

Mood monitoring in bipolar disorder: Is it always helpful?

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Key message:

This article offers a cautionary note about the use of mood monitoring in bipolar disorder. We propose that, although potentially helpful for some individuals, mood monitoring in bipolar disorder can at times be inappropriate and even harmful. We finish by offering tentative recommendations for future practice.

Learning points:

- There is cautionary evidence to suggest that mood monitoring is unhelpful for some people with a diagnosis of bipolar disorder.
- We tentatively suggest that an individualised, collaborative and normalising approach to mood monitoring may be optimal and reduce potential limitations.

Mood monitoring is widely used in the treatment and self-management of bipolar mood swings. Typically, service-users record their affective states in a paper or electronic diary over an extended period (e.g. weeks, months). The aim is to help people to achieve greater awareness and understanding of their affective states, which then enables them to better prepare and account for problematic changes in their mood, preventing escalation to mood episodes and relapse. A possible strength of mood monitoring is that ambulatory monitoring allows for insights that might not normally be identified through retrospective assessment, facilitating intervention before a deterioration in mood state occurs. Mood monitoring is therefore a form of high-intensity early warning sign detection and planning intended to keep people well.

Clinicians have employed mood monitoring within psychological interventions, including cognitive behavioural therapy (CBT), psychoeducation modules, and as a standalone intervention. It is also promoted widely outside of clinical services through self-help books, websites and resources. There are now multitudes of freely available mood monitoring diaries on the internet, some endorsed by leading bipolar disorder charities. Additionally, there are burgeoning numbers of smartphone mood monitoring software applications, with varying levels of supporting evidence and validation (1).

This Clinical Care Article considers the question: Is mood monitoring always helpful in people with a diagnosis of bipolar disorder? The authors propose that, although potentially helpful for some individuals, the use of mood monitoring in bipolar disorder can at times be inappropriate or even detrimental. We advocate the need for careful and sensitive deployment of mood monitoring, with consideration of an individual formulation and clear personalised goals, rather than *one size fits all* adoption. We explore for who, when and how mood monitoring might be most helpful.

Theoretical and empirical sources for caution

Mood monitoring assumes that greater awareness of affective states is always better for the individual. However, psychological models of bipolar disorder have theorised that vigilance to mood states can also be problematic. In their integrative cognitive model of mood swings, Mansell and colleagues (2) posit that people may interpret their internal states, such as mood change, in ways that are extreme and highly polarised. For example, a brief and commonplace feeling of happiness may be interpreted as the excitement that precedes a dangerous relapse. This entails worry and rumination that can, in turn, contribute to a subsequent anxious or depressed mood state. At times, it may be difficult for individuals to discern between the early stages of an extreme mood state and an everyday fluctuation in mood, making it difficult to calibrate an appropriate response. This may lead service users to live restrictive lifestyles avoiding activities that they enjoy in order to safeguard themselves, possibly erroneously, from the possibility of further mood episodes.

The emerging literature provides some cautionary evidence for mood monitoring. Saunders and colleagues completed a qualitative evaluation of a digital mood monitoring system as part of the Automated Monitoring of Symptom Severity (AMoSS) study (3). They found that four of 21 participants with a diagnosis of bipolar disorder spoke about the potential of mood monitoring to become preoccupying and induce paranoia. The authors also noted that ‘concerns were raised that reactive mood changes might be misinterpreted as representing illness relapse’. Similar findings have been observed in online mood monitoring interventions for treatment resistant depression. Incecik and colleagues (2020, p51) state that ‘many participants viewed their increased insight positively; but for some, spending time evaluating their symptoms was thought to contribute to a deterioration in mood’. Although these numbers are small, they point to the possibility that there are subgroups of service users where mood monitoring is less clinically indicated.

There is also quantitative evidence for the pitfalls of mood monitoring. The MONitoring, treAtment, and pRediction of bipoLAr Disorder Episodes (MONARCA) feasibility trial evaluated the use of smartphone technology for daily self-monitoring for six-months (5). The data showed a tendency towards more sustained depressive symptoms in the intervention group leading the authors to hypothesise that daily self-monitoring may have increased fear of not recovering. The authors conclude that electronic mood monitoring ‘needs critical consideration and further clarification before it is implemented as a clinical tool’ (p. 2691). However, many eHealth symptom monitoring studies do not monitor or report adverse events, and in most countries, mood monitoring apps are already widely accessible to people with bipolar disorder with no evaluation of safety.

Clinical recommendations

Given the potential benefits and costs of mood monitoring, there is a clear need for guidance on its use, both for clinicians and people with a diagnosis of bipolar disorder. Here, we offer tentative recommendations based on the existing evidence base and theory, and clinical experience. To contextualise this guidance, we describe the factors that may result in constructive and therapeutic use of mood monitoring as employed within cognitive and behavioural interventions.

1. Ensure that mood monitoring would be helpful for that person at that time.

It is important to recognise that therapeutic needs and goals around mood management will vary from one person to the next, and that mood monitoring can fulfil a number of functions. We recommend having a clear rationale for the use of mood monitoring with each individual, guided by his or her presenting difficulties and priorities, and arriving at this rationale collaboratively. The

choice of whether and how to use mood monitoring will depend upon this understanding. For example, for the individual who reports little awareness of their mood shifts, mood monitoring may help to build confidence in recognising and responding to the early signs of a potential bipolar episode. However, for the individual who is already fearfully monitoring mood, the focus of the work may be to reduce or limit monitoring behaviour, or highlight the potential impact that it might be having. Understanding the rationale for mood monitoring, as it applies to the individual, will facilitate an informed choice about whether it would be helpful at that time. Reviewing the process regularly will help to determine whether it is or has become counterproductive and the person should not feel under pressure to continue regardless. Ultimately, mood monitoring is one tool to achieve a therapeutic aim and alternatives can always be found.

2. Normalise everyday variations in mood and help the person to discriminate between actual, and perceived, signs of relapse.

Helping individuals to discriminate between mood states and the early stages of full relapse can be an important aspect of mood monitoring. This may involve looking at thoughts, feelings, behaviours, urges, physical sensations, events, and reactions from others. For some individuals, the emphasis of mood monitoring is upon becoming more aware of seductive positive states or slow-building low states. Although this can potentially lead to relapse prevention strategies, it can also send the implicit, overgeneralised message that all everyday mood states are dangerous and need monitoring. This can lead to catastrophic interpretations of and hypervigilance to mood, raising people's levels of anxiety and distress, especially if no solution or coping approaches have been identified. It is important therefore that guidance is clear that many everyday fluctuations in mood states are not a sign of relapse, but rather, understandable reactions to day-to-day stressors, or common variations in mood. In order to protect against unhelpful and overgeneralised interpretations of mood states, we recommend placing emphasis on normalising everyday moods, elaborating upon the rich palette of emotions that we can all experience, and increasing the range of moods that are seen as acceptable by the individual. Normalising variations in mood may help the individual to form a more helpful, less aversive, relationship with their mood. It is sometimes helpful to gather information from others (e.g. clinicians, family) and use the system to provide a different and more normalising perspective. Similarly normalising approaches, using peer workers to help people make sense of their data, are currently being adopted in the monitoring of psychotic experiences.

3. Help the person to achieve positive ways of responding to mood changes prior to mood monitoring.

For individuals who do not feel confident in coping with certain moods, preparation for mood monitoring is particularly important. Pre-agreed coping strategies may increase perceived control over potentially problematic moods making them less anxiety provoking when they occur. These strategies may be as simple as rehearsing what the person will do if an extreme affective state occurs, in line with their values and wishes. At the more elaborate end, it may also include fully systematised relapse prevention plans or therapeutic strategies. For some individuals, it will be important to reduce, rather than increase, cautious behaviour. In our clinical experience, some people with bipolar disorder can end up restricting their lifestyle for fear of triggering relapse, leading to unintended interpersonal, financial, and emotional consequences. Mood monitoring can therefore also be used to test out the effects of deliberately expanding or reclaiming activities and relationships, which can, nevertheless, be daunting for individuals and clinical services. Either way, ensuring that people have a clear understanding of what changes in mood signify, and how they will respond to these changes before embarking on regular mood monitoring, is important.

Conclusion

There are some empirical and theoretical reasons for caution when employing mood monitoring in individuals with a diagnosis of bipolar disorder, which require further consideration in clinical and academic forums. In this article, the authors offer some tentative recommendations for maximising the benefits of mood monitoring, whilst mitigating the possibility of iatrogenic effects.

References

1. Antosik-Wójcińska AZ, Dominiak M, Chojnacka M, Kaczmarek-Majer K, Opara KR, Radziszewska W, Olwert A, Świącicki Ł. Smartphone as a monitoring tool for bipolar disorder: a systematic review including data analysis, machine learning algorithms and predictive modelling. *International Journal of Medical Informatics*. 2020; 31:104131.
2. Mansell W, Morrison AP, Reid G, Lowens I, Tai S. The interpretation of, and responses to, changes in internal states: an integrative cognitive model of mood swings and bipolar disorders. *Behavioural and Cognitive psychotherapy*. 2007;35(5):515-39.
3. Saunders, K. E., Bilderbeck, A. C., Panchal, P., Atkinson, L. Z., Geddes, J. R., & Goodwin, G. M. (2017). Experiences of remote mood and activity monitoring in bipolar disorder: a qualitative study. *European Psychiatry*, 41, 115-121.

4. Incecik E, Taylor RW, Valentini B, Hatch SL, Geddes JR, Cleare AJ, Marwood L. Online mood monitoring in treatment-resistant depression: qualitative study of patients' perspectives in the NHS. *BJPsych Bulletin*. 2020;44(2):47-52.
5. Faurholt-Jepsen M, Frost M, Ritz C, Christensen EM, Jacoby AS, Mikkelsen RL, Knorr U, Bardram JE, Vinberg M, Kessing LV. Daily electronic self-monitoring in bipolar disorder using smartphones—the MONARCA I trial: a randomized, placebo-controlled, single-blind, parallel group trial. *Psychological medicine*. 2015;45(13):2691-704.