MONASH University

Emergency department experiences for children with comorbid autism spectrum disorder (ASD) and ADHD

Dr Beth Johnson

beth.johnson@monash.edu

Turner Institute for Brain and Mental Health

Alice Garrick, Carrington Scarffe, Marie Lee

Centre for Undergraduate Research Initiatives and Excellence

25th July 2019

Overview

Children with ASD and ADHD present to emergency departments with greater frequency than their typically developing peers

ASD and ADHD symptoms can in themselves can create secondary difficulties unrelated to the primary reason for presenting in ED

What barriers to care exist for children with comorbid ADHD + ASD attending emergency departments?

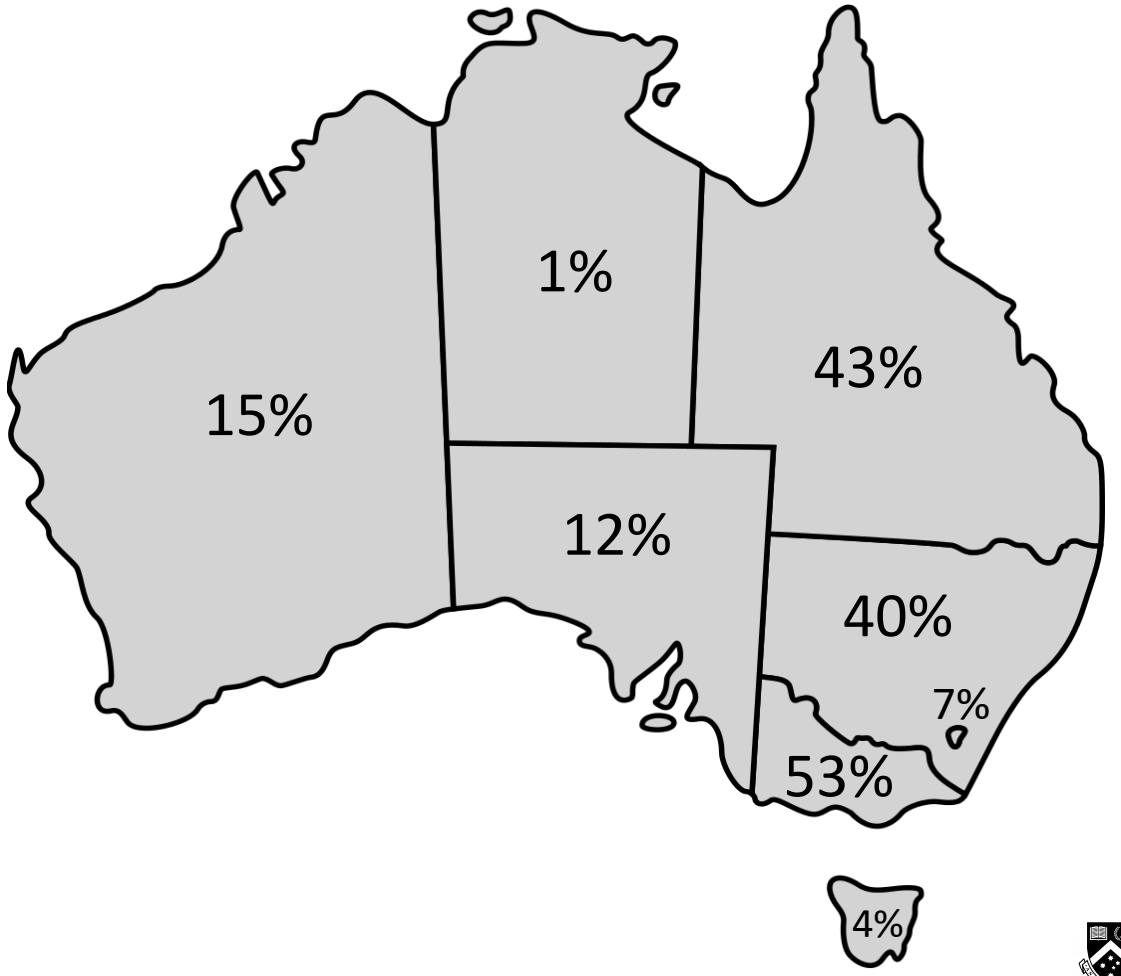
MONASH University

Participant demographics

n=175 parents of children with ASD+ADHD (126M, 47F, 2NB)

Child age:
3-7 years : 29.7%
8-11 years: 41.1%
12-18 years: 28.5%

Other comorbidities:
Anxiety: 72%
ODD: 21.7%
Intellectual disability: 14.85%
Epilepsy: 5.14%



MONASH University

Reasons for presentation in ED

Reason for presentation to ED	
Accidental injury	68.0%
Gastrointestinal issues	37.7%
Asthma	21.7%
Infection	16.6%
Self harm	12.0%
Allergy	6.3%
Seizure	6.3%
Anxiety	0.6%

Binary logistic regression analysis revealed no relationship between reason for presentation and other comorbidities

MONASH University

Sensory difficulties, behaviour and meltdown

Escalating anxiety and behaviour was a significant barrier to care, and can impede diagnosis and treatment of the original reason for presentation

62.8% parents reported that their child had a **meltdown** during their stay
5% of children were **restrained for routine tests**
4% of children **absconded**
2% of children had to be **sedated**

Factors that contributed to their child's escalating behaviour in ED:

• Anxiety due to **visual** overstimulation (e.g. bright lights)	35.1%
• Anxiety due to **auditory** overstimulation (e.g. chatting, beeping)	39.6%
• Anxiety due to being **touched** (unfamiliar people, instruments)	10.8%
• **Trauma** from previous hospital experience	12.6%

MONASH University

Communication and impacts on care

Social communication difficulties are one of the primary diagnostic criteria for ASD.

Mismatch between ED staff expectations and child's communication abilities were identified as a significant barrier to care:

- Frustration from ED staff when a child doesn't communicate in a way or level that is expected for their age/presentation
- Doctors yelling at children who are slow to respond
- Avoidance of eye contact or atypical body language being misconstrued
- Assuming that non-verbal or low verbal = intellectual disability

Communication of pain

Children with ASD+ADHD can express pain in atypical ways, which can lead to misdiagnosis, mismanagement or dismissal in ED

Parents perceptions of their child's pain threshold

Underreactive (**high pain tolerance**):	**58.2%**
Average:	7.4%
Over-reaction (low pain tolerance):	25.7%
Over-reactive to anticipation of pain, under-reactive to actual injury/illness:	8.6%

1 in 10 reported ED staff didn't recognize, or take seriously, their child's expression of pain (quiet/not making a fuss so child must be OK, or too hyperactive to be ill or in pain)

MONASH University

Learnings:

Staff training to better understand the breadth of presentation of ASD and ADHD

Parents often have to act as guides or interpreter's for their children in ED

Appreciation for atypical presentation (e.g. verbal and non-verbal expressions of pain and discomfort) and atypical communication

Consider ways to **triage or modify the environment** to reduce chance of meltdown