

# Medication Considerations for People with Developmental Disorders

Presented by the Victorian Dual Disability Service

Better and fairer care.
Always.

#### Victorian Dual Disability Service (VDDS)

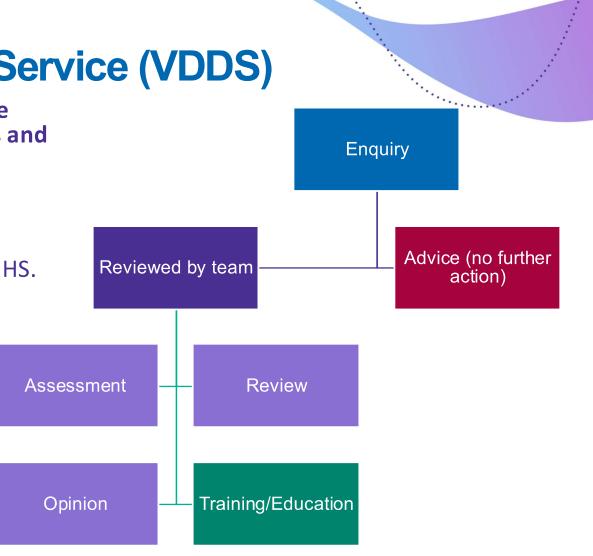
State-wide mental health service for people with co-occurring mental health challenges and a developmental disability.

#### What does VDDS do?

- Telephone consultation to anyone.
- Assessment & consultation for public AMHS.
- Assessment & consultation for NDIS participants
- Education & Training
- Service Development

### How to make a referral or request training:

- Telephone Referral: (03) 9231 1988
- Email: <u>vdds@svha.org.au</u>





### **OBJECTIVES**

- 1. Understand patterns of psychotropic prescribing to people with developmental disorders.
- 2. Understand the major practical issues in prescribing to people with developmental disorders.
- 3. Understand legal and ethical issues in relation to prescribing to people with developmental disorders.
- 4. Knowledge of good prescribing practice.



## What are Psychotropics?

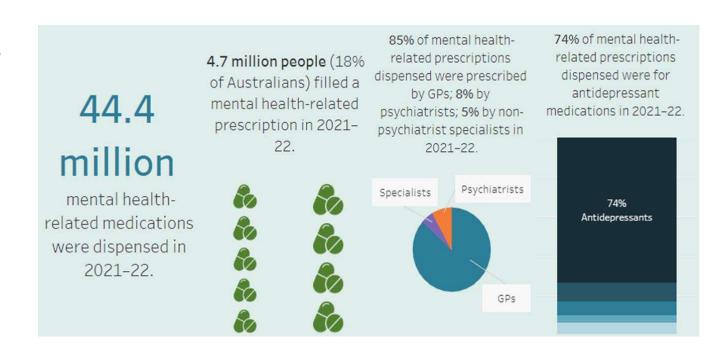
- Psychotropic medication are used to modify mental function (mood, thought, memory, cognition, perception).
- Prescribed to treat mental illness (psychosis) AND symptom management (mood lability).
- Major groups include antipsychotics, antidepressants, mood stabilizers, sedatives and anxiolytics.
- Many other drugs are psychoactive (opioids etc.) but term generally limited to those prescribed specifically to modify mental function. Caffeine is the most widely used psychoactive substance.
- Worldwide most commonly prescribed psychotropic medications are anxiolytics followed by antidepressants (alprazolam 48.5 million & sertraline 41.4 million prescriptions per year in USA).



# Mental Health-related Prescriptions in Australia 2021-22 (AIHW)

1 in 6 Australians (18% of the population) were dispensed a mental health-related prescription

- Antidepressants (74%)
- Antipsychotics (10%)
- Anxiolytics (7%)
- Stimulants for ADHD (6%)
- Hypnotics /sedatives (4%)





### **Prevalence of Developmental Disorders**

- Autism: ~ 1% of adult population (limited data in adults).
  - Very high worldwide incidence in children (2-4).
  - Some evidence suggesting incentives in government policy (NDIS) contributing to this.
- Intellectual Disability: ~ 3% (ABS 2012)
  - Higher for men (3.3%) than for women (2.6%)





# PRESCRIBING FOR INTELLECTUAL DISABILITY

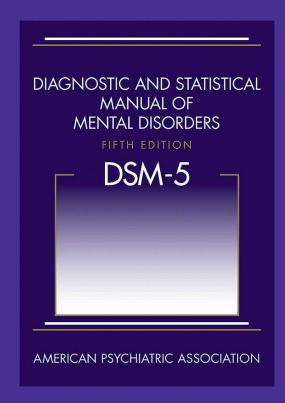
## What is an Intellectual Disability (ID)?

#### **DSM-5 Criteria (Intellectual Developmental Disorder)**

- A. Deficits in intellectual function (clinical Ax and IQ <70)
- B. Deficits in adaptive function
  - Failure to meet expected standards without ongoing support.
  - 1 or more ADLs
  - Across multiple environments
- C. Onset during developmental period (0-18 years)

#### **Severity**

Mild, moderate, severe and profound; determined on basis of function **NOT** IQ





# Prevalence of Prescription in PWID



- Approx. 70% in institutions and 50% of PWID in community are prescribed psychotropics
- Mainly antipsychotics (40-50% in community samples)
- Often several different types of psychotropic (30% polypharmacy)
- High rates of off-label prescribing
- Higher if including medication with psychotropic / psychoactive effects
- Many also prescribed medication for medical conditions with potential for interaction
- High number also using 'complimentary' medication (herbal, vitamins, fish oil, minerals, cannabis) ~20%



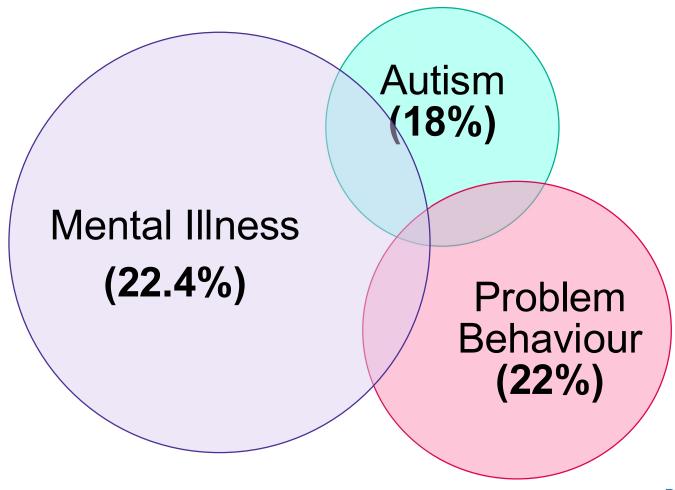
# Demography of Psychotropic in PWID

ST VINCENT'S





#### **Mental Health Needs of PWID**





#### **Increased Mental Health Problems**

Higher prevalence of risk factors

Biological	Psychological	Social	Developmental
Epilepsy	Coping strategies	Stigma	Sex
Brain injury	Abuse	Discrimination	Size
Genetic	Choice and control	Exclusion	Mental Age
	Self-esteem	Poverty	
		Accommodation	
		Employment	

 Rates of mental health problems in PWID are at least 2.5 times higher

➤ Schizophrenia: 3 to 4% (1%)

➤ Depression: 8% (3.8%)



#### **Assessment of Mental Illness**

Difficulty in providing history

Barriers to recognising and reporting symptoms

Difficulty accessing services and seeking assistance

Modified presentations due to developmental delay

Presentations secondary to specific syndromes (e.g. Prader Willi)

Problems blamed on ID (diagnostic overshadowing)

Inability to meet criteria for DSM 5 or ICD 10 diagnosis

Difficulties in accessing collateral information

Stigma, discrimination and exclusion

Lack of training and experience

Lack of policies and procedures

Lack of service models

Lack of resources (pressure on system)



# **Adverse Effects of Psychotropics**

Class	Observable or reportable	Unseen or difficult to detect
Antidepressants	Suicidal ideation, sexual dysfunction, headache, nausea/vomiting Anticholinergic (TCAs)	Increased bleeding risk, serotonin toxicity
Anxiolytic / hypnotics	Drowsiness, hypersalivation, vertigo, disorientation, jaundice, incontinence	Dependence, tolerance, blood disorders, respiratory depression
Antipsychotics	Extrapyramidal side effects: dystonias, akathisia, dyskinesia, Parkinsonism; Weight gain Constipation Incontinence	Metabolic syndrome, hyperprolactinaemia, electrolyte disturbance, cardiac abnormalities, haematological abnormalities, neuroleptic malignant syndrome
Anticonvulsants	Drowsiness, ataxia, psychosis, tremor, severe skin eruptions	Menstrual irregularities, memory impairment, haematological abnormalities, hepatotoxicity, osteoporosis, teratogenesis



# **Issues in Prescribing**

High rates of medical co-morbidities (obesity, diabetes, dysphagia, epilepsy)

Difficulty in establishing diagnosis

High rates of frailty and more susceptible to adverse reactions

Variable capacity to consent (legal and ethical issues)

'Prescribing cascade' of medication (dose increased and additional medication added due to poor response)

Limited evidence base as often excluded from research (consent issues)

May have increased sensitivity (pre-existing brain pathology)



# **Issues in Prescribing**

Loss of information over time, due to staff and professional turnover.

May be poorly compliant with monitoring requirements (ECG, blood levels)

Atypical responses and difficulty in monitoring for desired effect

Variable ability to report side effects

Variations in physical size, liver and renal function, volume of distribution all modify drug distribution and effects

Administration of medication (nurses vs NDIS staff vs family)

Sometimes the only option considered due to inability to access social and psychological interventions)



# PRESCRIBING FOR AUTISM

#### What is Autism?

- Autism Spectrum Disorder (ASD)
- Lifelong neuro-developmental disability.
- Multiple causes (genetic / environmental)
- Wide variation in presentation and support needs.
- Core features
  - Social communication challenges
  - Repetitive and restricted interests and/or behaviours.
- Common strengths
  - Recall of facts
  - Attention to detail
  - Following rules
  - Visual skills
- Increasingly common (1:68 children, 1:100 adults)
- High rates of other developmental dx (ID ~ 50%, ADHD ~ 40%)





### **Associated Problems**



- Physical problems (altered pain threshold, GI problems 85%, epilepsy 39%)
- Unusual sensory processing & social impairment
- Anxiety Fight, flight or freeze
  - Irritability, aggression, meltdowns
  - Absconding
  - Catatonia
- Sleep & dietary problems
- Impaired perspective taking (Theory of Mind, cognitive empathy)
- Impaired executive function (organise, generalise)
- Sticky attention

# Biomedical Interventions for Core Symptoms of Autism





#### **NICE Guidelines 2012:**

- There are no biomedical treatments for the core symptoms of ASD.
- This includes:
- ➤ Psychotropic medications
- **≻**Vitamins
- ➤ Supplements
- > Exclusionary diets



#### **Autism and Mental Health**



- Same range of mental disorders as everyone else.
- High prevalence of other developmental disorders (ID, ADHD).
- High prevalence of psychiatric disorders.
- High prevalence of challenging behaviours.
- Again, Autism is not something that can be "treated", however some mental health disorders and challenging behaviours may be targeted using pharmacological treatment.

Better and fairer care. Always.

# Pharmacotherapy in Autism



- Rates of psychotropic prescribing:
  - > 27% of children
  - > 66% of adolescents
  - > 70-80% of adults
- Most evidence is for children
- Many psychiatric medications prescribed off-label
- Once started, psychotropics are often continued without review.



# **Antipsychotics in Autism**

- Improved irritability, aggression & repetitive behaviour
- Risperidone only PBS subsidised medicine specifically for ASD (dose <3.5 mg/day, adults only when previously prescribed <18)</li>
- Aripiprazole is FDA (but not TGA) approved for ASD
- Limited evidence for other agents
- Adverse effects (sedation, weight gain, akathisia, prolactin)
- Relapse vs discontinuation/withdrawal syndrome





**Australian Government** 

**Department of Health**Therapeutic Goods Administration

# **Antidepressants in Autism**



- Commonly prescribed class
- Anxiety, depression, OCD, also repetitive behaviours
- Limited evidence of effectiveness, may be less than NT population.
- Difficulty with side effects

  Activation/agitation
  GI effects
- Anecdotal reports that low doses can help with repetitive behaviour & intense interests
- Best evidence for Fluoxetine, Fluvoxamine, Clomipramine
- Withdrawal issues



#### **Mood Stabilisers in Autism**

- Valproate, Lamotrigine, Carbamazepine, Lithium
- In general response rates are poorer than SSRIs & antipsychotics, except in comorbid BPAD, or seizure disorder (anticonvulsants)
- Methodological problems, small samples, different diagnostic criteria, high placebo response
- High rates of adverse effects & interactions
- Little evidence but frequently prescribed





#### Other Medications in Autism



#### Melatonin

- Regulates circadian rhythm, 80% of people with ASD have sleep problems
- Trials show it can work & is well tolerated
- Naltrexone/Buprenorphine for self injury
  - Disappointing findings from studies, but sometimes works
- Clonidine or Guanfacine
  - Moderately effective for ADHD in children
  - Sleep & irritability in adults
- Psycho-stimulants
  - May be less effective & poorly tolerated



# Psychotropics for Challenging Behaviours

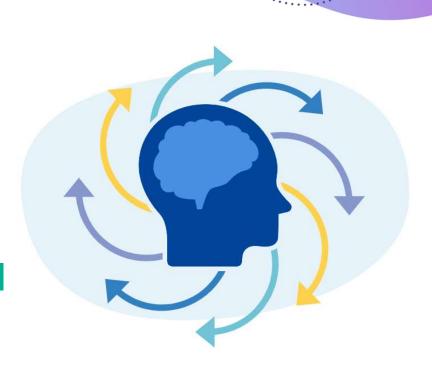
# Definition of Challenging (Problem) Behaviour

"Culturally abnormal behaviour(s) of such an intensity, frequency or duration that the physical safety of the person or others is likely to be placed in serious jeopardy, or behaviour which is likely to seriously limit use of, or result in the person being denied access to, ordinary community facilities and is likely to lead to responses that are restrictive, aversive or result in exclusion"

(RCPsych 2007)

### **Challenging Behaviours**

- Secondary to mental illness
- Secondary to medical illness
- Interaction between the person and their environment
- Learned behaviour: importance of past and present environment, internal and external setting conditions, and response of others in shaping behaviours (the 'functional model')





# Assessment of Challenging Behaviour

# **HELP Model**



- · Health?
- Medical condition, pain, substance etc



- Environment?
- Physical environment, supports, sensory preferences



- Lived Experience?
- Life events, trauma, emotional distress.

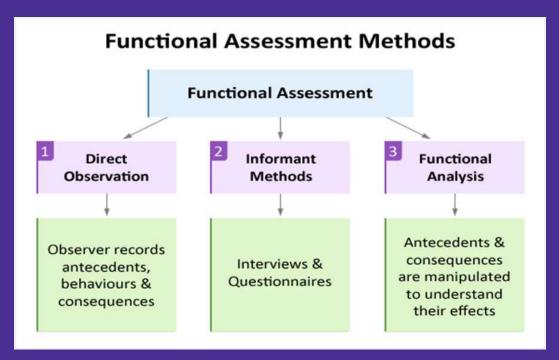


Psychiatric Disorder?



# Management of Challenging Behaviour

- 1. Treat physical illness
- 2. Treat / address mental health problems
- 3. Address environmental factors
- 4. Functional Behaviour Assessment → Positive Behaviour Support







# Pharmacotherapy of Behaviour

Better and fairer care. Always.

# Consensus Guidelines for Pharmacological Treatment of Challenging Behaviour

Little evidence

T VINCENT'S

Cautious approach

Collect baseline data before beginning medication

Keep regimen as simple as possible

Start low and go slow

Avoid frequent drug and dose changes

Evaluate medication efficacy against baseline

Monitor for side effects regularly & systematically

Review regimen regularly & after any change

Avoid polypharmacy, change 1 drug at a time

Better and fairer care. Always.

# Ethics, Legislation and Systemic Issues

# Consent

- Capacity to consent requires:
  - > Ability to understand and retain information presented
  - Use information to understand how it relates to themselves
  - > Ability to make a decision
  - > Free from coercion
  - > Ability to communicate decision
- In practice most people with ID haven't provided consent (but ASSENT)
- Majority unable to consent even with support and education (depends on how high bar is set..)





# Mental Health Legislation



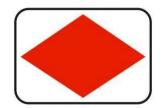
T VINCENT'S

- Legally, adults have capacity unless proven otherwise (i.e. assumption of capacity)
- Consistent with human rights approach, mental health legislation requires the least restrictive option be used, which is understood as being on a voluntary basis.
- Consequence is that people who assent are not provided with the protection of mental health legislation.
- Mental health legislation often specifically excludes intellectual disability, which can act as a barrier to protecting PWID when being treated.
- Can only use this legal framework to enable the assessment for/treatment of a mental illness (DSM 5).

Better and fairer care. Always.

# **Guardianship Act**

- Guardianship Act provides for 'substitute decision maker'
- Informal is NOK (the spouse or domestic partner; the primary carer of the person; the oldest willing/able adult child of the person; the oldest willing/able parent of the person; the oldest willing/able adult sibling of the person) – see Office of the Public Advocate
- Formal court process to appoint a public guardian (need to demonstrate incapacity and a decision that needs to be made)
- Supported decision model (no longer best interests)
- 'No teeth' if person refuses
- Review less rigorous than Mental Health and Wellbeing Act 2022



Office of the Public Advocate



# **NDIS**



- Assumed oversight of medication used as 'restrictive practice'
- Interfaces with Disability Act in Victoria which sets out role of Office of Senior practitioner who monitors restrictive practices
- If no diagnosis (or not in Therapeutic guidelines) then deemed to be a restrictive practice
- Has to be part of a behaviour management plan
- Requires NDIS staff to determine why medication is being prescribed



In 2021-22,
chemical
restraint was
the most
frequently used
restrictive
practice in NDIS
settings.

52% authorised restrictive practice was chemical restraints

47% of unauthorised restrictive practice was chemical restraints

Antipsychotics were the most frequently used medications in unauthorised restrictive practice

# **NDIS Figures**



# **Disability Royal Commission Findings**

- ➤ Psychotropic medicines are over-prescribed, particularly for behaviours of concern in people with cognitive disability.
- ➤ There is limited evidence demonstrating these are effective in reducing behaviours of concern.
- ➤ People with cognitive disability may experience more side effects, including atypical effects, of psychotropic medication than people without disability.
- ➤ Monitoring of both the effect and adverse reactions of psychotropics problematic.
- Inappropriate use of psychotropics concerns both the health and disability sectors hence requires interdisciplinary collaboration to address it.
  - ➤ Regulatory frameworks governing psychotropic use as chemical restraint are complex and vary between jurisdictions.



#### **Disability Royal Commission - Recommendations**



- ➤ The NDIS Commission, ACSQHC and ACQSC publish joint annual progress reports on implementation of measures under the Joint Statement AND commission an independent evaluation to determine whether they have reduced the use of psychotropic medicines against people with cognitive disability.
- ➤ Stronger legal frameworks
- > Research into restrictive practice and strategies to reduce use
- > Data collection on restrictive practice across all sectors
- > Targets and Performance indicators



# **Medical Treatment Act**

- Victorian legislation
- Medical Treatment Planning and Decisions Act 2016
- The Act has given statutory recognition to advance care directives and simplified and laws relating to medical treatment decision making for people without decision making capacity.
- Sets out clear obligations for health practitioners caring for people who do not have decision making capacity.
- MUST specify who is providing consent to significant treatment (includes psychotropic and psychological treatment)





Overstretched public mental health system

GPs often feel under-skilled or unsupported

Private psychiatrists very difficult to access

NDIS
legislation
requires
medication
review when
used as
restrictive
practice

# **Access Difficulties**



#### **Consider a Home Medicines Review**

Microsoft Word - Medicines Review\_Easy Read\_UPDATED (countrysaphn.com.au)

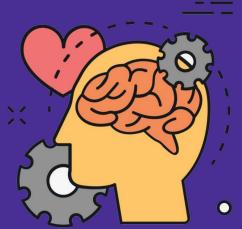




# Summary

- Psychotropic medication is overprescribed to people with ID
- Range of reasons for this includes:
- ➤ High rates of mental health problems
- ➤ Lack of clinical governance to ensure appropriate treatment (service models)
- > Lack of legislation to protect vulnerable population
- Prescribe on basis of clear rationale, monitor and evaluate.
- Ensure consent







For a copy of these slides, please email <a href="mailto:vdds@svha.org.au">vdds@svha.org.au</a> with subject header "Please send Medication webinar slides"

#### References

- Deb, S., Kwok, H., Bertelli, M., Salvador-Carulla, L. U. I. S., Bradley, E., Torr, J., & Barnhill, J. (2009). International guide
  to prescribing psychotropic medication for the management of problem behaviours in adults with intellectual disabilities.
  World Psychiatry, 8(3), 181-186.
- Deb, S., Roy, M., & Limbu, B. (2022). Pharmacological management of psychopathology in people with intellectual disabilities and/or autism spectrum disorder. BJPsych Advances, 1-12.
- De Kuijper, G. M., & Hoekstra, P. J. (2017). Physicians' reasons not to discontinue long-term used off-label antipsychotic drugs in people with intellectual disability. Journal of Intellectual Disability Research, 61(10), 899-908.
- Erickson, S. R., Houseworth, J., & Esler, A. (2022). Factors associated with use of medication for behavioral challenges in adults with intellectual and developmental disability. Research in Developmental Disabilities, 123, 104182.
- Sheehan, R., Hassiotis, A., Walters, K., Osborn, D., Strydom, A., & Horsfall, L. (2015). Mental illness, challenging behaviour, and psychotropic drug prescribing in people with intellectual disability: UK population based cohort study. Bmj, 351.
- Sheehan, R., & Hassiotis, A. (2017). Reduction or discontinuation of antipsychotics for challenging behaviour in adults with intellectual disability: a systematic review. The Lancet Psychiatry, 4(3), 238-256.
- Trollor, J. N., Salomon, C., & Franklin, C. (2016). Prescribing psychotropic drugs to adults with an intellectual disability.
   Australian Prescriber, 39(4), 126.
- Tsiouris, J. A., Kim, S. Y., Brown, W. T., Pettinger, J., & Cohen, I. L. (2013). Prevalence of psychotropic drug use in adults with intellectual disability: positive and negative findings from a large scale study. Journal of autism and developmental disorders, 43, 719-731.
- Unwin, G. L., & Deb, S. (2008). Use of medication for the management of behavior problems among adults with intellectual disabilities: A clinicians' consensus survey. American Journal on Mental Retardation, 113(1), 19-31.

