to accessing care

Weighted logistic regression analyses revealed that receiving care in the last 12 months was independently and significantly associated with female gender (p<0001, odds ratio (OR):4.65 (Confidence Interval (CI) :2.18-10.30) and unemployment (p=0.02, OR: 2.65 (C.I: 1.23-5.88). Suicidal ideation also significantly increased the odds (p=0.04, OR: 3.36, (C.I: 1.04-10.89) of being in receipt of care. Delusions, hallucinations or SCID-II borderline personality score or having had a previous depressive episode (see Table 3 for details) did not demonstrate an independent association.

#### Discussion

#### Main findings

There have been no previous estimations of the lifetime prevalence of BD in the general population living in the community in England prior to the APMS 2014. We found 1.72% of adults living in England screened positive for BD. Whilst the screen was not combined with a subsequent clinical diagnostic assessment this is consistent

with population estimates elsewhere of between 1.6% and 2.4% <sup>8, 23</sup> in which clinical diagnostic assessments have been completed. Of respondents screening positive, around 40% had not accessed any form of mental health care in the last 12 months. Interestingly only 17% had had any BD specific treatment in the last year, while around 15% sought treatment for their bipolar disorder over the last year but were refused. The rate of individuals without care is significantly higher than the estimation assumed by NICE in their most recent guidance <sup>12</sup> that around 1 in 4 of adults with BD never sought help or treatment.

Levels of paranoid delusions, hallucinatory experiences, borderline personality symptoms and depressive symptoms differed significantly between individuals who successfully sought care and those who did not. However, after adjustment only female gender, unemployment and the presence of suicidal ideation was independently associated with receiving care for any emotional or mental disorder in the last year.

#### Explanations

Age was not significantly linked to receiving care, despite the fact that BD is more prevalent in younger people. Our findings did not support previous. Research suggesting younger age could be linked to lack of access to care given the long delay between symptom appearance, diagnosis and treatment in bipolar disorder<sup>24</sup>. On the other hand, female gender was significantly associated with receiving care. This may be related to previous findings that women are more comfortable with, and potentially better at, expressing their emotions and communicating needs for intervention <sup>25, 26</sup>. Alternatively, it may reflect a bias in service responses to bipolar symptoms. Unemployment (including being economically inactive) was also significantly linked to receiving care, probably through association with more severe symptoms and functional impairment.

According to previous analyses of the Adult Psychiatric Morbidity Survey (APMS), the vast majority (82.4%)<sup>27</sup> of people diagnosed with a psychotic disorder (e.g. schizophrenia, also associated with severe and chronic functional impairment) were in touch with healthcare services and in receipt of treatment. We found that receipt of care in people with probable BD was considerably lower than in those with psychosis

and the extent of BD specific treatment is limited. This may be linked with This was surprising given the substantial morbidity which BD causes is broadly similar to psychotic disorders. It may also be linked with depressive symptoms in BD being misunderstood as major depressive disorder during medical consultations as opposed to being correctly identified as bipolar depression <sup>28</sup>. This is not only a risk in primary care given that a recent audit found that even in specialist mood disorder services few patients with a depressive illness were asked about hypomania, on presentation <sup>29</sup>.

It is widely assumed that psychotic symptoms are a measure of bipolar disorder severity including associated cognitive difficulties and may therefore be linked to accessing care <sup>30, 31</sup>. Psychotic symptom appeared to have no such effect in this analysis. Borderline personality disorder and bipolar disorder are comorbid in 20-40% of cases <sup>32, 33</sup>, and the severity of borderline personality symptoms might make access to care more likely. However, there is also concern that people with borderline personality disorder may experience rejection from services <sup>34, 35</sup>. Again, our analysis did not find evidence for that hypothesis.

Although 60% of those screening positive with BD reported receiving care for mental or emotional problems in the past year, only 16.9% had specific treatments for BD. This may reflect a lack of services available for BD patients or a general lack of diagnostic specificity; It was not the case that a high proportion of people with probable bipolar disorder who might need formal mental health services were using nonstatutory services such as self help groups.

In the current multivariate analyses receiving care was associated with a higher level of suicidal ideation. From the univariate analyses a higher portion of individuals with borderline personality symptoms also received care for BD. This does suggest that emotionally unstable personality psychopathology is not a barrier to care when BD symptoms were also present, and that the comorbidity means an appropriate service response. Psychotic symptoms were not strongly associated with access to care in individuals screening positive for BD, perhaps due to their relatively low frequency in BD cases in the community. There were very high proportions of suicidal thoughts in cases of BD who were receiving care. This may indicate that that they had reached a more severe symptomatic state (i.e. suicidal thoughts) or even a crisis point before accessing care.

#### Limitations

Despite its clinical utility and good psychometric properties, the instrument used to screen for BD has limitations. The MDQ is less sensitive than some of the longer measures (e.g. the Hypomania Checklist; <sup>36</sup>) at identifying Bipolar II disorders. The application of the MDQ in the general population is also limited by its low sensitivity of 0.28 (i.e. the proportion with the condition screening positive) and may thus lead to underestimates.

The data are cross-sectional. Longitudinal studies are needed to examine individual trajectories of symptom development and functional impairment, as well as access to care. In addition, psychotic symptoms in the current analysis were restricted to persecutory delusions and auditory-verbal hallucinations ('voices'), thereby missing broader feelings of suspiciousness/paranoia and hallucination-like experiences.

Finally, the variable 'use of medication for BD' was not defined in detail in the survey. As such, it was difficult to distinguish between medications aimed at treating mood instability, psychotic symptoms or depressive symptoms alone without assuming that these medications are specific for BD (i.e. mood stabilisers and anti-manic medications) in a narrow sense.

#### Implications

Our findings provide new data on the lifetime prevalence of BD spectrum disorders in the general population of England and the factors associated with mental health care. The finding that 4 out of 10 individuals with probably BD had not received mental health care in the last 12 months is of potential concern. It may be that they did not require care, though it is unlikely that this represents the explanation for most cases. Alternatively, they may not realise they are unwell or have a mental disorder, or simply cannot access care through conventional routes such as secondary mental health care. As a result, they may have been seeking care from voluntary organisations as mentioned above (charities etc.) where primary care is unable make a referral to crisis or community teams. With suicidal ideation showing the strongest association to accessing care amongst the clinical variables, and given that suicide risk in people with BD is 20 – 30 times higher than that of the general population<sup>37</sup>, this may indicate that whilst mental health care is accessible for those experiencing suicidal feelings, these individuals would need to reach a 'crisis point' first. It may also reflect the lack of new investment in services for people with bipolar disorder, and the disinvestment in other BD services such as Lithium clinics in the UK, where previously regular contact with mental health services was possible for this population.

Further research is needed into the way people with bipolar disorder interact with secondary mental health services. The views and experiences of people with bipolar disorder in accessing mental health services is an under-researched area. An Australian study reported that people with bipolar disorder felt there was a lack of awareness and understanding about the illness in community, and this was one reason why there were delays in seeking medical treatment. People also struggled to obtain accurate diagnoses and optimal treatment, and the authors described the healthcare system responses as inadequate<sup>38</sup>. Similar qualitative research is not available for the population using the English (or UK) healthcare system.

Finally, the pattern of the small proportion of people receiving treatment specifically for BD, coupled with the 1 in 7 of those requesting being refused care and that over 50% with a professional diagnosis of BD not receiving mental health care in the last year is of concern, given the morbidity and mortality that BD causes.

Service Used	Yes (%)	No (%)
Used any health care for mental health reasons	77 (59.2)	53 (40.8)
Spoken to GP about mental health problems	77 (59.2)	53 (40.8)
Seen psychiatrist in community	17 (13.1)	113 (86.9)
Seen psychologist in community	6 (4.6)	124 (95.4)
Seen psychiatric nurse in community	18 (13.8)	112 (86.2)
Attended self-support groups	12 (9.2)	118 (90.8)
Asked but refused specific form of care	19 (14.6)	111 (85.4)
Received professional diagnosis of BD	19 (14.6)	111 (85.4)
Received treatment for BD	22 (16.9)	108 (83.1)
Current use of BD medication	26 (20.0)	104 (80.0)

**Table 1.** Healthcare service use of survey participants who screened positive for BD in England. Allvariables indicate last 12 months except where specified otherwise.

Characteristic	Mental Health Care				
	Yes	No	Rate (%)	Weighted X <sup>2</sup>	p
Sociodemographics				Statistic	
Gender				17 / 8**	<0.0001
Male	23	25	116	17.40	<0.0001
Female	54	18	44.0 55 <i>4</i>		
Temale	54	10	55.4		
Age Group				6.71	0.242
16 – 24	10	14	18.5		
25 – 34	21	11	24.6		
35 – 44	15	8	17.7		
45 – 54	19	9	21.5		
55 – 64	11	7	13.8		
65 – 74	1	4	3.8		
75+	-	-	-		
Education Level				3.88	0.143
Higher	24	16	30.8		
Secondary	33	27	46.2		
Other	20	10	23.1		
Ethnic Group				0.06	0 794
White	67	47	87 7	0.00	0.754
Non-White	10	-, 6	12.3		
Non-white		0	12.5		
Employment Status				7.36**	0.006
Employed	29	34	48.5		
Unemployed	6	5	8.5		
Economically Inactive	42	14	43.1		
Living Condition				1.62	0.201
Alone	59	32	70.0		
Couple	18	21	30.0		
Diagnosis and Service Use					
Professional Diagnosis of BD				16.08**	< 0.0001
Yes	58	53	85.4		
No	19	0	14.6		
		-			
Asked but refused treatment				9.53**	0.002
Yes	17	2	14.6		
No	60	51	85.4		
Psychiatric Ward Admission				15.10**	0.0001
(Lifetime)					
Yes	25	6	23.8		
No	52	47	76.2		
Symptomatology					
Suicidal Thoughts				12.70**	0.0004

Yes	33	7	30.8		
No	44	46	69.2		
Borderline Personality Symptoms				11.60**	0.0007
Yes	30	7	29.6		
No	46	42	70.4		
Paranoid Delusions				12.00**	0.0025
Yes	33	17	38.5		
No/Unsure	28	10	29.2		
Auditory Hallucinations				8.74**	0.0127
Yes	13	1	10.8		
No/Unsure	7	5	9.21		
Depressive Episode				7.17**	0.007
Yes	23	4	71.5		
No	54	49	28.5		

\*\* Significant at *p* < 0.01 level.

**Table 2.** Characteristics of survey participants who screened positive for BD in England, stratified by those with and without care. All variables indicate last 12 months except where specified otherwise.

Measure	β (95% CI)	p	OR (95% CI)
Model 1			
Female Gender	1.54 (0.78 – 2.33)	<0.001	4.65 (2.18 - 10.30)***
Not in Employment	0.97 (0.20 – 1.77)	0.02	2.65 (1.23 – 5.88)*
Model 2			
Paranoid Ideation	0.40 (-0.32 – 1.11)	0.27	1.49 (0.73 – 3.04)
Auditory Hallucinations	0.28 (-0.53 – 1.10)	0.50	1.33 (0.59 – 2.99)
Borderline Personality	0.10 (-0.13 – 0.32)	0.39	1.11 (0.88 – 1.39)
Suicidal Thoughts	1.21 (0.04 – 2.29)	0.04	3.36 (1.04 – 10.89)*
Depressed Mood	0.57 (-0.80 – 1.94)	0.41	1.77 (0.45 – 6.97)

**Table 3**. Results from weighted logistic regression analyses with receiving care as outcome variable.OR, Odds Ratio; CI, Confidence Interval.

## References

- **1.** Rowland TA, Marwaha S. Epidemiology and risk factors for bipolar disorder. *Ther Adv Psychopharmacol* Sep 2018;8(9):251-269.
- 2. Murray CJ, Lopez AD. Evidence-based health policy--lessons from the Global Burden of Disease Study. *Science* Nov 1 1996;274(5288):740-743.
- **3.** Marwaha S, Durrani A, Singh S. Employment outcomes in people with bipolar disorder: a systematic review. *Acta Psychiatr Scand* Sep 2013;128(3):179-193.
- **4.** Crump C, Sundquist K, Winkleby MA, Sundquist J. Comorbidities and mortality in bipolar disorder: a Swedish national cohort study. *JAMA psychiatry* 2013;70(9):931-939.
- **5.** Weiner M, Warren L, Fiedorowicz JG. Cardiovascular morbidity and mortality in bipolar disorder. *Annals of clinical psychiatry: official journal of the American Academy of Clinical Psychiatrists* 2011;23(1):40.
- **6.** Young AH, Rigney U, Shaw S, Emmas C, Thompson JM. Annual cost of managing bipolar disorder to the UK healthcare system. *J Affect Disord* Oct 2011;133(3):450-456.
- Pari A, Ahmed A, Simon J, Wolstenholme J, Geddes JR, Goodwin GM. Economic evaluations in bipolar disorder: a systematic review and critical appraisal. *Bipolar disorders* 2014;16(6):557-582.
- **8.** Merikangas KR, Jin R, He JP, et al. Prevalence and correlates of bipolar spectrum disorder in the world mental health survey initiative. *Arch Gen Psychiatry* Mar 2011;68(3):241-251.
- **9.** Pini S, de Queiroz V, Pagnin D, Pezawas L, Angst J, Cassano GB, Wittchen HU. Prevalence and burden of bipolar disorders in European countries. *Eur Neuropsychopharmacol* Aug 2005;15(4):425-434.
- **10.** Drancourt N, Etain B, Lajnef M, et al. Duration of untreated bipolar disorder: missed opportunities on the long road to optimal treatment. *Acta Psychiatr Scand* Feb 2013;127(2):136-144.
- **11.** Dagani J, Signorini G, Nielssen O, Bani M, Pastore A, Girolamo G, Large M. Meta-analysis of the Interval between the Onset and Management of Bipolar Disorder. *Can J Psychiatry* Apr 2017;62(4):247-258.
- **12.** Excellence NIfC. Quality Standard QS95: Bipolar Disorder in Adults; 2015.
- **13.** Valtonen H, Suominen K, Mantere O, Leppamaki S, Arvilommi P, Isometsa ET. Suicidal ideation and attempts in bipolar I and II disorders. *J Clin Psychiatry* Nov 2005;66(11):1456-1462.
- **14.** Simon NM, Zalta AK, Otto MW, et al. The association of comorbid anxiety disorders with suicide attempts and suicidal ideation in outpatients with bipolar disorder. *J Psychiatr Res* Apr-Jun 2007;41(3-4):255-264.
- **15.** Byron CM, Z; Bridges, S; Papp, M; Cabrera-Alvarez, C; Purdon, S; Tyrer, F; Smith, J; Gill, V; Brugha, T; McManus, S. Chapter 14: Methods. *Adult Psychiatric Morbidity Survey 2014* 2016.
- **16.** Wang J, Patten SB, Williams JV, Currie S, Beck CA, Maxwell CJ, El-Guebaly N. Help-seeking behaviours of individuals with mood disorders. *The Canadian Journal of Psychiatry* 2005;50(10):652-659.
- **17.** Bhugra D, Flick GR. Pathways to care for patients with bipolar disorder. *Bipolar disorders* 2005;7(3):236-245.
- **18.** du Fort GG, Newman SC, Boothroyd LJ, Bland RC. Treatment seeking for depression: role of depressive symptoms and comorbid psychiatric diagnoses. *Journal of affective disorders* 1999;52(1-3):31-40.

- **19.** Hirschfeld RM, Williams JB, Spitzer RL, et al. Development and validation of a screening instrument for bipolar spectrum disorder: the Mood Disorder Questionnaire. *Am J Psychiatry* Nov 2000;157(11):1873-1875.
- **20.** Hirschfeld RM, Holzer C, Calabrese JR, et al. Validity of the mood disorder questionnaire: a general population study. *Am J Psychiatry* Jan 2003;160(1):178-180.
- **21.** Bebbington P, Nayani T. The Psychosis Screening Questionnaire. *International Journal of Methods in Psychiatric Research* 1995;5(1):11-19.
- **22.** Lewis G, Pelosi AJ, Araya R, Dunn G. Measuring psychiatric disorder in the community: a standardized assessment for use by lay interviewers. *Psychol Med* May 1992;22(2):465-486.
- **23.** Akiskal HS, Bourgeois ML, Angst J, Post R, Moller H, Hirschfeld R. Re-evaluating the prevalence of and diagnostic composition within the broad clinical spectrum of bipolar disorders. *J Affect Disord* Sep 2000;59 Suppl 1:S5-S30.
- 24. Berk M, Berk L, Moss K, Dodd S, Malhi GS. Diagnosing bipolar disorder: how can we do it better? *Medical Journal of Australia* 2006;184(9):459-462.
- **25.** Oliver MI, Pearson N, Coe N, Gunnell D. Help-seeking behaviour in men and women with common mental health problems: cross-sectional study. *Br J Psychiatry* Apr 2005;186:297-301.
- **26.** Judd F, Komiti A, Jackson H. How does being female assist help-seeking for mental health problems? *Australian and New Zealand Journal of Psychiatry* 2008;42(1):24-29.
- **27.** Bebbington PR, D.; Strydom, A.; Brugha, T.; McManus, S.; Morgan, Z. Chapter 5: Psychotic Disorder. *Adult Psychiatric Morbidity Survey 2014* 2016.
- **28.** Hughes T, Cardno A, West R, et al. Unrecognised bipolar disorder among UK primary care patients prescribed antidepressants: an observational study. *Br J Gen Pract* Feb 2016;66(643):e71-77.
- **29.** Hamad S MS, Chertri S, Zakaria Y. Differentiating Recurrent Unipolar Depressive Disorder from Bipolar Affective Disorder as a diagnostic code within the Coventry IPU 3-8 (Affective Disorders). *Frontiers in Psychiatry Conference Abstract: ISAD LONDON 2017: Perspectives on Mood and Anxiety Disorders: Looking to the future* 2019.
- **30.** Selva G, Salazar J, Balanza-Martinez V, et al. Bipolar I patients with and without a history of psychotic symptoms: do they differ in their cognitive functioning? *J Psychiatr Res* Apr-Jun 2007;41(3-4):265-272.
- **31.** Glahn DC, Bearden CE, Barguil M, Barrett J, Reichenberg A, Bowden CL, Soares JC, Velligan DI. The neurocognitive signature of psychotic bipolar disorder. *Biol Psychiatry* Oct 15 2007;62(8):910-916.
- **32.** Zimmerman M, Morgan TA. The relationship between borderline personality disorder and bipolar disorder. *Dialogues Clin Neurosci* Jun 2013;15(2):155-169.
- **33.** Paris J, Gunderson J, Weinberg I. The interface between borderline personality disorder and bipolar spectrum disorders. *Compr Psychiatry* Mar-Apr 2007;48(2):145-154.
- **34.** Lohman MC, Whiteman KL, Yeomans FE, Cherico SA, Christ WR. Qualitative Analysis of Resources and Barriers Related to Treatment of Borderline Personality Disorder in the United States. *Psychiatr Serv* Feb 1 2017;68(2):167-172.
- **35.** Weight EJ, Kendal S. Staff attitudes towards inpatients with borderline personality disorder. *Mental Health Practice* 2013;17(3):34-38.
- **36.** Meyer TD, Schrader J, Ridley M, Lex C. The Hypomania Checklist (HCL)—systematic review of its properties to screen for bipolar disorders. *Comprehensive psychiatry* 2014;55(5):1310-1321.
- **37.** Pompili M, Gonda X, Serafini G, Innamorati M, Sher L, Amore M, Rihmer Z, Girardi P. Epidemiology of suicide in bipolar disorders: a systematic review of the literature. *Bipolar Disord* Aug 2013;15(5):457-490.
- **38.** Highet NJ, McNair BG, Thompson M, Davenport TA, Hickie IB. Experience with treatment services for people with bipolar disorder. *Med J Aust* Oct 4 2004;181(S7):S47-51.