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Use of Psychotropic Medicines for the Treatment of Behavioural Disturbance in People with Intellectual Disability

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Abstract

Concern about the use of medication to manage behavioural problems in a person with intellectual disability has resulted in some jurisdictions considering prescription of medication for an undiagnosed psychiatric or physical condition as a type of restraint or restricted practice.

When the use of medication is indicated for an unclear psychiatric or non-psychiatric disorder, prescribers must make explicit the indication for medication use, dose, frequency and duration for which medicine should be used. If the medicine is being used primarily for the management of problem behaviours, consideration should always be given to availability and likely benefits of concurrent non-medication behavioural support management resources and services.

Keywords: Behavioural problems; Physical condition; Intellectual disability; Mental health

Introduction

Mental illnesses are common in people with intellectual disability. Almost one-third of people with intellectual disability are thought to have a comorbid psychiatric disorder [1,2] with rates of first-episode psychosis about ten times that of the general population [3]. However, people with intellectual disability can also present with behavioural difficulties when an underlying mental disorder or impairment due to a disorder of thinking, perception or mood is unclear. This can be because under-diagnoses of mental health disorders among persons with intellectual disability may occur as a result of the inability of the person with intellectual disability to articulate their concerns during routine clinical examination and in response to standard diagnostic interview questions [4]. Misinterpretation of psychiatric symptoms as an intellectual disability-related cognitive deficit, or diagnostic overshadowing, can also occur [5].

There is no argument that the use of psychotropic medicines for the treatment of mental illness in people with an intellectual disability is as effective as in people without intellectual disability. Therefore, its use for the treatment of these conditions is quite appropriate. However, it is also true that at times psychotropic medicines are needed for the management of behavioural disturbance in absence of a mental illness.

The rate of behavioural difficulties in people with an intellectual disability is considered high [6,7] and for many people with an intellectual disability, such difficulties persist for some time [8,9]. These behavioural difficulties can be challenging to deal with and if non-medication strategies to manage behavioural disturbance prove to be inadequate and/or there is an escalation of risk of harm to the person, other people or property, use of psychotropic medications becomes necessary.

Reasons for the use of psychotropic medicines for challenging behaviours

One quarter to half of the people with an intellectual disability are estimated to be receiving psychotropic medication. Approximately half of this number are thought to receive psychotropic medication to primarily manage problem behaviours e.g., aggression or self-injurious behaviours [10-12]. This is likely to be because psychotropic medicines are known to have specific therapeutic effects on a disorder of thought, perception and mood, which can frequently be a reason for the behavioural disturbance.

Many psychotropic drugs are also effective in the treatment of agitation, aggression and in enhancing emotional control per se.

There is also some suggestion that concurrent use of psychotropic medicines is also helpful to facilitate non-medication-based interventions such as positive behavioural support.

Effectiveness of psychotropic medicines used to manage behavioural disturbance

Several systematic reviews provide an indication of possible benefits of psychotropic drugs for the treatment of behavioural disturbance in people with intellectual disability, developmental delays and in autism spectrum disorder.

Atypical antipsychotic drugs, especially resperidone, have been found to be significantly better than placebo in the treatment of problem behaviour in people with intellectual disability and autism spectrum disorder [13-19]. Similarly, aripiprazole has shown similar efficacy [20]. Clozapine has been shown to be useful for the management of problem behaviour in individuals with an intellectual disability although several adverse effects were reported by study participants [21].

Other psychotropic drugs used for management of challenging behaviours in people with intellectual disability include antidepressants [22], lithium and other mood stabilisers [23], antianxiety drugs e.g., buspirone [24,25], beta-blockers [26] and opioid antagonist e.g., naltrexone [27]. Benzodiazepines have been tried, however, there are also concerns about, disinhibition and the resultant increase in self-injurious behaviour [28]. Use of psychostimulants e.g., methylphenidate in children with an intellectual disability and attention deficit hyperactivity disorder is thought to result in decreased impulsivity, inattention and hyperactivity [29,30].

Reasons for concerns about the use of psychotropic medicines in people with intellectual disabilities

Concerns about the use of psychotropic medicines, especially antipsychotic drugs, in people with an intellectual disability are now new [10,11,31-33]. In the United Kingdom, such concerns in relation to people with intellectual disability and complex needs at Winterbourne View Hospital in 2011 led to the Government concluding that major changes were urgently needed [34]. In the UK, a national campaign was launched in 2016 to address overuse of mediation in people with an intellectual disability: 'Stopping over medication of people with a learning disability, autism or both [STOMP]' [35].

Some jurisdictions in Australia now consider the use of psychotropic medication for the management of problem behaviour in the absence of a psychiatric disorder to be a `chemical restraint' [36-38]. The National Disability Insurance Scheme Quality and Safeguards Commission includes the use of medication for the primary purpose of influencing a person's behaviour without a diagnosed mental disorder, a physical illness or a physical condition as a `restricted practice' i.e., a practice or intervention that has the effect of restricting the rights or freedom of movement of a person with a disability, with the primary purpose of protecting the person or others from harm [39].

Reasons for an aversion to the use of psychotropic medication to manage behavioural problems include safety concerns and possible long term adverse effects of some psychotropic medicines. Communication difficulties may also make it more difficult for a person with an intellectual disability to convey the level of distress adverse effects may be causing to them. Moreover, there has been a concern that people with intellectual disability and their carers often feel excluded and find it difficult to discuss the need or use of psychotropic drugs [40]. This can lead to inappropriate use or its use for inappropriate indications.

Since some adverse effects of psychotropic medicines may be similar to index symptoms, these can result in further deterioration in the behavioural disturbance. For example, Serotonin Re-uptake Inhibitors can increase agitation, restlessness and irritability. Other psychotropic medicines can cause constipation and associated abdominal pain, headaches, dry mouth, sedation and lethargy, which can then lead to restlessness and agitation. Unusual syndromes of concern include serotonin syndrome [that can present with tachycardia, sweating, muscle rigidity, tremors, an increase in body temperature and blood pressure, dilated pupils and sometimes shock], metabolic syndromes and obesity, extrapyramidal symptoms, neuroleptic malignant syndrome and tardive dyskinesia. There is also a suggestion that different pharmacokinetics and pharmacodynamics in people with intellectual disability as compared to the general population may also leave them vulnerable to developing more adverse effects.

For people who have been on psychotropic medicines for some time, due consideration should also be given about the risk of withdrawing medicines. The risk of people experiencing withdrawal effects or adverse effects of withdrawing psychotropic medicines is significant [41].

How to use psychotropic drugs to manage behavioural disturbance

It is important that if there is an underlying mental disorder or other cause for behavioural disturbance, it is treated effectively. This should be informed by a comprehensive multidisciplinary medical and mental health assessment supported by information from reliable informants and carers of a person with an intellectual disability.

Depending upon the severity of behavioural disturbance, the urgency with which it needs to be managed, availability of non-medication related behavioural support and assistance and the extent of risk the person's behaviour presents, consideration may need to be given to the use of medication. The decision to use

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psychotropic medicines should be informed by a biopsychosocial assessment to identify any organic, psychological and social factors that may be contributing to behavioural disturbance.

When prescribing psychotropic medication for the treatment of behavioural disturbance, due consideration should be given to ensuring effective communication with the person with intellectual disability and their carers about likely benefits, possible adverse effects and alternate treatment options. Appropriate physical examination and other baseline investigations should be conducted at the time of initiation of treatment and a monitoring regime [to measure beneficial effects as well as adverse effects] agreed.

Several guidelines exist to guide prescribers about the appropriate use of psychotropic medicines to manage behavioural disturbance in people with intellectual disability [42].

Given concerns about the use of psychotropic medicines for behavioural disturbance and the fact that many jurisdictions now consider the use of psychotropic medicines for the treatment of behavioural disturbance in absence of a diagnosed mental illness to be chemical restraint, it is appropriate to follow the following process when prescribing a psychotropic medication for the management of behavioural disturbance:

- Clearly identify the symptoms or problem behaviours that require intervention in the immediate term and in the longer term.

- Identify any non-medication behavioural management strategies that have been tried and why the use of medication is indicated and/or has become necessary. If non-medication behaviour management strategies have not been tried, what behavioural support strategies are recommended concurrently and/or referrals that should be made for the person with intellectual disability to receive appropriate behavioural support.

- Consult with the person with an intellectual disability about the need to use medication and how it is likely to assist them. If they can give informed consent, obtain informed consent. Discuss with their family and carers about the need, likely benefits, possible adverse effects and monitoring regime to assess the benefits and adverse effects with the use of medication.

- Provide relevant information sheets on medicines being prescribed to the person with intellectual disability, and their families and carers.

- When prescribing medicines, clearly document prescribed dose, frequency and make explicit the indications for use of the medication being prescribed. If the medicine is an as required medication, clearly identify the dose to be used, the maximum dose that can be used in 24 hours, the minimum time interval between any two doses and indications for use of an as required medication.

- If there are reporting requirements [legislative, regulatory or policy], these must be fulfilled to ensure that both the indications for the use of medication as well as details of the prescription of medication for specific problem behaviours is explicit. This also allows for second opinions to be obtained and facilitates further discussion about the most appropriate interventions to support the person with intellectual disability.

Conclusion

Use of medication by a competent medical practitioner to alleviate disease and distress is an appropriate intervention. However, there is also a concern that in supporting a person with intellectual disability and their families and carers, in the past some psychotropic medicines may have been overused or used inappropriately. This could have been because of lack of availability of other non-medication-related resources to manage behaviours of concern in people with an intellectual disability or because of unavailability of expertise in assessment, investigation, diagnosis and management of behaviours of concern. Irrespective of the reason, it is important that medication is prescribed for the right indications, with a clear justification and in consultation with the person who is being prescribed medicines.

If medication is prescribed for an indication that may be questioned or considered a restrictive practice under a regulation, legislation or policy, medical practitioners must clearly document why the use of medication is the most appropriate treatment or intervention; the dose, frequency and duration for which a medicine is being prescribed; and what non-medication behaviour supports and strategies are likely to be beneficial and support the person being prescribed medication. Discussion of such matters provides an opportunity for consideration of other treatment options and alternatives and to deliver care and treatment to the person with intellectual disability in a manner that is most considerate of their individual needs.

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