SHORT COMMUNICATION

Pediatric Bipolar Disorder - An Orphan Diagnosis

Faheem Khan, Mukesh Bhimani and Tayyab Afreen

"12 years old boy brought by his parents in clinic with irritability, taking great interest in games, answering in class before asked by teacher, reaching school earlier than anyone else, asking his mother to send him for Olympics and whole night watching TV, attempting to engage his teacher in a friendship. This all developed brusquely. Parents denied any previous history of mood disorder or substance use, but on detail assessment revealed that last year he became little quiescent than usual and has left going to gym for 20 days, without any specific reason. Diagnosis was made of Bipolar affective disorder"

BACKGROUND & EPIDEMIOLOGY

Medical writing regarding Bipolar illness dates back to 1854, when Jules Farlet first described a condition with alternating moods of depression and mania, reaching to Emil Kraepelin in 1899 who made distinction and categorically distinguished between thought disorder and "manic-depressive psychosis", which reflects in the current diagnostic criteria of Bipolar illness.[1]

Kraeplin believed that mania in children is rare. In his research he found that roughly 0.5% had their first episode before age 10. An epidemiological survey, using DSM-IV criteria, reported prevalence of 1%.[2] Moreno et al in 2007 described the prevalence of bipolar disorder in individuals under age of 20 years in primary care, which was 0.01% and 0.44% in 1994 and 2002 respectively.[3] In another study life time prevalence was tremendously high up to 13 % below age 16 in community survey, and from clinic referral it was up to 20% below age 13 according to ̃arlson and Kashani.[4-5] The trend of diagnosing Bipolar disorder is changing in primary care, figures escalating from 10 % in 1994 to 34.1% in 2004.[6]

Department of Psychiatry, Aga Khan University Hospital Karachi, Pakistan.

Correspondence: Dr. Faheem Khan, Consultant/Instructor, Department of Psychiatry, Aga Khan University Hospital Karachi, Pakistan.

Email: faheem.khan@aku.edu

The other side of coin is atrocious since many Psychiatrists are reluctant about Bipolar illness in child & adolescents. Peter Parry in 2009 did a survey of 195 Child and adolescents psychiatrists in Australia and new Zealand, revealing that majority (53%) have never diagnosed a case and further 29 % reported that in their entire career they diagnosed only 1-2 cases.[7]

DIAGNOSIS & MANAGEMENT

Throughout literature search, thing which is most intricate is diagnostic criteria and developmental consideration when strived to differentiate between the illness and child adolescents' behavior. Attempt made to unravel this diagnostic dilemma by developing diagnostic criteria, but this task didn't accomplished because of overlapping symptoms of Bipolar, ADHD and conduct disorder and still criteria is unable to help researchers & clinicians in diagnosing Bipolar illness with same comfort as in adults. Even if it is done, patients do not follow text books especially children and adolescents, who are not physically developing but also behavior patterns altering from irritable to aggressive, from exploratory to overactive & from future planner to grandiose. This makes it very difficult to decide whether it is an illness or a normal behavior pattern in this population.

There are two major impact studies done on this area, first was prepubertal and early adolescents bipolar disorder phenotype (PEA-BP) in 1998 by Geller[8] and second was course and outcome of bipolar youth (COBY) by Axelson and Birmaher in 2006.[9] Both adjusted for criteria, Gellar made a change in essential period to 14 days from 07 days or >4hrs/day or >180 days/year. COBY study adjusted minimum duration to be 04 hours within 24 hours and at least four cumulative period lifetime days, also it included irritability as one of the symptom along with elated mood. PEA-BP found similarities between presentation of Bipolar in adults and children including elated mood (89%), grandiosity (85%), racing thoughts (70%), psychosis (59%) and most importantly irritability with elated mood in 97 %. But there are differences in Manic symptoms in children, as children might not have enough financial resources to spend or role to command authorities, yet in their circumstances they can play a

grandiose role by sending flowers to neighbors for relationship etc. Sexual disinhibition at times presents in adolescents, but again it is very difficult to make a discretion of normal behavior in this population or as a part of disease process.

Course of illness is also an important aspect in pediatric bipolar illness, which is generally chronic as compared to adult episodic illness,[10] this is one of the factors that make difficulty in distinguishing from ADHD, which is not only a pertinent differential in Bipolar rather also a common co-morbid condition. Rates of co-morbidity in different studies range from 60 to 90%. (Borchardt and Bernstein,1995;[11] Geller et al., 1995,[12] West et al 1995[13]) Conduct disorder is second most common co-morbid.

There are some other medical conditions one should keep mind as important differentials such as head injury, Systemic lupus erythematosus, temporal lobe epilepsy, and hyperthyroidism.[14]

Besides the diagnostic quandary, managing the children with bipolar illness is also a challenging situation for caregivers. While treating children with bipolar illness, clinicians are bombarded with lots of parents' concerns such as Is it a lifelong condition? are our children having psychiatric issues? for how long one has to take medications? do these medications have more side effects on children? and lastly, is it a curable illness?

To answer them we have to see guidelines and literature which is still evolving. Practice parameter answers some of these questions.[15] Lithium the gold standard in acute mania is also approved for use in children but not below 12 years. Evidence supporting use of medications which are FDA approved in adults, including Aripiprazole, Olanzapine, Quetiapine, Risperidne, Valporate, Lamotrigine or a combination of Fluoxetine and Olanzapine for Bipolar Depression. Before starting mood stabilizer one should prescribe essential investigations.[15] Risk of weight gain is double in child and adolescents so antipsychotics with risk of metabolic syndrome should be considered before prescribing. Give a treatment trial for 4-6 weeks before changing to other drug if response is low. ECT has not gained much popularity in younger age group, Stimulant role in particular Bipolar depressed with co-morbid ADHD is gaining confidence but before it comes to recommendation it has to prove its efficacy.

PAKISTAN AND CHILD MENTAL HEALTH: RECOMENDATIONS

After thorough literature search using search engines like Pubmed, science direct and Pakmedinet it was found that there is no publication yet on this area from Pakistan. I wonder whether we psychiatrists here have ever diagnosed this, which is there in literature since the time of Kraepelin. Are we diagnosing cases of Bipolar illness as ADHD and trying to fix the problem with stimulants or labeling children & adolescents with conduct disorder?

In Pakistan, College of physicians and surgeons (CPSP) formulate curriculum and training structure for fellowships in different specialties. Psychiatry training structure as per CPSP does not make child psychiatry rotation compulsory during four year of residency in Psychiatry, although suggest to see few patients, but under whose supervision? Here in Pakistan we have extreme dearth of child psychiatrists. Most of the teaching programmes have been running without a child Psychiatrist. Fellowships programme in child psychiatry will help to bridge this gap and number of professionals needed in this part of world. Also extended epidemiological survey will help in identifying specific illness pattern and area to address as priority list one. Programmes should be developed for school so that deviant behaviors can be picked early and teachers can play an ally role. This will also help in treatment adherence. Media can play a pivotal role in educating mass. A team including occupational therapist, Psychiatrist, Psychologist, Remedial teachers and social workers should be made in each big city. All this need strong political will. We need to explore this highly potential field and encourage promising trainees to join this area and to serve around 32% (under 18 years) of our population.[16]

This note will help us to converge our attention towards Bipolar in child & adolescents by building a foundation for further debate and serve as food for thought to update us!

REFERENCES

1 Sadock JB, Sadock VA. Mood disorders. In Kaplan & Sadock's. Synopsis of psychiatry,10th ed. Philadelphia: Lippincot Williams & Wilkins, 2007, pp.527-578

2 Lewinsohn, P., Klein, D. N., & Seeley, J. R. (1995). Bipolar disorder in a community sample of older adolescents: Prevalence, phenomenology, comorbidity and course. Journal of the American Academy of Child and Adolescent Psychiatry, 34, 454–463.

3 Moreno, C., Laje, G., Blanco, C., Huiping, J., Schmidt, A. B., & Olfson, M. (2007). National trends in the outpatient diagnosis and treatment of Bipolar Disorder in Youth. Archives of General Psychiatry, 64, 1032–1039

4 Carlson, G. A., & Kashani, J. H. (1988). Manic symptoms in a nonreferred adolescent population. Journal of Affective Disorders, 15, 219–226.

5 Hazell, P. L., Carr, V., Lewin, T. J., & Sly, K. (2003). Manic symptoms in young males with ADHD predict functioning but not diagnosis after 6 years. Journal of the American Academy of Child and Adolescent Psychiatry, 42, 552–560.

6 Blader, J. C., & Carlson, G. A. (2007). Increased rate of bipolar disorder diagnoses among U.S. child, adolescent, and adult inpatients, 1996–2004. Biological Psychiatry, 62, 107–114.

7 Parry P, Furber G, Allison S,(2009) The paediatric bipolar hypothesis:The view from Australi and New Zealand, Child and Adolescent Mental Health Volume 14, No. 3, 2009, pp. 140–147

8 Geller, B., Williams, M., Zimerman, B., Frazier, J., Beringer, L., & Warner, K. L. (1998b). Prepubertal and early adolescent bipolarity differentiate from ADHD by manic symptoms, grandiose delusions, ultra-rapid or ultradian cycling. Journal of Affective Disorders, 51, 81–91

9 Axelson, D., Birmaher, B., Strober, M., Gill, M. K., Valeri, S., Chiapetta, L., et al. (2006). Phenomenology of children and adolescents with bipolar spectrum disorders. Archives of General Psychiatry, 63, 1139–1148.

10 Carlson GA (1984). Classification issues of bipolar disorders in childhood. Psychiatric Developments 2, 273–285.

11 Borchardt CM, Bernstein GA (1995). Comorbid disorders in hospitalized bipolar adolescents compared with unipolar depressed adolescents. Child Psychiatry and Human Development 26, 11–18.

12 Geller B, Sun K, Zimmerman B, Luby J, Frazier J, Williams M (1995). Complex and rapid-cycling in bipolar children and Validity of bipolar disorder in children 299 adolescents: a preliminary study. Journal of Affective Disorders 34, 259–268.

13 West S, McElroy S, Strakowski S, Keck P, McConville B (1995). Attention deficit hyperactivity disorder in adolescent mania. American Journal of Psychiatry 152, 271–274.

14 Kowatch, R. A., Youngstrom, E. A., Danielyan, A., & Findling, R. L. (2005b). Review and meta-analysis of the phenomenology and clinical characteristics of mania in children and adolescents. Bipolar Disorders, 7, 483–496.

15 McClellan J, Kowatch R, Findling RL, Work Group on Quality Issues. Practice parameter for the assessment and treatment of children and adolescents with bipolar disorder. J Am Acad Child Adolesc Psychiatry 2007 Jan;46(1):107-25.

16 populaiton by selective age groups, online, 2010, population census organization[cited on 28th February 2010] URL: http://www.statpak.gov.pk/depts/pco/statistics/other_tables/pop_by_age_group.pdf