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COMMENTARY

Psychotropic medication for problem behaviours in intellectual disability and autism spectrum disorder: the need for caution†

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SUMMARY

Many persons with intellectual developmental disorders and/or autism spectrum disorder presenting problem behaviours undergo pharmacotherapy without receiving an appropriate psychiatric assessment and diagnosis. Instead, prescription of psychotropic medication should have specific aims and involve interdisciplinary assessment, personalisation and patient and family participation. Current knowledge about pharmacological management of problem behaviours in this population is limited, necessitating extreme caution in clinical practice and more research into the complex interrelated factors that affect presentation, course and treatment response.

KEYWORDS

Psychotropic medications; psychopharmacology; psychopathology; intellectual disability; autism spectrum disorder.

The article by Deb and colleagues (Deb 2022a, this issue) is an excellent contribution to the literature on the clinical use of psychotropic medications in people with intellectual disabilities (intellectual developmental disorders, IDD) and/or autism spectrum disorder (ASD), which is a major concern for clinical psychiatry and public health in the majority of countries across the world. It points out through a series of case vignettes the crucial problems associated with excessive and inappropriate medication with which clinicians deal daily. However, some of the aspects covered deserve more discussion, which I intend to provide in the present commentary.

Focusing on the reason for prescribing

More consideration should have been given to the fact that many scholars and expert clinicians in the field follow a reductive, dichotomous position regarding the use of psychotropic medications for complex behavioural epiphenomena such as problem behaviours, leaning towards advocating their employment either in most cases or in very few cases (Tyrer 2008; McCreary 2015). Instead, it should be emphasised that appropriate prescription and management of psychotropic medications in people with IDD/ASD is more of a matter of rationale than frequency. Psychotropic medications should be used with specific aims and following appropriate assessment and other clinical processes, in accordance with principles of interdisciplinarity, precision, personalisation and participation. Many persons with IDD/ASD undergo pharmacotherapy without receiving an appropriate psychiatric assessment and diagnosis. To implement an interdisciplinary approach, different professionals must work together to address the complex interactions between individual and target symptoms or behaviours. An interdisciplinary approach is also useful to define a profile of the person's strengths, weaknesses and needs that allows planning of the most effective intervention, which might be alternative to or integrative of psychotropic medications. A precision approach to treatment should consider specific evidence-based and up-to-date psychiatric knowledge in the field of IDD/ASD as well as each person's variability in symptom presentation, genes, physical health issues, environment, history and lifestyle. Personalisation requires professionals to be able to create connections of clinical meaning and value concerning symptoms/behaviours observed, information collected from different sources, and the individual's history and experiences. Participation implies that the planned treatment must be shared with the person with IDD/ASD and their family.

Improved prescribing practice is particularly relevant for problem behaviours, as overuse and inappropriateness of psychotropic medications should be reconsidered in the light of the complexity of factors that underlie these issues.

Problem behaviours and their causes

In this commentary, I use 'problem behaviours' instead of 'behaviours that challenge' (which is

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used in Deb and colleagues' paper and more generally in the UK) as I think this term can better express that a variety of factors, including physical and mental health problems, can directly influence behavioural changes rather than always implying intervening factors with challenging effects. This seems to be intended also by Deb and colleagues since their first two case studies illustrate such situations.

Many researchers agree on the fundamental role played by psychiatric comorbidity in increasing the severity of functional impairment in people with IDD/ASD and in the accentuation of frequent adjunctive problems, such as impulsivity, irritability, aggressiveness or self-injury, which may lead to confusion in the differential diagnosis between IDD/ASD-related problem behaviours and psychopathology-related problem behaviours (Bertelli 2022). Despite high prevalence rates, problem behaviours in IDD/ASD have long been rarely and inadequately considered by mental health research and clinics, with attention being paid to their specific nature rather than to their relationship with psychiatric symptoms and diagnostic categories (Bertelli 2022). The scientific literature overall indicates that a large proportion of problem behaviours shown by people with IDD are associated with psychopathological issues, which are reported to be five times more prevalent in this group than in the general population, although some more recent studies in the UK indicate a higher link with aspects of wider psychological changes such as emotion dysregulation, mood instability, agitation and irritability (Melville 2016; Smith 2022). Potentially treatable mental health conditions may play a role in causation of problem behaviours.

The controversy is complicated by the diagnostic overshadowing between IDD/ASD and co-occurring psychiatric disorders, such that many clinicians tend to attribute all problem behaviours to the basic neurodevelopmental condition. Some problem and maladaptive behaviours have been associated with impulsivity and irritability as expressions of the rigidity and repetitive behaviours present in IDD/ASD (Vitiello 2021). Randomised controlled trials have shown the efficacy of risperidone and aripiprazole in managing these symptoms in children (Kaplan 2012), leading the US authorities to adopt these compounds for the treatment of irritability in children with ASD. However, impulsivity and overactivity have also been indicated as potentially treatable correlates of problem behaviours and predictors of persistence of such behaviours (Laverty 2020, 2023). Such diagnostic difficulties are also due to clinicians' lack of training and knowledge with respect to the specific symptomatic presentation of psychopathology in people with IDD/ASD, and poor scientific research and dissemination. This is particularly relevant for adults since most research has focused on children and adolescents. Consequently, the extent to which co-occurrence of psychopathology influences the prescription of psychotropic medications has not been sufficiently investigated, especially in reference to the association of specific drug classes, specific psychiatric disorders and specific symptoms, including when presented as behavioural changes.

Antipsychotic choice and use of non-pharmacological interventions

The most important change to be made in clinical practice is to reduce the use of antipsychotic medications that have the strongest dopamine D_2 receptor blocking properties, especially when they are prescribed long term and used to treat problem behaviours for which a psychotic character has not been ascertained (Deb 2022b). Compared with limited short-term use, medium- and long-term use show a considerably increased risk of side-effects that may significantly worsen the neurodevelopmental disability. In medium- and long-term therapies, it is always advisable to periodically review the psychopathological framework and reformulate the therapeutic rationale for the psychopharmacological prescription (Deb 2009).

Additionally, clinicians frequently overlook the possibility that non-pharmacological interventions, especially behavioural therapy, can be very helpful even in situations when medication is required to control the most acute episodes of problem behaviour, although this has been stated in guidelines such as those from the National Institute for Health and Care Excellence (2012) and the World Psychiatric Association (Deb 2009).

Behavioural pharmacology

In the past 15 years, research and practice in behavioural pharmacology has considerably increased with the aim of evaluating the extent to which specific behavioural techniques can improve the effectiveness of specific drugs and vice versa as well as exploring the mechanisms of action of behaviourally active drugs and using these drugs as tools for the analysis of complex behaviours. Nevertheless, the body of data supporting specified intervention of behavioural pharmacology is still very limited; furthermore, meta-analyses have revealed that not all individuals with IDD/ASD will benefit from high-intensity behavioural therapy (Hagopian 2018; Sandbank 2021).

The limitations of current knowledge regarding the pharmacological management of psychopathology in people with IDD/ASD necessitate exercising extreme caution in clinical practice and

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stepping up research efforts to address the complexity of interrelated factors that have an impact on the pathological thresholds, presentation, course and treatment response of specific psychiatric disorders.

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Declaration of interest

None.

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