A Literature Review on Alcohol and Substance Use in people with Learning Disabilities

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Definition of learning disability

Learning disability (LD) is defined by three core criteria: [1]

- Significant impairment of intellectual functioning;
- Significant impairment of adaptive/ social functioning;
- Age of onset before adulthood.

Background

- Up to 2% of the population
- Over 1 million people in England[2]

- Exists on a gradient – from mild to profound

- Around 80% of people with mild LD are not diagnosed or known to statutory services[3]

Background – type of LD

Type of LD	IQ	% of those with LD	Presentation
Mild	50–69	80	• Conversational language – can read / write • Can live independently / work
Moderate	35–49	12	• Variable language – limited reading / writing • Likely to need support in ADLs / accommodation
Severe	20–34	7	• No / minimal language • Assistance for basic tasks and self care • Highly supported accommodation
Profound	<20	1	• Full time support for all needs • High rates of co-morbidity

Background – Causes of LD

- Caused by any factor that affects brain development
- Often the cause is unknown

Background – Causes of LD

Cause	Examples
Genetic	Chromosomal disorders, syndromes – Down syndrome, Fragile X, Turner's Metabolic Structural abnormalities – hydrocephalus, microcephaly
Antenatal	Teratogens – alcohol, drugs Maternal infection –TORCH infections Maternal hypothyroidism
Perinatal	Extreme prematurity – intraventricular haemorrhage, periventricular leucomalacia Hypoxic-ischaemic injury – birth asphyxia Metabolic – neonatal hypoglycaemia, hyperbilirubinaemia
Postnatal	Traumatic brain injury Anoxia – suffocation, near drowning Infection – meningitis, encephalitis

Background – risks

- Greater risk of physical health disorders
- 4x more mental health problems
  Point prevalence = 40%[4]
- Worse access to healthcare[5]
- People with learning disabilities say they don't receive advice on health promotion[6]

Background – risks

- Changing patterns of care for people with LD
- From long-stay institutions to community care
- Exposed to social and environmental pressures
- Adopt behaviours that impact negatively on their health
- More access to alcohol / illicit substances/ sexual relationships

Alcohol + Substance Use

- Discrepancies in the literature
- Studies suggest:
  - lower[7,8,9,10,11,12,13,14]
  - similar[15,16,17]
  - higher[18,19,20]

  Risk of substance use than general population
- Most studies find lower rates of alcohol use than general population[21,22]
- Of those that do use – higher risk of substance abuse[15,17,22]
- Appears to be a hidden problem within the LD population

Prevalence

- Prevalence of substance misuse 0.5–2.6 % (up to 26%)[23,34]
- Alcohol main substance to be misused[25,26]
- Followed by cannabis and cocaine [26]

Past month prevalence[22]	%	Vs general population
Alcohol	35.5–47	Lower (similar)
Smoking	20.5	Same
Marijuana	13	Lower
Cocaine	1.5	Lower

Prevalence

- 1/5th of alcohol users also use illicit drugs/ prescribed medication[25]
- Older adults more likely to use alcohol exclusively[22]
- Younger more likely to use alcohol + cannabis or stimulants[22]
- ~ 5% of youths in drug and alcohol service have a degree of LD[21]
- If LD + mental disorder – substance abuse range of 7-20%[23,27]

Reasons to use

1. Being like others – to‘fit in’
2. Social and emotional influences
3. Learning from experience
4. Choices and challenges
5. Self medicating against negative experience
6. To relieve stress
7. To develop relationships

- Similar to general population[24,28,29,30]

Risk factors

Risk factors[7,16,21,22,25,26,31]	
•Male •Mild LD population •Young •Those that don't use LD services •Living independently •Forensic history •Mental health problem •Stressful life events •Non-urban area •Non – Caucasian	•Use of substances by friends •Poor understanding of disability •Hyperactivity •Lack of assertiveness •Low self esteem •Susceptibility to peer pressure •Desire for social acceptance •Social isolation •Lack of example setting in childhood
Supportive family are a strong protective factor[8]	

Characteristics

Compared to the non-LD population:

- Later onset of use[22,27,29]
- Greater risk of peer influence[16]
- Less caucasian[23]
- 'All or nothing' principle[12]
- Less likely to receive treatment or remain in treatment[22]

Risks for the user

Risks for the user[13,17,22,23,25,29,]
Medication interactions Less likely to seek help High risk of complications: – ↑cognitive deficits – Cardiovascular, respiratory and GI problems – ↑ epileptic activity – ↑ motor deficit Aggression, erratic mood changes Sexual exploitation Difficulties maintaining relationships Loss of daily routine

Prevention + Interventions

Interventions suitable for non-LD population are not suitable for LD

- Need to adapt interventions
- Reasonable adjustments must be made
- Need early identification
- Need to start at young age

  In one study 6% tried cigarettes and 15% drank alcohol at the age of 10 years or younger[32]

Interventions

- People with LD and substance misuse report that their main source of support is from LD services – in educational and liaison roles[30]
- Perceive main stream addiction services as negative[30]
- Need better access to a wide range of specialist services

Interventions

Interventions include:[13,21,24,27,29,30,32,33]

1. Behavioural modification
   Self-determination theory
   Motivational interviewing
   Cognitive behavioural therapy
   Psychomotor therapy

2. Alcohol education

3. Modification of existing treatment
   E.g. AA concept of powerlessness over substances

4. Further healthcare professional training

5. Liaison between alcohol services and services for people with LD

Interventions

Modification of existing treatment

- Longer treatment
- Short sessions
- More supportive
- Repetition
- Close work with family members
- Patience
- Flexibility
- Simplification of topics
- Teaching approach
- Less confrontation
- Increased individual work + Less group work
- Concrete goals over short time frames
- Use of pictures / quizzes / games
- Incentives
- Role playing
- Maintenance sessions

Interventions

So far interventions have varying success:[24,32]

- Increased knowledge and skills
- Not improved attitudes
- Some reduction in substance use

LD mentioned in NICE Alcohol guidelines:[34]

- Assisted inpatient withdrawal recommended
- No further guidance given
- Clearly additional guidance needed

Conclusion

Little evidence to guide practice:

- Most studies epidemiological and inconclusive[21]
- Unreliable rates of substance use in LD population[22]
- Effective and evidence based prevention programs lacking
- Studies are small, run in specialist single centre settings and are uncontrolled[24]

- Some RCT's in progress[17,24]

Further research

More robust research needed[22,33]

- To gauge magnitude of problem
- To elucidate substance use patterns + consequences
- To clarify pathways to substance abuse care
- To test effectiveness of interventions
- Prevention studies
- To establish guidelines

References

1. Learning Disability: Definitions and Contexts, Professional Affairs Board of The British Psychological Society, 2000.
2. People with Learning Disabilities in England 2012 Eric Emerson et al, Improving Health and Lives: Learning Disability Observatory.
3. People with learning disabilities in England in 2013, Protecting and improving the nation's health, Public Health England.
4. Cooper SA , Smiley E , Morrison J , et al.: Mental ill-health in adults with intellectual disabilities: prevalence and associated factors. *British Journal of Psychiatry* 190:27-35,2007
5. Facing the Facts: Services for People with Learning Disabilities – A Policy Impact Study of Social Care and Health Services (Department of Health 1999)
6. Equal Treatment: Closing the Gap A formal investigation into physical health inequalities experienced by people with learning disabilities and/or mental health problems. DRC. 2006
7. Improving Health and Lives, Learning Disability Observatory. 'Health inequality and people with learning disabilities in the UK; 2012' Emerson E et al.
8. Papachristou E, Anagnostopoulos D Behavioral disorders and substance abuse in adolescents with mental retardation Psychiatriki. 2014 Apr-Jun;25(2):139-50
9. Fakier N, Wild LG. Associations among sleep problems, learning difficulties and substance use in adolescence. J Adolesc. 2011 Aug;34(4):717-26. doi: 10.1016/j.adolescence.2010.09.010. Epub 2010 Oct 16.
10. Janusis GM, Weyandt LL. An exploratory study of substance use and misuse among college students with and without ADHD and other disabilities. J Atten Disord. 2010 Nov;14(3):205-15. doi: 10.1177/1087054710367600. Epub 2010 May 17.
11. McCrystal P, Percy A, Higgins K, Substance use behaviors of young people with a moderate learning disability: a longitudinal analysis, Am J Drug Alcohol Abuse. 2007;33(1)
12. Reis O, Wetzel B, Häßler F. Mild or borderline intellectual disability as a risk for alcohol consumption in adolescents - A matched-pair study. Res Dev Disabil. 2015 Dec 11. pii: S0891-4222(15)30001-9. doi: 10.1016/j.ridd.2015.11.007.
13. Frielink N Pretreatment for substance-abusing people with intellectual disabilities: intervening on autonomous motivation for treatment entry. J Intellect Disabil Res. 2015 Dec;59(12):1168-82. doi: 10.1111/jir.12221. Epub 2015 Sep 15.
14. McGuire BE, Daly P, Smyth F. Lifestyle and health behaviours of adults with an intellectual disability. J Intellect Disabil Res. 2007 Jul;51(Pt 7):497-510.

References

15. Beitchman JH et al, Substance use disorders in young adults with and without LD: predictive and concurrent relationships, J Learn Disabil. 2001 Jul-Aug;34(4):317-32.
16. Katims DS, Zapata JT, Yin Z. Risk factors for substance use by Mexican American youth with and without learning disabilities. J Learn Disabil. 1996 Mar;29(2):213-9.
17. Schijven EP et al. Evaluating a selective prevention program for substance use and comorbid behavioral problems in adolescents with mild to borderline intellectual disabilities: Study protocol of a randomized controlled trial. BMC Psychiatry. 2015 Jul 22;15:167. doi: 10.1186/s12888-015-0563-1
18. Blum RW, Kelly A, Ireland M. Health-risk behaviors and protective factors among adolescents with mobility impairments and learning and emotional disabilities. J Adolesc Health. 2001 Jun;28(6):481-90
19. Hogan A, McLellan L, Bauman A. Health promotion needs of young people with disabilities--a population study. Disabil Rehabil. 2000 May 20;22(8):352-7.
20. Swerts C et al, Substance use among individuals with intellectual disabilities living independently in Flanders. Res Dev Disabil. 2016 Apr 6. pii: S0891-4222(16)30069-5. doi: 10.1016/j.ridd.2016.03.019.
21. Barrett N, Paschos D. Alcohol-related problems in adolescents and adults with intellectual disabilities. Curr Opin Psychiatry. 2006 Sep;19(5):481-5.
22. Carroll Chapman SL, Wu LT. Substance abuse among individuals with intellectual disabilities.Res Dev Disabil. 2012 Jul-Aug;33(4):1147-56. doi: 10.1016/j.ridd.2012.02.009. Epub 2012 Mar 7.
23. Substance abuse and persons with disabilities, Disabled World, 2013-07-22 (2013-11-15).
24. Kouimtsidis C et al. Extended brief intervention to address alcohol misuse in people with mild to moderate intellectual disabilitiesliving in the community (EBI-ID): study protocol for a randomised controlled trial. Trials. 2015 Mar 25;16:114. doi: 10.1186/s13063-015-0629-x.
25. Taggart L et al, An exploration of substance misuse in people with intellectual disabilities. J Intellect Disabil Res. 2006 Aug;50(Pt 8):588-97.
26. Chaplin E, Gilvarry C, Tsakanikos E. Recreational substance use patterns and co-morbid psychopathology in adults with intellectual disability. Res Dev Disabil. 2011 Nov-Dec;32(6):2981-6. doi: 10.1016/j.ridd.2011.05.002. Epub 2011 Jun 2.

References

27. Quintero M, Substance abuse in people with intellectual disabilities. Social work today. Vol. 11 no.4 p.26
28. Tobacco and Alcohol Use in People With Mild/Moderate Intellectual Disabilities: Giving Voice to Their Health Promotion Needs. J Appl Res Intellect Disabil. 2016 Mar 21. doi: 10.1111/jar.12255.
29. National Institute on Alcohol abuse and Alcoholism. Module 01 – Disabilities and Alcohol use disorders
30. Taggart L et al Listening to people with intellectual disabilities who misuse alcohol and drugs. Health Soc Care Community. 2007 Jul;15(4):360-8.
31. Cosden M, Risk and resilience for substance abuse among adolescents and adults with LD. 155-61J Learn Disabil. 2001 Jul-Aug;34(4):352-8.
32. Kiewik M, Substance use prevention program for adolescents with intellectual disabilities on special education schools: a cluster randomised control trial. J Intellect Disabil Res. 2016 Mar;60(3):191-200. doi: 10.1111/jir.12235. Epub 2015 Dec 2.
33. Kerr S et al Tobacco and alcohol-related interventions for people with mild/moderate intellectual disabilities: a systematic review of the literature. J Intellect Disabil Res. 2013 May;57(5):393-408. doi: 10.1111/j.1365-2788.2012.01543.x. Epub 2012 Mar 28.
34. NICE – Alcohol-use disorders. The NICE guideline on diagnosis, assessment and management of harmful drinking and alcohol dependence. Oct 2014.