Mental Health Problems Among Lebanese Children: Definition, Epidemiology and Treatment

Aline Hajj PharmD, PhD
Assistant Professor & Researcher
Laboratory of Pharmacology, Clinical Pharmacy & Quality Control of Drugs (LPCQM)
Faculty of Pharmacy
Saint-Joseph University of Beirut - Lebanon (USJ)

Souheil Hallit PharmD, MS, MPH, PhD candidate
Director of the Research Department
Psychiatric Hospital of the Cross, Jal Eddib, Lebanon.
Lecturer and Preceptor
Lebanese University, Hadath, Lebanon
Universite Saint Joseph, Beirut, Lebanon
Universite Saint-Esprit Kaslik, Kaslik, Lebanon

Pascale Salameh
PharmD, MPH, PhD
Professor of Epidemiology- Lebanese University
Chair, Scientific Committee- Lebanese Order of Pharmacists

Hala Sacre PharmD
Director, Drug Information Center - Lebanese Order of Pharmacists

INTRODUCTION

According to the 2001 World Health Report, 10–20% of children and adolescents globally suffer from a mental disorder and 50% of mental disorders start before 14 years of age [1]. These figures apply to the whole countries, but might be exacerbated in regions where violence prevails, particularly the Middle eastern region. In fact, this region is going through a crucial health phase. The Arab uprisings and the wars that followed, coupled with ageing and population growth, have a major impact on the region's health and resources. Despite the improvements in life expectancy and other health indicators, even under stress, the current situation will cause deteriorating health conditions for many countries and for many years [2]. The accelerating burden of mental health is alarming with increasing levels of instability [3]. In this article, we will develop the most common mental diseases of childhood and their treatment, along with their epidemiology and suggestions actions for treatment outcomes improvement.

ANXIETY DISORDERS IN CHILDREN

Childhood anxiety disorders are the most common type of psychiatric problem in children [4], affecting up to 20% of children and adolescents at some point during their life [5]. Children born to anxious parents are themselves more likely to be anxious, through both environmental (parenting style, parent-child interactions) and genetic factors have been implicated. Anxious parents may exacerbate their children's anxiety through overprotection and excessive control [6]. Phobias often occur outside the normal developmental period during which fears occur (for example, a fear of the dark at age 15 instead of age 4) [7]. Anxiety disorders include Generalized Anxiety Disorder (GAD), Obsessive Compulsive Disorder (OCD), Panic Disorder, Posttraumatic Stress Disorder (PTSD), Social

Anxiety Disorder, Separation Anxiety Disorder, Selective Mutism where the child refuses to speak in situations where talking is necessary, and specific phobias (intense fear from a specific situation, i.e. flying, dogs, etc.).

Treatment

Cognitive-behavioral therapy (CBT) is a psycho-social intervention [8,9] that is the most widely used evidence-based practice for improving mental health [10]. Guided by empirical research, CBT focuses on the development of personal coping strategies that target solving current problems and changing unhelpful patterns in cognitions (e.g. thoughts, beliefs, and attitudes), behaviors, and emotional regulation [8,11]. Many medications are also used for the treatment of anxiety disorders, including selective serotonin reuptake inhibitors (SSRI) [12-15], venlafaxine [16,17], duloxetine [18], and benzodiazepines [19,20], but not imipramine [20-22].

DEPRESSION IN CHILDREN

Depression is a common condition with up to 8% of all teenagers having met criteria for depression in 2012 [23]. Depression can have significant lasting effects when diagnosed in childhood and adolescence, and has been associated with later interpersonal difficulties, early parenthood, impaired school performance, unemployment, and other mental disorders and substance use disorders [24]. Additionally, the Food and Drug Administration (FDA) issued a black box warning on the safety and efficacy of antidepressants for children and adolescents: physicians should observe for "clinical worsening, suicidality, and unusual changes in behavior" during these initial visits or "at times of dose changes, either increases or decreases." [25].

Treatment

Both CBT and interpersonal therapy (IPT) have been adapted to address major depressive disorder in adolescents, and have been shown to be effective in tertiary care, as well as community settings, such as schools and primary care [26,27]. CBT sessions can be delivered individually or in groups, and are usually scheduled weekly for approximately 12-16 weeks. Among the antidepressants, only fluoxetine has been approved for use in children and adolescents with depression. Escitalopram is approved for use only for adolescents aged 12 years and older. This is in contrast to other SSRIs and other antidepressants (e.g., venlafaxine) where preliminary evidence suggests them to be more efficacious in older youth. Medications should be initiated at a low dose and increased in recommended increments every 1-2 weeks. The patient and family should be informed of the possible side effects, including possible switch to mania or the development of behavioral activation or suicide-related events [28].

AUTISM SPECTRUM DISORDER

Definition

Autism Spectrum Disorder (ASD) is a biologically based neurodevelopmental disorder characterized by impairments in two major domains: 1) deficits in social communication and social interaction and 2) restricted repetitive patterns of behavior, interests, and activities [29].

ASD encompasses disorders previously known as autistic disorder (also called classic autism, infantile or childhood autism), childhood disintegrative disorder, pervasive developmental disorder-not otherwise specified, and Asperger disorder (also known as Asperger syndrome).

Treatment

ASD is a chronic condition that requires a comprehensive treatment approach. Management must be individualized according to the child's age and specific needs [30], and it requires a multidisciplinary approach combining behavioral/educational interventions as well as pharmacological interventions of comorbidities. Management strategies should be implemented as early as possible [31-35]. Although there is no cure, symptoms can decrease over time. Hence, the golden goal would be to maximize functioning, allow the child to move toward independence, and improve the quality of life of the child and his family. Psychopharmacologic interventions in children with ASD are not used to treat the underlying ASD but the developmental and mental health comorbidities, in conjunction with behavioral and environmental interventions. These interventions target the core symptoms of ASD that interfere with learning, socialization, health, safety, quality of life, or overall functioning [36,37].

1- Hyperactivity, inattention, and impulsivity: Children with ASD may be inattentive, hyperactive, and disorganized. These behaviors may be related to comorbid attention deficit hyperactivity disorder (ADHD) or to other factors that affect function in children with ASD (eg, overarousal, anxiety). Potential therapies for these symptoms include stimulant medications (eg, methylphenidate), alpha-2-adrenergic agonists (eg, clonidine), atomoxetine, atypical antipsychotics (eg, risperidone), and anticonvulsant mood stabilizers (eg, valproic acid). Stimulants and risperidone are beneficial for hyperactivity [35,38-40].

2- Maladaptive behaviors/ problem behaviors/ Irritability: Maladaptive behaviors in children with ASD include irritability, aggression, explosive outbursts (tantrums), and self-injury. These behaviors also occur in response to anxiety or frustration. Risperidone and aripiprazole are the only approved atypical antipsychotics [41,42] to treat irritability, self-injurious and aggressive behaviors. Other medications (eg, stimulants, SSRI, alpha-adrenergic agonists) may be used, depending upon cause of aggression (hyperactivity, anxiety, impulsivity) [43].

3- Repetitive behaviors and rigidity: Repetitive behaviors, stereotypies, and rigidity in children with ASD often interfere with function. Despite the lack of high-quality evidence that SSRI are beneficial, fluoxetine (or another SSRI) can be suggested as an initial medication for repetitive behaviors. SSRI have fewer side effects than the other agents and may be helpful in the treatment of coexisting anxiety [44].

4- Anxiety, depression and other mood disorder symptoms: Anxiety, depression and dysregulated mood in children with ASD are treated with the same therapies that are used to treat other children. Anxiety could be treated by an SSRI, depressive symptoms by an SSRI or SNRI, and dysregulated mood by atypical antipsychotics or SSRI [45-47].

ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD) IN CHILDREN & ADOLESCENTS

Attention deficit hyperactivity disorder (ADHD) is a disorder that manifests in childhood with symptoms of hyperactivity, impulsivity, and/or inattention. The symptoms affect cognitive, academic, behavioral, emotional, and social functioning [48].

Treatment

ADHD is a chronic condition and should be managed in a manner similar to other chronic conditions of childhood [49,50]. Management of children with ADHD can include behavioral interventions, medication, school-based interventions, or psychological interventions (alone or in combination) and should involve the patient and his parents. Specific goals should be set, aiming at i. allowing the child improve his relationships with parents, teachers, siblings, or peers (eg, playing without fighting at recess); ii. improving academic performance (eg, completes academic assignments); and iii. improving rule following (eg, does not talk back to the teacher) [51,52]. Epidemiological studies showed that almost one-third of children with ADHD have one or more coexisting conditions (eg, learning disabilities, oppositional defiant disorder, conduct disorder, anxiety disorder, mood disorders, tics, sleep disorders) [52,53]. That is why it is important to treat coexisting conditions concurrently with ADHD [49].

Treatment strategies for children with ADHD vary according to age. For preschool children, a behavior therapy is recommended rather than medication as the initial therapy. For school-aged children and adolescents, initial treatment with stimulant medication (including methylphenidate and amphetamine) is recommended in combination with behavioral therapy, to improve core symptoms and target outcomes [49,50,52-58]. Atomoxetine may be more appropriate than stimulants for patients with a history of illicit substance use, concern about abuse or diversion, or family preference against stimulants. Alpha-2-adrenergic agonists (such as clonidine) can also be an alternative in children who poorly respond to stimulants/atomoxetine, have unacceptable side effects or coexisting conditions

[49,50, 52-58]. Most of the efficacious pharmacological treatments are associated with anorexia, weight loss and insomnia [58].

EPIDEMIOLOGY OF MENTAL DISEASES AMONG LEBANESE CHILDREN

In Lebanon, the wars led to a devastating number of deaths, injuries, and displacements. Such tragedies have detrimentally affected its civilians psychologically. Furthermore, several epidemiological studies were conducted to assess prevalence of some common mental disease in youth:

- Among adolescents in Beirut (2012), the 30-day prevalence of psychiatric disorders was 26.1 %, with anxiety disorders (13.1%) and ADHD (10.2%) being the most prevalent disorders. Only 6 % of those with disorders reported seeking professional help. Parental marital status, not attending school, having a chronic medical condition, having a family psychiatric disorders, and propensity to bullying were correlates of psychiatric disorders [59].
- ADHD in Beirut: 10.20% of the adolescents were diagnosed with ADHD. Having ADHD was associated with having academic difficulties and being involved in bullying. Adolescents with ADHD also had higher odds of drinking alcohol, smoking cigarettes, and having comorbid emotional and conduct disorders (compared to those without ADHD) [60].
- Post-Traumatic Stress Disorder (PTSD): Prevalence rates of PTSD ranged from 8.5% to 14.7% for the civil war, 3.7% for adolescents with sensory disabilities, 21.6% for The Grapes of Wrath War, and 15.4% to 35.0% for the 2006 July War. Bereavement, injury, house destruction, and economic problems, low self-efficacy and scholastic impairment were related to PTSD [61].

ACTIONS TO TAKE

Interventions designed for traumatized youth must build individual coping skills of children and adolescents, yet at the same time target parents and teachers [62]. The integrated intervention may intend to use trauma-focused cognitive behavioral therapy model that integrates cognitive, behavioral, interpersonal, and family therapy principles with trauma interventions [63]. However, in a recent study on Mental Health Attitudes and Beliefs of Parents and Teachers in South Lebanon, three themes still emerge: (a) mental health care is a priority for overall health, (b) mental illness is a cultural taboo, and (c) there is a need for better education and cultural understanding about mental health [64]. Thus, a change of culture in Lebanon and participation of parents to children therapy is mostly needed.

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