

Controversies around Attention Deficit Hyperactivity Disorder (Implications for the policy makers in Georgia)

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Abstract

This paper addresses the issues related with the proper diagnosis of ADHD that is one of the recently recognized childhood disorders in Georgia. As a result of many controversies related with the diagnosis of ADHD and its connection with social-cultural factors, the direct transfer of ADHD assessment methods from western practice to local context without solid research done, would be inappropriate. The lack of special trainings available for professionals who deal with ADHD increases the risk for children to be treated inadequately. Moreover, the role of teacher, curriculum content and instructional methods in provoking ADHD problems should be addressed.

It is very important to increase public-private efforts in order to ensure that children with emotional and behavioral conditions are appropriately diagnosed and managed by qualified healthcare professionals, parents, and educators. A team approach is a very progressive strategy for improving assessment and treatment of ADHD children. Public funding should be available for research on ADHD as well as for creating special education programs. Though treating ADHD is not cost-effective, policy makers should address this problem in a timely manner, as its impact on the individuals, families, and society is very negative.

Keywords: *ADHD, childhood disorder, ADHD assessment methods, misdiagnosis, psychosocial treatment, psychostimulants, impulsiveness, temperament, motivation, cultural expectations, team approach, education programs, behavioral modification programs, parent management training.*

Introduction

ADHD (Attention Deficit Hyperactivity Disorder) is one of the most spread disorders among children in US. Even though the solid research was done on this issue, it still causes much controversy and confusion among both professionals and lay people in general. In fact, discussions about this disorder started very recently in Georgia. Lack of knowledge and research about this disorder in the Georgian context may cause negative affects on the individual lives of children, as there is a real risk of inappropriate diagnosis of children and labeling them with ADHD as well as providing an inappropriate treatment.

In this paper I would like to address the issues related with the proper diagnosis of ADHD as well as some implications for the policy makers. Thus, several questions need to be answered: is ADHD a separate disorder or is it a phantom disorder? What is the scientific evidence to support ADHD as a disorder? What is the impact of ADHD on individuals, families, and society? What are effective treatments for ADHD? What are the barriers to appropriate identification of ADHD? What are the risks of the use of stimulant medications? There is much professional literature regarding these questions, some of which will be presented below.

Definition, History and Etiology of ADHD

What is the clinical description of ADHD? ADHD is a syndrome of genetic origin in which one's biological system has experienced chemical, neuroanatomical, or maturational changes and has caused a lack of balance and ability to pay selective attention [1]. Barkley [2] described the primary problem in ADHD as a deficit in the motivation system, which makes it impossible to stay on task for any

length of time unless there is constant feedback (reward). American Psychiatric Association defined three subtypes of ADHD: combined type (meeting criteria for both inattention and hyperactivity-impulsivity), predominantly inattentive type, and predominantly hyperactive-impulsive type.

Although ADHD was described by physicians many years ago, its frequency was only recently recognized. ADHD is often accompanied by learning disorders in reading, spelling, or arithmetic, and other behavior disorders. ADHD is more common in boys than in girls [3]. According to Silver [4], girls show fewer aggressive syndromes and are less intrusive; thus, they are less likely to come to the attention of their teachers and other professionals. Some authors highlighted that ADHD is a lifetime disability for about half of children with this disorder [3,4]. ADHD is the most recent term given by psychiatrists to a childhood disorder that has had a variety of names in the past (such as Minimal Brain Injury, Minimal Cerebral Dysfunction, Hyperkinetic Syndrome, Hyperactivity, and Attention Deficit Syndrome) [3, 5].

The etiology of ADHD is unknown. It was highlighted that there is an interplay of both biological (genetic factors as well as damage of the central nervous system and brain) and psychosocial factors that lead to a final common pathway of the ADHD [1, 5, 6]. However, psychosocial factors are not thought to play a primary etiological role. School and home environments can influence the severity of ADHD symptoms, but child-rearing practice does not cause ADHD [7].

The genetic contribution to the etiology of ADHD is substantial [5, 6, 7]. According to Haber [5], the genetic factor composes 40 percent of the true ADHD cases. Many parents and grandparents of the children diagnosed with ADHD have the same kinds of problems with attention and activity that their children and grandchildren have [5, 6,7]. However, no single gene that is responsible for transmitting ADHD symptoms has been described or found [1]. The hereditary component is probably polygenic [7]. More research is necessary in order to clarify these questions.

Controversies around ADHD

Within the scientific community various aspects of ADHD have caused controversy. One area of debate relates to establishing diagnosis. Silver [4] indicated that there are no formal tests available to identify ADHD. Also, no physical, laboratory, or neurological findings are associated with this disorder. However, excellent psychological tests, rating scales, and computer-based tests can clarify whether a child or adolescent is hyperactive, distractible, or impulsive. But these symptoms (inattention, increased activity, or impulsivity, or any combination thereof) can be considered as symptoms of any number of disorders, ranging from problems with the sensory systems, mental illness, or scholastic, psychological, and medical problems [5].

Moreover, a lot of stress creates tremendous turmoil and destruction for kids: divorce, death, alcoholic parents, violence, posttraumatic stress (PTSD) [5,8]. In other words, their support systems do not function adequately so the children become frustrated and are unable to follow directions, but this does not mean that they should be labeled as having ADHD. Also, it is indicated that the children might become hyper because of their low blood sugar and allergic reactions to some food. All these problems create the look-alike symptoms of ADHD.

Some professionals indicated possible common etiologies between ADHD and creativity. Creative children exhibit impulsivity, motor hyperactivity, and inattention. Similarly, they are not valued by their teachers as much as more conforming, less creative students. Therefore, creative children's behaviors may be seen as maladaptive in school, and they may be incorrectly diagnosed as suffering from ADHD. The stories of creative individuals are full of instances of childhood problems in school [9].

Thus, it is very important to know the exact cause of the symptoms. Indeed, some of the medications and techniques used to treat one disorder might make another disorder worse [5]. For instance, if a child has ADHD and Depression, or ADHD and Anxiety, or ADHD and anger, or ADHD and Manic Depression, or any combination of these conditions, then Ritalin, Dexedrine, or Adderall

(these medicines are used to be the first-line stimulant medication for individuals with ADHD) will usually make the child more depressed, nervous, or angry [10].

Many professionals agree that ADHD often does not present as an isolated disorder. A number of psychiatric conditions co-occur with ADHD. There is clearly a great deal of overlap between ADHD and a number of learning conditions and conduct disorders [11]. Co morbidity complicates the diagnostic process and can impact on natural history and prognosis, and on the management of children with ADHD [1, 3, 4, 6, 12]. Thus, the absence of a single cause weakens the validity of ADHD as a discrete syndrome [11].

According to the National Institute of Mental Health [13], while there is no medicinal cure for ADHD, a number of psychostimulants (such as Ritalin, Pemoline, Adderall, etc.) can temporarily relieve ADHD symptoms in the case of the true ADHD case. These drugs may decrease children's impulsiveness, improve their behavior and academic problems, and even their physical coordination (handwriting, athletic ability). However, the length of symptomatic relief varies from about 3 to 9 hours, depending on which drug is taken, the dosage, and the individual's response to the drug [13]. McGinnis [14] noticed that no study has ever demonstrated that taking Ritalin can cause any lasting behavioral or educational benefits in ADHD patients.

Moreover, psychostimulants have addictive potential and side effects [13]. Many doctors and parents are increasingly alarmed about this trend. McGinnis [14] indicated that Ritalin is a chemical cousin of methamphetamine, and its pharmacological effects and addiction patterns are similar to cocaine's. According to Keirse [15], in most cases parents are not told that these stimulants, like sedatives and tranquilizers, are brain-disabling drugs. Some kids with ADHD who take psychostimulants lose weight or their appetite, and temporarily grow more slowly. Trouble falling asleep is another side effect (13, 15).

The considerable debates are related to the epidemiology of ADHD. There are more ADHD cases in the United States than elsewhere in the world [5,7]. ADHD has become America's No. 1 child psychiatric disorder. According to Keirse [15] and Wender [3], as many as four to five million children in the United States suffer from some form of ADHD. Also, Ritalin use in the United States is five times higher than the rest of the world combined. However, this difference appears to be an artifact of different diagnostic practices and cultural expectations [7]. Accordingly, this indicates a need for a more thorough study of ADHD in different populations and a better definition of the disorder [13].

The other debates are related to the connections between temperament and ADHD. According to Woods and Ploof [12], the development of the ADHD symptomatology can be seen as an interaction between the fundamental (innate) temperament of the child and the stimulation forthcoming from the environment, as represented by parents, teachers, and significant others, as well as the cultural milieu into which the child is born.

Individuals differ in their responsiveness to the conditioning process. In other words, individuals are born with a varying capacity for imprinting feelings of psychic pain and psychic pleasure. This capacity could be measured in the population, and this variability will take the form of a normal distribution curve, with most individuals falling somewhere in the middle—having an average capacity—and a small percentage of individuals falling at either extreme—having too much or too little capacity. For instance, ADHD is an extreme variant of a naturally occurring temperament continuum. The conditioning process for children with ADHD is difficult because the anticipation of rewards and punishments plays little part in the motivation of their behavior. Therefore, ADHD children require much supervision and discipline from others (immediate reinforcement, repetition, and consistency) in order to enhance the activity of the reward and punishment systems in their brain [12].

Keirse [15], also, indicated, that sometimes a child's temperament is misunderstood and contributes to a misdiagnosis of ADHD, when actually it is the child's temperament that is truly the problem and requires a psychosocial approach [15]. The question of temperament has a long history.

Aristotle's Hedonics type is very similar to diagnosis of children with ADHD, many of whom are concrete in perception and impulsive in action [15]. Therefore, they can not sustain their attention to school work if there is nothing in the assignment that appeals to their temperament. Children with such a temperament are prone to ignore the teacher's agenda or forget their assigned work. This disinterest can hardly be taken as evidence of brain dysfunction. The problem is really a clash between two types of temperament: those who value opportunities to have fun and those who value schedules for getting work done [15].

The other controversy is related to the terminology—attention deficit. According to Keirse [15], medical practitioners try to increase children's attention with stimulant drugs because they think that they do not "have" enough attention to succeed in school. However, psychologists and other behavior scientists say that attention is a form of consciousness, hence a hypothetical mental event that is difficult to be observed. Therefore, it is impossible to tell what children are paying attention to, when they are not actively engaged in doing their assignment. It is obvious that they need different kinds of psychosocial intervention (rather than physical intervention) in order to increase their interests in school activities. "The symptoms" of attention deficit (such as inattention to schoolwork, disobedience to teacher's directives, etc.), of course, do not cause the deficit of attention [15].

Impact of ADHD on individuals, families and society

Children with ADHD have definite impairments, which have a profound impact on their families, schools, and society [13]. Several studies suggest that many children with untreated emotional and behavioral conditions fail to reach their full potential. Children with ADHD experience academic and social difficulties that have far-reaching and long-term consequences. They are at significantly higher risk for developing anti-social behavior, which contributes to societal problems such as violent crime and teenage pregnancy. For many individuals, the impact of ADHD continues into adulthood [13].

Families who have children with ADHD experience increased levels of parental frustration, marital discord, and divorce. The direct costs of medical care for children and youths with ADHD represent a serious burden for many families. In fact, the lack of public and private funding for appropriate diagnosis and treatment of ADHD and the lack of integration with educational services are substantial barriers and represent considerable long-term costs for society.

Children with ADHD create problems for their teachers: they disrupt the class, fight with classmates, assault teachers, or simply do not follow the teacher's instructions. Public school teachers do not have sufficient time and interest to develop an Individual Education Program (IEP) for children with ADHD. They immediately refer these children to the specialists. Harried teachers do not explore the real reasons of why some children are not interested in their subject. They do not question even if it is the problem of curriculum content or instructional method [15].

The main professionals who deal with the ADHD children in Georgia are pediatricians, child neurologists, psychologists, and psychiatrists. However, they lack of special training in assessment, diagnosis and treatment of ADHD. There are no standards of care for children with ADHD and it depends on the physician who treats the child. Though some practitioners use structured questionnaires, rating scales for assessment of ADHD child, these measurement instruments are not adapted to the Georgian context.

Implications for the policy makers

All the above indicates that it is very important to increase public-private efforts in order to ensure that children with emotional and behavioral conditions are appropriately diagnosed, treated, monitored, and managed by qualified healthcare professionals, parents, and educators. A team approach, one that includes all mental health professionals, parents, teachers, and school psychologists, is a very progressive strategy for improving assessment and treatment of children with ADHD. Also, it

is important to inform the parents of children with ADHD about different treatment options available and guide them in their decision making process [13].

The lack of public or private funding for psychiatric and psychological evaluations, behavioral modification programs, school consultation, parent management training, and other specialized programs should also be addressed. Another cost implication lies in the fact that there is no funded special education category specifically for children with ADHD. The lack of uniformity in diagnosis of ADHD requires continuing education, training, and residency programs for physicians in order to increase their expertise in this area [13; 16).

Haber [5] stated that no child should be diagnosed with ADHD and placed on medication or any other form of therapy without a comprehensive evaluation in all environments; a thorough plan for follow-up in the home, school, and play environments; proper parent education and training; and absolute evidence of the child's significant clinical difficulty and dysfunction in all of these settings. Therefore, it is not recommended to diagnose preschool children with ADHD, as their "attention seeking behavior" is appropriate for their developmental age, and there is no possibility to evaluate the level of their dysfunction in the school setting. Accordingly, an important research need is the investigation of standardized age - and gender-specific diagnostic and treatment criteria [13].

Also, more study is needed to guarantee that providers and parents have necessary information about the impact of medication on brain development [5, 13]. Finally, it is suggested that psychosocial treatment of ADHD including a number of behavioral strategies (such as contingency management and clinical behavior therapy) is effective approach for preschoolers with attention deficit.

Conclusion

In order to make a proper diagnosis of ADHD it is important to consider such factors as child's temperament and cultural milieu. Thus direct modeling of ADHD problems from western culture, and especially, from US would be very inappropriate for Georgian reality. As connection between developmental and educational (school based) assessments and health-related (medical practice-based) services is crucial in diagnosis of ADHD child, policy makers should emphasize the importance of team approach, that is collaboration between all mental health professionals, parents, teachers, and school psychologists in dealing with children diagnosed with ADHD. Public funding should be available for scientific research on development of assessment standards for ADHD in Georgia, creating individual education programs, behavioral modification programs, school consultations, parent management training, and other specialized programs.

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