

OMS Staff Professional Development Workshop



Addressing challenges presented by students

Neurodiversity: Spreading the net wider

20 September 2023

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Karakia

Kia hora te marino

May peace be widespread.

Kia whakapapa pounamu te moana

May the sea be like greenstone;

Hei huarahi mā tātou i te rangi nei

a pathway for all of us this day.

Aroha atu

Let us show respect for each other,

Aroha mai

for one another.

Tātou i a tātou katoa.

Bind us all together.

Welcome and Introductions



Welcome and Introductions

Peter Radue



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Shedding light on autistic traits in struggling learners: A blind spot in medical education

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Learning Outcomes

By the end of this session, you will be able to:

- Explore ways to use the neurodiversity paradigm to support health professions education students using autistic traits as an example.
- Apply the neurodiversity paradigm to to analyse challenges experienced by a learner in a healthcare setting

Session Overview

1. Neurodiversity definition and paradigm
2. Autism, autistic traits, three main cognitive characteristics
3. Applying Autistic traits to analyse a scenario
4. Whole group discussion
5. Closure

Neurodiversity

Definition

Neurodiversity is a term used to explain the unique ways people's brains work.

Neurodiversity is an umbrella term, including dyspraxia, dyslexia, attention deficit hyperactivity disorder, dyscalculia, autistic spectrum and Tourette syndrome.
(Clouder et al., 2020, p. 757)

Neurodiversity paradigm

- ASD
- ADHD
- Dyspraxia
- Tourette's
- Intellectual disability

ASD/AT – social communication difficulties

Autistic traits

AT versus ASD

Cognitive characteristics

Process information differently

Continuum of traits and disability

Continuum of overlapping 'neuroatypicality' and 'neurotypicality'

Context and expectations

‘High-functioning autism’

Atypical cognition, attitudes, behaviours

Normal/above average IQ

Good potential for functional compensation

Strengths

- Systematising skills
- Pattern recognition
- Visual and long-term memory
- Moral sense, honesty, social justice

Persistent intense focus → success

Educators – explicit steps

Autism traits – cognitive characteristics

1. **Mindblindness (Theory of Mind)**
2. **Weak Central Coherence**
3. **Executive dysfunction**

1. Mindblindness (Theory of Mind)

- Decoding emotions
- Emotional reciprocity
- Implicit social codes
- ‘Reading’ what others think
- ‘Putting yourself in someone’s shoes’
- Anticipating reactions
- ‘Reading between the lines’

2. Weak Central Coherence

- Focus on details, context is missed
- ‘Seeing the big picture’
- Rules and facts versus common sense
- Clinical reasoning – premature closure

3. Executive dysfunction

High-level coordination of cognitive functions

- → timely, appropriate strategies
- Cognitive flexibility
- Relevant adaptation to new information
- Inhibition of unhelpful reactions
- Updating working memory
- Planning and organisation

Challenges

Non-specific, vague, heterogeneous issues

Reading emotions, non-verbal cues

Communication, professionalism

→ disrespect, ADHD, coldness, narcissism, rudeness

‘Willingness’ versus ‘capability’

Applying the model in context

Consider the scenario, with particular regard to:

- **Context**
- ***Mindblindness*** ('reading' others, decoding emotions and the implicit, anticipating responses)
- ***Weak Central Coherence*** (focus on details versus the big picture, context and common sense)
- ***Executive Dysfunction*** (cognitive flexibility, updating, adapting, planning)

Scenario: Interacting with patients

Part 1

James is a final-year medical student in the training hospital. He is asked to see a 55-year-old patient, Rosa, while other members of his team are busy. Rosa has presented with atypical chest pain. In tears, Rosa asks for a coronary angiogram. After a thorough history and physical examination, James concludes that the pain is non-cardiac in origin and tells the patient that an angiogram is not indicated. With a quavering, more pressured voice, Rosa insists that she wants an angiogram. Very calmly, James repeats his answer.

Scenario: Interacting with patients

Part 2

The underlying cause for Rosa's demand, a friend's sudden death from an undiagnosed cardiac issue, is unrecognised - James didn't elicit this. Rosa subsequently tells the registrar 'He didn't notice I was upset! I never want a medical student again!'

The registrar later tries to give James feedback. James is surprised at the patient's reaction. He doesn't recognise any cause for concern about his behaviour, and focuses on the correctness of his diagnosis and the need to manage resources appropriately.

Whole Group Discussion

Which neurocognitive characteristics did you think applied? Why?

Applying the neurodiversity lens, what approach could you take to help this student?

Cognitive characteristic	Key features	Possible constructive approach
Mindblindness	Reading' others, decoding emotions and the implicit, anticipating responses	Making explicit Structured approaches – 'rules' Ask!
Weak Central Coherence	focus on details versus the big picture, context and common sense	Structured approaches – cognitive forcing
Executive Dysfunction	cognitive flexibility, updating, adapting, inhibition, planning	Learning metacognition Practice

Closure

Reflect on this session

What questions or new insights might you have about how you address challenges presented by students?

How might your awareness of neurodiversity impact your teaching practice?

Resources available to assist you

- A conversation with a colleague who has experience with neurodiverse students
- At the Otago Medical School:
 - Contact your local Associate Dean Student Affairs
 - For assessment queries, consult your local Education Advisor and the *MB ChB Assessment Policies and Procedures*
<https://www.otago.ac.nz/oms/education/mbchb/current-students/resources/policies-guides>
- For the wider university: University of Otago policy about supporting neurodiverse students:
<https://www.otago.ac.nz/administration/policies/equity> and
<https://www.otago.ac.nz/disabilities/about/policies>

References

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Shaw, S. C., Fossi, A., Carravallah, L. A., Rabenstein, K., Ross, W., & Doherty, M. (2023). The experiences of autistic doctors: a cross-sectional study. *Frontiers in Psychiatry*, 14, 1160994.

Evaluation

We value your feedback. We have allocated 3 minutes of today's session for you to reflect and share your thoughts with us.

The link to the evaluation form is in chat now.



Tēnā koutou
Thank you

Next session: Wed 18th October
Microaggressions: What are they and how
can we counter them