**IMPACT ON EDUCATION OF CHILDREN AFFECTED WITH ADHD IN ENGLAND**

**Introduction**

# ADHD

Attention Deficit Hyperactivity Disorder (ADHD) refers to the mental health disorder that has the potential to ensure above-normal levels of impulsive, reckless and hyperactive behaviours. Anyone diagnosed with ADHD might face serious issues to focus their attention on any particular task. According to the available research studies, both adults, as well as children, can have ADHD (Barkley, 2011). A renowned British Paediatrician Sir George Still first time discussed this term in the year 1902, according to him, ADHD is "ADHD includes a combination of persistent problems, such as difficulty sustaining attention, hyperactivity and impulsive behaviour” (Gillberg, 2014). He predicted that some children are unable to control their behaviours like other children, but they are still intelligent and can do wonders in their lives. American Psychological Association published the first "Diagnostic and Statistical Manual of Mental Disorder" where the majority of the mental disorders were mentioned. The manual prescribed some tentative medication procedures also for mental disorders. It has been learned over the time that ADHD has no boundaries and children of almost every ethnic group and at every continent were found affected with the mental disorder. ADHD is a purely neurobiological disorder associated "with the inherent imbalance of brain chemicals (noradrenaline & dopamine)" (Fones et al., 2000). However, some structural brain issues in children and adults were also found to be the causes of ADHD. Most of the times, genetic has a major role to play in this disorder and some of the extended family members might show such symptoms.

# The trend of ADHD among Children in England

Within England, as per the reports of National Health Services, 3-5% of the children and 2% adults identified with ADHD (Paul and Kern, 2011). Revelations by the researchers have suggested that this issue is more prevalent in males in England as compared to females (Gillberg, 2014). ADHD impacts the learning processes by halting the child’s ability to concentrate on one topic. For instance, children of age group 6-12 may face serious issues of concentrating on the syllabus being delivered in class as his attention will divert to some other issues due to this mental disorder (Sayal et al., 2010). The child would hardly memorize the due dates, assignments, and lessons given by the teacher in class. Similarly, the child would be unable to focus on his assignment while attempting it, and many of times the child does not even realize that he is suffering from the issues of mental disorder (Man et al., 2017). Most cases of ADHD are diagnosed among the children of age group 6-12. The patients of ADHD improve over time but many young age group people were also observed continuously facing this issue. Researchers have found that children affected by ADHD face more issues of sleep and anxiety disorder problems (Beau-Lejdstrom et al., 2016).

# Theoretical Frameworks dealing with ADHD

There are mainly three theories that deal with the ADHD which include Executive Dysfunction, State Regulation and the Delay Aversion (Kidd, 2010). Executive Dysfunction elaborates the deficits in "higher-order" cognitive processes like planning, reasoning, sequencing, holding attention to a particular task, selection of appropriate behaviours and the working memory. These major processes control as well as manage the "lower-level" cognitive operations like perception, learning and the language (Malmqvist, 2018). This theoretical framework suggests that symptoms of ADHD occur due to a loss in executive control caused primarily by function, structure, and biochemical function abnormalities (Malmqvist, 2018). Many of the Neuropsychological tests that are pertained to the executive function system have been applied to analyse the children diagnosed with ADHD. It is learned that the ADHD explains the inattention and impulsivity, however, it ignores the hyperactivity element of ADHD (Sjowall et al., 2013).

The State Regulation Method explains the loss of children mental and physical health affected with ADHD can best be explained by a non-optimal energy condition. This research is focused primarily on the Sanders cognitive energy model. According to this model, the success of the task is considered a consequence of the basic cognitive stages. The primary stages are stimuli labelling, binary judgement and elementary cognitive phases. This theoretical paradigm predicts that when the child diagnosed with ADHD is in the optimum state, the disparity between children with ADHD and children developing is reduced (Konrad and Eickhoff, 2010).

Now the last framework is Delay Aversion that was discovered and discussed by the Sonuga-Barke in the early 1990s. Elements of Executive Dysfunction are also incorporated into it. This theory suggests that “children with ADHD can wait but usually they do not want to”. Children with ADHD are not always impulsive for immediate reward. They do so only under particular circumstances (Sjowall, et.al, 2013). Hyperactivity and the Inattentiveness denote the attempts to minimise the subjective experience of delay in such situations where it cannot be neglected (Marco et al., 2009). Now a new model called the dual Pathway Model was also developed that compare the performance of children with ADHD with the those on inhibition task and delay aversion task (Cacace and McFarland, 2006).

# Identification of ADHD

There are some designated tests performed to diagnose ADHD. Qualified healthcare professionals who have the pertinent expertise and training in ADHD like Paediatrician, Clinical Psychologist or Psychiatrist used to diagnose the patients. Assessment mainly involves detailed psychosocial and developmental history, use of specific questionnaires, observation of the behaviour of the child and some important psychological tests. It is important to mention here that the diagnosis of the children can be made at an early age, but it will not be confirmed unless he/she is six years old. The input of teachers related to children is also important, and it is considered good practice to include the input of teacher into an assessment (DuPaul and Kern, 2011).

# Why is it important to discuss ADHD?

Discussing ADHD is very important as it is one of the most challenging and common childhood neurobehavioral disorder. This issue is impacting not only the children, and the families only but the overall community also (Konrad and Eickhoff, 2010). Research studies by National Health Service predicted that almost one-third of patients diagnosed with ADHD carry this disease into adulthood also (Mcfarland, 2010). The ratio of children diagnosed with this disease is more in the US, up to 5-11%, as compared to other parts of the world and there is a multitude of factors involved that might be the reason behind it (Barkley, 2011).

# Personal Reflection on ADHD

Since childhood, I came across some of the children to whom I observed as affected with ADHD. Until eighth grade, I also faced certain issues of forgetting the things and not concentrating on a single subject or issue. However, over time, with the help of my parents and psychologists, I have overcome this challenge, and now as an adult, I don't foresee any challenge for me.

# Purpose and Need of Study

It is really important to do a thorough research study on this subject as problems like ADHD are often overlooked by the parents as well as the community. Given the healthcare services in England, it is learned that there is no specialized and committed program sponsored by the government focused on the treatment of children experiencing certain mental health issues. Children who are diagnosed with the ADHD display the sign like not able to stay seated, unable to do the extra-curricular activities consistently, talking too often, trouble in waiting its turn, and running around where it is inappropriate. As the children are the future of England and hence comprehensive research on this subject is mandatory to analyse the causes of ADHD in England, the possible attempts made by the government, diagnosis of the condition possible drugs and the impacts of such mental illness on the education and learning behaviour of children. The research study would also cover why ADHD is a more disturbing problem for the children as opposed to the adults and how the parents can play an effective role to deal with it.

**Reference**

BARKLEY, R. A. 2011. The importance of emotion in ADHD. *Journal of ADHD and related disorders,* 1**,** 5-37.

BEAU-LEJDSTROM, R., DOUGLAS, I., EVANS, S. J. & SMEETH, L. 2016. Latest trends in ADHD drug prescribing patterns in children in the UK: prevalence, incidence and persistence. *BMJ Open,* 6.

CACACE, A. T. & MCFARLAND, D. J. 2006. Delineating auditory processing disorder (APD) and attention deficit hyperactivity disorder (ADHD): A conceptual, theoretical, and practical framework. *An introduction to auditory processing disorders in children***,** 39-61.

PAUL, G. J. & KERN, L. 2011. *Young children with ADHD: Early identification and intervention*, American Psychological Association.

FONES, C. S., POLLACK, M. H., SUSSWEIN, L. & OTTO, M. 2000. History of childhood attention deficit hyperactivity disorder (ADHD) features among adults with panic disorder. *Journal of affective disorders,* 58**,** 99-106.

GILLBERG, C. 2014. *ADHD and its many associated problems*, Oxford University Press.

KIDD, P. M. 2010. Attention-deficit/hyperactivity disorder (ADHD) in children: rationale for its integrative management. *Alternative Medicine Review,* 5**,** 402-428.

KONRAD, K. & EICKHOFF, S. B. 2010. Is the ADHD brain wired differently? A review of structural and functional connectivity in attention deficit hyperactivity disorder. *Human brain mapping,* 31**,** 904-916.

MALMQVIST, J. 2018. Has schooling of ADHD students reached a crossroads? *Emotional and Behavioural Difficulties,* 23**,** 389-409.

MAN, K. K., IP, P., HSIA, Y., CHAN, E. W., CHUI, C. S., Lam, M. P., WONG, W. H., CHOW, C., YUNG, A. & WONG, I. C. 2017. ADHD drug prescribing trend is increasing among children and adolescents in Hong Kong. *Journal of attention disorders,* 21**,** 1161-1168.

MARCO, R., MIRANDA, A., SCHOLTZ, W., MELIA, A., MULLIGAN, A., MÜLLER, U., ANDREOU, P., BUTLER, L., CHRISTIANSEN, H. & GABRIELS, I. 2009. Delay and reward choice in ADHD: an experimental test of the role of delay aversion. *Neuropsychology,* 23**,** 367.

SAYAL, K., FORD, T. & GOODMAN, R. 2010. Trends in recognition of and service use for attention-deficit hyperactivity disorder in Britain, 1999–2004. *Psychiatric Services,* 61**,** 803-810.

SHIELS, K. & HAWK JR, L. W. 2010. Self-regulation in ADHD: The role of error processing. *Clinical psychology review,* 30**,** 951-961.

SJÖWALL, D., ROTH, L., LINDQVIST, S. & THORELL, L. B. 2013. Multiple deficits in ADHD: executive dysfunction, delay aversion, reaction time variability, and emotional deficits. *Journal of Child Psychology and Psychiatry,* 54**,** 619-627.

TOP LAKE, M. E., CONNORS, L., SHUSTER, J., KNEZEVIC, B. & PARKS, S. 2008. Review of cognitive, cognitive-behavioral, and neural-based interventions for Attention-Deficit/Hyperactivity Disorder (ADHD). *Clinical psychology review,* 28**,** 801-823.