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Review article

Substance use disorders in individuals with mild to borderline intellectual disability: Current status and future directions

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ABSTRACT

Knowledge regarding substance use (SU) and substance use disorder (SUD) in individuals with mild to borderline intellectual disabilities (ID) has increased over the last decade, but is still limited. Data on prevalence and risk factors are fragmented, and instruments for screening and assessment and effective treatment interventions are scarce. Also, scientific developments in other fields are insufficiently incorporated in the care for individuals with ID and SUD. In this selective and critical review, we provide an overview of the current status of SU(D) in ID and explore insights on the conceptualisation of SUD from other fields such as addiction medicine and general psychiatry. SU(D) turns out to be a chronic, multifaceted brain disease that is intertwined with other physical, psychiatric and social problems. These insights have implications for practices, policies and future research with regard to the prevalence, screening, assessment and treatment of SUD. We will therefore conclude with recommendations for future research and policy and practice, which may provide a step forward in the care for individuals with ID and SUD.

Contents

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1. Introduction

Although substance use (SU) and substance use disorders (SUD) among individuals with mild to borderline intellectual disability (ID; IQ 50–85, American Psychiatric Association [APA], 2013) have gained attention over the past decade, there are still many gaps in our knowledge on prevalence and risk factors (Carroll Chapman & Wu, 2012) and there is a dearth of tools for assessment and effective treatment interventions (Kerr, Lawrence, Darbyshire, Middleton, & Fitzsimmons, 2013). In addition, practitioners and researchers working with this target group insufficiently incorporate scientific developments in other fields, including addiction medicine and general psychiatry, into the care of and research on SU(D) in ID. For example, while in ID services SUD is commonly viewed as a relatively simple behavioural problem (Simpson, 2012), in addiction medicine SUD is generally seen as a chronic brain disease (Hyman, 2005), which is characterised by the persistent desire to use and the inability to cut down or control SU, even in the face of negative consequences (APA, 2013)[2]. These insights should have consequences for the care and treatment of individuals with ID with SUD and the field of research on SU(D) in ID (Van Duijvenbode, Didden, Voogd, Korzilius, & Engels, 2012b). In this selective and critical review, we will first describe the current status and challenges regarding SU(D) in ID. We will then explore insights on the conceptualisation of SUD from general psychiatry and addiction medicine. Last, we will describe implications these conceptualisations have for the care and treatment of individuals with ID and SUD as well as future research in this area.

2. Current status

There is a growing body of research on SU(D) among individuals with ID, who have been identified as a risk group for more severe negative consequences of SU (Slayter, 2008) and for developing SUD (Burgard, Donohue, Azrin, & Teichner, 2000; McGillicuddy, 2006). In this section, we will describe the literature on the prevalence and risk factors, screening and assessment and treatment of SUD in ID and the gaps in our current knowledge on these topics.

2.1. Prevalence and risk factors of substance use disorders

Although large population-based studies into SU(D) among individuals with ID are lacking, data suggest that all types of substances are used in this group (To, Neirynck, Vanderplasschen, Vanheule, & Vandevelde, 2014; VanDerNagel, Kiewik, Buitelaar, & De Jong, 2011). While alcohol is the main substance used and misused in both individuals with and without ID, percentages of alcohol use and misuse seem to be lower among those with ID and a large proportion of individuals with ID are teetotallers (i.e., they do not use any substances; Simpson, 2012; VanDerNagel, Kiewik, Buitelaar, et al., 2011). In a Dutch survey, the prevalence of the use and misuse of cannabis and other illicit drugs among individuals with ID, on the other hand, seemed relatively high compared to that in individuals without ID (VanDerNagel, Kiewik, Buitelaar, et al., 2011).

Based on previous studies, the total prevalence of SUD was estimated by Sturmey, Reye, Lee, and Robek (2003) around 0.5–2% of the ID population. In an American study using Medicaid files, Slayter (2010) found that 2.6% ($n = 9484$) of the clients with a diagnostic code for ID also had a code for SU related treatment. A capture-recapture analysis, however, showed that the reported 4.0% SUD in an ID facility and 5.2% ID in an addiction medicine service in the same region in The Netherlands had limited overlap. Single source data thus underestimate the population prevalence of co-occurring SUD and ID (VanDerNagel et al., 2014). The prevalence of SU(D) in ID also highly depends on sample characteristics (Carroll Chapman & Wu, 2012). For instance, in a British community-based study among 1023 adults with mild to profound ID, Cooper, Smiley, Morrison, Williamson, and Allen (2007) found 1% of SUD diagnosis, while McGillicuddy and Blane (1999) found 21% alcohol misusers in a community sample ($n = 122$) with mild to moderate ID in the US. In referred samples (see e.g., Chaplin, Gilvarry, & Tsakanikos, 2011; Didden, Embregts, Van der Toorn, & Laarhoven, 2009) or forensic samples (see e.g., Hassiotis et al., 2011;

[2] According to the APA (2013), SUD encompasses a wide range of disorders from mild to a severe state of chronically, relapsing and compulsive substance use. Substances are used in larger amounts or over a longer period of time than was intended, despite having knowledge of the adverse physical, psychological, social and interpersonal problems related to SU or even in the face of these consequences. As opposed to SUD, SU does not lead to these adverse consequences or risks.