Attention Deficit Hyperactivity Disorder

Name

Institution

**Introduction**

This assignment is concerned with the description and elaboration of the most evident childhood related psychological disorder named Attention Deficit Hyperactivity Disorder (ADHD). Main body section will demonstrate the standard definition of ADHD, its symptoms, presentations, etiology/risk factors and treatments. After presenting related integrated information extracted from the pre-existing literature, conclusion section will attempt to demonstrate the meaningful take away messages from it.

**Main Body**

**Preface**

Darwin’s theory of Individual Differences proposed the most appealing and intriguing notion to explain individuality and uniqueness among Living beings in terms of physical, mental, emotional and social diversity (Dal, et. al., 2012). Diversity can be judged through various phenomena including physical appearance, preferences, orientations, outlooks, lifestyle and socialization with parents, relatives, peers, colleagues and community. A universally accepted benchmark of normality acts as a strictly programmed decision maker to assign the tag of “normal” or “abnormal” to certain thinking patterns and behaviors.

In other words, social norms direct the extant of appropriateness of certain thinking patterns and behaviors that enable an individual to gain social approval and desirability accordingly. However, various approaches to define normality will initiate a long thread of discussion, therefore it will be avoided. Relating the term normality with the two psychological phenomenon “attention” and “physical and motor activity”, if the deviation occurs from what the average individuals possess, it will undoubtedly lead to an abnormal situation, formally named as “Attention Deficit Hyperactivity Disorder (ADHD). A thorough elaboration of this disorder will be presented below:

**Definition**

According to APA, Attention Deficit Hyperactivity Disorder (ADHD) is an umbrella disorder encapsulating inattention (inability of stay focused even for short time span), hyperactivity (increased physical and motor activity) and impulsivity (taking physical, mental or emotional actions instantly without an apparent cause), evident mainly in children (Danielson et. al., 2016).

**Symptoms of ADHD**

Based on the Criteria defined by American Psychological Association (APA), ADHD can be diagnosed depending on three types of symptomatic representations:

**Inattentive**

1. Inability to pay attention and make careless mistakes
2. Inability to stay focused in school and home
3. Inability to listening attentively. Hence, appear indifferent
4. Inability to follow instructions
5. Inability to organize or plan activities and tasks
6. Inability to commit to such tasks that require sustained mental effort
7. Excessive forgetting and troubled learning and memory
8. Losing things more often e.g., pencils, notebooks, schedule papers, toys

**Hyperactive/impulsive or**

1. Inability to stay seated
2. Move hands, feet, body aimlessly
3. Difficulty in waiting for turn
4. Excessive talking
5. Excessive intruding
6. Answer abruptly before the question is completed

**Combined**

Combined presentation follows all the above mentioned symptoms of inattention and hyperactivity for the age range of 5 to 17 years.

**Etiology and Risk factors of ADHD**

Although psychologists are still unable to identify single chief cause of ADHD but they suspect following “potential” causes that attempt to develop the onset of ADHD:

1. **Prenatal causes:**

Prenatal causes involve pre-birth conditions mainly concerned with the maternal factors. The higher level of stress is the most debatable cause of ADHD among child after birth. The underlying correlation between stress and ADHD is strongly interlinked with the production of stress hormone (cortisol) that takes the body to aroused condition, commonly termed as “fight or flight” situation. If the stress is constant, the continuous production of cortisol leads the child to develop higher brain activity and in turn ADHD (Grezenko, Shayan & Polotskia, 2008). Other maternal conditions include smoking, alcohol, brain injury or premature birth (Lanley et. al., 2007).

1. **Heredity**

If an individual’s single relative is having ADHD, the likelihood of acquisition becomes four times (Bao, 2008). Hence, ADHD appears to have strong genetic basis.

1. **Neurological complications**

Brain injury resulting in frontal lobe damage is another potential cause of ADHD because this part of brain controls motor activity, attention, organizing and planning (Shue, & Douglas, 1992). Moreover, lower levels of dopamine in brain are also involved in the manifestation of ADHD symptoms (Madras, Miller & Fischman, 2005).

1. **Food & Nutrition**

The type of diet that child consumes has a direct impact on his mental and physical health. Woo et. al., 2014 examined the effects of various diet types (traditional, traditionally-healthy, snacks and seaweed-egg). After carrying experimental studies, it was found that individuals with snack type nutrition were comparatively higher at-risk than other categories. However, lower odds of acquiring ADHD were linked to tradition-healthy dietary patterns. Deficiency of Omega-3 Fatty acids and Iron is also associated with ADHD symptoms (Konofal et. al., 2004; Sinn, 2008).

**Treatment**

Based on the nature of risk factors, ADHD manifestation can be controlled through eliminating or mitigating its respective etiology. Two types of interventions are mainly used for eliminating ADHD Symptoms.

1. **Psychopharmacological interventions**

This treatment includes medicines that directly affect nervous system and neurotransmitter levels. Typically, Methyphenidate Hydrochloride (Ritalin) assists the minimization of hyperactive and impulsive behavior, enabling individuals to stay focused, improve organization and socialize effectively (Arcieri et. al., 2012). Other drugs include Guanfacine, Clonidine Hydroxide, Imipramine, Buproprian Hydroxide and Atomoxetine with their respective side effects (Jain et. al., 2011).

1. **Psychotherapeutic interventions**

Although medicines are used as a frontline treatment for ADHD mitigation but their effectiveness becomes more evident when coupled with the psychological therapies based on the rational and behavioral modifications (Toplak et. al., 2008; Abikoff, 2016). These therapies involve the basic principle of Operant Conditioning with the idea of positive and negative reinforcement aimed at strengthening and diminishing certain behaviors. Group therapy and individual therapies (Behavioral Modification, Emotional therapy, CBT and Parental Education) are significantly effective in this regard (Toplak et. al., 2008; Abikoff, 2016).

**Conclusion**

This assignment thoroughly presented that Attention Deficit Hyperactivity Disorder is mainly seen in children with the symptoms including reduced attention span, poor learning, memory and organizing skills, increased motor output and impulsivity. It typically takes three forms for its representation depending upon the dominancy of symptoms e.g., inattention, hyperactivity and combined. As there is nothing without a cause, so is the case with ADHD. Genetics, neurology and prenatal factors play major role in the manifestation of its symptoms. Treatment encapsulates two interventions e.g., psychopharmacological and psychotherapeutic. Cutting long into short, it can be concluded that ADHD is perfectly manageable but poorly curable because its risk factors are not amenable to change. Prenatal and post-natal care is highly significant in this regard.

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