The views of early intervention service staff on the treatment of first episode bipolar disorder

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Abstract

Objective

Little is known about how first episode bipolar disorder (BD) is managed in early intervention for psychosis services (EIS). We aimed to investigate the knowledge and views of EIS staff on the assessment and treatment of BD.

Methods

A 27-item anonymised online questionnaire was distributed to EIS mental health professionals in England. Descriptive data analysis was undertaken.

Results

Responses were received from 117 EIS staff. Most were ‘fairly confident’ in their knowledge about causes, presentations, and relapse indicators of BD, but less confident on pharmacological and psychological treatments. 85% expressed the view that more BD training was necessary in this area with 78% reporting no clear care packages within the service. 72% believe early BD should be treated within EIS only if patients have psychosis.

Conclusions

Clearer care packages and staff training are needed for EIS staff to optimise care for bipolar disorder.

Key words: bipolar disorder, first episode, early intervention, staff, views
Introduction

Bipolar disorder is a severely debilitating mental illness that affects around 1% of the population (Pini et al. 2005). Residual depressive symptoms are common and 90% suffering multiple episodes (Angst and Sellaro 2000). There is evidence of accumulating cognitive and functional disability and lower treatment efficacy with each increasing episode number (American Psychiatric Association 2013; Martin and Smith 2013), and therefore there has been increasing interest in whether early intervention (EI) focusing on the early course of bipolar disorder improves outcomes (Berk et al. 2009). Current evidence suggests EI is more clinically and cost effective compared to standard out-patient treatment (Joyce et al. 2016). However specialist services for this group are limited.

In the UK, people with a first episode of bipolar disorder (mania) with psychotic symptoms are likely to be managed within early intervention in psychosis services (EIS). These are specialist services designed to help young people with a first episode of psychosis. First episode bipolar disorder (manic psychosis) makes up around 5-20% (Macneil et al. 2011; Marwaha et al. 2016) of EIS caseloads. Studies of people with bipolar disorder within EIS indicate this group have better functioning and quality of life at follow-up in comparison to people with schizoaffective disorder or non-affective psychosis (Macneil et al. 2012; Macneil et al. 2011). However, little is known about what care this group actually receive within EIS and the knowledge and views of EIS staff is one important aspect of answering this question. This knowledge could enable a better understanding of whether EIS are optimally set up for people with bipolar disorder or whether further development or policy initiatives are needed. The aims of this study were therefore to understand the knowledge and views of EIS staff in treating and managing BD.

Methods
A 27 item on-line questionnaire was used to gather the views of mental health professionals within EIS in England. Ethical approval was attained from the Biomedical and Scientific Research Ethics Committee at Warwick University, UK.

Questionnaire development involved constructing items related to broad themes around the identification and treatment of people with first episode BD within EIS. The questionnaire covered a number of areas: (i). clinician age, sex, professional background, number of years working within EIS, number of people with BD on caseload (ii). knowledge and treatment of early BD (iii) team resources for BD and training needs (iv) views of whether people with BD should be treated in EIS, in what context and why. Responses to most questions were designed around a scale with 4 items so that a neutral response was not allowed. Two questions gave the opportunity for free text responses. We defined first episode BD using the DSM-5’s definition of “at least one episode of elated/irritable mood with increased activity/energy” (American Psychiatric Association 2013Association 2015) and “early BD” meaning early in illness course.

The pilot questionnaire containing 27 items created by one of the investigators (TB) was reviewed by three medical students, and other research team members (SM and AT) who are clinical academic psychiatrists with substantial experience of working within EIS. Feedback on content, readability and acceptability was obtained, and item content and language refined or further explained. After piloting, the questionnaire was modified with the inclusion of definitions to reduce ambiguity of terms used in the survey. The final survey questions are shown in Appendix A.

A request to complete the questionnaire was sent out to mental health professionals working in EIS teams via the IRIS Early Intervention in Psychosis Network, a national network of EIS managers and lead clinicians. Additionally, direct approaches were made to early intervention
teams in Coventry, North Warwickshire, Oxfordshire, Birmingham and Leicester. A reminder with a stated deadline was sent after the first and 4th week and the questionnaire link remained live for 8 weeks. Participation was voluntary. The questionnaire was anonymous.

**Analysis strategy**

All responses were analysed descriptively. Frequency and percentage endorsement of each of the possibilities on the likert scales for each question were calculated. Post-hoc chi square tests were performed to assess if there was a significant difference in responses between medical and other mental health professionals.

**Results**

Responses were obtained from 117 mental health professionals working in England. The sample comprised 25 Psychiatrists, 34 community psychiatric nurses, 17 team managers, 17 clinical psychologists, 9 occupational health therapists, 4 support time recovery worker and 10 others. There were 73 female respondents and 43 male respondents with one respondent not reporting their gender. The average mean time of clinical experience was 6 years with a range of less than a year to 18 years.

On average, the proportion of patients on staff caseloads who had a diagnosis of BD was 10.4%, with the range being 0%-50%. On initial inspection of the data, medical staff appeared to be responding differently to other mental health professionals and therefore we performed Chi squared analysis post hoc to investigate if responses were statistically different.

**Knowledge of assessment and management of bipolar disorder**

[Table 1]
Respondent views on these sections of the survey are shown in table 1. The majority of respondents (64%) were ‘fairly confident’ in their knowledge of BD with fewer than 2% of the sample being ‘not at all confident’. Doctors were significantly (p<0.05) more confident that they knew the risk factors and course of BD compared to other mental health professionals. There was no significant difference between medical and other mental health professionals in recognising when someone with BD might relapse or on recognising the difference between affective and non-affective psychosis.

In terms of knowledge about treatment of bipolar depression, mania and maintenance treatment, level of confidence was generally lower (commonest responses of “fairly confident”, range: 44-60%) in comparison to items that measured confidence in knowledge of course, risk factors, signs of relapse of BD (commonest responses of “fairly confident”, range: 62-84%). There were no significant differences between medical staff and others in knowledge of the use of mood stabilisers in early BD but significant differences did emerge in all other questions regarding the pharmacological management of BD (Table 1). Differences between professional groups did not exist when confidence in the use of psychological treatments in BD was assessed.

Staff views on team resources for treatment of BD within their EIS and training needs

[Table 2]

[Figure 1]

Absolute values and percentages related to participant responses to survey items can be found in table 2. Most respondents (77%) were most likely to answer “somewhat”, when asked to what extent their EIS is set up to treat people with early BD. With regards to whether they are able to deliver evidenced based care the commonest answer (59%) was ‘somewhat’. Only a minority (22%) of staff reported having a clear care package for the treatment of BD within
their EIS (Fig. 1). The bulk of respondents (85%) expressed a desire for more training on recognising and managing early BD and compared to medical staff, other health professionals were significantly (p<0.05) more likely to endorse this.

**Should people with bipolar disorder be managed within EIS and why?**

One in five staff (21%) stated people with BD should be managed in EIS whether they have psychotic symptoms or not. A minority (7%) do not believe any young person with a diagnosis of BD should be managed in their EIS. The most common response (72%) was “only if psychotic” and there were no significant differences between professional groups in these responses.

[Figures 2 and 3]

Reasons for people with BD to be managed within EIS, or not, are shown in figures 2 and 3 respectively. The main three reasons for managing BD within EIS was: “we are used to diagnostic uncertainty”, “we have the necessary skills” and “there is overlap with treatment of psychosis”. Respondents main three reasons for believing EIS was not a suitable service for the management of BD was: “bipolar disorder patients may dislike being treated within a ‘psychosis’ service”, “bipolar disorder is better served by those with a special interest in bipolar”, and “diagnostic uncertainty is different in bipolar disorder”.

There were only a minimal number of free text responses but included the following: “schizophrenia is not ‘non affective’ due to persecutory delusions which are very affective”, “General adult psychiatry is ‘kitchen sink’ for all that does not fit elsewhere. Risk diluting down expertise by asking clinicians to accept early bipolar patients into EIS”, “bipolar currently sits within our EIS but will require a dedicated treatment pathway”, “important to treat the person as a whole when they present rather than categorise them” and “important not to forget depressive phase of illness”.
Discussion

Early intervention in BD has been advocated on the basis that a prodrome can be defined (Martin and Smith 2013), there is neuroprogression linked to cognitive and functional difficulties (Berk et al. 2009) and reduced treatment efficacy with increasing episode number. There is a dearth of research evidence on the treatment of this group within EIS and this survey represents an important first step to understanding staff knowledge and views of this group, how well people with early BD might be served and what future service improvements may be needed to optimise the care of early BD.

Main findings

The study found that respondents believed they had sufficient knowledge on the aetiology, presentations and management of BD, with medical staff being more confident in a number of areas. Most respondents believed their EIS is set up to some extent to treat people with BD and that in the main, they can deliver evidence based care for this group. These generally positive and encouraging messages need to be balanced with lower levels of confidence in treating bipolar depression, mania or providing maintenance or psychological treatment; also only a minority stating they have clear care packages for this group, and the strong desire for more training on BD, especially within the non-medical EIS workforce. Over 70% of those surveyed reported BD should only be treated within their EIS if there was evidence of psychosis. Amongst those that answered BD should not be managed within EIS, the possibility that people with BD may not want to be treated in a psychosis service was the commonest reason given.

Limitations

Although the questionnaire included a definition of key terms, we cannot be sure all participants interpreted questions in the same way, a problem common to all non-face to face surveys. However, questionnaire development utilised a team approach and questions
underwent piloting. Whilst we obtained a relatively good number of responses (N=117) we
do not know the response rate and therefore cannot comment on the representativeness of our
sample. The questionnaire was sent to EIS throughout the country using the EI in Psychosis
Network (IRIS Network) and this together with the professional backgrounds of the
respondents does suggest we may have achieved a level of professional and geographical
spread.

**Furthermore, the focus of the survey was the knowledge and views of staff on the recognition
and medical treatment of BD within EI services, while there was limited focus on staff
knowledge of psychological and social interventions for BD. It may be that a greater focus on
these aspects of treatment would have resulted in higher levels of confidence from
respondents, and this may explain some of the differences in responses between medical staff
and other professional groups.**

The survey items asked about respondent’s knowledge and views about BD, but we have no
way of assessing how far responses represent actual levels of knowledge of BD and the
nature of services in which staff work. Therefore because of social desirability bias, it is
possible that staff had a tendency to report greater skill levels than is the case in reality,
though this would be less likely to be an issue in responses directed at their views about
whether BD should be treated in EIS. A further limitation common to research investigating
attitudes and opinions is the difficulty in correlating these views with behaviours. There is
evidence that attitudes and opinions have little relationship to clinical practice (Wicker and
University of Wisconsin 1969). However, the identification of further training needs in
assessing and treating bipolar disorder and the perceived gaps in staff knowledge is an
important one, and needs to be addressed if bipolar patients are to remain within EI services
and effectively managed.
**Implications**

Early intervention of BD is in its infancy (Marwaha et al. 2016) but pathways for further development may involve either embedding early intervention for BD in youth services, developing bespoke BD EIS, or continuing with this group’s care within EIS for first episode psychosis. This study suggests that the third of these potential models, and the only currently existing one in England, is likely to need further development and support, to aid care for this group.

Though doctors were more confident than other health professionals in their knowledge of presentation and recognition of BD, no differences emerged in recognizing relapse. Other mental health professionals clearly feel equipped to identify this and are the front line in real world practice. Confidence in knowledge of managing BD compared to knowledge of the condition was lower for all professional groups. Taken together these findings indicate EIS staff may benefit from further training in BD and this was supported by their own high endorsement of this training need.

It was surprising that although the majority of respondents believed their EIS was set up to some extent to treat people with BD, most admitted to having no clear care packages for this group. Although respondents may feel that they can provide individualised care to people with BD within their EIS, the lack of specific care packages for BD patients suggests that This would suggest that management of BD within EIS in England is currently underspecified and further work is necessary in developing frameworks and care packages incorporating guidelines such as those of the National Institute for Health and Care Excellence (NICE) and / or the British Association of Psychopharmacology (BAP). Aside from pharmacological treatment, psychological approaches specific to first episode BD are
also likely to be needed. These take into account disturbances in activation, sleep and cognitive style and are consistent with a developmental approach (Macneil et al. 2012; Macneil et al. 2011). Psychoeducation groups, are also thought to be an important component of treatment for this group (Kessing et al. 2013). The extent to which these more specialised BD psychological treatments are available within EIS is currently unknown.

The views of the majority of staff indicate that they very much view current configurations suitable only for those with BD who also have psychotic symptoms, with a rejection of the tenet that those without this symptomatology should be accommodated within EIS. In fact BD was identified by the NIMHE National Early Intervention Programme acceptance criteria (NIMHE 2008) as an area in which it may be difficult to decide about acceptance into EIS. This document suggested that EIS should only accept people with BD with “definite psychotic symptoms”, the rationale being that services had been configured around the incidence of schizophreniform psychoses and psychoeducational approaches were focused on psychosis. It is unclear if that was uniformly followed a decade ago, but also how far that guidance has persisted with widespread service changes that have taken place in the UK since that time (The Kings Fund 2015).

The NIMHE position is probably inconsistent with providing early intervention to the whole population of first episode BD. Staff views indicate only a proportion of people with bipolar I, that is those with psychotic symptoms, should be admitted to EIS. Information on symptom profiles in first episode BD is lacking. In those with a very severe episode needing hospital admission, up to 88% may have psychotic symptoms (Tohen et al. 2003). However, the rate of psychotic symptoms is unclear (and likely to be much lower) in the group who do not require hospital admission. Research on established cases indicates around 50-60% of people who suffer from a manic episode will have psychotic symptoms in their various forms
Delusions are commoner than hallucinations but tend to last for less than a week (Morgan et al. 2005). It is unclear if these psychotic symptoms would satisfy entry criteria for EIS in their current configuration. Indeed, what constitutes psychotic symptoms may vary between services, especially where symptoms such as flight of ideas are concerned.

In the context of these staff views it is unlikely that people with bipolar II would be eligible for entry into EIS in England. This is despite high levels of suicidality (Novick et al. 2010), dysfunction and morbidity in this sub-type of the disorder (Baek et al. 2011). If EI treatment is to be extended to all with BD then substantial changes within EIS for psychosis would need to take place for this to be acceptable to EIS mental health professionals. Some staff believe people with BD might be better served by a service with a special interest in the condition. Interestingly there was also high endorsement of the idea that people with BD may themselves feel stigmatised by being managed in a “psychosis” service. However, around 1 in 5 staff believed EIS should manage people with BD irrespective of psychotic symptoms suggesting a widening of the current remit of EIS would be acceptable to a significant minority of staff.

This survey highlights the need for further research in early intervention service level innovations to help people with first episode BD. Because of the use of likert scales and the limited scope for adding free text comments in this study future studies may benefit from using a qualitative approach in interviewing people and analysing responses thematically. Within current EIS, alongside staff training, new care packages specific to early BD need development and implementation, and these will need evaluation on the basis of clinical and cost-effectiveness. If young people with BD, other than those with psychotic symptoms are to
be provided early intervention programmes in England more widely, then staff will need to be engaged and also entry criteria to services will need to be modified.

**Key points:**

- This study surveyed a variety of EIS staff through an online questionnaire
- EIS staff feel they require further training in the management of bipolar disorder
- The majority of EIS staff say their services lack clear care packages for bipolar disorder
- The majority of staff felt bipolar disorder should only be treated within EIS if patients presented with clear psychotic symptoms
- It remains unclear if EIS has any role in non-psychotic bipolar disorder

**Acknowledgements:** We wish to thank all EIS staff who gave of their time in completing the survey

**Disclosure of Interest:** None to declare

**References**


Table 1. Respondent confidence in their knowledge and management of bipolar disorder
<table>
<thead>
<tr>
<th>Survey items</th>
<th>How confident</th>
<th>Chi square analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very confident % / N</td>
<td>Fairly confident %/N</td>
</tr>
<tr>
<td>Distinguishing between non affective psychosis and manic psychosis?</td>
<td>23.2 (26)</td>
<td><strong>64.3 (76)</strong></td>
</tr>
<tr>
<td>Knowledge of risk factors for early bipolar disorder?</td>
<td>14.4 (16)</td>
<td><strong>63.0 (70)</strong></td>
</tr>
<tr>
<td>Course of early bipolar disorder?</td>
<td>11.3 (13)</td>
<td><strong>53.9 (62)</strong></td>
</tr>
<tr>
<td>Recognising the signs and symptoms that suggest imminent relapse?</td>
<td>24.3 (28)</td>
<td><strong>73.0 (84)</strong></td>
</tr>
<tr>
<td>Use of mood stabilisers in early bipolar disorder?</td>
<td>17.9 (20)</td>
<td><strong>41.0 (46)</strong></td>
</tr>
<tr>
<td>Recognising side effects associated with the above medication?</td>
<td>21.6 (24)</td>
<td><strong>45.0 (50)</strong></td>
</tr>
<tr>
<td>Use of medication in the treatment of depression in early bipolar disorder?</td>
<td>17.9 (20)</td>
<td><strong>41.1 (46)</strong></td>
</tr>
</tbody>
</table>
Recognising the side effects associated with using the above class of medication?

<table>
<thead>
<tr>
<th>Survey items</th>
<th>How confident</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of antipsychotics in the treatment of early bipolar disorder?</td>
<td>21.6 (24) 27.8 (31) 23.4 (26) 5.4 (6)</td>
</tr>
<tr>
<td>Recognising the side effects associated with using the above class of medication?</td>
<td>33.9 (38) 40.6 (46) 13.1 (15) 1.8 (2)</td>
</tr>
<tr>
<td>Using psychological treatments for early bipolar disorder?</td>
<td>25.0 (28) 48.2 (55) 25.0 (28) 1.8 (2)</td>
</tr>
</tbody>
</table>

*Statistically significant (medical staff more confident)

Commonest responses in bold text.

Table 2: Respondent views on how far their EIS is set up for treating people with bipolar disorder

<table>
<thead>
<tr>
<th>Survey items</th>
<th>How confident</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognising the side effects associated with using the above class of medication?</td>
<td>21.6 (24) 49.5 (55) 23.4 (26) 5.4 (6)</td>
</tr>
<tr>
<td>Use of antipsychotics in the treatment of early bipolar disorder?</td>
<td>21.6 (24) 46.8 (52) 29.5 (33) 2.7 (3)</td>
</tr>
<tr>
<td>Recognising the side effects associated with using the above class of medication?</td>
<td>33.9 (38) 52.7 (60) 11.6 (13) 1.8 (2)</td>
</tr>
<tr>
<td>Using psychological treatments for early bipolar disorder?</td>
<td>25.0 (28) 48.2 (55) 25.0 (28) 1.8 (2)</td>
</tr>
</tbody>
</table>

*Statistically significant (medical staff more confident)
<table>
<thead>
<tr>
<th>Question</th>
<th>Very desirable</th>
<th>Desirable</th>
<th>Not really</th>
<th>Indifferent</th>
</tr>
</thead>
<tbody>
<tr>
<td>What extent is your EIS set up to treat people with early bipolar disorder?</td>
<td>15.8 (18)</td>
<td>67.5 (77)</td>
<td>12.3 (14)</td>
<td>4.4 (5)</td>
</tr>
<tr>
<td>Are you able to deliver evidence based medicine for early bipolar disorder?</td>
<td>16.2 (18)</td>
<td>53.1 (59)</td>
<td>28.8 (32)</td>
<td>0.9 (1)</td>
</tr>
<tr>
<td>Desire for more training on recognising and managing early bipolar disorder?</td>
<td>38.2 (44)</td>
<td>35.7 (41)</td>
<td>16.5 (19)</td>
<td>9.6 (11)</td>
</tr>
</tbody>
</table>

Commonest responses in bold text

*Statistically significant (other mental health professionals more likely to endorse need for training)

Appendix A: Questions within the online survey
Background information: sex, role within the early intervention service, years have you worked within the early intervention service, numbers on caseload, proportion of your caseload made up of people with early bipolar disorder.

How confident are you that you could distinguish between non affective psychosis (such as schizophrenia) and manic psychosis when a patient presents at the early intervention service?

How confident are you that you know the risk factors for early bipolar disorder?

How confident are you that you know the course for early bipolar disorder?

How confident are you that you can recognise signs and symptoms that suggest someone with early bipolar disorder is about to relapse?

How confident are you that you about the use of mood stabilizers in early bipolar disorder?

How confident are you about recognising the side effects associated with using the above class of medication?

How confident are you that you know about the use of medication in the treatment of depression in early bipolar disorder?

How confident are you about recognising the side effects associated with using the above class of medication?

How confident are you that you know about the use of antipsychotics in the treatment of early bipolar disorder?

How confident are you about recognising the side effects associated with using the above class of medication?

How confident are you that you know the psychological treatments for early bipolar disorder?
All above questions answered on a likert scale of: not at all confident, not confident, fairly confident, very confident

To what extent is your EIS set up to treat people with early bipolar disorder?

Do you feel you are able to deliver evidence based medicine within the early intervention service for early bipolar disorder?

All above questions answered on a likert scale of: not at all, not really, somewhat, very much so

Do you have a clear care package for patients admitted with early bipolar disorder?

Yes, no, unsure

If you answered yes to the above question please indicate how confident you feel in using it.

Not at all confident to very confident

How evenly are your resources split between patients with non-affective psychosis and those with manic psychosis? 1 being exclusively manic psychosis and 10 being exclusively non-affective psychosis?

How strongly do you feel you would benefit from more training on recognizing and managing early bipolar disorder? 1 being indifferent and 4 being very strongly

In your opinion, should treatment for early bipolar disorder sit within EIS for psychosis?

Yes – Whether they have psychosis or not, Yes – But only if they have psychosis, No

Please indicate how strongly you feel about your answer to the above question? 1 being indifferent and 4 being very strongly

If you answered YES to the above question please select the TOP 3 reasons that appeal to you.
we are youth focused, we have necessary skills, it would be easier to develop bipolar disorder early intervention service within early intervention services for psychosis, there is an overlap of treatment, we are used to diagnostic uncertainty, we currently already offer this, other – their answer.

If you answered NO to the above question please select the TOP 3 reasons that appeal to you.

lack of capacity, skill set does not match what is needed, bipolar disorder better served by those with a special interest in bipolar disorder, bipolar disorder patients may not like being treated within a ‘psychosis’ service, diagnostic uncertainty is different in bipolar disorder

Thank you for taking the time to complete this questionnaire. Is there anything that has not been asked that you would like to comment on?