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Fair is foul, and foul is fair: reframing neurodevelopmental disorders in the neurodevelopmental perspective

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We argue here that the surge in the prevalence of autism spectrum disorder (ASD) diagnoses combined with the broadening of the neurodevelopmental disorders category has witnessed a de-emphasis of intellectual disabilities (intellectual developmental disorders) (ID/IDD). This is a recurring theme of equivocation towards ID/IDD in psychiatry. On the 400th anniversary of Shakespeare’s death, it is perhaps befitting to reconsider the motif of ID/IDD in psychiatry under the maxim ‘*Fair is foul, and foul is fair*’. As in Macbeth (Act 1, Scene 4), the story of ID/IDD is subjected to a number of prophecies. The first involves the legacy of indifference to the mental health needs of persons with ID/IDD despite evidence that 40% have co-occurring psychiatric disorders (1). The second endorses the notion that brain dysfunction in ID/IDD, unlike that in ASD, is ‘fixed’ and not amenable to early remediation. The third is an ethics gap that consents that disproportionate ills associated with ID/IDD are less deserving of attention in terms of both services and research on the basis of IQ.

These contradictions withstanding the neurodevelopmental perspective have been gaining influence in our aetiological insights and in informing interventions across psychiatry. It is highlighting the importance of dimensional classification of disorders in better capturing their heterogeneity and severity, differentiating variations across individuals, and identifying the time course, brain–behaviour associations, as well as their functional significance (2). This new paradigm nurtures the view that ID/IDD, ASD and major psychiatric disorders, including schizophrenia, may represent less distinctive forms of psychopathology than was previously considered. Genome-wide association studies increasingly show that these disorders share copy number variants.

The neurodevelopmental focus transfuses all the sections of the DSM-5 and the forthcoming ICD (ICD-11 Beta). How this emphasis ought to be applied requires greater training among psychiatrists not only in ASD, but in ID/IDD, across all levels of severity. For example, it has recently been suggested that high functioning forms of ASD may remain unrecognized or misclassified by adult psychiatrists as complex mood, post-traumatic, personality or psychotic disorders (3). The continuous distribution in the general population of quantitative ASD traits is often shared with other psychiatric conditions or premorbid states (3). The idea

that neurodevelopment signifies a common vulnerability factor for most mental disorders is, however, not new. Early stages of many psychiatric disorders may emerge in the neurodevelopmental period and bear clues not only to their causation but to their remediation (4). The extension of the neurodevelopmental spectrum at the normal or above-average levels of IQ spectrum is clearly an important transformation. This change ought not to undermine the important comorbidity between ASD and ID/IDD. While much of the recent research focuses on ASD independently, almost half of subjects with ASD have co-occurring ID/IDD (5). A de-emphasis of comorbidity between ASD and ID/IDD is also likely to lead us back to inadequate consideration of mental health needs of those individuals with more severe forms of cognitive and adaptive impairments. The ‘bridging’ of data between ASD and ID/IDD is particularly salient given the need to address the disproportionately greater health disparities faced by this complex group of individuals facing co-occurring developmental, psychiatric and medical conditions. This approach is likely to prevent the prospect of an important segment of the public receiving increasingly inferior quality of mental health and social care.

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