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Childhood Mood Disorders: Myth or Reality

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The concept of depressive syndrome and mania that is distinct from the broad class of childhood onset emotional disorders has a relatively short history. In the past it was felt that children, for theoretical reasons such as ‘immature personality structures’ could not experience extremes of mood. Depression in adolescents was viewed as a normal feature of development, so-called ‘emotional turmoil’. However, the last two decades saw intensive research in this area which has led to a reappraisal of the concept of childhood depression and its difference from adolescent depression. In contrast to adolescent depression, pre-adolescent depression is less likely to lead to adult depression, has more overlap with other disorders, is less prevalent, shows a male preponderance and is more strongly associated with family dysfunction [1].

The clinical presentation of bipolar-disorder (BD) in the pre-adolescent and early adolescent age groups is greatly debated, although mid- to late-adolescent-onset BD is considered similar to adult BD [2]. Apart from the classical descriptions of bipolar disorder, children presenting with “affective storms,” mood lability, severe irritability and temper outbursts, symptoms of depression, anxiety, hyperactivity, poor concentration, and impulsivity with or without clear episodicity, can attract the DSM IV diagnosis of bipolar disorder- not otherwise specified (BD-NOS) [3]. Over the past decade, there is a surge in the numbers of children and adolescents diagnosed with BD in USA. However, there is a considerable transatlantic debate and European skepticism over the high prevalence of pediatric BD in the US [2]. A large epidemiological study in the UK did not detect any cases of pre-adolescent

mania. Studies in psychiatric hospitals found BD in 0.0006% of hospitalized patients in Finland, 1.2% in Denmark, and 2.5-4.2% in India [4].

Additionally, the treatment for pre-pubertal affective disorder is controversial due to the limited evidence of the efficacy and safety of mood-stabilizer and antipsychotic medications in this population [5]. Ethical challenges in conducting clinical trials of psychotropic medications in children [6] and Blackbox warnings against the use of certain anti-depressants in this group has guidelines focusing on the efficacy of psychotherapy in depression [1] and off label clinical use of psychotropics. The proponents of the debate claim that the early detection and treatment of affective disorder would prevent adult morbidity and cite examples from adult psychiatry literature of retrospective studies claiming that a high percentage of affective disorders have roots in childhood and adolescence. The skeptics claim that affect-dysregulation can be a symptom of a broad range of clinical condition like ADHD, conduct disorder, developmental trauma and misdiagnosis and pharmacological treatment may be detrimental [5].

In the background of such global controversies, this study by Sagar, *et al.* [7] gives an interesting insight in the Indian clinical scenario. Although the study is retrospective, it shows bipolar disorder as being less common than depression, half with an onset in early childhood, presentation age being <13 years, lack of major psychosocial stressors in majority of the cases and male preponderance. The study doesn’t make clear distinctions in the clinical presentation between pre-pubertal and post-

pubertal presentations. However, the SD of <3 in both the groups indicate that there were a substantial number of patients below the age of 10 years and a significant number of patients in the bipolar group presented with >1 episode, indicating an earlier onset of the illness. Although difficult to extend the findings to any epidemiological trends in the Indian population, it sheds some light on the clinical presentation of mood disorders in the clinic based population from an Indian context, adding to the emerging literature and greater understanding of the concept of mood disorders in childhood.

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The Ignominy of Low birth Weight in South Asia

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Although estimates vary, it is recognized that more than 20 million infants worldwide, representing 16% of all births in developing countries, are born with low birth weight (LBW). The vast majority, over 95%, of these births are in developing countries [1]. More than two thirds (68%) of all LBW infants are born with evidence of intrauterine growth retardation (IUGR), the majority in South-Central Asia, where more than a quarter (27%) of all infants weigh less than 2500 g at birth [2]. Such IUGR infants mostly include those born at term (about 9.6% of all newborns weigh between 2000 and 2499 g at birth). They may also include preterm infants (an estimated 1.3% infants born globally weighing between 1500-1999 g at birth) or those born with a combination of prematurity and IUGR. Term IUGR infants have much higher rates of morbidity and neonatal complications including a higher risk of mortality [2]. It is estimated that newborn infants weighing between 2000–2499 g (those representing the majority with term IUGR) are 2.8 (95% CI 1.8-4.4) times more likely to die during the neonatal period than those weighing more than 2499 g at birth. Despite limited data from community settings, it is also known that the corresponding relative risks of dying

from birth asphyxia and infectious diseases are 2.3 (95% CI 1.3-4.1) and 2.0 (95% CI 1.2-3.4) for those weighing 2000-2499g at birth [2]. More importantly, the well documented long term effects of LBW, coupled with post-natal factors also highlight important links with the growing epidemic of non-communicable diseases [3].

Recognized major risk factors associated with term LBW include maternal undernutrition, frequently reflected with low maternal body-mass index [4], as well as placental insufficiency associated with severe morbidity such as pre-eclampsia. The potential role of multiple micronutrient deficiencies in affecting birth weight is underscored by several studies from South Asia attributing the IUGR to specific deficiencies and corroborated by the recognized effect of multiple micronutrient supplementation in pregnancy on increasing the birth weight [5]. These distal determinants of LBW are manifestations of a number of proximal factors including poverty and marginalization. These social determinants of LBW were poignantly underscored by the classic enunciation of the “Asian enigma” by the late Professor Ramalingaswami, *et al*. [6], who highlighted the importance of gender