

Clinical Profile of Mood Disorders in Children

RAJESH SAGAR, RAMAN DEEP PATTANAYAK AND MANJU MEHTA

From the Department of Psychiatry, All India Institute of Medical Sciences, Ansari Nagar, New Delhi, India.

Correspondence to: Dr Rajesh Sagar, Additional Professor, Department of Psychiatry, All India Institute of Medical Sciences, Ansari Nagar, New Delhi 110 029, India. rajeshsagar@rediffmail.com

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Objective: To describe the clinical profile of pediatric mood disorders.

Design: Retrospective record review; Ages ≤ 16 y.

Setting: Tertiary case hospital.

Participants: Children ≤ 16 year with a DSM-IV diagnosis of Mood disorders.

Methods: Records were screened for the period between June 1, 2008 and May 31, 2010.

Results: The prevalence of mood disorders was 4.1% (38/930). Mood was depressed in 51.9% and irritable in

33.3% of depressive disorders. Other common symptoms were anhedonia, sleep/appetite disturbances, concentration difficulty and anxiety. Nearly 13.2% had suicidal ideation and 28.5% had comorbid psychiatric disorder. Family history was positive in 39.5%, while an identifiable stressor was present in 50%.

Conclusions: The pediatric mood disorders have a unique clinical presentation and requires more research, especially from Indian setting.

Key words: Children, Depressive disorders, Early-onset, India, Mood disorders, Pediatric.

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Over the past two decades, there is an increasing recognition that children and adolescents can have mood disorders beginning at a very young age [1]. The pediatric-onset disorders have a potential to affect the cognitive, emotional and social development of the child or adolescent and are a major source of morbidity and mortality [2,3]. The early age of onset is usually associated with a severe or recurrent disorder with significant academic and psychosocial impairment [3]. Unfortunately, many of the children and adolescents with these disorders remain undiagnosed and untreated [4].

The mood disorders broadly comprise of depressive and bipolar disorders, which are currently diagnosed using essentially the same criteria as in adults. Age-appropriate modifications have been specified in DSM-IV [5]. However, research over past decade indicates that there may be significant differences in terms of clinical presentation among children and adults [3]. Pediatric-onset disorders may even represent a special group of disorders with distinct phenomenology and etiopathogenesis [6]. The study describes the clinical profile of pediatric mood disorders presenting at a tertiary care hospital in India.

METHODS

This study is a two year retrospective review of clinical records of patients visiting our Child and Adolescent Clinic, a specialty clinic with a team of psychiatrists, psychologists and social workers-focusing on the mental health problems in children and adolescents. Records were screened for the period between June 1, 2008 and May 31, 2010. Patients aged 16 and below, belonging to either gender, who had been diagnosed to be suffering from mood disorders as per DSM-IV [5] were identified. Patients were excluded if psychiatric disorder was the result of medical disorder or substance use or if there was inadequate history or doubtful diagnosis. The relevant

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information was collected on a semi-structured data sheet, which included the sociodemographic details (age, gender, socioeconomic status, residence and education), risk factors (birth and early developmental details, parental age at conception, positive family history and psychosocial stressor, if any) and illness details (onset, course, duration and symptomatology). Data was analyzed by SPSS using descriptive statistics.

RESULTS

A total of 930 patients were evaluated in child and adolescent clinic over a period of two years, of which 38 patients (4.1%) were identified to have Mood disorders. Depressive disorders (2.9%; $n=27$) were twice as common as Bipolar disorders (1.2%; $n=11$).

The mean age of patients with mood disorders was 13.68 ± 2.53 years (13.70 ± 2.23 years for depressive disorders and 13.64 ± 3.29 years for bipolar disorders). There were 60.5% ($n=23$) males with an over-representation of males in depressive disorders (17:10). The mean years of education was 7.71 ± 2.62 and majority (84.2%; $n=32$) belonged to middle socio-economic status families. Most (76.3%, $n=29$) patients were from National Capital Region and rest were from neighboring states of Uttar Pradesh, Bihar and Haryana. Patients were accompanied by both parents (21.1%; $n=8$), either parent (68.4%, $n=26$), or a sibling or an uncle (10.5%, $n=4$).

Nearly 42.2% of mood disorders had onset of mood disorder in childhood (≤ 12 yrs). At the time of presentation, 7.4% of depressive disorders and 36.3% of bipolar disorders had a prior history of mood episode(s). There was a comorbid psychiatric disorder in 28.5% ($n=11$) of patients, in the form of anxiety disorder ($n=4$), Attention deficit hyperactivity disorder ($n=3$), conduct disorder ($n=2$) and dissociative disorder ($n=2$).

A family history of psychiatric illness was present

among 39.5% ($n=15$) of mood disorders. An identifiable stressor with a temporal relation to onset of illness was present in 50% ($n=19$) of mood disorders. The common stressors were in the form of an Illness, injury or death ($n=7$); interpersonal conflicts or scolding ($n=5$); academic stressors ($n=4$); change of school/house ($n=2$) and birth of a sibling ($n=1$). A history of perinatal complications was present in 2.6%. The age of father at the time of conception was ≤ 35 years in 13.2% ($n=5$), while the age of mother at the time of conception was ≤ 30 years in 26.3% ($n=10$).

DISCUSSION

In this study, the clinic prevalence for mood disorders was 4.1%, earlier clinic-based epidemiological studies from India have shown the prevalence of pediatric depressive disorders to vary between 1.2% and 5.9% [7]. The age of onset was ≤ 12 years in 42.2% of patients, retrospective adult studies have also reported that 20% of bipolar disorders may report the onset before ten years of age [8]. The study findings also suggest a contribution of genetic vulnerability as well as psychosocial stressors in onset of disorders, which is also reported earlier [1,9].

Some differences have emerged in our sample compared to the adult literature. Irritable, rather than euphoric or depressed mood, was found in a significant proportion of mood disorder patients. In previous studies, children with manic episode were found to have markedly and chronically elevated levels of irritability rather than

TABLE I CLINICAL SYMPTOMATOLOGY OF PEDIATRIC MOOD DISORDERS (N=930)

<i>Depressive symptoms (Unipolar)</i>		<i>Manic symptoms (Bipolar)</i>	
Depressed mood	51.9%	Mood disturbance	100%
Anhedonia	51.9%	Predominant cheerful	50%
Sleep/appetite disturbance	48.1%	Predominant irritable	50%
Decreased concentration	40.7%	Inflated self-esteem & grandiose ideas	100%
Anxiety symptoms	37%	Increase in goal directed activity	87.5%
Fatigue/weakness	33.3%	Overtalkativeness	75%
Decreased Interaction	33.3%	Decreased need to sleep	62.5%
Irritable mood	33.3%	Over demanding	62.5%
Hopelessness	18.5%	Distractibility	37.5%
Somatic symptoms	18.5%	Increased grooming	25%
Suicidal ideation	11.1%	Sexual disinhibition	25%
Psychotic symptoms (persecutory delusion)	11.1%	Increased libido	12.5%
Guilt	7.4%		
Depersonalization	3.7%		
Obsessive compulsive symptoms	3.7%		
Catatonia	3.7%		

WHAT THIS STUDY ADDS?

- Pediatric mood disorders have a unique clinical presentation. Both family history and psychosocial stressors play an important role.

euphoria, but some other researchers emphasize irritable mood to be significant only if co-occurring with elated mood or grandiosity in diagnosis of mania [8]. Younger age of onset has previously been associated with more frequent anxiety and somatic symptoms in depression [9,10]. In our study, anxiety symptoms were quite common, present in 37% of depressed patients, while somatic symptoms were not as frequent. The cognitive symptoms e.g., hopelessness and guilt were present less frequently in consonance with previous literature [12], perhaps due to a less evolved cognitive structure and relatively less capacity to articulate thoughts into words. Decreased concentration emerged as a significant concern for many child and adolescents patients, which also contributed to academic difficulties. Suicidal ideation is common in early onset mood disorders [7,15] and was manifested by 13.2% of sample, comprising of patients with unipolar and bipolar depression.

The present study adds to the limited Indian literature on pediatric mood disorders and describes their unique clinical presentation. It is, however, limited by absence of a prospective design, especially in view of issues concerning diagnostic stability. It is a hospital based sample with limited generalizability to community patients. There is also a need to study age-specific symptom manifestations in children during early and middle adolescence. Larger studies with prospective design are required to further elicit clinical and phenomenological aspects of pediatric major psychiatric disorders.

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