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Brief report

Bipolar disorder among adolescents and young adults: Results from an epidemiological sample

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ABSTRACT

Background: Over the past decade, the clinical recognition and treatment of bipolar disorder (BD) in youth have increased significantly; however, little is known about prevalence of and service use for this disorder at a population level. The objective of this study was to measure the lifetime prevalence of BD, and to describe the socio-demographics, comorbidities, and use of mental health services among 15–24-year-olds with BD.

Methods: Data were extracted from the Canadian Community Health Survey: Mental Health and Well-being (CCHS 1.2), a representative population-based survey of 36,984 people age 15 and older. Among subjects age 15–18 and 19–24 ($N=5673$), we calculated lifetime prevalence rates of BD and report the demographic and clinical characteristics and rates of service use of this sample.

Results: The weighted lifetime prevalence of BD was 3.0% among 15–24-year-olds ($N=191$): 2.1% among 15–18-year-olds, and 3.8% among 19–24-year-olds. Rates of psychiatric comorbidity were high, with anxiety disorders, problematic substance use, and suicidality present among nearly half of the sample. Mental health services were accessed in the previous 12 months by 56.1% of youth with BD.

Limitations: The questionnaire used in CCHS 1.2 relied on self-report, limiting its applicability to this younger sample.

Conclusions: BD is particularly common among young adults and there are specific factors associated with BD in youth. Nearly half of all youth with BD have never used mental health services, suggesting that clinicians should be more vigilant about the signs and symptoms of BD in young people.

1. Introduction

Bipolar disorder (BD) is a chronic and severe mental illness and a leading cause of medical disability worldwide (Murray and Lopez, 1997). BD has a typical onset in adolescence or young adulthood (Grant et al., 2005; Kogan et al., 2004), an age normally associated with increasing independence and the establishment of future professions and significant relationships. When BD presents during this critical period, it can have a profound impact, and is clinically associated with poor prognosis in young adulthood and beyond (Leverich et al., 2007).

Despite the recent increase in the diagnosis and treatment of BD in the younger population (Moreno et al., 2007), only a minority access treatment (Leverich et al., 2007). Even when they receive mental health services, young patients with BD are

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often misdiagnosed with other conditions such as unipolar depression (Perlis, 2005). The under-recognition and misdiagnosis of BD are major barriers to effective treatment.

Although BD poses a significant burden on youth and their families, there are few nationally-representative studies examining the prevalence of BD and related characteristics among adolescents and young adults. The National Comorbidity Survey — Replication (NCS-R) estimated the total lifetime prevalence of DSM-IV BD type-I as 1.0% among adults over 18 (Merikangas et al., 2007), BD-I and II together as 3.9% among adults, and 5.9% among 18–29-year-olds (Kessler et al., 2005). The National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) reported a lifetime prevalence of DSM-IV BD-I of 3.3%, and 5.0% among 12–29-year-olds (diagnosed retrospectively from age 18–29) (Grant et al., 2005); however, neither study focused specifically on characteristics associated with BD in youth. Jonas et al. (2003) estimated the lifetime prevalence of DSM-III BD-I and II among 17–19 year olds as 1.6% in the Third National Health and Nutrition Examination Survey (NHANES III), and 0.9% in the Epidemiologic Catchment Area Study (ECA) population. While this study did use the NHANES III sample to calculate lifetime prevalence among youth and reported specific characteristics associated with BD in the general population, it did not examine these factors associated with BD in adolescents and young adults specifically. Separate analyses of adolescents and young adults are warranted due to differences in residential status (i.e. still living with parents/family vs. independently), degree of financial independence, and differences in mental health service provision (children's vs. adult mental health systems).

Although not a nationally representative sample, Lewinsohn et al. (2000) conducted the largest community study of specific demographic and psychological factors associated with BD in youth to date. Lewinsohn et al. (2000) followed a group of Oregon high school students aged 14–18, and found they had a lifetime prevalence of DSM-IV BD-I, II or cyclothymia of approximately 1% as adolescents (14–18 years old) and 2.1% as young adults (24 years old). Young adults with BD exhibited greater psychosocial impairment and poorer global functioning compared with young adults with no psychiatric diagnosis. This study was limited by its relatively small sample size and geographical area of interest.

In light of the increased severity, persistence, and impact of this illness associated with an earlier age of onset, the paucity of nationally-representative data on BD in the adolescent and young adult population merits further study of this disorder in youth. Using the Canadian Community Health Survey: Mental Health and Well-being (CCHS 1.2), a nationally-representative survey, we present the estimated lifetime prevalence, clinical characteristics, and rates of service use of BD in Canadian adolescents aged 15–18 and young adults aged 19–24.

2. Methods

2.1. Subjects

The survey sample was drawn from the CCHS 1.2, a nationally-representative community mental health survey conducted by Statistics Canada in 2002. CCHS 1.2 surveyed persons 15 years or older who were randomly selected from private households. Structured interviews were conducted using the World Mental Health–Composite International Diagnostic Interview (WMH-CIDI), a well-validated questionnaire which is based on Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV) criteria to establish psychiatric diagnosis (American Psychiatric Association et al., 2000; Kessler and Ustun, 2004; Kessler et al., 2006). The survey also collected data on demographics, clinical characteristics, and mental health service utilization. Subjects were interviewed in person at their home whenever possible; the remainder (14%) were assessed over the phone. Full methodological details of this survey have appeared elsewhere (Gravel and Beland, 2005).

The total sample size for the CCHS 1.2 was 36,984; we focused on a subsample of individuals ages 15–24, which consisted of 5673 individuals.

2.2. Bipolar disorder diagnosis

Manic episode was defined by DSM-IV criteria (elevated or expansive mood plus ≥3 additional manic symptoms or irritable mood plus ≥4 symptoms) causing significant impairment and not attributable to medications, drug or alcohol use, or medical causes. CCHS 1.2 criteria differed from DSM-IV criteria only in duration of episode: while DSM-IV criteria require a distinct period lasting at least 1 week or any duration requiring hospitalization, the CCHS 1.2 interview based diagnosis on a period of "several days or longer." If they met study criteria for a lifetime manic episode, subjects were diagnosed with BD, most closely resembling bipolar disorder type-I but for the difference in episode duration. The sample likely included subjects with BD type I as well as BD-II and "not otherwise specified" but the CCHS 1.2 interview did not include criteria required to accurately differentiate these subgroups of BD.

2.3. Illness history and psychiatric comorbidity

Lifetime history of comorbid anxiety disorder was determined by the DSM-IV criteria for panic disorder, agoraphobia, or social phobia; other anxiety disorders were not assessed. Twelve-month history of a comorbid substance use disorder was defined as heavy alcohol use (≥5 drinks per occasion, ≥1 time per month) or heavy illicit drug use (average ≥1 time per month), associated with ≥1 DSM-IV criterion for substance abuse or dependence. Suicidality was defined based on the presence of current or past suicidal ideation or suicide attempts.

2.4. Demographic variables

Age, sex, and ethnicity (white or non-white) were determined for the sample, as well as education status (full-time or not) and employment status (full-time or not). Income adequacy (either low income or not low income) was determined according to household income with a threshold level based on number of household residents (<$15,000 for 1–2 household residents, <$20,000 for 3–4 residents, and <$30,000 for 5 or more residents). We also examined urbanicity, based on the respondent's enumeration area according to Statistics Canada criteria.