

Mental health problems in children and adolescents with Autism Spectrum Disorder/ADHD: Relevance for General Practice

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Mental health problems in children and adolescents with Autism Spectrum Disorder and/or ADHD: Relevance to General Practice

What do you think?



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Prevalence of Child and Adolescent Mental Health Disorders (CAMHD) in UK

- Survey of 5-15 year-olds in Great Britain [England, Wales, Scotland] in 1999¹
- 10% had a Mental Disorder [Boys>Girls; Adolescents>Pre-adolescents]
- Conduct disorder = 5%; Anxiety and depression = 4%; Hyperkinetic Disorder (Severe ADHD) = 1%
- Risk factors: lone parent families; re-constituted families; families with >5 children; poorly educated parents; low income families

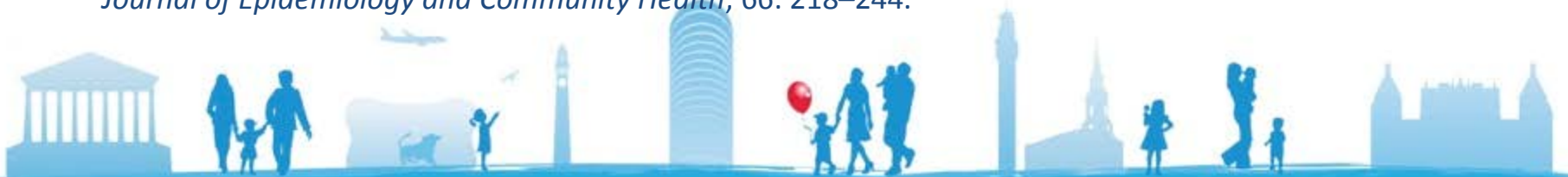
1. Meltzer, H., Gatward, R., Goodman, R., & Ford, T. (1999). Mental health of children and adolescents in Great Britain. *International review of psychiatry* (Abingdon, England), 15(1-2), 185-7. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/12745331>



Autism Spectrum Disorder (ASD) and Attention Deficit Hyperactivity Disorder (ADHD)

- Neurodevelopmental disorders (ND) [DSM-5¹]
 - Also include Intellectual (learning) disabilities, Tic Disorders, Communication Disorders, Specific Learning Disorders
- Prevalence of ND = 3-4%² [7-15 year-olds in England]
- Life-long (and not just childhood) conditions¹
- Significant impact on the lives of children, adolescents and young adults [especially, if already socio-economically deprived²

1. American Psychiatric Association (2013) *Diagnostic and statistical manual of mental disorders. Fifth edition.* DSM-5. Author. Washington DC.
2. Emerson E (2012) Deprivation, ethnicity and the prevalence of intellectual and developmental disabilities. *Journal of Epidemiology and Community Health*; 66: 218–244.



ASD and ADHD:

Core features and comorbid symptoms

ASD

- Qualitative impairment in reciprocal social interaction and social communication, plus
- Restricted interests, rigid and repetitive behaviours [RRB]
- Sensory hyper- or hypo-sensitivity
- Associated anxiety and challenging behaviour
- Self-image problems

ADHD

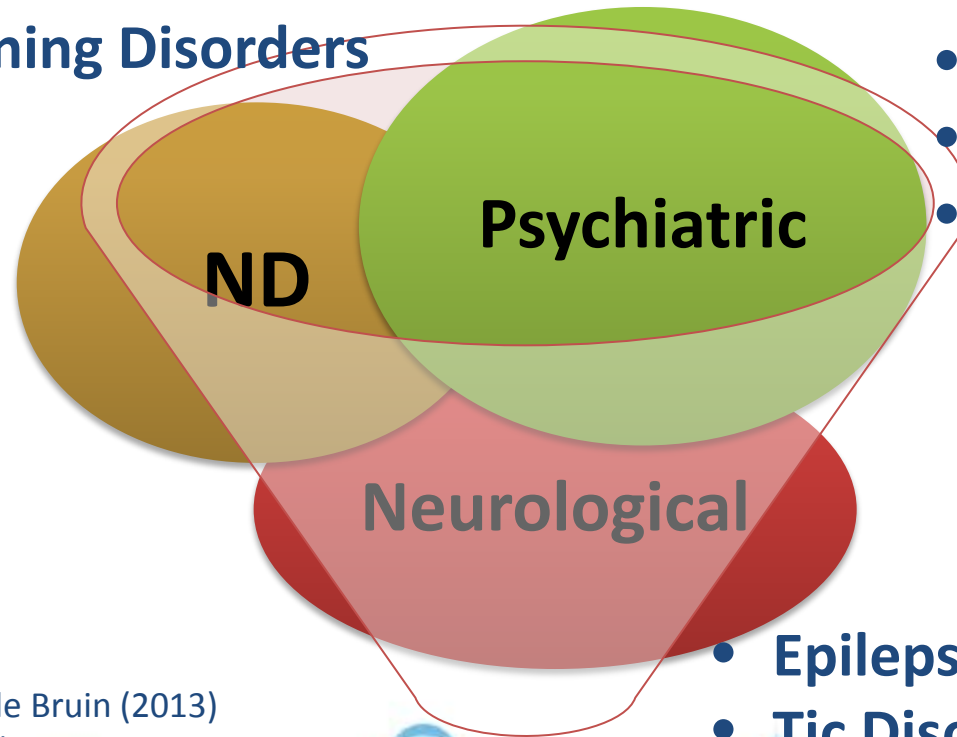
- Inattention
- Hyperactivity/impulsivity
- Developmentally inappropriate
- Quantitative and qualitative impairment
- Cognitive and behavioural symptoms
- Social skills problems
- Low self-esteem and poor confidence



ASD and ADHD: Comorbidity (31-74%¹ [Ave. = 50%])

- Autism Spectrum Disorder
- Intellectual Disorder
- Specific Learning Disorders
- Dyspraxia

- Sleep Disorder
- Conduct Disorder
- Substance Misuse
- Depression
- Anxiety



- Epilepsy
- Tic Disorder/Tourette

1. Van Steensel, Bögels, de Bruin (2013)
J Child Fam Stud (2013) 22:368–376

Rule and not the exception (2/3)

ASD/ADHD and comorbidity¹

- Study conducted in Netherlands
- 7-18 year-olds [$n=80$]; clinic population
- Comparative study: compare and contrast psychiatric comorbidity (disorders) between ASD [$n=40$] and ADHD [$n=40$]
- ASD: 57.5%; ADHD: 40% (one comorbid disorder)
- Externalising disorders (Conduct Disorder [CD] or Oppositional Defiant Disorder [ODD]): no group differences
- Internalising disorders (anxiety and mood disorders): ASD > ADHD; Anxiety disorder – ASD > ADHD
- No association with age and/or IQ
- Future: Valid and reliable screening tools as well as effective treatment options for these comorbid disorders.

1. Van Steensel, Bögels, de Bruin (2013) *J Child Fam Stud* (2013) 22:368–376



ASD/ADHD and comorbidity

	ASD (%)	ADHD (%)
Comorbid disorder	57.5	40
Internalising disorders	35	12.5
Anxiety disorders	27.5	10
<i>Social anxiety disorder</i>	10	2.5
<i>Specific phobia</i>	12.5	2.5
<i>Obsessive-compulsive disorder</i>	7.5	0.0
Mood disorders		
Major depressive disorder	2.5	5
Dysthymic disorder	10	0.0
Externalising disorders	22.5	27.5
ODD	22.5	20.0
CD	2.5	12.5

Van Steensel, Bögels, de Bruin (2013) J Child Fam Stud (2013) 22:368–376



ASD/ADHD and Young Adulthood [18-25 years]: Life outcomes, including mental health

- Lifelong neurodevelopmental disorders
- US National Autism Indicators Report¹ (2015) - transition into young adulthood for ASD youth¹ and outcomes
 - Analysed data from the National Longitudinal Transition Study-2 (NLTS-2) [2000-2009] and the 2011 Survey of Pathways to Diagnosis and Service
 - Measured experiences and outcomes of youth on the autism spectrum during their transition into adulthood across a variety of topics

1. Roux, AM., Shattuck, PT., Rast, JE., Rava, JA., and Anderson, KA. (2015) *National Autism Indicators Report: Transition into Young Adulthood*. Philadelphia, PA: Life Course Outcomes Research Program, A.J. Drexel Autism Institute, Drexel University



ASD/ADHD and Young Adulthood [18-25 years]: Life outcomes, including health/mental health¹

1. Roux, AM., Shattuck, PT., Rast, JE., Rava, JA., and Anderson, KA. (2015) *National Autism Indicators Report: Transition into Young Adulthood*. Philadelphia, PA: Life Course Outcomes Research Program, A.J. Drexel Autism Institute, Drexel University



ASD/ADHD and Young adulthood [18-25 years]: Life outcomes, including mental health¹

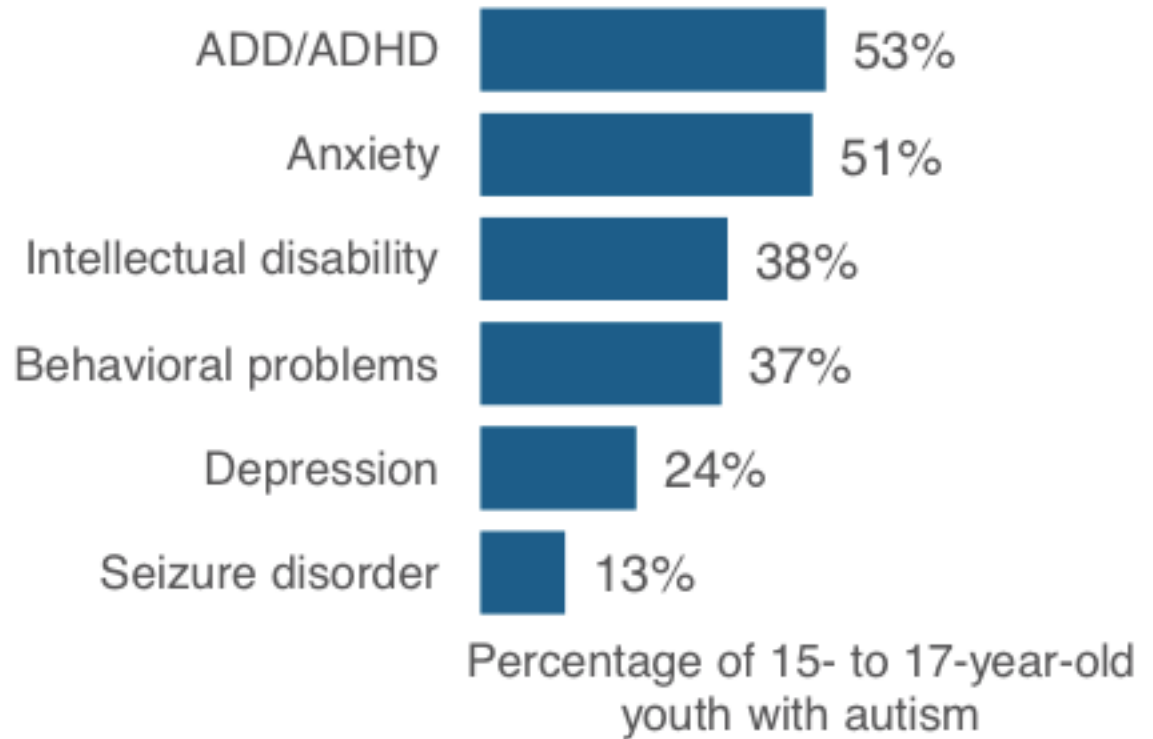
- Lifelong service and support needs, but change with age; 'life unfolds'; 'Falling off a cliff'¹ (26% received no services)
- Over one-third (37%) of young adults were disconnected (no education or job after high school) during their early 20s
- Health/Mental health
 - **No data for 18-25 year-olds**
 - 15-17 year-olds (youth): 60% had at least two health or mental health conditions in addition to ASD
 - 77% of youth on the autism spectrum took at least one kind of prescription medication on a regular basis for any type of health or mental health issue.

1. Roux, AM., Shattuck, PT., Rast, JE., Rava, JA., and Anderson, KA. (2015) *National Autism Indicators Report: Transition into Young Adulthood*. Philadelphia, PA: Life Course Outcomes Research Program, A.J. Drexel Autism Institute, Drexel University



ASD/ADHD and comorbidity: Youth [15-17 year-olds]¹

Over half of youth had ADD/ADHD and anxiety issues in addition to autism.

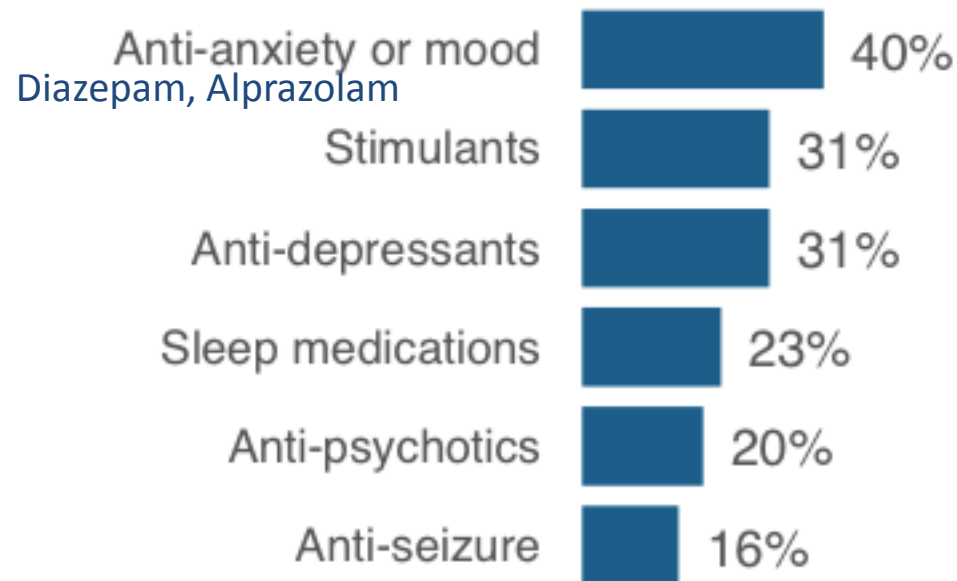


1. Roux, AM., Shattuck, PT., Rast, JE., Rava, JA., and Anderson, KA. (2015) *National Autism Indicators Report: Transition into Young Adulthood*. Philadelphia, PA: Life Course Outcomes Research Program, A.J. Drexel Autism Institute, Drexel University



ASD/ADHD, comorbidity and medication: Youth [15-17 year-olds]¹

Many youth took at least one type of medication for conditions that co-occurred with autism.



Percentage of 15- to 17-year-old youth with autism

1. Roux, AM., Shattuck, PT., Rast, JE., Rava, JA., and Anderson, KA. (2015) *National Autism Indicators Report: Transition into Young Adulthood*. Philadelphia, PA: Life Course Outcomes Research Program, A.J. Drexel Autism Institute, Drexel University



ASD/ADHD and comorbidity: Pharmacotherapy

- ADHD
 - Stimulants and non-stimulants to treat core features
 - Pharmacotherapy is part of comprehensive management
- ASD
 - No known efficacious pharmacotherapy for core symptoms (although in development – oxytocin for social skills)
 - Psychotropic medication prescribed to control associated behavioural/emotional symptoms (Risperidone, Aripiprazole, ADHD medication)
 - Greater propensity for adverse effects-cautious approach



ASD/ADHD and comorbidity: Pharmacotherapy [<18 year-olds]

- Depression
 - SSRIs: Fluoxetine – first line; Sertraline – second line
- OCD
 - Setraline
 - No evidence that SSRIs reduce RRB in ASD¹
- SSRIs
 - Risk/benefit ratio varies with age; better tolerability in adults
- Tricyclics (Clomipramine) not recommended as not tolerated

1. Williams K, Brignell A, Randall M, *et al.* Selective serotonin reuptake inhibitors for autism spectrum disorders. Cochrane Database Syst Rev 2013; 8:CD004677.



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Mental health problems in children and adolescents with Autism Spectrum Disorder and/or ADHD:

General Practice

How can you be helped to help your patients?

- Screening in the Practice/Surgery [Recognition]
- Early intervention/Primary intervention
 - In the practice
 - Referral to agencies outside the practice [CAMHS, Vol. orgs., etc.]



Thank you

