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Brief report

Bipolar disorder incidence between children and adolescents: A brief communication

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ABSTRACT

Background: Bipolar affective disorder is one of most injurious psychiatric diseases, not, rarely leading patient for suicide, and its prevalence keeps increasing worldwide, notably on low and, middle-income countries. For children living in northeast Brazil, extreme social conditions constitute, an environment of special vulnerability.

Objective: Here we show that bipolar disorder incidence, between children and adolescents in this Brazilian region increased 34.2% from 2005 to 2014 and, in, the same area and age group, deaths provoked by self-caused injuries also became progressively, greater.

Results: According to DATASUS, the Brazilian national databank for public health, information, in the last five years, we observed an increase of Bipolar Disorder incidence rates under, 19 year-old of about 34.2% in the northeast region of Brazil, while the increase for Brazilian general, population was 12.4%. If considered only patients under 10, this number is even greater, of 47.2%. Content of Table 2 shows this disproportion, while comparing the advance of bipolar disorder, morbidity indices nationwide and worldwide.

Conclusion: Children living in Brazil's northeast, region are in a condition of extreme social disadvantage, what can be determinant for the recent and, sequential increase of bipolar disorder prevalence and the mortality in this age-group due to suicide, one of possible reflections of untreated mood disorders. For protecting these children is important to, identify the factors which prevent these illnesses and promote resilience for these young people.

1. Introduction

Mental disorders have clearly negative influences for development of children and adolescents, provoking in these age groups irreversible damage for their personality and, more immediately, for their learning capacity (Fu-I, 2010). Bipolar affective disorder is one of most injurious psychiatric diseases, not rarely leading patient for suicide (Rush, 2003), and its prevalence keeps increasing worldwide, notably on low and middle-income countries (Collins et al., 2011). For children living in northeast Brazil, extreme social conditions constitute an environment of special vulnerability. Here we show that bipolar disorder incidence between children and adolescents in this Brazilian region increased 34.2% from 2005 to 2014 and, in the same area and age group, deaths provoked by self-caused injuries also became progressively greater (DATASUS, 2011, 2011). In the second half of last decade, mortality due to suicide between 10 and 19 years old achieved the maximum rate of 2.165 per 100,000 inhabitants, 20% greater than average worldwide indices (World Health Organization, 1999; Bertolote and Fleischmann, 2002).

These trends reveal numerically the reality of social abandonment these children and adolescent face daily in their lives, even with the recent increase of population's medium income and the relatively efficient governmental assistance programs for poor families. The worldwide-known positive changes in Brazilian economy were not followed by the expected providing of adequate public policies for young people, especially in the northeast region, leaving children and adolescents in contact with stressing factors,

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familiar problems, violence, alcohol and drugs (Brown and Harris, 1989). This combination, in addition to childhood and adolescence natural fragilities and mood fluctuations made them vulnerable to development of bipolar disorder (Alloy et al., 2005). Establishment of the psychopathology and the persistence of those stressing factors is what takes them to the extreme consequence: suicide.

Mental disorders have an important repercussion over children development. In these age groups, they can cause irreversible injuries for their personality characteristics and, more immediately, for their learning capacity, for example (Fu-I, 2010). Childhood and adolescence are both naturally periods of changes, doubts and mood fluctuation, what makes them more susceptible for developing psychopathologies such as anxiety disorders and disruptive behavior disorders (Faedda et al., 2014). Therefore, the attention for mental health in this age group should be even more intense, once the symptoms of many psychiatric illnesses in these patients are different from those presented by adults (American Psychiatric Association [APA], 2000). In some cases, social or environmental conditions can amplify this natural susceptibility for mental health problems in children, like for young people on northeast region of Brazil.

For general population, 60% of mood disorder episodes are preceded by stressing factors, notably with social origin (American Psychiatric Association [APA], 2000). It is important to highlight that this combination of genetic predisposition and global psychosocial stressing factors is fundamental to deflagrate the occurrence of complete episodes of mood disorders, but do not have significant influence for provoking the subsequent manifestations (Kessler, 1997; Lacerda-Pinheiro et al., 2014). Patients with bipolar disorder with or without positive dysregulation profile significantly differed from patterns regarding to of psychiatric comorbidity, psychosocial and psychoeducational dysfunction, and cognitive deficits, as well as in their risk for bipolar disorder in first degree relatives (Biederman et al., 2013). Psychiatric literature cites low socioeconomic level, occurrence of stressing life events, negative cognitive style, parental negligence or hostility, minor social support, social and sexual abuses as reasons for precipitation of mood disorders in children and adolescents (Lish et al., 1994). Most of these items are part of daily life of Brazilian northeastern children.

Brazil is the fifth world's largest country in territory extension. In the same territory, there are completely different places such as São Paulo and Rio de Janeiro, on southeast Brazil, strongly industrialized areas that concentrate most of nation's wealth, and areas of the northeast region, historically affected by income concentration, archaic rural economy, dry weather and principally lack of efficient social-based governmental policies. Recently, due to important improvements on national economy, which led for an expressive increase of Brazilian families' average income, this reality became slightly different, but not less preoccupant. Instead of hunger, which put several northeast children in risk some decades ago, drugs, alcohol, urban violence, children abuse and lack of opportunities probably constitute the stressing factors relationed with this increase in the incidence of mental disorders (Alloy et al., 2005; Kendler et al., 2003; Akiskal et al., 1985).

Depression, abuse of alcohol, schizophrenia and bipolar disorder are, in this sequence, the four most prevalent mental disorders in low and middle-income nations, according to the a study of World Health Organization's Global Mental Health Initiative (GMHI) (World Health Organization, 2004). Table 1 abstracts some results of the cited study, exposing the differences of mental, neurological and substance abuse diseases' prevalence between richer and poorer countries.

According to GMHI, the distribution of mental, neurological and substance-use disorders in low and middle-income countries differs from what is observed in high-income countries. Brazil, despite of being one of ten world's largest economies, has wealth concentration standards which classify it as a middle-income country to World Bank criteria, employed to stratify nations by that study (Collins et al., 2011). Bipolar disorder, although represents just the sixth most prevalent disorder in richer countries, is the fourth in the low and middle-income ones. According to this, the United States had the highest lifetime and 12-month prevalence of bipolar spectrum and the impropriate treatment is a serious public health problem (Merikangas et al., 2011, 2007). This difference can be justified by some of the vulnerability conditions we show here, because several areas of the world face the same reality of northeast Brazil.

Table 1
Differences of mental, neurological and substance abuse diseases' prevalence between richer and poorer countries (World Health Organization, 2004).

	High-income countries		Low-and middle-income countries
1	Unipolar depressive disorders	1	Unipolar depressive disorders
2	Alzheimer's and other dementias	2	Alcohol-use disorders
3	Alcohol-use disorders	3	Schizophrenia
4	Drug-use disorders	4	Bipolar affective disorder
5	Schizophrenia	5	Epilepsy
6	Bipolar affective disorder	6	Alzheimer's and other dementias
7	Migraine	7	Drug-use disorders
8	Panic disorder	8	Migraine

Bipolar affective disorder is a pathology characterized by an alternance depression and mania or hypomania phases. In the depressive phase, patient shows depressed mood, low self-esteem and considerable deficit of attention, while in the maniac phase, humor is exalted, happy or upset, and there are feelings of indestructibility, disinhibition and increase of physical and sexual capacities (American Psychiatric Association [APA], 2000; Kessler, 1997). This disorder occurs more frequently in individuals along the third decade of life and medical literature reports that first symptoms usually appear at 20 years-old (Lish et al., 1994; Akiskal et al., 1985). However, 17% of bipolar adult patients related the showing first symptoms before the age of nine (Fu-I, 2010). Psychiatrics already classified an early-starting type of bipolar disorder, responsible for the increasing incidence of this disturb between children and adolescents. Early-starting bipolar affective disorder has some specificities when compared with the same disorder on adult patients. For example, patients present episodes of depression as the first symptom, instead of a maniac episode, making more difficult to diagnose it correctly (Kendler et al., 2003).

Several pathologies, as cyclothymic disorder (Akiskal et al., 1977), can precede the development or arise along the course of bipolar disorder in children and adolescents (Akiskal et al., 1985). In this age group, the existence of comorbidities is almost the rule, instead of an exception[1]. Attention deficit disorder, hyperactivity, anxiety, alimentary disturbs, epilepsy and substance abuse are some of most frequent comorbid diseases which turn more difficult to diagnose and to give effective treatment for bipolar patients (World Health Organization, 2004; American Psychiatric Association [APA], 2000).

According to DATASUS, the Brazilian national databank for public health information, in the last five years, we observed an increase of Bipolar Disorder incidence rates under 19 year-old of about 34.2% in the northeast region of Brazil, while the increase for Brazilian general population was 12.4%. If considered only patients under 10, this number is even greater, of 47.2% (DATASUS, 2011).

For some psychopathologies, suicide represents, in patients' standpoint, the ultimate way to get free from what is burdening them. This can be perceived in some studies regarding to children suicide or childhood depression. In general, patients with bipolar disorder have