Available online at http://lumenpublishing.com/journals/index.php/ejmh

ISSN: 2559-7604

Eastern-European Journal of Medical Humanities and Bioethics

2017, Volume 1, Issue 1, December, pp. 36-44

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Bioethics in Intervention in the Deficit Attention Hyperkinetic Disorder (ADHD)

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Abstract: Attention Deficit Hyperkinetic Disorder (ADHD) is one of the most common psychiatric disorders that occurs during childhood and adolescence. Attention Deficit Hyperkinetic Disorder (ADHD) is a *chronic neuro-biological disorder that begins in childhood and which is characterized by a level of inattention, hyperactivity and impulsivity that are inappropriate with the development, and which may manifest in various combinations at school, at home and in social contexts.*

Keywords: attention deficit hyperactivity disorder, ADHD, aetiology, treatment.

Introduction

Attention Deficit Hyperkinetic Disorder (ADHD) is one of the most common psychiatric disorders that occurs during childhood and adolescence. The characteristics of ADHD are inattention, hyperactivity and impulsivity. Regarding the incidence of this disorder, the opinions of the specialists are divided: some consider that the disorder is as common in current times, but the diagnosis is more precise (Cucuruz (Grec), 2013), others incline to the opinion that the incidence is increasing due to the agitated way of life that is specific to the current society (Aniţan et. all., 2007). This disease occurs more frequently in boys than in girls, the ratio being 4:1. (Coropceanu, 2011). Attention Deficit Hyperkinetic Disorder - ADHD - is a chronic neuro-biological disorder that begins in childhood and

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which is characterized by a level of inattention, hyperactivity and impulsivity, which is inappropriate for the development, and which can manifest itself in different combinations at school, at home and in social context (Aniţan et. all., 2007).

Symptoms

ADHD begins in the first 5 years of life in the form of hyperactive behaviour, against the backdrop of a pronounced and lasting lack of attention, lack of involvement and interest in lasting activities. Children who suffer from ADHD are not involved in activities that call for attention, change their interest frequently, switching from one activity to another, failing to complete any of them, showing a great disorganization in the activities carried out. Children suffering from the hyperkinetic disorder are generally impulsive, committing unhealthy actions, with the risk of causing accidents (Hodor-Popon & Iftene, 2008). Stefan Aniţan, Marius Vartic, Maria Aniţan (2007) synthesizes the basic symptoms of ADHD according to degrees of inattention, hyperactivity and impulsivity.

Symptoms of inattention:

1. incapacity to pay attention to details;
2. committing errors due to negligence;
3. difficulty in focusing their attention;
4. problems in listening to the interlocutor;
5. problems in finishing a task they have started;
6. problems in organizing the activity;
7. avoid activities that require sustained attention;
8. problems in placing objects back in place;
9. distractibility;
10. forgetting tasks.

According to DSM-IV (American Psychiatric Association, 2000), the symptoms of hyperactivity and impulsivity are grouped together as follows:

Hyperactivity:

1. Increased mobility of the limbs, the child playing with his hands and feet,
2. the inability to stay seated for long,
3. run and climb excessively even in situations where this is inadequate,
4. difficulty playing quietly,
5. acts as if "pushed by a motor "
6. speaks excessively.

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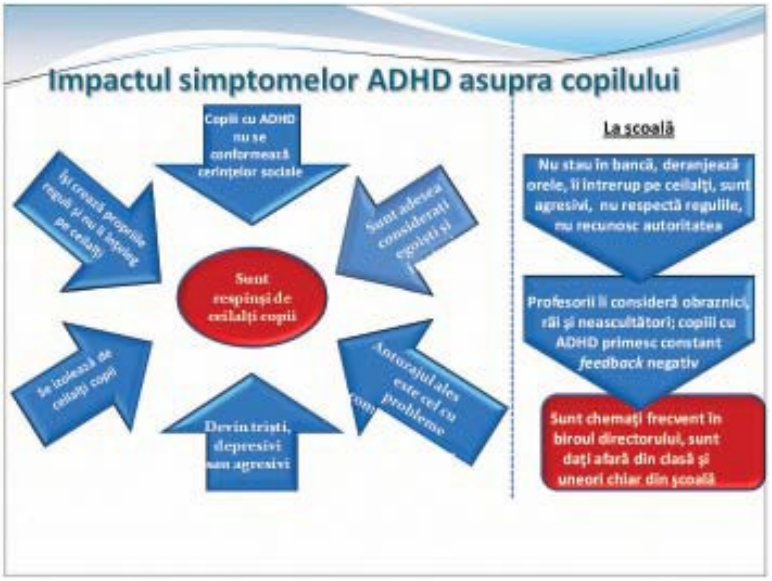
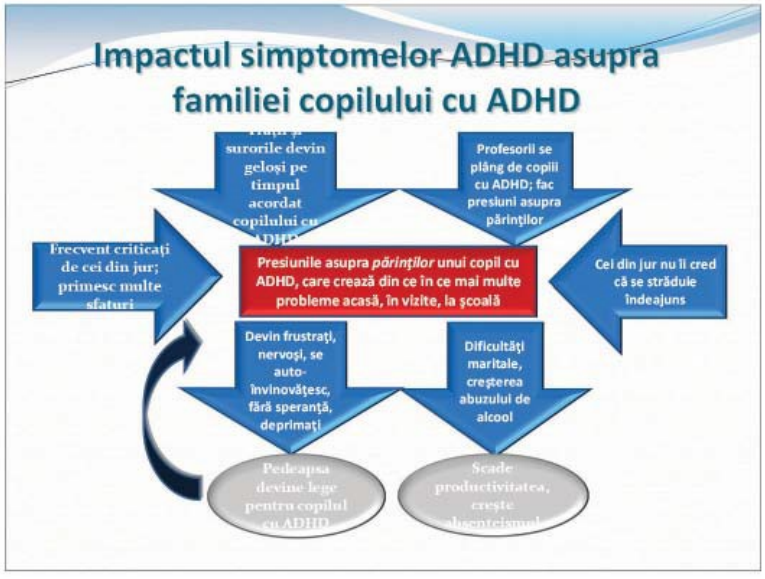
Impulsiveness:

7. responds before the interlocutor finishes the question,
8. difficulties in waiting for their turn,
9. interrupt or disturb others. (Aniţan et. all., 2007)



Taken from (Geampalia-Gherghină & Matican, 2016)



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80% of children diagnosed with ADHD continue to show the same symptoms in adolescence, while 67% of them also manifest them in adulthood.

A number of features associated with ADHD have been regarded as being positive:

- Creativity and inventivity
- Assume the risk that can lead to important discoveries
- Ability to process information and make more comprehensive observations
- High level of energy
- Good negotiation skills
- Intuition and reaction
- Ability to over-concentrate (Coropceanu, 2011).

The tipology of ADHD

According to DSM IV (American Psychiatric Association, 2000), there are three types of ADHD: typology called inatent, hyperactive-impulsive and combined.

Aetiology

Analysing the possible aetiology of attention deficit hyperactivity disorder, Tudor-Adrian Hodor-Popon and Felicia Iftene (2008) list a number of factors that can lead to ADHD: the hereditary, environmental, behavioural and social background. The exact cause of ADHD remains unknown, and it is unlikely that only one etiology is available in all cases due to the heterogeneity of the disorder (Cucuruz (Grec), 2013).

The ADHD etymology is heterogeneous. A first theory is of neuroanatomic and neurochemical nature (Geampalia-Gherghină & Matican, 2016). According to this theory, ADHD originates in the damage of inhibitory regulation circuits between basal ganglia, the cerebellar and the prefrontal cortex. The levels of dopamine and noradrenaline are low, resulting in the inhibition of inhibitory function and resulting in hyperactivity and impulsivity. Another theory concerns the existence of acquired brain injury (Geampalia-Gherghină & Matican, 2016). According to this theory, a number of pre and perinatal factors can prevent normal brain development and ADHD: alcohol consumption, maternal smoking, maternal stress leads to exposure of the fetus to elevated glucocorticoid levels, thus increasing vulnerability (Geampalia-Gherghină & Matican, 2016). According to the genetic theory, ADHD is a high heritable disorder (60-

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80%), although there is the possibility of postnatal acquisition of the disease. The differentiation of the two types of ADHD is particularly difficult because they have the same clinical aspect and respond to treatment the same. The Family Factor Theory identifies a number of factors associated with the early development and persistence of ADHD: early maternal deprivation, inconsistent and chaotic educational environment, and the quality of intra-family relationships.

The diagnosis

The hyperkinetic disorder with deficient of attention is not only specific to the western culture, but also in other cultures with a different incidence. Differences in the use of the concept are coming from different diagnostic practices, rather than from the differences in the clinical presentation (Cucuruz (Grec), 2013). Tudor-Adrian Hodor-Popon and Felicia Iftene (2008) show that the diagnosis with ADHD is quite difficult due to the occurrence of comorbidities such as: learning disorder, behavioural disorders, anxiety, learning difficulties, so the diagnosis is based on the information provided by parents and/or teachers, due to the absence of laboratory tests that highlight this mental disorder.

Cerebral imaging studies have revealed a series of brain changes in the cortical areas responsible for attention, cerebral inhibition and memory, while a series of biochemical studies have demonstrated dysfunctional neurotransmitters-norepinephrine and dopamine responsible for attention control (Coropceanu, 2011).

According to DSM-IV (American Psychiatric Association, 2000), the diagnosis with ADHD can be set after the age of 7, in the presence of symptomatology for at least 6 months, the symptoms being clearly observable in at least two different social contexts, such as at home and at school (Aniţan et. all., 2007).

There are two distinct phases in the diagnosis of ADHD: screening, which includes a series of questions addressed to the parent about the possible symptoms that the ADHD may indicate: inattention, hyperactivity, impulsivity, and the existence of functional difficulties due to the presence of these symptoms. If these symptoms are present, a full evaluation is performed to establish the diagnosis of ADHD.

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The therapy of persons diagnosed with ADHD and the considerations involved

About the therapy of ADHD, the psychiatric perspective is directed in the pharmacological direction (Aniţan et. all., 2007). Drug treatment prepares the body for proper functioning but cannot provide the child with the necessary skills for school life (Cucuruz (Grec), 2013). Drug treatment consists of the administration of psycho-stimulus, of which the most widespread is ritalin and antidepressants. Ritalin is also used as a medicine to increase intellectual performance (Coropceanu, 2011), being used in what is called neuroenhancement, which is why the use of this medicine, especially prescribed for clinically healthy people, with the aim of improving cognitive abilities, raises a series of ethical concerns. Zambo, starting from the existing considerations in literature raises the authenticity of the person undergoing Ritalin therapy, generally with neuro-enhancing substances. Such *moral enhancement* does not lead to the adoption of a desirable conduct based on a real self-understanding, but as a result of changes in the chemistry of the brain activity. Medication focuses on changing behaviours. It does not increase self-awareness or heal the body or mind.

Perring C. (1997) also draws the attention to the increased incidence of ADHD diagnosis and the privileged approach of the retinal therapy and the avoidance of other forms of non-medication therapy. The concern regarding the exaggerated use of Ritalin is consistent with the general use of wide and excessive psychotropic drugs, at the expense of psychotherapy. In the case of ADHD diagnosis, one identifies (Perring, 1997) a tendency of overdiagnosis and medication. The concept of medicine defines the understanding of any problem encountered in the society through medical terms, and the transformation of any form of social intervention into a therapy. Overdiagnosis is the tendency to identify problems - preferably medical ones - even where the aspects that are different from normal are non-pathogenic. This tendency leads to the medicalization of the social life (Van Dijk et all., 2016).

Foreman (2006) proposes a model of ethical practice in the therapy of children with ADHD which is based on a series of assumptions:

- in order to be ethical, the practice must be consistent with the benevolence, non-maleficence, justice, and respect for autonomy (Beauchamp & Childress, 2012).

- consider the child's best interest as a patient.

- strictly following the actual procedures regarding the rights of the beneficiary, the consent of the legal representatives, but also, as far as

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possible, the assent of the beneficiaries, the confidentiality etc. (Foreman, 2006).

Foreman (2006) rejects the concerns on overdiagnosis, as well as the excessive attention deficit treatment previously presented (Perring, 1997). Foreman argues that the opposition to medical treatment can be justified in some particular cases, with the right of the patient(s) to refuse treatment. As a general practice, however, Foreman (2012) recommends the medical therapeutic model, which is scientifically justified, thus respecting the principles of nonmaleficence and beneficence. From the point of view of the respect for autonomy, there are, in the author's opinion, a series of challenges, due to the burden faced by the legal representatives whom are asked for consent for therapy in case of premature diagnosis, when the child's assent cannot be requested but will be pursued during therapy. From the author's point of view, the ethical practice of any therapy, including for ADHD, should not be compromised by the political correctness, which leads to the need to reject the critics about the medicalization of the social life.

Zambo also points out that although the therapy with neuroleptics in case of ADHD can produce beneficial effects in most cases, there are significant risks of negative side effects such as loss of memory, insomnia, etc. (Zambo, 2013). As such, the medication should be accompanied by social, behavioural and educational therapy.

From the psycho-pedagogical perspective, the difficulties of adapting pupils with attention deficit and hyperactivity to the school environment can be improved by structured and personalized psycho-pedagogical intervention programs (Moțiu-Socaciu, 2010). Cucuruz (Grec) (2013) considers that the intervention programs for specific attention deficit and hyperactivity disorder, and the psycho-pedagogical literature in the field are of exploratory type, a series of paralyzing formative-ameliorative interventions being presented. Psycho-pedagogical interventions include behavioural techniques, aimed at strengthening or diminishing certain behaviours, as well as cognitive interventions, focusing on organizational strategies, social skills and independent work skills (Cucuruz (Grec), 2013). The term educational and behavioural intervention is currently used in the guidelines of the American Paediatric Academy, with the meaning of combined, educational and behavioural cognitive interventions (Cucuruz (Grec), 2013).

The behavioural theory is considered one of the most efficient methods of non-medical treatment used in children and adolescents diagnosed with ADHD.

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Conclusions

ADHD is a disorder that is frequent among children, with symptoms being prolonged during adolescence and even adulthood. Children with ADHD have difficulty paying attention and learning, making it difficult for them to focus on a particular activity, including a learning task. Avoiding harmful factors and early therapy can reduce the morbidity and comorbidity associated with ADHD. With regard to the ethical dilemmas raised by the therapy of children suffering from ADHD, it is necessary to respect as accurately as possible the nonmaleficence and the beneficence, and to pay an increased attention to the decision of the legal representatives, the autonomy being partially substituted by the delegated consent due to the patient's early age when diagnosed. It is important to involve the patient as much as possible in the therapeutic process, especially at the age of adolescence and adulthood. In our opinion, in spite of the contrary opinions expressed, the medicalization of the social life especially in the case of children suffering from ADHD is excessive, precisely because of the tendency of overdiagnosing the attention deficit.

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