

COMORBIDITY IN CHILDREN AND ADOLESCENT PSYCHIATRY

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SUMMARY

Numerous epidemiological and clinical studies found a high incidence of comorbidity in children and adolescent psychiatry. In population of children and adolescents is most often described and researched comorbidity of depression, anxiety disorders, than in hyperkinetic and behavioral disorders, and finally the difficulty in reading (dyslexia) and antisocial behavior disorders. The common occurrence of two diagnoses may be the result of a disorder that has a complex pattern of symptoms, which apparently seems to be two disorders, but in fact is a single disorder. Comorbidity may be two disorders that share the same set of risk factors or is it possible that a one disorder is a risk of development of other disorder.

Knowledge and understanding of comorbidity is important as a preventive and therapeutic point of view. Comorbidity is particularly important because complicates diagnostic process and influences the course, prognosis and treatment of children and adolescents.

Key words: comorbidity – children – adolescents - psychiatry

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Introduction

Comorbidity in psychiatry is defined as the simultaneous presence of one or more mental disorders (diseases) in the same person, in addition to the primary disorder. Numerous epidemiological and clinical studies with adult subjects found a high incidence of comorbidity (up to 60%), especially in depression, personality disorder and substance abuse. The population of children and adolescents is most often described and researched comorbidity of depression, anxiety disorders, than in hyperkinetic and behavioral disorders, and finally the difficulty in reading (dyslexia) and antisocial behavior disorders. Knowledge and understanding of comorbidity is important as a preventive and therapeutic point of view.

Possible explanations of the difference in the frequency of comorbidity in the various studies are as follows:

First, comorbidity may represent an artifact caused by the way of choice of respondents and the application of insufficiently sensitive diagnostic tools, such as questionnaires with too broad a range.

Second, comorbidity may derive from nosological approach is used. Philosophy that is basic in the two most commonly used nosology systems, DSM-IV and ICD-10 (ICD-10), differ in access to co-morbidity. Multiple diagnosis is possible in both systems but it is more likely that the comorbidity found by applying DSM-IV than the application of ICD-10 clinical version. However, the version of ICD-10 research uses rules that are similar to those in DSM-IV and this is more likely to find similar patterns of comorbidity as well as the DSM-IV.

ICD-10 refers to psychiatric disorders as well as other medical / somatic states in which the clinician

should choose the diagnosis that best fits the pattern of symptoms the patient manifests. The assumption is that the higher the probability that a mixed represent atypical clinical manifestation of a disorder, but also the existence of two completely separate entities. Dual diagnosis will be set only if there are two clearly separate, fully independent state.

In contrast, the DSM-IV classification, each diagnosis has a set of criteria and encodes each clinician diagnosis that meets the given criteria. Since the mixed clinical types are common in clinical psychiatry, multiple diagnoses are too (American Psychiatric Association 1994).

The common occurrence of two diagnoses may be the result of a disorder that has a complex pattern of symptoms, which apparently seems to be two disorders, but in fact is a single disorder.

Finally, comorbidity may be two disorders that share the same set of risk factors or is it possible that a one disorder is a risk of development of other disorder.

The above differences indicate the need for research to clarify the different patterns of comorbidity and mechanisms of their creation. Useful contributions to the understanding of comorbidity are given with researches of comorbidity from the developmental perspective in children's and adolescent age.

Comorbidity with ADHD

There is a large problem in children and adolescents with the syndrome of attention-hyperactivity disorder comorbidity, which was highlighted by both the clinical and epidemiological sample. Even $\frac{2}{3}$ of primary school children with such a syndrome have at least one more diagnosed psychiatric disorder. In a sample of psychiatric disorder that is usually conduct disorder and

the opposition-defiant disorder, and in pediatric sample most common is learning disorder. About 20% to 25% of children with opposition-defiant disorder meet criteria for a learning disorder (Pliszka 2000). Major comorbid conditions include disorders of speech and communication, learning disorders, conduct disorders and the opposition-defiant disorder, anxiety disorders, mood disorders and Tourett's syndrome or chronic ticks. Comorbid disorders or substance abuse can make the diagnosis and treatment of ADHD more difficult. Depression may also coincide with ADHD, increasingly prevalent among girls and older children (Brunsvold & Oepen 2008). Epilepsy is a commonly comorbid disorder and can cause ADHD like behaviour.

Comorbidity is particularly important because complicates diagnostic process and influences the course, prognosis and treatment of children and adolescents with hyperkinetic syndrome. Assessment and treatment of comorbid disorder are often as important as the assessment and treatment of symptoms of attention-hyperactivity disorder. Parents and teachers reported significantly less on anxiety and mood disorders because they a lot better seeing externalized problems.

Only in the last ten years it has become apparent that the internalized disorders (anxiety and depression) may occur along with ADHD. The clinical and epidemiological studies have shown that in $\frac{1}{3}$ of children with ADHD occur anxiety disorders too (Jensen 2001).

There are great differences in the nature of the symptoms of ADHD in girls and boys, while girls have fewer symptoms overall, and girls with ADHD and anxiety disorder are less impulsively than girls with only ADHD.

Prolonged heavy drinking of alcohol and drugs can cause neurocognitive dysfunction in adolescents, and at the same time cognitive deficits may be a risk factor for the development of chronic substance use or substance abuse. Adolescents with attention disabilities, who are not necessarily a diagnosis of ADHD may be exposed to greater risk of developing problems related to alcohol and drugs (Tapert 2002). It is believed that ADHD is common among adolescents who are taking treatment for substance disorders, and is estimated to be present in 20-50% of these people.

Conduct disorder and ADHD as the comorbidity are associated with significantly worse prognosis in behavior, including problems related to taking the substances. When drug is „in the game“ once, adolescents with ADHD have tendencies of much more rapid transition from substance abuse to dependence, and experience withdrawal symptoms much more difficult than adolescents without ADHD.

Psychoactive substances related disorders

Some psychiatric disorders often accompany the use of psychoactive substances.

On adolescents prone to psychoactive substances we can see very often behavior disorder, the beginnings of antisocial and borderline personality disorder, also mood disorders. These disorders can induce taking psychoactive substances because of the behavior models that characterized impulsivity, autodestructive tendencies and negligence for the consequences of their actions. Evidence indicates a strong link among early antisocial behaviour, conduct disorder and substance abuse. Surveys of adolescents with alcoholism show rates of 50 percent or higher for additional psychiatric disorders, especially mood disorders (Kaplan & Sadocks 2009). Depressed adolescents in crisis are taking stimulation using psychoactive substances, using them as a temporary escape from unpleasant feelings of hopelessness or anxiety. Mental problems can sometimes determine a kind of inclination of psychoactive substances (eg. amphetamines are used as antidepressants, and opiates and alcohol as anxiolytics).

Mood disorders

Depressive disorders in children and adolescents often occur with other symptoms or disorders. There is believe that most young people in the major depression have at least one comorbid disorder (40%-90%), as well as 30%-50% of them have two or more psychiatric disorders. The two most common comorbid disorders were diagnosed dysthymia and anxiety disorder, and the frequency of appearances behind them following disruptive behavioral disorders and substance abuse. Very often is comorbidity with conduct disorders.

Comorbid disorders are similar for girls and boys, except that boys have more disruptive disorders and depression, and in girls eating disorders and depression.

The most common comorbidity is with anxiety disorder (separation anxiety, GAD, phobias, OCD). It is believed that 30%-75% of clinically depressed children have anxiety disorders.

High coincidence of personality disorder was found in depressed adolescents, also in eating disorders and abuse of psychoactive substances (Brooks-Gunn & Petersen 1991). There is opinion that about one-third of patients with eating disorders have symptoms of depression too.

Substance abuse often begins after first episode of depression, although this depends on the individual. Depressed children associated with ADHD or conduct disorders in adulthood have more frequent attempted suicide or criminal behavior, as opposed to children who have depression only.

ADHD often occurs simultaneously with depression, and may be present before the first episode of depression and complicate treatment of both conditions. Depression is associated with school and interpersonal problems. Also it is associated with increased coincidence of suicidal behavior, violent thoughts, smoking and early pregnancy. There is a significant correlation of depression and somatic disorders, which

can be related to stress due to discovery that person has a somatic disease. Depression in children and adolescents has a significant negative impact on interpersonal functioning.

Depressive disorders can overlap with bodily disorders. Some authors have found that the diagnosis of headache 40% of them have criteria for depression, and many of these children showed improvement in mood and headaches after treatment with antidepressants. Children with recurrent abdominal pain with no detected organic causes have significantly more psychiatric disorders (in most cases depression and anxiety) than a group of physically healthy children (Edward & Huntley 2007). Children with inflammatory intestinal diseases become depressed often have more life events and conflicts in the family than children with same diseases without depression.

Somatic complaints are very common among children and adolescents with major depression. A high correlation was found between scores on the checklist of somatic symptoms and BDI. Fatigue, headaches and sleep problems were strongly associated with depression. Physical complaints and the frequency of somatic complaints increased with the weight of depression, regardless of present anxiety. These data suggest that somatic complaints are strongly associated with depression than with anxiety.

Early – onset bipolar disorder often coexists with comorbid ADHD, which is present in 60 to 90 percent of cases. These two disorders share many diagnostic criteria, including distractibility, hyperactivity and talkativeness. Even when the overlapping symptoms were removed, 89 percent of children with bipolar disorder have full criteria for ADHD.

Children and adolescents with bipolar disorder have high rates of comorbid conduct disorder and anxiety disorders.

Posttraumatic Stress Disorder (PTSD)

PTSD in children often coexists with other disorders such as attention disorder, conduct disorder, ADHD and other disorders. The misdiagnoses of ADHD may be due to the overlap of symptoms between ADHD and Post Traumatic Stress Disorder (PTSD). PTSD symptoms relate to past trauma they could result in depression, alcohol substance abuse, etc.

Learning disorder

Children with learning disorder are at higher risk for attention problems, disruptive behavioral disorders and

depressive disorders. About 25 percent of children with reading disorder also have ADHD (Fletcher et al. 1999). Some evidence suggests higher incidence of aggressive behavior in young children with reading disorders. Children with learning disorders experience higher levels of anxiety symptoms. Also, these children are at higher risk for problematic peer relationships and have less social skills. Children with mathematics disorder are at high risk for expressive language disorder and developmental coordination disorder.

Conclusion

Every disorder has a specific treatment. A misdiagnosis means a patient will not receive the proper treatment. Inadequate treatment of a disorder may result in long-term educational difficulties, familial dysfunction, social impairments, reduced self-esteem, as well as an inability to hold prolonged employment or relationships. Comorbidity can also be a result of inadequate treatment.

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