

## EDITORIAL

# Neurodevelopmental disorders including intellectual disability: a clinical tool kit for mental health professionals

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## SUMMARY

This editorial introduces the first of two special issues of *BJPsych Advances* on neurodevelopmental disorders, including intellectual disability, autism spectrum disorder, attention-deficit hyperactivity disorder and epilepsy. This issue is intended to offer a clinical tool kit for mental health professionals giving guidance on assessment and management of these disorders and associated conditions, such as behaviours that challenge.

## KEYWORDS

Neurodevelopmental disorder; autism; intellectual disability; attention-deficit hyperactivity disorder; epilepsy.

Neurodevelopmental disorders are primarily clinical conditions with onset typically during the developmental period. Clinical features usually become evident during the pre-school years. Developmental delays in learning, communication and acquiring new skills, together with global deficits in areas such as intellectual ability, social and occupational functioning and the control of executive functions and behaviour, are common across the spectrum of neurodevelopmental disorders.

Neurodevelopmental disorders are classified in DSM-5 (American Psychiatric Association 2013) into intellectual disability, autism spectrum disorder (ASD), attention-deficit hyperactivity disorder (ADHD), communication disorders, specific learning disorder, motor disorders and other neurodevelopmental disorders. The classification has helped in our understanding of each neurodevelopmental disorder. It helps delineate neurodevelopmental disorders one from another, notwithstanding their co-occurrence and sometimes overlapping symptoms, and also from other psychiatric disorders that can cause diagnostic overshadowing. However, owing to overlapping behavioural phenotypes there is an increasing trend to view and classify

neurodevelopmental disorders on a spectrum. Given the considerable genetic heterogeneity, there is also a move to classify these disorders on the basis of genetic aetiology and epigenetic mechanisms and to link behavioural phenotype to genotype (Morris-Rosendahl 2020).

## Advances in assessment and treatment

Over the past decade, advancements in assessment tools and the development of a range of evidence-based therapeutic techniques that have a clearer rationale have promoted evidence-based treatment of neurodevelopmental disorders in community and hospital settings. These tools and techniques have also been incorporated into clinical tool kits and clinical care pathways, for example clinical guidelines and quality standards, by the National Institute for Health and Care Excellence (NICE). Evidence-based interventions have included:

- psychological approaches incorporating applied behaviour analysis, positive behaviour support, dialectical behaviour therapy, steps to effective problem-solving, mindfulness-informed approaches, environmental adjustment and manipulation, group cognitive-behavioural therapy and eye movement desensitisation and reprocessing;
- speech and language therapy and enhanced communication, for example the use of Makaton, British sign language or the picture exchange communication system (PECS) and the use of assistive technology;
- occupational therapy, such as sensory integration training;
- genetic screening panels for determining the aetiology of intellectual disability, autism and epilepsy;
- the use of psychotropic medication for mental illness, ADHD and for behaviours that challenge; such prescribing is mindful of the risk of overmedication in people with ID, autism or both, and is

actively incorporated within clinical care pathways, taking a multidisciplinary and holistic approach, as in two NHS England projects: ‘Stopping the over-medication of people with a learning disability [intellectual disability], autism or both’ (STOMP), which aims to prevent weight gain, patients feeling ‘drugged up’ and complications such as serious physical health problems (NHS England 2022), and ‘Supporting treatment and appropriate medication in paediatrics’ (STAMP), which promotes the availability and use of appropriate medication in line with NICE guidance for children and young people (Royal College of Psychiatrists 2021);

- risk formulation and the reduction of restrictive practices and interventions;
- timely assessment, diagnosis and appropriate treatment for physical health conditions, thereby reducing both morbidity and mortality.

### A shift of perspective

Our understanding of neurodevelopmental conditions has also been enhanced by a sociological perspective that normalises such conditions and moves away from the language of disorder and deficits. There is a move embracing neurodiversity (Singer 2016), promoting the idea that the communication and interactions, behaviour and experiences of people with autism, ADHD, intellectual disability and other neurodevelopmental conditions vary from individual to individual, questioning and debating commonly held concepts of the ‘normal’ range of processing of thought, learning and adaptive behaviour.

Several legal frameworks are in place enforcing equality and reasonable adjustments in the workplace and wider society; these help to reduce stigma, promote social inclusion and encourage ‘co-production’ with people with neurodevelopmental conditions in the development of public services and provision of opportunities to enable them to lead their best life in the community.

Ethical principles and evidence-based guidance (or lack of it) for managing mental illness and behaviours that challenge in people with neurodevelopmental disorders have led to considerable investment by policy makers, care providers and mental health and social care services in respect of the changes in psychiatry’s approach to managing these conditions and improving the quality of life of those affected.

### This issue

In this first of two themed issues on neurodevelopmental disorders, we focus on clinical practice

guidance and clinical tool kits for assessment and management of these disorders and associated conditions, such as behaviours that challenge. In their article on developmental disorders in children, Tevis & Matson (2022) discuss prevalence, assessment tools, risk factors and evidence-based treatment options. Hassiotis & Rudra (2022) describe a stepped-care model for behaviours that challenge in adults with intellectual disability, within the context of the relative lack of single interventions showing clinical and cost-effectiveness. Perera and colleagues (2022) describe the presentation of ADHD symptoms and functional impairments in people with intellectual disabilities, to promote accurate diagnosis by clinicians; they also explore the relationship between autism and bipolar disorder.

The article by Davidson and colleagues (2022) reflecting on the use of available clinical tools to help differentiate between autism and attachment disorder is complemented by a commentary by Biswas & Beardsworth (2022).

A user-friendly tool kit on genetic testing for psychiatrists is described by Clark & Koutsogianni (2022), incorporating an overview of the range of genetic tests and panels available for intellectual disabilities, ASD and epilepsy. The authors also provide guidance on when to refer to a clinical geneticist and where to find resources and information for parents and carers about genetic testing.

The article by Williams and colleagues (2022) describes psychiatric, neurobiological and physical conditions associated with pica, discussing their assessment and management.

The issue opens with a Cochrane Corner summary of the findings Maguire and colleagues’ (2022) review evaluating the efficacy and safety of antidepressants for treating depressive symptoms in people with epilepsy and depression and the effect on seizures, which is followed by with a commentary by Makan (2022).

It was our goal to provide psychiatrists who work with those with neurodevelopmental disorders an up-to-date overview of the latest developments in the assessment, diagnosis and management of this range of conditions. We trust that we achieve this.

### Author contributions

Both A.B. and P.C. conceived, drafted and revised the final manuscript.

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## Declaration of interest

A.B. is a member of the *BJPsych Advances* editorial board and P.C. is the editor of *BJPsych Advances*.

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