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Research report

Service use among Mexico City adolescents with suicidality

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ABSTRACT

Background: We report the lifetime and 12-month prevalence and associations of mental health treatment among Mexican adolescents with suicide-related outcomes (SROs; including ideation, plans, gestures and attempts).
Methods: A representative multistage probability household survey of 3005 adolescents aged 12 to 17 years residing in the Mexico City Metropolitan Area was carried out in 2005. Discrete-time survival analyses were used to assess the relationships between SROs and receiving treatment for emotional, alcohol, or drug problems.
Results: The prevalence of lifetime service use among respondents with SROs was 35% for those with ideation only, 44% for those with ideation and plan, 49% for those with gesture and 50% for those with attempt; the prevalence of 12-month service use was 10%, 24%, 6% and 21%, respectively. Timing between onset of SRO and receiving treatment for emotional, alcohol, or drug problems showed that about 50% of adolescents will have contact with a service provider before developing any SRO. Healthcare professionals were the most likely to be consulted, followed by school-based programs.
Limitations: This survey was limited to adolescents living in one of the largest metropolitan areas in the world and the analyses used data on retrospectively reported ages of onset that are subject to recall errors.
Conclusions: Most suicidal adolescents do not receive treatment, and many adolescents develop their suicidality in spite of prior contacts with service providers. Interventions to increase treatment, prevention, and monitoring are sorely needed for this vulnerable population.

1. Introduction

Suicidality is a persistent mental health problem. Among respondents in adult community samples, about 30% of ideators reported additional episodes during a 10-year follow-up (Borges et al., 2008a), and in clinical samples, suicide re-attempt post-discharge is frequent (Prinstein et al., 2008; Cooper et al., 2006). Only a minority of adolescents with psychiatric disorders receive some form of mental health treatment in Mexico (Borges et al., 2008a,b,c), and even those adolescents with the most severe disorders often remain untreated (Benjet et al., 2009). Surveys of the general adult population in Mexico have shown that those with suicide ideation, plan and attempt have higher rates of 12-month treatment for emotional, alcohol, or drug problems than those without suicidality (Borges et al., 2005). Similarly, research on adolescents around the globe, mainly in developed societies, has shown higher rates of visits to a primary care provider among completed suicides (62.4% with primary care

Abbreviations: SROs, Suicide-related outcomes; MAMHS, Mexican Adolescent Mental Health Survey; WMH-CIDI-A, World Mental Health computer assisted adolescent version of the Composite International Diagnostic Interview; Ors, odd-ratios.

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providers one year before the suicide; Luoma et al., 2002) and among those with suicide ideation (36.7% lifetime use; De Leo et al 2005; 64.4% 12-month use; Kessler et al., 2005) and attempts (98% 12-month use; Suominen et al., 2002; 42% lifetime use; De Leo et al., 2005; 79% 12-month; Kessler et al., 2005). However, it is important to examine the use of mental health resources among suicidal adolescents in less developed countries, which often have much more limited capacities to provide mental health care in general (Wang et al., 2007).

In addition to documenting rates of mental health treatment after adolescents develop suicidality, it is also important to examine whether there had been opportunities for providers to intervene prior to the development of suicidality (Suominen et al., 2002; Seymour-Barnes et al., 2001; Houston et al., 2003; Suominen et al., 2004). Studies among completed suicides have shown that about 50% of adolescents that die by suicide had, at some time, consulted with the health care system (Beautrais, 2003). Follow-ups of suicide attempt cases suggest that 71% had seen their general medical provider (GP) in the 12 months prior to the index attempt (Houston et al., 2003) and as many as 89% (Suominen et al., 2004) consulted any type of health provider before the index attempt. After the index attempt, 73% (Houston et al., 2003) consulted again within 12 months with their GP and 93% did so with other types of providers (Suominen et al., 2004).

Prior studies of treatment rates among suicidal adolescents do not always differentiate between ideation, plans, gestures and attempts (Cheung and Dewa, 2007; Freedenthal, 2007; Pirkis et al., 2003; Rhodes et al., 2006; Benjet et al., 2007) and usually focus on a single measure such as attempt. More detailed analyses of these different forms of suicidal behavior may lead to new insights on where to allocate scarce treatment resources (Kessler et al., 2005). Finally, reasons for and potentially modifiable determinants of mental health treatment among adolescents with suicidality are largely unknown, with little prior research controlling for the presence of concurrent mental disorders (Pirkis et al., 2003; Houston et al., 2003). All of this information is crucial to guide the development and targeting of effective interventions to increase treatment, prevention, and monitoring of suicidality among adolescents.

1.1. Objective

In 2005, the National Institute of Psychiatry in Mexico conducted the Mexican Adolescent Mental Health Survey (MAMHS), a representative household survey of 3005 adolescents aged 12 to 17 residing in Mexico City (Benjet et al., 2007). In order to address the lack of information about the relationships between suicidality and treatment for emotional, alcohol, or drug problems in developing countries, we report here on the lifetime and 12 month rates of mental health service use (in three service sectors: healthcare, non-healthcare and school-based) among adolescents with suicide-related outcomes (SROs; including suicidal ideation, suicide plan, gesture and attempt), the temporal order of suicidality and consultation, and potential determinants of mental health treatment.

2. Method

2.1. Participants

The MAMHS survey was designed to be representative of the 1,834,661 adolescents aged 12 to 17 that are permanent residents of private housing units in the Mexico City Metropolitan Area. The final sample included 3005 adolescent respondents selected from a stratified multistage area probability sample. In all strata, the primary sampling units were census count areas—or groups of them, similar to US census tracts, cartographically defined and updated by the Instituto Nacional de Estadística, Geografía e Informática (INEGI) in 2000 (INEGI, 2000). Secondary sampling units were city blocks (or groups of them) selected with probability proportional to size. All households within these city block units with adolescents aged 12 to 17 were selected. One eligible member from each of these households was randomly selected. The response rate of eligible respondents was 71%. Details about the survey have been presented elsewhere (Benjet et al., 2009).

2.2. Procedures

Fieldwork, which involved face-to-face interviews in the homes of the selected participants, was carried out from March through August 2005. An oral and written explanation of the study was given to both parents and adolescents. Interviews were administered only to those participants for whom signed informed consents were obtained from a parent/legal guardian and the adolescent. All study participants were left a mental health resources card with contact information for different institutions where they could seek services should they wish to do so. The Human Subjects Committee of the National Institute of Psychiatry approved the recruitment, consent and field procedures.

A number of actions were taken for quality assurance, such as extensive interviewer training, elaboration of field manuals, and continuous feedback and independent supervision of field managers, supervisors and interviewers. Finally, quality control programs designed for the World Mental Health Survey Initiative were used to identify possible errors regarding the dating of events (onset and recency, age consistency, etc.), as well as possible missing patterns, and to introduce corrected values when possible (Kessler et al., 2004). Dating of events is available only at yearly intervals.

2.3. Measures

Suicidal outcomes, receiving treatment for emotional, alcohol, or drug problems and potential risk factors were assessed in the Mexican Adolescent Mental Health Survey using the World Mental Health computer assisted adolescent version of the Composite International Diagnostic Interview (WMH-CIDI-A) (Kessler and Ustun, 2004). The translation of the adolescent instrument was done according to the translation and back-translation recommendations of the World Health Organization. The fieldwork was conducted by Berumen and Associates, an established survey research firm in Mexico that employed interviewers who had received