Journal of Affective Disorders: Correspondence Response to Zimmerman (2021)

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We thank Professor Zimmerman (Zimmerman, 2021) for his interest in our paper and for taking the time for a detailed investigation (? overview) of the psychometric properties of the Mood Disorder Questionnaire (MDQ; Hirschfeld et al., 2000) in relation to our study based on Adult Psychiatric Morbidity Survey (APMS) data (Humpston, Bebbington, and Marwaha, 2021). We agree that the psychometric properties of screening instruments are important because we use them to tell us something about prevalence and to make policy suggestions where appropriate. Individuals specialised in epidemiological research will be familiar with the calculation of sensitivity, specificity and positive and negative predictive values. We point out (?acknowledge) in the paper that 29 respondents who had previously been given a professional diagnosis of bipolar disorder (BD) did not screen positive on the MDQ.

The Adult Psychiatric Morbidity Surveys are carried out regularly in England at 7-8 year intervals. BD has been generally neglected in population surveys in England (or generally??), despite high costs to the person and to society. Indeed the fourth (2014) survey was the first to include an attempt to measure bipolar disorder symptoms (Marwaha, Sal, and Bebbington, 2016). The MDQ was used as a pragmatic choice to assess bipolar symptoms. Longer assessments with better psychometric properties are available, such as the Composite International Diagnostic interview used in the World Mental Health Surveys, but on its own it would involve a participant burden broadly equivalent to a diagnostic assessment. Whilst we agree that such a diagnostic assessment would be the ideal in assessing bipolar disorder, it was judged infeasible in the context of an epidemiological household survey sampling around 8000 people. A follow-up diagnostic assessment of those screening positive is more practicable, but was not possible within the constraints of APMS 2014. Faced with this issue, what should the choice be? Rather than abandoning measurement of bipolar disorder symptoms altogether, we decided upon the approach selected. In particular, if individuals screen positive on the MDQ, they are likely to have bipolar disorder symptoms, even at a subsyndromal level.

Professor Zimmerman's piece reports the sensitivity, specificity, PPV and NPV on the MDQ using data from previous studies in different populations. He then transposes these values to the APMS. In fact, the psychometric properties of the MDQ in our study remain unknown, and more broadly in the APMS, given (as Professor Zimmerman points out) that we were unable to carry out a gold standard diagnostic assessment. We therefore cannot know these psychometric values with any degree of certainty

Finally, we would highlight the purpose of the APMS 2014 and its predecessors, namely to provide a measure of psychiatric morbidity (that is, broad estimates of its prevalence, and its socio-economic correlates, comorbidity and features) at a population rather than an individual level. In fact, no clinician-based diagnostic assessments are carried out for any mental disorder in the APMS. In practical terms, we may remain obliged to rely heavily on screening tools in large general population surveys given the intrinsic constraints on their methodology (including limitations on time, resources, and training). Smaller surveys with more detailed and extensive instruments fall prey to serious issues of generalisability.

Certainly, further research is needed to develop and assess new screening tools with improved psychometrics for bipolar disorder. Nevertheless, in the meantime noisy data are better than no data, and will shape potential methodological improvements.

References

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