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Missed conceptions about paediatric bipolar disorder: a reply and discussion of DMDD

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Letter to the Editor

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We read with interest Dr Connors reply (Connors, 2023a) to our letter to the editor (Malhi *et al.*, 2023b) in which we had questioned a number of aspects of his thoughtful examination of paediatric bipolar disorder (PBD) (Connors, 2023b).

On the same page

We were reassured by his response because, with respect to the points that Dr Connors feels we critiqued, we believe that our views are in fact largely aligned. For instance, for accurate diagnosis, we agree that a longitudinal assessment is useful and would go as far as to say that it is essential, as is a proper formulation rather than relying on '*diagnostic checklists*' (Connors, 2023a). This is precisely why we have recently detailed the '*deep-seated flaws within our current adult diagnostic criteria for bipolar disorder*' and shown that this creates a constitutive problem because of the '*transposition of adult diagnostic criteria to define the illness in children and adolescents*' (Malhi *et al.*, 2023a). The latter is predicated on the not unreasonable assumption that bipolar disorder has its provenance in childhood. However, this assumption overlooks the possibility that at its source, when nascent, bipolar disorder appears very different.

In a granular analysis of this issue, we discuss three problems when diagnosing bipolar disorder in adults that we term '*the Trojan Horse*', '*low resolution*' and '*the blind spot*' (Malhi *et al.*, 2023a). These correspond to the delay in diagnosis of bipolar disorder, our inability to differentiate unipolar major depression and bipolar depression, and the focus of research and clinical practice on depressive and manic episodes, instead of mixed episodes. We point out that these problems, '*are even greater when extrapolating from adults to younger individuals*' because, as we explain, '*in this phase of life, the illness is only just beginning to emerge in the form of subtle mood disorder symptoms*'. In addition, we discuss difficulties that constrain current classificatory criteria, noting that diagnosis invariably involves detecting '*a flawed signal*', that is often '*obscured*', and that even when a signal of sorts can be identified we are then faced with the difficulty of '*differentiating the signal*' from the normal vicissitudes of emotional growth and maturation. Hence why overall, we feel that our perspective is not dissimilar to Dr Connors: succinctly reflected by his sentiment that '*without addressing the poor validity and reliability of the diagnosis, it is unlikely that basic research can progress*' (Connors, 2023a). Thus, for all practical purposes, as regards the diagnosis of bipolar disorder, we feel that we are on the same page – give or take a few words.

We therefore return to the third point concerning disruptive mood dysregulation disorder (DMDD), where once again, we find ourselves agreeing with much of what Dr Connors has to say. For example, we accept that DMDD, specifically its history, lies outside the scope of his original article (Connors, 2023b). Nevertheless, we feel it is important that we question this diagnosis and respectfully disagree that just because DMDD has failed '*as an alternative diagnosis to PBD*' (Connors, 2023a), introducing other diagnostic terms would not be helpful.

Dr Connors correctly points out that '*childhood bipolar disorder has long been used interchangeably with paediatric bipolar disorder to refer to supposed pre-pubertal forms*' (Connors, 2023a) and that similarly '*adolescent bipolar disorder has been used to introduce dubious diagnostic features for bipolar disorder within this age group*'. We concur. He also quite appropriately expresses concern that these terms have failed to curtail overdiagnosis and that perhaps limiting their use to research alone would be difficult to ensure. However, our proposal aligns adolescent bipolar disorder with its adult counterpart and avoids the aberrations likely to be introduced by bridging puberty. In addition, by regarding prepubertal states as a primordial soup – the distinction forces the adoption of different research paradigms to better understand the antecedents of bipolar disorder in childhood.

The principal reasons why DMDD has failed are twofold. First, we argue that the intent of DMDD, to a large extent, was primarily to camouflage the overdiagnosis of PBD and reduce the labelling of children with this label by providing an alternative diagnosis. The second reason

DMDD has proven to be a failure is that it was poorly conceptualised and completely impractical in real-world settings (Malhi and Bell, 2019). Therefore, given it has been more than a decade since its dramatic appearance in DSM-5 in the absence of sufficient research and because it remains a controversial diagnosis, we feel it is necessary to briefly scrutinise its progress to date.

A decade of dysfunction

One of the original goals of introducing DMDD, a completely new diagnosis, into the already fraught diagnostic landscape in which children were being labelled with PBD, was to reduce the medication of children by providing diagnostic differentiation. It has clearly failed in this regard and failed as a diagnosis. Hence, its conspicuous omission from the latest (11th) version of the ICD (World Health Organization, 2019). This is not particularly surprising given that fundamental flaws were noted almost immediately after it was introduced (Lochman *et al.*, 2015). Specific criticisms included the significant departure of DMDD criteria from those used to describe severe mood dysregulation (SMD), the provisional research syndrome that had been adopted to create the DSM-5 diagnosis. Further, field studies and secondary analysis of DMDD exposed its limited reliability, high overlap with other disorders and lack of psychiatric consensus (Axelson *et al.*, 2012; Margulies *et al.*, 2012; Copeland *et al.*, 2013). This came about because remarkably, DMDD as we know it had not been peer-reviewed prior to its inclusion within DSM-5 (Lochman *et al.*, 2015). A WHO task group went as far as to state that it would increase diagnostic confusion and contrary to its desired aim, DMDD would instead '*create a new target for . . . drug development and trials*' (Lochman *et al.*, 2015). Consequently, the creation of a new diagnostic category was questioned.

These early concerns were well founded and in the decade since have been borne out in the literature. Recent evaluations have shown that the diagnosis has been a spectacular failure in reducing the medication of children (Findling *et al.*, 2022), and that instead, when compared to PBD, the diagnosis of DMDD has '*. . . increased antipsychotic and polypharmacy prescriptions and higher rates of comorbidity and inpatient hospitalization in youth*'. In addition, DMDD has failed to provide any meaningful diagnostic differentiation from other related disorders, and its criteria prove to be unwieldy and difficult to apply in clinical practice (Evans *et al.*, 2021). Hence why, a recent sample of child psychiatrists and psychologists '*agreed that DMDD remained controversial and that most DMDD diagnoses did not abide by the DSM-5 rules for differential diagnosis*' (Boudjerida *et al.*, 2024). Thus, it seems DMDD exacerbated the very problems it was meant to solve. Again, this does not surprise us, as we discredited the diagnosis of DMDD 5 years ago, describing it as 'fake views' (Malhi and Bell, 2019).

Conclusion

So where does this leave us? We now have a poorly conceived diagnosis (PBD) that has been shown to lead to misdiagnosis and the unnecessary treatment of children with medications. In addition, we have an equally poorly conceived corrective measure (DMDD) that has not only failed to remedy the problems caused by PBD but also arguably made them worse. Hence, our proposal to dispense with these defunct terms that are not only causing harm but also hindering research and instead introduce a more logical description of the likely inception of bipolar symptoms that emerge from a prepubertal miasma, and following puberty may manifest as an adolescent bipolar syndrome.

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References

Axelson D, Findling RL, Fristad MA, Kowatch RA, Youngstrom EA, Horwitz SM, Arnold LE, Frazier TW, Ryan N and Demeter C (2012) Examining the proposed disruptive mood dysregulation disorder diagnosis in children in the longitudinal assessment of manic symptoms study. *The Journal of Clinical Psychiatry* **73**(10), 6867–50.

Boudjerida A, Guilé J-M, Breton J-J, Benarous X, Cohen D and Labelle R (2024) A Delphi consensus among experts on assessment and treatment of disruptive mood dysregulation disorder. *Frontiers In Psychiatry* **14**.

Connors MH (2023a) Misconceptions about paediatric bipolar disorder. *Acta Neuropsychiatrica* **35**(6), 374–376.

Connors MH (2023b) Paediatric bipolar disorder and its controversy. *Acta Neuropsychiatrica* **35**(2), 96–103.

Copeland WE, Angold A, Costello EJ and Egger H (2013) Prevalence, comorbidity, and correlates of DSM-5 proposed disruptive mood dysregulation disorder. *American Journal of Psychiatry* **170**(2), 173–179.

Evans SC, Roberts MC, Keeley JW, Rebello TJ, De La Peña F, Lochman JE, Burke JD, Fite PJ, Ezpeleta L, Matthys W, Youngstrom EA, Matsumoto C, Andrews HF, Elena Medina-Mora M, Ayuso-Mateos JL, Khoury B, Kulygina M, Robles R, Sharan P, Zhao M and Reed GM (2021) Diagnostic classification of irritability and oppositionality in youth: a global field study comparing ICD-11 with ICD-10 and DSM-5. *Journal of Child Psychology and Psychiatry* **62**(3), 303–312.

Findling RL, Zhou X, George P and Chappell PB (2022) Diagnostic trends and prescription patterns in disruptive mood dysregulation disorder and bipolar disorder. *Journal of the American Academy of Child & Adolescent Psychiatry* **61**, 434–445.

Lochman JE, Evans SC, Burke JD, Roberts MC, Fite PJ, Reed GM, De La Peña FR, Matthys W, Ezpeleta L, Siddiqui S and Elena Garralda M (2015) An empirically based alternative to DSM-5's disruptive mood dysregulation disorder for ICD-11. *World Psychiatry* **14**(1), 30–33.

Malhi GS and Bell E (2019) Fake views: dmdd, indeed!. *Australian & New Zealand Journal Of Psychiatry* **53**, 706–710.

Malhi GS, Jadidi M and Bell E (2023a) The diagnosis of bipolar disorder in children and adolescents: past, present and future. *Bipolar Disorders* **25**(6), 469–477.

Malhi GS, Jadidi M and Bell E (2023b) Time to transition from paediatric to adolescent bipolar disorder. *Acta Neuropsychiatrica* **35**(6), 372–373.

Margulies DM, Weintraub S, Basile J, Grover PJ and Carlson GA (2012) Will disruptive mood dysregulation disorder reduce false diagnosis of bipolar disorder in children? *Bipolar Disorders* **14**(5), 488–496.

World Health Organization (2019) *International Statistical Classification of Diseases and Related Health Problems (11th Revision)*. Geneva: World Health Organisation.

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