High rates of psychiatric disorders in a sample of Brazilian children and adolescents living under social vulnerability – urgent public policies implications

Altas taxas de transtornos psiquiátricos em uma amostra de crianças e adolescentes brasileiros que vivem em vulnerabilidade social - implicações urgentes em políticas públicas

Dear Editor,

The United Nations estimate that there are 100 million children living in the streets around the world. Many of them are victims of early emotional stress (EES), such as physical and sexual abuse, and severe socioeconomic problems, that may increase the prevalence of psychiatric disorders (PD). However, there is a gap between the needs of this population and the health services available, which tend to focus on substance use disorders (SUD) and underestimate other mental problems.

The aim of this letter was to report the prevalence of PD in a sample of Brazilian children and adolescents living under conditions of social vulnerability and a history of EES. From June 2007 to September 2009, 351 children and adolescents were referred to The Equilibrium Project (TEP) by shelters, Children's Court, and Guardianship council. TEP's target population is children and adolescents that are separated from their family because they had run away from home or were sent to foster centers by the Justice System and, sometimes, their siblings who are still at home. They underwent a careful clinical psychiatric evaluation. Participants were interviewed and observed alone. In some cases (when available), they were also observed interacting with their parents, legal guardians, or caregivers. Demographic and clinical information were obtained by a semi-structured psychiatric interview, which includes detailed sociodemographic

information and questions about the medical past and current history, neurodevelopmental history, drug use, and family-related mental disorders. All diagnoses were made by trained psychiatrists, discussed with the interdisciplinary team, and reviewed by an expert in child and adolescent psychiatry (S.S.)

The sample was formed predominantly by males (68%) with average age between 12 and 19 years old (65%) (range from 3 to 19 years old). The lifetime prevalence of PD was 88.8% (n = 312). The most prevalent were substance use (SUD; 40.4%, n = 142), mood (35.3%, n = 124), hyperkinetic (16.2%, n = 57), and anxiety disorders (8.8%, n = 31). More than half of our sample showed a lifetime history of physical or sexual abuse: 58.4% (n = 205); 13.1% (n = 46) were both physically and sexually abused. Additionally, many of them suffered from other variable psychosocial stress, such as admission to a foster center (84.6%, n = 297) or institutional education (39.8%, n = 140).

The present data reveals high rates of PD, such as SUD, mood, hyperkinetic, and anxiety disorders associated with early emotional stress. It is relevant to consider that the rate of depression was more than 30 times higher than that found (1%) in an epidemiologic survey in Brazil conducted with children living with their families.<sup>3</sup> Comparing with international surveys of children living in foster centers, our prevalence of emotional and behavioral problems is still 1.8 times higher.<sup>4</sup>

Although SUD are common among homeless youth, the high prevalence of internalizing problems, such as mood disorders, shows the importance of a global assessment.<sup>5</sup>

However, there are some limitations in our study such as the lack of a structured instrument to evaluate psychiatric diagnoses. Another potential limitation is a possible referral bias, because

some of our children may be referred for their psychiatric disorders, although TEP provides intervention for both primary and secondary prevention.

In conclusion, our data highlight that our country urgently needs a critical evaluation of the mental health services provided, and must develop effective treatment programs including outcast youth, such as those living on the streets, shelters, and in poverty regions. In order to provide a better care, a comprehensive interdisciplinary approach, and urgent public policies are mandatory.

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## Disclosures

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Thiago Fernando da Silva	FMUSP	FAPESP* CNPq*	-	-	-	-	-
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Note: FMUSP = Faculdade de Medicina, Universidade de São Paulo; IPq-FMUSP = Instituto de Psiquiatria, Faculdade de Medicina, Universidade de São Paulo; FAPESP = Fundação de Amparo à Pesquisa do Estado de São Paulo; CNPq = Conselho Nacional de Desenvolvimento Científico e Tecnológico; FFM = Fundação Faculdade de Medicina; NIDA = National Institute on Drug Abuse. For more information, see Instructions for authors.

### References

- United Nations (UN). Education Primary Education. [cited 2009 Dec 20].
  Available from: http://portal.unesco.org/education/en/ev.php-URL\_ ID=32968&URL\_DO=DO\_TOPIC&URL\_SECTION=201.html
- Fleitlich B, Goodman R. Social factors associated with child mental health problems in Brazil: cross sectional survey. BMJ. 2001;323(7313):599-600.
- Fleitlich-Bilyk B, Goodman R. Prevalence of child and adolescent psychiatric disorders in southeast Brazil. J Am Acad Child Adolesc Psychiatry. 2004;43(6):727-34.
- 4. Burns BJ, Phillips SD, Wagner HR, Barth RP, Kolko DJ, Campbell Y, Landsverk J. Mental health need and access to mental health services by youths involved with child welfare: a national survey. J Am Acad Child Adolesc Psychiatry. 2004;43(8):960-70.
- Yoder KA, Longley SL, Whitbeck LB, Hoyt DR. A dimensional model of psychopathology among homeless adolescents: suicidality, internalizing, and externalizing disorders. *J Abnorm Child Psychol.* 2008;36(1):95-104.

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