Autism and Depression - Prevalence

- Fewer data on prevalence – meta analysis found rates of 1-44% in 19 studies (Wigham et al 2017)
- But data available suggests similar rates to anxiety - eg 44% borderline or clinical (Strang et al, 2012)
- A large study with over 1500 autistic people found that autistic adults are three times more likely to suffer from depression and five times more likely to attempt suicide than neurotypical people. (Croen et al, 2015).
- It is likely that many autistic people are not diagnosed (Bitsika & Sharpley, 2015; Brice & Rodgers, 2018) and therefore there might be an underestimation in the prevalence of depression in this population.

Presentation of depression in autism

- Social communication differences, and alexithymia may complicate reporting of depression
- Along with a paucity of measures developed for autistic populations
- What we do know:
### Prototypical depression symptoms that commonly mark depression in autism
- Depressed and/or irritable mood
- Loss of pleasure in previously enjoyed activities
- Hopelessness and tearfulness
- Negative beliefs about oneself
- Feelings of failure or worthlessness
- Constricted affect
- (Increased) Social withdrawal
- Change in appetite (increased or decreased)
- (Increased) Sleep problems
- Poor concentration abilities
- Lack of motivation
- Thoughts about death or suicidal ideation

### Depression symptoms that may be more specific to autism
- Increased irritability
- Changes in circumscribed interests (CI):
  - Decreased pleasure in
  - Increased intensity
  - Change to darker/morbid content
- Increased repetitive behaviors
- Increased anxiety or insistence on sameness
- Increase in aggression or self-injury
- Regressive behavior
- Decline in self-care

### Risk factors for depression in autism
- Lower perceived social support and social satisfaction
- Life stress/Trauma
- Female gender
- Increasing age
- Absence of ID
- Poorer emotion regulation skills
Psychological risk factors

- Cognitive inflexibility – via anxiety to depression
- Perfectionism

Differential cognitive style in depression in ASD?

- Perhaps more typical than thought – eg Gotham et al (2015) found, contrary to expectation that people with ASD endorsed items about worthless and guilt
- The more depressive symptoms the adolescents reported, the more the adolescents explained negative events by internal, stable, and global causes. (Barnhill and Smith Myles, 2001)
- We know nothing like as much as we do about pathways to anxiety in autism
Environmental risk factors

- Inappropriate educational placement
- Inadequate workplace support
- Lack of social opportunities

Trajectory of depression

- Higher rates found in adults than younger populations - Depression may follow a developmental trajectory, becoming more prominent in adulthood (Hollocks et al, 2018)
- Trend toward a significant positive relationship between BDI-II scores and chronological age; this could reflect a “real” developmental phenomenon of depressive symptomatology increasing with age (Kessler et al 2003)
- Higher levels of depression symptoms were also associated with more autism symptoms and high levels of depression were associated with higher levels of generalized anxiety. (Johnston and Iarocci, 2017)
The role of camouflaging

• Suppressing autistic tendencies and/or effortfully engaging in “typical” social behaviours (Hull et al., 2017)
• Particularly associated with autistic females, but increasingly recognised that males camouflage too (Bradley et al, 2021)
• Adaptive camouflaging efforts may help autistic women fit in and avoid a range of social stressors associated with mental health concerns
• But camouflaging is also associated with feelings of not being accepted or belonging in society, which, in turn, increases risk of depression, suicidal thoughts and behaviours (Bradley et al 2021).

Why is camouflaging associated with poorer mental well being? (Bradley et al 2021)

- It’s exhausting, leads to burn out
- Creates unrealistic expectations
- Identity issues – perception of not being accepted for oneself
Positives of camouflaging (Bradley et al. 2021)

- Allows access to the social world
- Resilience building – learn compensatory strategies

What reduces the need to camouflaging? (Bradley et al. 2021)

1. Having a diagnosis, autism advocacy
2. Understanding of neurodiversity
The relationship between anxiety and depression

- The presentation may be similar to anxiety – some overlaps and some atypical presentations (e.g., Stewart et al., 2006)
- Many people report being depressed because of living with high levels of anxiety

How to assess depression across the intellectual/verbal spectrum

- Cognitively-able and socially-motivated autistic youth may experience sadness, increased irritability, anhedonia, sleep disturbance, diminished appetite, self-deprecatory thoughts, coupled with an exacerbation of their autism symptoms (e.g., more intense circumscribed interests and increased rigidity).
- Autistic youth with intellectual disability may present with increased crying, self-injury, aggression, perseveration, weight gain or loss, and toileting accidents.
Suicidality - Do high rates of anxiety and depression lead to high suicide/suicidality thoughts and behaviours in ASD?

- Suicide attempts: 7.2-15%
- Suicidal behaviours: 10.7-50% (Segers and Rawana, 2014)
- Typical adolescent population: 7.8% and 15.8% respectively (APA)
- 50% lifetime prevalence of self-harm behaviour
- 11-12% of those who die by suicide in the UK have evidence of autism, most are undiagnosed (Cassidy et al. 2017)
- People with ASD represent 7.3 to 15% of suicidal populations

Increased risk

- Our recent research showed that 66% of autistic adults had contemplated suicide in their lifetime ... significantly higher than patients with psychosis, a high-risk group in which suicide has been extensively studied (Cassidy, 2014).
Risk factors

- Female gender - autistic women are just as likely, if not more likely, to die by suicide as autistic men (Hirvikoski et al., 2016; Kirby et al., 2019)
- Camouflaging
- Peer victimisation, Substance abuse
- Behavioural problems eg aggression, mood dysregulation
- Taking psychotropic medication (Segers and Rowana, 2014)
- Depression, mood dysregulation (explosive temper, irritability, impulsivity
- Youth with ASD who consider or attempt suicide had poorer inhibition, flexibility, and adaptive skills (Armour et al, 2015)
- And a lack of social support and unmet support needs in autistic adults significantly predicted suicidality (Cassidy et al., 2018)

Treatments for depression in autism

- Medication
- Adapted psychological therapy (Keefer et al, 2018; Santomauro et al, 2016)including CBT, mindfulness
- Regrettably we do not have much research evidence for the efficacy of either (Kim and Lecavalier, 2021)
Positive notes/moves in the right direction?

• The double empathy problem
• Post-covid changes to education delivery? Increased awareness in schools?
• Neurodiversity programmes within companies

Summary and take home points

• Depression is more prevalent among autistic people
• There are many reasons for this including reduced social opportunities, issues of identity, and living with high levels of anxiety
• Depression is treatable

• But often the most effective interventions are environmental
• Change on a societal level is afoot – neurodiversity movement