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BRIEF REPORT: Comparison of Clients With Mild and More Severe Intellectual Disabilities Referred to a Dual Diagnosis Service

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Abstract

Among those with a dual diagnosis, clinical profiles may differ by functioning level (mild versus severe intellectual disability). Few studies have examined these differences. This study examined differences in rates of primary diagnosis, prescribed medication, risk classification for problem behaviours, and demographic variables between individuals with mild and more severe intellectual disability (ID). Schizophrenia was more common in adults with mild ID and individuals with moderate to severe ID were more likely to be classified as presenting with significant disruptive, destructive or aggressive behaviour. The two groups displayed similar psychotropic medication profiles. Possible implications of these results are discussed.

The prevalence of mental illness is greater in those with intellectual disability (ID) relative to the general population (Pyles et al., 1997), and there has been increasing recognition of the need for specialized clinical services to support individuals with ID and mental health issues. Within this population, both the prevalence of mental health concerns and approaches to respond to such concerns may vary with cognitive ability. For instance, there have been conflicting reports on the prevalence of mental illness in individuals with more mild disability relative to those with more severe disability. Reiss et al. found no difference in overall prevalence of psychiatric symptomatology, while Holden et al. found mental illness to be more prevalent in participants with moderate ID than in people with severe and profound ID (Holden & Gitlesen, 2004; Reiss, 1988). In addition, it is complicated to diagnose psychotic disorders in individuals with more severe disabilities (Reid, 1993). In general, the treatments for individuals with more severe disabilities require more caregiver involvement than may be the case for those with more mild disabilities. However, few studies have compared the clinical profiles of these groups, even though a better understanding of their respective profiles could assist clinicians in better meeting their needs.

In the present study, the relationships between psychiatric symptomatology and other variables of interest were examined in individuals with mild versus more severe ID. Demographic variables, history of medication, and levels of risks for challenging behaviours were considered along with psychiatric diagnoses in a sample of 103 clients from the Dual Diagnosis Program at the Centre for Addiction and Mental

Health. It was found that schizophrenia was more common in the mild group and that both groups exhibited challenging behaviours. The findings from this study add to the literature of psychiatric symptomatology and relationship with other variables of interest in individuals with ID.

Method

Participants

The sample was composed of 103 outpatient and inpatient clients receiving services between 2006 and 2008 from the Dual Diagnosis Program at the Centre for Addiction and Mental Health, a tertiary level service for individuals with a dual diagnosis from across Toronto and Peel regions. At the time of referral, 11 individuals were diagnosed with borderline intellectual functioning, 46 with mild ID, 3 with borderline/mild ID and 26 with moderate and 17 with severe ID. For these analyses, clients were divided into two groups (borderline/mild and moderate/severe) based on the level of disability recorded in their medical chart.

Measures

In addition to demographic data collected upon referral to the program, clients were also classified as "mild risk," "major risk," or "no risk" for a range of challenging behaviours, based on caregiver ratings. A history of psychiatric diagnoses and medication information was also included in their charts.

Procedure

A retrospective chart review was conducted to collect demographic, diagnostic, behavioural and medication information for inpatients and outpatients of the Dual Diagnosis Program at CAMH between 2006 and 2008. This study was approved by the Research Ethics Board at the Centre for Addiction and Mental Health.

Results

Chi square analyses were used to test the significance of differences among the two groups. *P*-values less than 0.05 were considered significant. Bonferroni corrections were not used.

Demographic Variables

Demographic information is shown in Table 1. The two groups did not differ significantly with regard to gender (50/50 versus 63/37) or distribution across age categories. The mean age of clients with borderline/mild ID (M = 35.38, SD = 12.07) did not differ significantly from clients with moderate/severe ID (M = 32.77, SD = 12.31) ($t = 1.076$, $p = 0.285$).

Primary Diagnosis

Diagnostic information was available for 53 individuals with borderline/mild ID and 40 individuals with moderate/severe ID and is shown in Table 2. Anxiety, mood, personality and other disorders were grouped together due to a small number of patients within each category. The separate trend in all four of these categories was the same and the combined categories showed no difference between the two groups. Individuals with mild ID were more likely to be diagnosed with schizophrenia than individuals with more severe ID. Individuals with moderate/severe ID were less likely to have a psychiatric diagnosis at the time of referral to service than individuals with a mild disability.

Risk Classification for Problem Behaviours

Information regarding risk classification for problem behaviours was available for 20 individuals with borderline/mild ID and 19 individuals with moderate/severe ID and is shown in Table 2. Each of these clients was classified as either mild, major or no risk in three separate categories (disruptive, aggressive, and destructive behaviour) resulting in 60 observations for individuals with borderline/mild ID and 57 observations for individuals with moderate/severe ID.

Individuals with moderate/severe ID were more likely than individuals with borderline/mild ID to be classified as major risks for disruptive, destructive or aggressive behaviour according to caregiver report at the time of referral. Individuals with borderline/mild ID were more likely than individuals with moderate/severe ID individuals to be classified as no risk for disruptive, destructive, or aggressive behaviour. Individuals with moderate/severe ID

Table 1. Differences in demographic variables and primary diagnoses between individuals with mild/ borderline ID and individuals with moderate/severe ID

	Borderline/ Mild ID n (%)	*Moderate/ Severe ID n (%)*	χ^2	*p-value*
Gender	*n* = 60	*n* = 43		
Male	30 (50.0)	27 (62.8)	1.658	0.198
Female	30 (50.0)	16 (37.2)		
Age	*n* = 60	*n* = 43		
0–20	6 (10.0)	7 (16.3)	0.895	0.344
21–40	35 (58.3)	28 (65.1)	0.485	0.486
41–60	18 (30.0)	7 (16.3)	2.566	0.109
61+	1 (1.7)	1 (2.3)		
*Primary Axis I Diagnosis				
Psychotic disorder	*n* = 53	*n* = 40	11.699	0.001
Other (Anxiety, mood,	16 (30.2)	1 (2.5)	0.074	0.786
personality and other	20 (37.7)	14 (35.0)	8.25	0.004
disorders)	17 (32.1)	25 (62.5)		
No Axis I Diagnosis				

** "Primary Axis 1 Diagnosis" refers to the individual's primary mental health diagnosis, based on categories in the Diagnostic and Statistical Manual of Mental Disorders (APA, 1994).*

Table 2. Risk classification for disruptive, destructive, or aggressive behaviour and prescribed medication for individuals with

	Borderline/ Mild ID n (%)	*Moderate/ Severe ID n (%)*	χ^2	*p-value*
Risk classification	*n* = 60	*n* = 57	6.282	0.012
Major Risk	16 (26.7)	28 (49.1)	0.000	0.993
Mild Risk	21 (35.0)	20 (35.1)	7.477	0.006
No Risk	23 (38.3)	9 (15.8)		
Medication	*n* = 48	*n* = 40	0.162	0.683
Anti-Depressants	16 (33.3)	12 (30.0)	0.183	0.669
Anxiolytics	25 (52.1)	19 (47.5)	2.994	0.084
Anti-Psychotics	37 (77.1)	24 (60.0)	0.895	0.344
Other (Mood-Stabilizers, Stimulants, Anti-Convulsants, and Beta-blockers)	18 (37.5)	19 (35.8)		

and individuals with borderline/mild ID were equally likely to be classified as mild risks for disruptive, destructive, or aggressive behaviour.

Prescribed Medication

Medication information was available for 48 individuals with borderline/mild ID and 40 individuals with moderate/severe ID and is shown in Table 2. Individuals with moderate/severe ID and individuals with borderline/mild ID were equally likely to be prescribed anti-depressants, anxiolytics, and other medications (mood stabilizers, stimulants, anti-consultants, and beta-blockers). There was a non-significant trend for more anti-psychotics prescribed to individuals with borderline or mild ID relative to individuals with moderate/severe ID.

Discussion

This study compared individuals with mild ID to individuals with more severe ID and found significant differences between these two groups. Individuals with more severe ID were less likely to have a psychiatric diagnosis at the time of referral to the program when compared to individuals with mild ID. These results concur with Holden and Gitlesen (2004), who found that psychiatric symptomology decreases with severity of ID. In addition, this study found that individuals with more severe ID were more likely to be classified as risks for problem behaviours than individuals with mild ID. This is the same pattern reported by Moss and colleagues for self-injurious behaviour (2000). It has been hypothesized that problem behaviours occur with great frequency among individuals with ID because of a frustration with the inability to communicate with others, among other reasons (Carr et al., 1996). This might explain why individuals with moderate or severe ID were more likely to be classified as risks for problem behaviours, as their inability to communicate is greater than that of individuals with borderline or mild ID.

Regardless of the cause of these problem behaviours, the individuals with moderate or severe ID in this study are experiencing distress worthy of attention from a mental health team, yet their symptoms may not fall under the classification of a traditional disorder. It may be that internal symptoms of disorders (particularly psychotic disorders) are more difficult to diagnose in individuals with moderate or severe ID. Holden and Gitlesen (2004) have suggested that standard psychiatric examinations are less useful for individuals with severe ID. Alternatively, this could be a case of "diagnostic overshadowing" as the problem behaviours observed in individuals with moderate or severe ID may be attributed to the severity of ID, and an additional diagnosis may not be made (Mason & Scior, 2004).

This study also found that individuals with more severe ID are just as likely as individuals with mild ID to be prescribed antidepressants, antipsychotics and anxiolytics, despite being less likely to be given an additional diagnosis beyond ID. It is possible that psychiatrists are prescribing medication based on problem behaviours observed rather than psychiatric diagnoses in this group. There is limited evidence for the efficacy of medications for behavioural problems. For instance, Tyrer and colleagues found that anti-psychotics had no greater effect than placebos in reducing aggressive behaviour in individuals with ID (2008). It is important that when individuals with more severe disability are prescribed psychotropic medications for behaviour as opposed to an underlying psychiatric condition, that behaviour monitoring is taking place so that one can objectively determine whether the medication has the hypothesized benefit.

A major limitation of this study is the small sample size. These analyses should be replicated with a larger sample, since the current findings include non-significant trends that are hindered by the low power of the analysis.

Clinical services like the Dual Diagnosis Program can meet the needs of individuals across the range of cognitive functioning. Therefore, in designing services, service providers should recognize that individuals with differing levels of ID may have unique needs. For example, restricting a service to individuals with a formal psychiatric diagnosis would prevent individuals with more severe disabilities from accessing services, even though they have significant behavioural issues, similar medication profiles and a clear need for such services. Future research should explore exactly how the psychiatric symptoms in the two groups differ and why these symptoms are leading to similar rates of psychotropic medication use between the two groups.

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