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Embracing complexity when moving towards an integrated model of suicide for bipolar disorder

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There is a general recognition that we need to move beyond psychiatric categories to understand suicide risk. Indeed, in recent years there has been a renewed focus on the development of psychological and psychosocial models of suicide risk. One of the common themes of these new models is the recognition that the factors associated with the emergence of suicidal ideation are different from those that govern the transition from ideation to suicidal behavior. Such ideation-to-action models have shifted the focus from psychiatric disorder to other transdiagnostic markers of vulnerability including psychological, biological and psychosocial vulnerability markers. It is heartening, therefore, to see Malhi, Outhred, Das, Morris, Hamilton, and Mannie's¹ integrated BD model, a useful addition to the research literature which synthesises both psychiatric and psychosocial approaches to understanding suicide risk and builds upon the existing theoretical evidence base. As they highlight, there are myriad conceptual and methodological challenges to realising such an integrated approach to understanding suicide risk in bipolar disorder (BD), and indeed numerous other contexts. In the current commentary, we discuss several of these here.

We have recently refined one of the predominant ideation-to-action models, the integrated motivational-volitional model (IMV²), upon which Malhi and colleagues¹ draw. In this latest update we have introduced further complexity into the model, specifically expanding the range of variables in light of new evidence but crucially, also adding additional pathways to account for the often non-linear nature of the suicidal process. Even for the purposes of explanatory parsimony, at this stage we would urge caution in categorising distinct profiles of suicidal processes, e.g. the longer-duration and shorter-duration processes described in Malhi et al¹. Although it is likely to be fruitful in the future, profiling of this kind may inadvertently lead to individuals classified as "longer-duration" being overlooked for crucial immediate-term support. This is akin to the current situation where

checklist-type risk assessment tools are used to (largely inaccurately) classify individuals into categories of "low", "medium" and "high" risk of making a suicide attempt. In fact over the course of repeated attempts, the cycle of transition from distress to suicidal behaviour is likely to occur with increasing rapidity, therefore the critical window for intervention becomes narrower. Whilst new techniques such as network analysis and machine learning demonstrate some potential for being able to construct more individually specific vulnerability profiles, currently we do not have anywhere near the evidence base to be able to make definitive statements regarding individual trajectories. In part this is due to the chronic dearth of prospective research on suicide, especially focusing on the days and weeks following an index suicide attempt as well as the reliance upon self-reported and often retrospective reports of suicidal thoughts, plans and behaviours.

Investigating complexity within the suicidal process also means embracing complex methods. Given the mood cycling which is often a hallmark of BD, a method which could be used to investigate some of the hypotheses set out in the BD integrated model, is the Experience Sampling Method (ESM). This structured daily-diary technique administers multiple short questionnaires per day via smartphone and can provide data almost in real-time regarding participants' mood, social interactions, and appraisals³. ESM has previously been employed in studies of BD, however to our knowledge none of these studies has used ESM to investigate variability in suicidal ideation or behaviour. Recent research on variability in suicidal ideation with individuals without BD has demonstrated that as well as moment-to-moment fluctuations in suicidal thoughts, individuals also experienced fluctuations in hopelessness, burdensomeness and loneliness⁴. ESM would be an ideal method to assess rapid fluctuations in mood and contextual appraisals that may accompany suicidal thoughts and behaviours in BD. It would also be of interest to investigate the extent to which changes

in mood activate implicit attitudes to death/suicide in BD, as they have been shown to be important in other populations⁵.

One final point about language, as a research field, we need to be vigilant about the terminology we use and avoid use of terms such as "commit* suicide" and "successful suicide" which are viewed by many as stigmatising. Although progress has been made in reducing the use of such terms, there is still scope for improvement.

In sum, we welcome Malhi et al's¹ efforts at modelling suicide in BD, as a truly integrated approach to suicide should draw upon *both* psychiatric and psychosocial vulnerability factors. For such an approach to succeed it is paramount that complexity is embraced and not overlooked, which brings with it unique, but surmountable, conceptual and methodological challenges.

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