



Catatonia, Autism *and its Discontents*

Presented by **Dr Angela Livingstone**

Victorian Dual Disability Service

Better and
fairer care.
Always.

Victorian Dual Disability Service (VDDS)

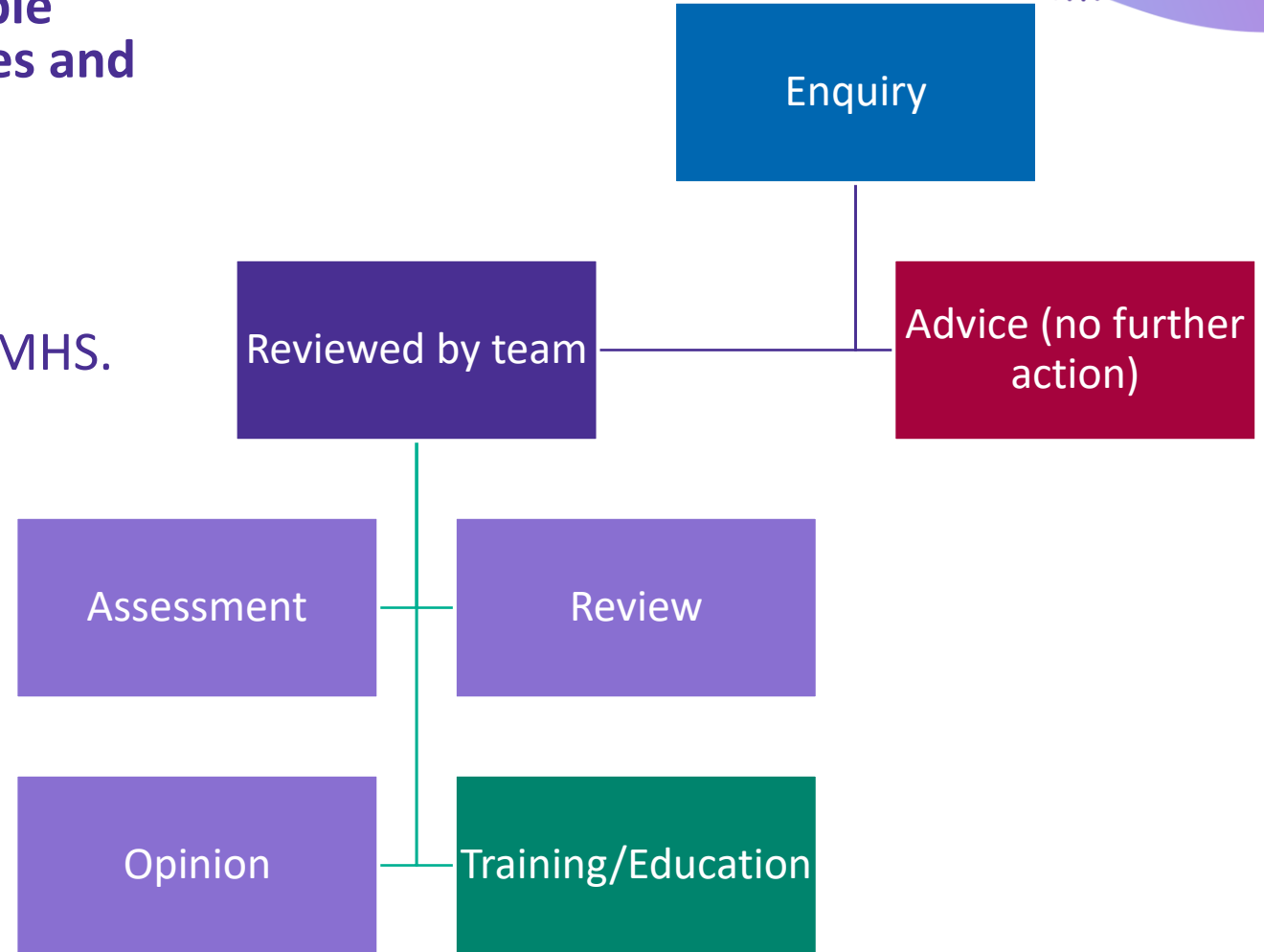
State-wide mental health service for people with co-occurring mental health challenges and a developmental disability.

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: vdds@svha.org.au*



Outline

- ❖ What is Catatonia?
- ❖ What is its relationship to Autism?
- ❖ How can we recognise and treat it?

Ayn Rand: The Virtue of Selfishness

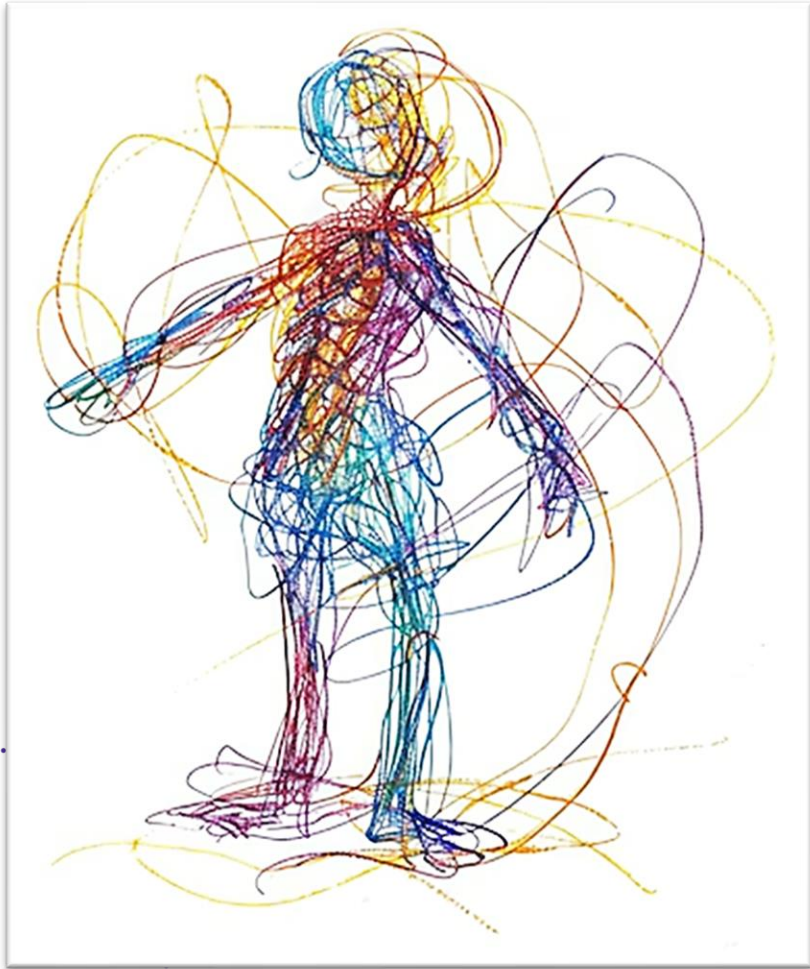
“Nothing is given to man on earth except a potential and the material on which to actualize it. The potential is a superlative machine: his consciousness; but it is a machine without a spark plug, a machine of which his own will has to be the spark plug, the self-starter and the driver; he has to discover how to use it and he has to keep it in constant action.”



What is Catatonia?

The background features a dark purple field with several large, overlapping, wavy shapes in shades of purple, blue, and white. A series of small, light-colored dots form a dotted line that meanders across the composition, passing through the text area.

Why Catatonia?



- ❖ Nearly no exposure to catatonia before working at VDDS.
- ❖ Multiple presentations since, often associated with significant features of Autism Spectrum Disorders.
 - Why did I never see / recognise it before?
 - Why is it apparently common in ASD?
- ❖ Resistance from AMHS to diagnose and suggest treatment.

Historical Aspects

- ❖ Galen (AD 129-216)
- ❖ Philip Barrough (1583)
- ❖ Robert Bayfield (1663)



Artwork by Elizabeth Hinders

Historical Aspects



❖ Kahlbaum (1874)

❖ Kraepelin (1893)

Historical Aspects

- ❖ Wernicke (1900)
- ❖ Bleuler (1911)
- ❖ Kleist (1913, 1943)



Historical Aspects

Leonhard (1936); three pairs of categories:

- ❖ Parakinetic catatonia vs manneristic catatonia
- ❖ Speech-prompt vs speech-retarded catatonia
- ❖ Proskinetetic vs negativistic

Also was the first to describe catatonia in children.



Childhood Catatonia



Artwork by Sasha Bassari

- ❖ Catatonia has been described in children as young as five years, but is far more common in adolescents and adults.
- ❖ In younger children the clinical picture may vary, with fewer catatonic symptoms overall and less psychomotor retardation (stupor, immobility), and the presence of incontinence (not usually reported in adults).
- ❖ Schizophrenia is the most common diagnosis.
- ❖ More common in male children.
- ❖ Can be associated with an acute non-psychotic anxious state (*Thakur et al., 2003*).

DSM-5 Criteria

- Catatonia Associated With Another Mental Disorder (293.89)
- Catatonic Disorder Due to a General Medical Condition
- Unspecified Catatonia

Must include at least three of the following:

<i>Stupor</i>	<i>Catalepsy</i>	<i>Waxy Flexibility</i>
<i>Mutism</i>	<i>Negativism</i>	<i>Posturing</i>
<i>Mannerism</i>	<i>Stereotypy</i>	<i>Agitation</i>
<i>Grimacing</i>	<i>Echolalia</i>	<i>Echopraxia</i>

Some Medical Causes of Catatonia

- ❖ Epilepsy
- ❖ Wilson's Disease
- ❖ Tay-Sach's Disease
- ❖ Tuberous Sclerosis
- ❖ Hyponatraemia
- ❖ Rheumatic Fever
- ❖ Encephalitis
- ❖ Thyroid Derangement
- ❖ Substance Use
- ❖ Withdrawal of medication



Things That Look Like Catatonia (*but aren't*)

Elective
Mutism

Metabolic-induced
Stupor

Parkinson's
Disease

Malignant
Hyperthermia

Locked-in
Syndrome

Stiff Person
Syndrome

Neuroleptic
Malignant
Syndrome

Toxic
Serotonin
Syndrome

Psychiatric Diagnoses Associated with Catatonia



Artwork by Vassia Sarri

- ❖ Mood Disorders
- ❖ Psychotic Disorders
- ❖ Mental Disorders due to a General Medical Condition
- ❖ Substance-Induced Disorders
- ❖ Developmental Disorders
 - Autistic Disorder
 - PDD-NOS
 - Childhood Disintegrative Disorder
 - Prader-Willi

How Common is Catatonia?

Well...

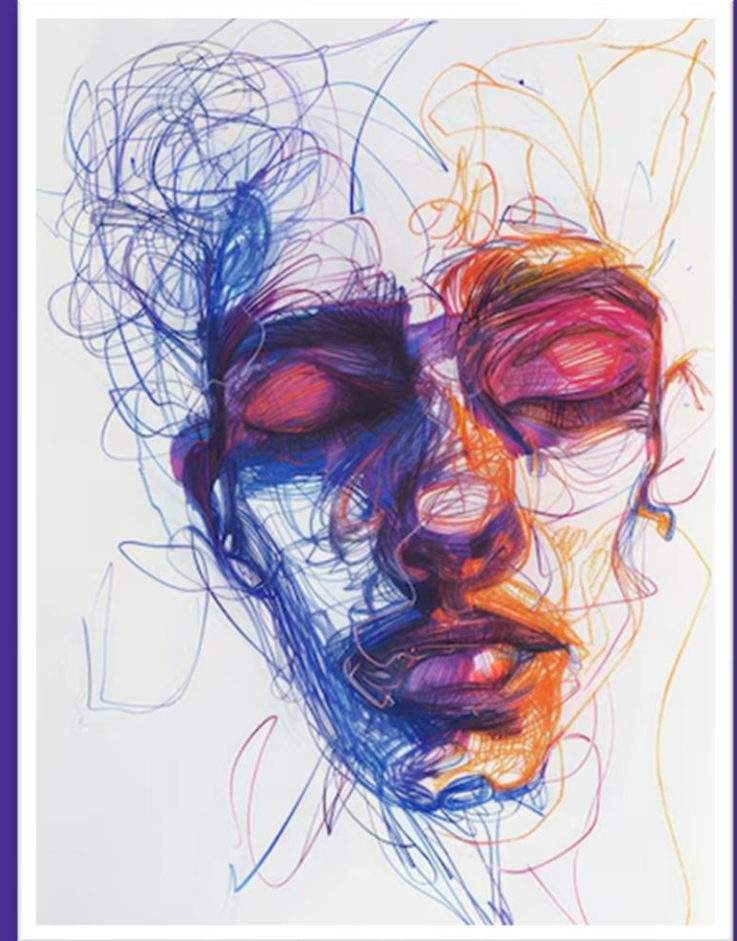
- ❖ Studies estimate between 6-17% of MH inpatients have catatonia.
- ❖ 15999 mental health admissions to one Victorian urban AMHS in past 15 calendar years

BUT

- ❖ 66 were coded as having catatonia (ICD-10 F20.2, F06.1)

= 0.4%

Why?



“Where Have All The Catatonics Gone?”

(title of an editorial by B. Mahendra, Psychological Medicine, 1981)

❖ What has happened?

- The rate of periodic (mood-related) catatonia seems to have remained stable, while there is a decline in the rate of chronic (psychotic) catatonia

❖ Why?

- Rates remain higher in developing countries – is decline due to decreased incidence of obstetric complications, head trauma etc.?
- Encephalitis lethargica? Other viral causes for the previously high levels of catatonia?
- Different treatment approaches?
- Diagnostic overshadowing?

Subjective Experiences



Artwork by Mark Armstrong

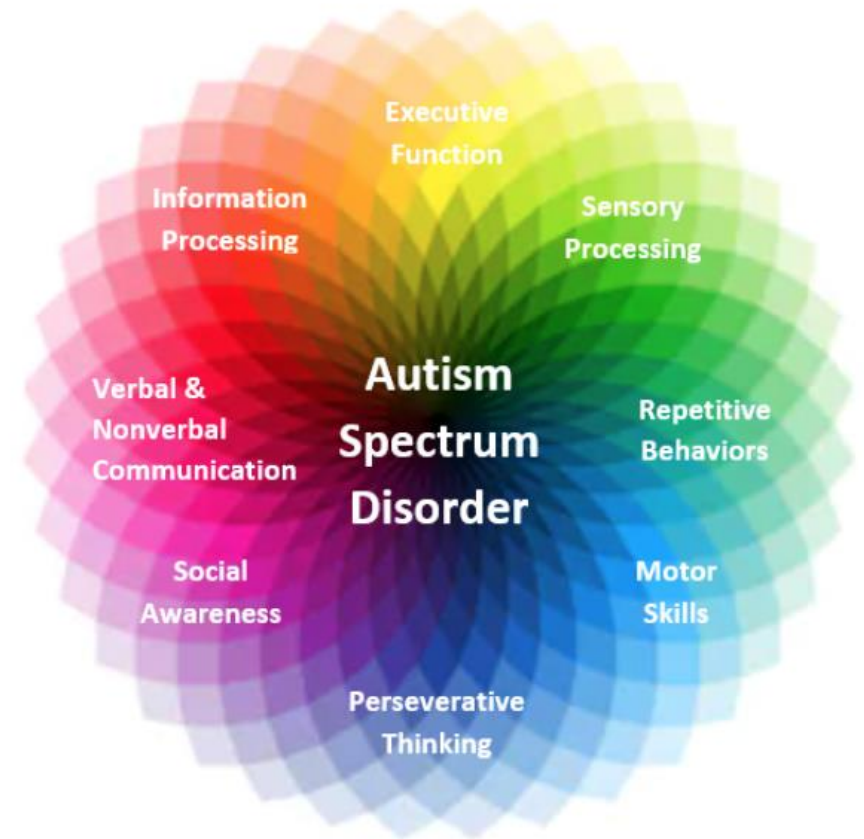
- ❖ Northoff (1998) retrospectively investigated the subjective experience of catatonic patients.
- ❖ Self-questionnaire of 22 akinetic subjects.
- ❖ Compared to:
 - 22 with akinetic Parkinson's
 - 22 with noncatatonic major depression
 - 22 with noncatatonic paranoid schizophrenia
 - 22 with residual schizophrenia



Catatonia and its Relationship with 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.
- ❖ Increasingly common (1:68 children, 1:100 adults)



Catatonia and Autism

Common catatonic behaviors



Rigidity of stupor that lasts for hours or even days



Performing strange movements



Staying in uncomfortable positions without shifting



Erratic and extreme movement



Echolalia
(repetition of words or behaviors)

- ❖ Catatonia is a relatively common condition in ASD ~10%
- ❖ People with ASD & catatonia are at increased risk for negative outcomes with a 60-fold increase in mortality, which may include suicide.
- ❖ Onset is often in adolescence with functional regression.
- ❖ Benzodiazepines & ECT are the most effective treatments.

Catatonia and Autism

Wing & Shah (2000)

- Reported that 30 of 510 (17%) of patients attending a tertiary referral centre for autism in the UK met criteria for diagnosis of catatonia. No child under 15y demonstrated the full syndrome, and in most cases catatonic symptoms started between 10y and 15y

Billstedt, Gilberg & Gilberg (2005)

- Found 13 of 120 (12%) patients with autistic disorders between 17 and 40 years had clinically diagnosed catatonia with severe motor initiation problems, and another 4 had several symptoms but not the full picture.

Kakooze-Mwesige, Wachtel and Dhossche (2008)

- Estimated the incidence of catatonia as one in seven (14%) of adolescents/ young adults with autism, similar to the incidence of catatonia in those with affective and psychotic disorders.

Catatonia and Autism

Why might they be related?

- ❖ Clinical boundaries between ASD and childhood SCZ are not always clear; possible familial co-inheritance and comorbidity may be common.
- ❖ Is Autism the same “disease” as catatonia?
 - If so, why don't BZPs and ECT work in “treating” ASD?
- ❖ Symptom overlap

Loss of language

Loss of social skills/
adaptive behaviour

Stereotypies

Compulsive behaviour

Hyperkinesia

Echolalia/echopraxia

Staring/gaze avoidance

Catatonia and Autism

A Consumer's Experience



*“My first major mental health episode happened in the middle of 2023... **People didn’t understand or believe what I was going through...** I think it was triggered by **Autistic burnout**. I didn’t have the capacity to do anything, and that’s not quality of life”*

- AMHS consumer

Catatonia and Autism

A Consumer's Experience

*“I was taken to the ED. I was catatonic at the time... I couldn't speak, and I became non-verbal. ED staff didn't understand... The doctors tried to get my history from me, but I couldn't talk... One ED doctor said **'If we can't get a history from you, then we can't treat you'**... It felt like they thought I was trying to be difficult [because I couldn't talk]... Felt like my **brain was overheating**. [I think] my **Autistic response to stress** is either a meltdown, or shutting down [catatonia]. Luckily, I was admitted to the ward and diagnosed... They treated me with benzos... That slowly worked”*

- AMHS consumer

What Might This Experience Reflect?

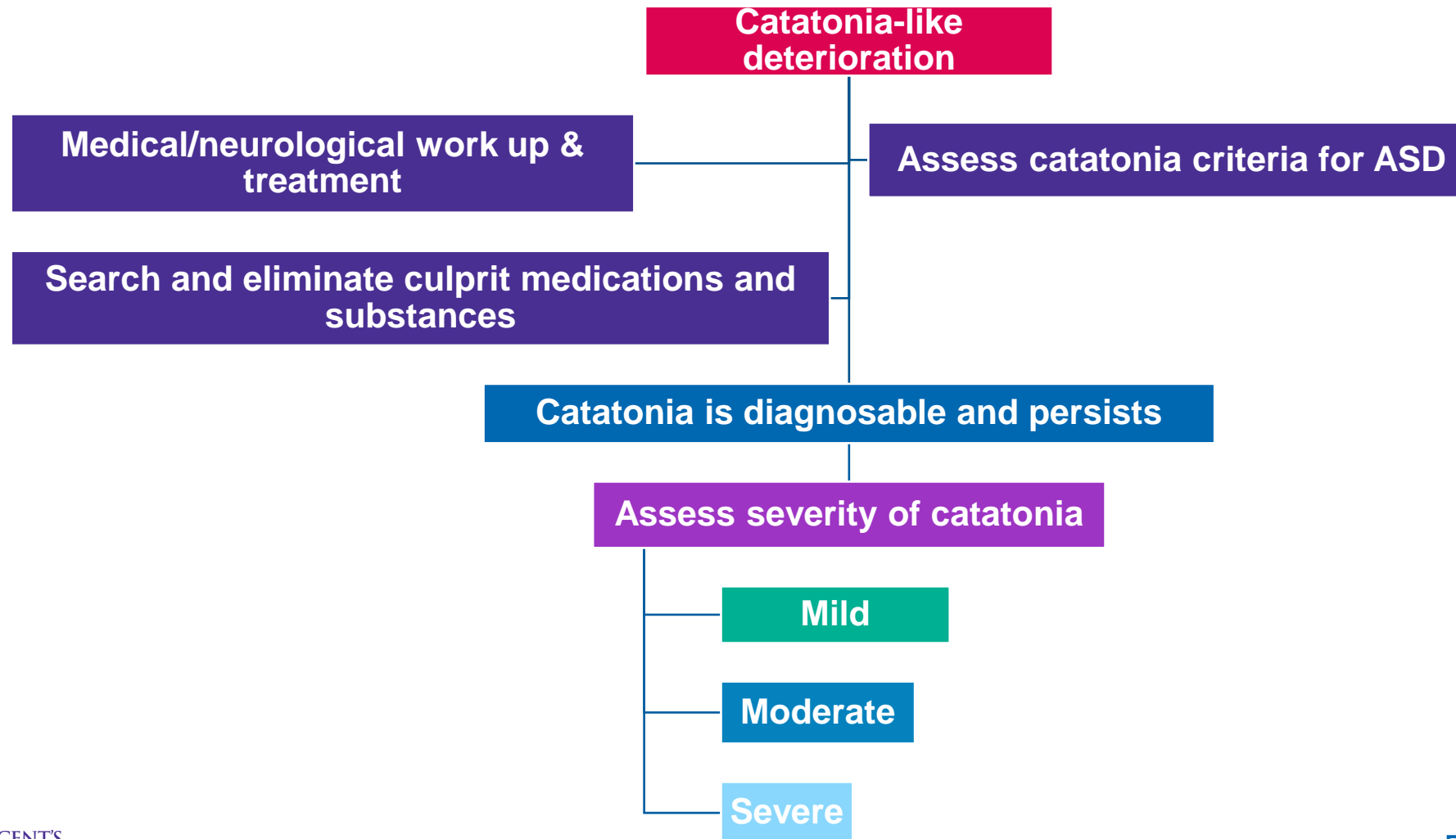
- ❖ Autism and Stress?
- ❖ Consumer awareness when catatonic?
- ❖ Mental health staff knowledge of catatonia and / or Autism?
- ❖ Assumptions / biases?
- ❖ Treatment of catatonia in ASD?





Assessing and Treating Catatonia

Assessment of Catatonia in Autism



Bush Francis CRS

1. Observe patient while trying to engage in a conversation.
2. Examiner scratches head in exaggerated manner - *Echopraxia?*
3. Examine arm for cogwheeling. Attempt to reposition, instructing patient to "keep your arm loose" - move arm with alternating lighter and heavier force - *Negativism Waxy flexibility?*
4. Ask patient to extend arm. Place one finger beneath hand and try to raise slowly after stating, "Do NOT let me raise your arm"
5. Extend hand stating "Do NOT shake my hand" – *Ambitendence?*
6. Reach into pocket and state, "Stick out your tongue, I want to stick a pin in it" - *Automatic obedience?*
7. Check for grasp reflex
8. Check chart for reports of previous 24-hour period. In particular check for oral intake, vital signs, and any incidents.
9. Attempt to observe patient indirectly, at least for a brief period, each day.

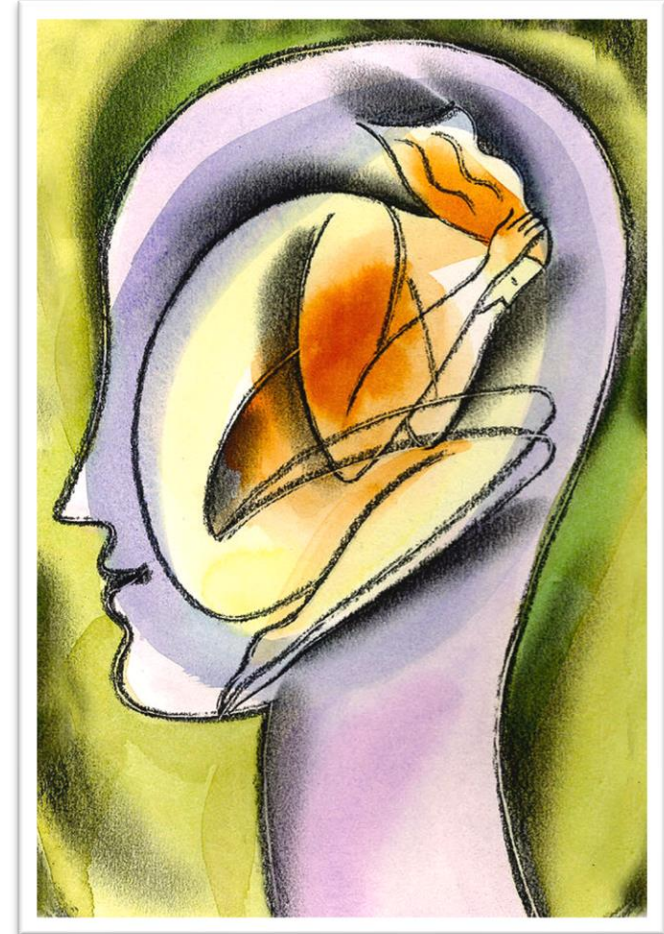
Treatment of Catatonia



- ❖ Identify catatonia and exclude other diagnoses
- ❖ Assess severity of catatonia
 - Is there a medical emergency due to dehydration/malnutrition?
 - Are features of malignant catatonia present (e.g. fever, altered conscious state, autonomic instability, stupor)?
- ❖ Cease antipsychotics / other medications that may be contributing
- ❖ Lorazepam
- ❖ ECT
 - Acute
 - Sometimes maintenance may be required

Treatment of Catatonia Specific to Autism

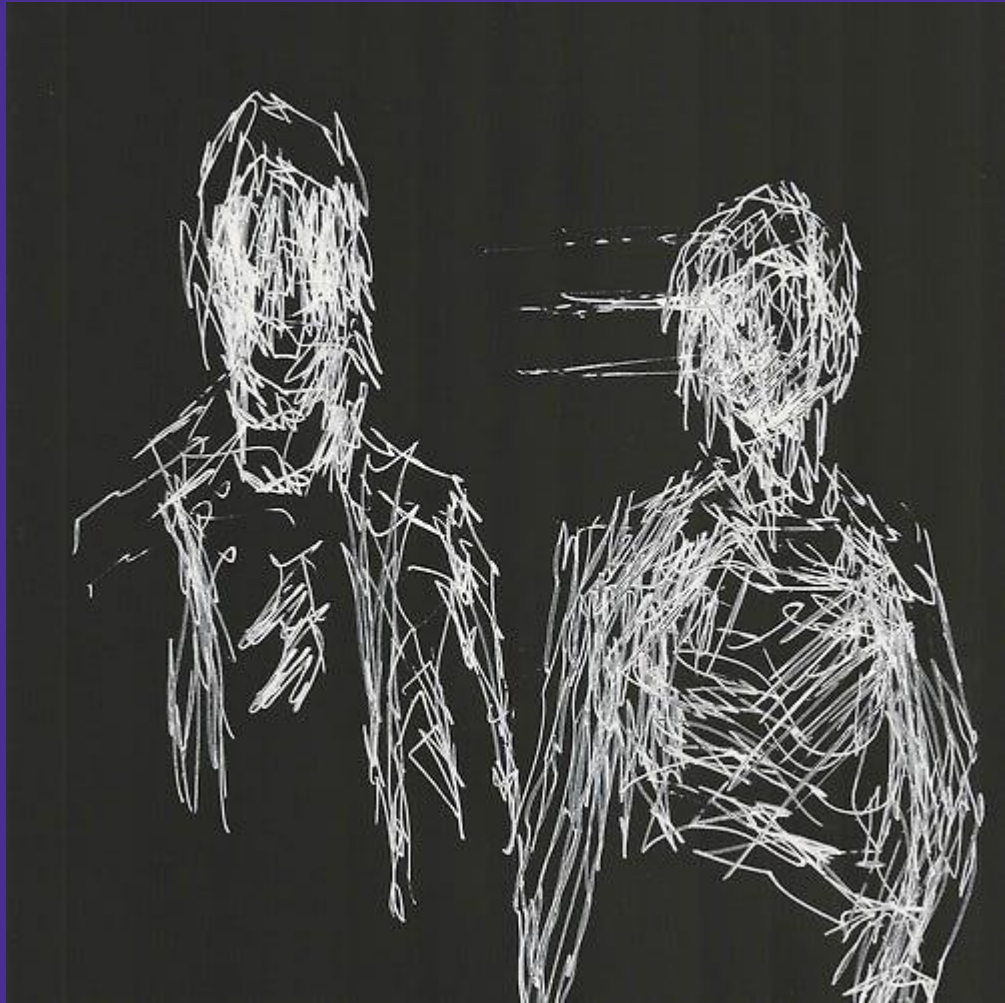
- ❖ Lorazepam and ECT may be less effective in ASD, particularly in the absence of anxiety. Psychological approaches to chronic catatonic deterioration in ASD include:
 - effective management of ASD (structure, routine)
 - avoidance of forced choice
 - stress reduction
 - external prompts (especially with feeding)
 - physical activity with rhythmic and repetitive movements
 - physical assistance to relinquish fixed postures



Artwork by Leon Zernitsky

Recommendations

- ❖ Recognise what catatonia looks like and when catatonia may be present.
- ❖ Recognise it as a risk factor for NMS
- ❖ Recognise that catatonic complications of mental illnesses may need specific treatment.
- ❖ Suspect catatonia in adolescent/youth autistic regression
- ❖ To own a duty of care and advocacy.
- ❖ Question whether an Autistic consumer's presentation may be due to or affected by catatonia.
- ❖ Reflect on your own biases and assumptions about Autism and catatonia.



*“Shape without form, shade without colour
Paralysed force, gesture without motion*

*...
Between the idea
And the reality
Between the motion
And the act
Falls the Shadow”*

(T.S.Eliot, The Hollow Men)

Conclusion

- TBC



Artwork by Van Lanigh

Thank you

- For a copy of these slides, please email vdds@svha.org.au with subject header *“Please send Catatonia slides”*

References

Aziz, S., & Hendren, R. L. (2020). Catatonia in autism spectrum disorder in youth, a systematic review. *International Journal of Autism & Related Disabilities*.

Beach, S. R., Gomez-Bernal, F., Huffman, J. C., & Fricchione, G. L. (2017). Alternative treatment strategies for catatonia: a systematic review. *General Hospital Psychiatry*, 48, 1-19.

Northoff G. (2002) What catatonia can tell us about “top-down modulation”: a neuropsychiatric hypothesis. Dept. of Psychiatry, University of Magdeburg, Germany

G. Northoff, W. Krill, J. Wenke, B. Gille, M. Russ, J. Eckert, U. Pester, B. Bogerts & B. Pflug (1998). Major Differences in Subjective Experience of Akinetic States in Catatonic and Parkinsonian Patients, *Cognitive Neuropsychiatry*, 3:3, 161-178,

Wachtel, L. E. (2019). Treatment of catatonia in autism spectrum disorders. *Acta Psychiatrica Scandinavica*, 139(1), 46-55.

Further Reading

- <https://www.theatlantic.com/health/archive/2016/10/how-shock-therapy-is-saving-some-children-with-autism/505448/>
- <http://bjp.rcpsych.org/content/176/4/357>
- <http://www.psychiatristimes.com/articles/treating-catatonia-autism>
- <https://www.ncbi.nlm.nih.gov/pubmed/20202760>