

ADHD AND CHALLENGING BEHAVIOUR IN PEOPLE WITH INTELLECTUAL DISABILITY: SHOULD WE SCREEN FOR ADHD?

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SUMMARY

People with Intellectual Disability (ID) have cognitive impairments that affect their level of functioning the causes of which are multiple and often unknown. Behavioural difficulties are common among people with ID. Attention Deficit Hyperactivity Disorder (ADHD) is recognised more among people with Intellectual Disability and could be a cause of problem behaviours. Screening and assessing for ADHD in people with ID is difficult because of the paucity of robust assessment tools and diagnostic criteria.

Key words: *intellectual disability - challenging behaviour - ADHD*

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Introduction

Intellectual Disability (ID) is defined as difficulties in cognitive functioning in the presence of deficits in adaptive functioning that have arisen in the developmental stage in childhood (BPS 2000). The prevalence of ID in the population approximates to 2.5% (Maulik et al 2011). Emerson (1995) describes Challenging Behaviour (CB) as “culturally abnormal behaviour(s) of such intensity, frequency or duration that the physical safety of the person or others is placed in serious jeopardy, or behaviour which is likely to seriously limit or deny access to the use of ordinary community facilities”. It is one of the commonest difficulties in people with ID for carers, families, and services to manage. Various studies report a range of 15 to 50% of people with ID presenting with challenging and aggressive behaviour (Emerson et al 2001, Benson & Brooks 2008). The aetiological causes of CB are multiple that often interact with each other making the understanding of CB difficult for clinicians.

Challenging behaviour is associated with an increased prevalence of psychiatric symptoms, especially anxiety, and psychosis (Holden & Gitlesen 2003). In addition to mental disorders, underlying physical health issues, environmental, social and psychological problems, and communication difficulties contribute to or exacerbate challenging behaviour.

The presence of other neurodevelopmental disorders such as Autism and ADHD also increases the risk of the person experiencing mental disorders and presenting with challenging behaviour. Autism is one of the commonest neurodevelopmental disorders in people with ID with a prevalence rate in people with ID of approximately 30% (Adult Psychiatric Morbidity Survey (APMS) 2007) and therefore a diagnosis of Autism increases the risk of challenging behaviour. Lecavalier (2006) reports that up to 20% of children with Autism can present with signs of aggression and irritability. Signs of ADHD are also common in people

with ID with a prevalence rate higher than in the general population (Baker et al 2010, Dekker & Koot, 2003, Emerson, 2003). ADHD is often under diagnosed in people with ID (Perera 2015).

ADHD and Challenging Behaviour

The relationship between criminality and ADHD where it has been shown to increase the risk of violent criminality (Lundstrom et al 2013, Knecht et al 2014). Behavioural features of psychopathy are commonly seen among individuals with ADHD when compared to people without ADHD (Eisenbarth et al 2008). Studies of offenders with ID have shown that ADHD with conduct disorder and problematic behaviour is associated with offending behaviour (Lindsay et al 2013). This raises the importance of the diagnosis of ADHD in individuals presenting with challenging and offending behaviours.

Diagnosing ADHD

The diagnostic criteria of ADHD of DSM V are commonly used in clinical practice when assessing people with ID for the signs of the disorder. Establishing a diagnosis of ADHD requires the presence of inattention and/or hyperactivity and impulsivity that must have been evident in childhood causing significant functional impairment to the person (DSM V). The symptom criteria include 9 inattention and 9 hyperactivity/impulsivity ones. Diagnosing ADHD in people with ID can be challenging because the core signs can be attributed to the person's level of intellectual disability and therefore it is not always possible in some people with ID to make the diagnosis.

There is no clear guidance on how to assess ADHD in ID and the assessment process is the same as that for people in the general population. It is essential however that the developmental age of the person is considered because of the presence of the core signs in people with lower intellectual functioning.

The presence of other disorders such as Autism and communication difficulties can make it difficult to apply all the DSM V criteria of ADHD inattention and hyperactivity/impulsivity in people with ID. There are no structured or validated tools used to help in assessing for ADHD in ID and therefore, an experienced clinician's judgement is crucial in making the distinction between ADHD and behaviour consistent with the level of ID. We argue that in people with ID, ADHD is one of the most significant functional impairments causing Challenging Behaviour. Therefore people with ID and challenging behaviour should be screened and assessed for signs of ADHD.

Objective assessment of ADHD in ID

Assessment of ADHD includes screening for symptoms followed by a detailed diagnostic assessment to confirm presence of ADHD. Various screening instruments for ADHD in the non-ID population are available. Taylor et al (2010) considered screening tools for ADHD and found 14 tools but only two scales had robust psychometric statistics and content validity. In contrast, there are no validated tools to screen for ADHD in people with ID as far as we are aware. A screening tool for ADHD in ID would be valuable in screening individuals presenting with challenging behaviour and could also be applicable among offenders with ID. Structured diagnostic assessment is important to confirm the diagnosis of ADHD and assess for comorbid mental illnesses and neurodevelopmental disorders. Many diagnostic structured interview tools are used to diagnose ADHD such as DIVA 5. The DIVA-5-ID was recently produced to help with the diagnosis of ADHD in people with ID. It is hoped that structured tools will reduce the likelihood of clinicians overlooking neurodevelopmental disorders such as ADHD after a diagnosis of ID and/or autism is made.

Conclusion

Challenging Behaviour is common in people with Intellectual Disability. ADHD is recognised more in people with ID but is often under diagnosed and could be an important aetiological factor in the occurrence of challenging behaviour. On this basis, it would be worth screening for ADHD in all cases of challenging behaviour in people with ID whilst considering the importance of the impact of developmental stage on the diagnosis of ADHD in ID. The challenge for the future is ensuring the applicability of ADHD diagnostic criteria in people with cognitive impairments is robust and includes the use of validated and reliable assessment tools for ADHD in ID.

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References

1. *Adult Psychiatric Morbidity Survey (APMS) 2007*
2. *American Psychiatric Association (APA). (1994). Diagnostic and statistical manual of mental disorders: DSM-IV (4th ed.). Washington, DC: American Psychiatric Association.*
3. Baker BL, Neece CL, Fenning RM, Crnic KA, Blacher J. *Mental disorders in five-year-old children with or without developmental delay: focus on ADHD. Journal of Clinical Child Adolescent Psychology 2010; 39:492-505*
4. Benson BA & Brooks WT: *Aggressive challenging behaviour and intellectual disability Current Opinion in Psychiatry 2008; 21(5):454-8.*
5. Dekker MC & Koot HM: *DSM-IV disorders in children with borderline to moderate intellectual disability, I: prevalence and impact. Journal of American Academy of Child Adolescent Psychiatry 2003; 42:915-922.*
6. Eisenbarth H, Alpers GW, Conzelmann A, Jacob CP, Weyers P, Pauli P. *Psychopathic traits in adult ADHD patients. Personality and Individual Differences 2008; 45, 468-472*
7. Emerson E, Kiernan C, Alborz A, Reeves D, Mason H, Swarbrick R, Mason L, Hatton C, *The prevalence of challenging behaviors: a total population study. Research in Developmental Disabilities 2001; 22, (1):77-93.*
8. Emerson E. *Prevalence of psychiatric disorders in children and adolescents with and without intellectual disability. Journal of Intellect Disability Research 2003; 47:51-58.*
9. Holden B, & Gitlesen JP, *Prevalence of psychiatric symptoms in adults with mental retardation and challenging behaviour. Research in Developmental Disabilities 2003; 24 (5):323-332*
10. Knecht C, de Alvaro R, Martinez-Raga J, et al. *Attention-deficit hyperactivity disorder (ADHD), substance use disorders, and criminality: a difficult problem with complex solutions. International Journal of Adolescent Medicine and Health 2008; 27(2), 163-175.*
11. Lecavalier L. *Behavioral and Emotional Problems in Young People with Pervasive Developmental Disorders: Relative Prevalence, Effects of Subject Characteristics, and Empirical Classification. Journal of Autism and Developmental Disorders 2006; 36, (8)1101-1114.*

12. Lindsay WR, Carson D, Holland AJ, Taylor JL, O'Brien G, Wheeler JR. *The Impact of Known Criminogenic Factors on Offenders with Intellectual Disability: Previous Findings and New Results on ADHD*. *Journal of Applied Research in Intellect Disability* 2013; 26:71–80.
13. Lundstrom S, Forsman M, Larsson H, Kerekes N, Serlachius E, Langstrom N, Lichtenstein P. *Childhood Neurodevelopmental Disorder and Violent Crminiality: A Sibling Control Study*, *Journal of Autism and Developmental Disorder*, 2014; 44 (11) 2707-2716.
14. Maulik PK, Mascarenhas MN, Mathers CD, Dua T, Saxena S. *Prevalence of intellectual disability: a meta-analysis of population-based studies*. *Res Dev Disabil* 2011; 32(2): 419-436.
15. National Institute for Health and Clinical Excellence. *Attention deficit hyperactivity disorder Diagnosis and management of ADHD in children, young people and adults*. NICE Clinical Guideline 72. London; 2009.
16. Perera B. *Diagnosis of Attention Deficit Hyperactivity Disorder in Adults with Intellectual Disability: How Are We Doing with Diagnosis and Treatment?* *European Psychiatry* 2015; 30 (1), 28–31, 862.
17. Storebø OJ. & Simonsen E. *The Association Between ADHD and Antisocial Personality Disorder (ASPD)*. *Journal of Attention Disorders* 2013; 20, 10, 815 – 824.
18. Taylor A, Deb S, Unwin G. *Scales for the identification of adults with attention deficit hyperactivity disorder (ADHD): A systematic review*. *Research in Developmental Disabilities* 2011; 32. 924–938.

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