ATTENTION DEFICIT DISORDERS AMONG ADULT LEARNERS: CAUSES, SYMPTOMS AND **TREATMENT**

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Abstract:

In the present scenario of curriculum change, modification and possible reform, the traditional approach of teaching has been cynically criticized. Due to different reasons, many institutions have started reducing teaching time from 40-50 minutes to 15-20 min in length. Lack of attention among learners may be one of the most significant factors. A review of the literature on this topic reveals many facts drawn from previous studies. The most alarming findings could be related to significant decrease in students' attention during a lecture/class. Such behavioural patterns are very dangerous for learners, and wastage for parents as they may lose a human resource. Therefore, the present theoretical approach towards Attention Deficit Disorders (ADHD) among Saudi learners in general and adult learners in particular will explore something useful which can be treated as a base for further researches especially empirical studies.

Index Terms - Attention Deficit Disorders, traditional teaching, behavioral patterns, human resource, Saudi learners

I. INTRODUCTION

Attention Deficit Disorders (ADD) is officially called Attention-Deficit/Hyperactivity Disorder, or AD/HD (American Psychiatric Association, 1994), however many people even some professionals, still call it ADD. Hence it is important to note that nomenclature hardly matters much. ADD has been divided into three subtypes of disorder: inattentiveness, impulsivity, and hyperactivity.

ADD is a neurobiological disorder which is mainly characterised by difficulty controlling behavior and/or paying attention to anything. It can be triggered by environmental factors. It is usually diagnosed in childhood and continues to adulthood. This has been endorsed by some studies '30-60% of affected individuals continue to be affected by the disorder even if they grow into adults.(Weiss & Hechtman, 1993).

ADHD has been found quite closely related to the issue of dysregulation of thought and action (Schachar et al. 2000), a manifestation of a motivational style (Sonuga-Barke et al. 1996; Sagvolden et al. 1998; Nigg 2001). ADHD may affect all aspects of one's life, says Harpin (2005). (http://dx.doi.org/10.1136/adc.2004.059006)

Image-1



http://www.myhealthlinks.com/wpcontent/uploads/2016/01/ADD-symptom.jpg



https://i1.wp.com/www.additudemag.com/wp-content/uploads/2016/11/61_2_Treat_7types-of-adhd_Slideshow_61_brain-impulses_ts-453592743.jpg?resize=1280%2C720px&ssl=1

1.1. Who is affected by ADHD?

ADD/ADHD affects children and adults, and we all know that most children and adolescents go to schools/colleges/universities at this stage, therefore the most affected group is none other than the students. It is interesting to note that around 3 to 5% of children have an ADHD. (Ougrin, Chatterton & Banarsee, 2010)

The likelihood of affected among boys is three times more that the girls counterpart. ADHD affects people of all ages especially children of school going age. There are evidences in researches that ADHD exists even in preschool children (Lavigne et al. 1996; Daley et al. 2009). This disorder is even found among teenagers (Wolraich et al. 2005) and among adults (Mannuzza et al. 1993; Barkley et al. 2002).

It is also interesting to note that ADHD (representing ADD and ADHD) affects two to three times more boys than girls, but the girls who are affected can be impaired as severely as boys. It can place great stress on parents, siblings, friends, teachers, and others closely connected with the child.

1.2. Causes of ADHD

Like all mental disorders, Attention-Deficit/Hyperactivity Disorder results from a combination of genetic and environmental factors.(Van Loo, Martens & Genomics. 2007,429-444). Because attention deficit hyperactivity disorder (ADHD) affect a child's learning ability and get along with others. Some Parents, teachers and peers think an ADHD child's behavior is caused by a lack of discipline, a chaotic family life, or even too much TV. ADHD has long been recognised as a clinical entity (Taylor, 2011). On the other hand, Alberts-Corush, Firestone, & Goodman (1986) and Sprich, Biederman, Crawford, Mundy, & Faraone (2000) contend that AHDH has a base of inherited phenonmenon.

Genetically informative studies of depression and antisocial behaviour (Tully, Iacono, & McGue, 2008, Harold et al., 2011; Lewis, Rice, Harold, Collishaw, & Thapar, 2011; Silberg, Maes, & Eaves, 2012;) show the important contribution of noninherited factors to intergenerational transmission of these problems and highlight that the manifestation of genetic liability varies with the environmental context (Rhee & Waldman, 2002) while genetic factors can also affect (Nigg, Nikolas, & Burt, 2010). In a nutshell, it can be stated that quite a good number of people diagnosed with ADHD have relatives with the same disorder, therefore, genes are thought to be at least partially involved.

1.2.1. What Causes ADD?

As mentioned, ADD is a neurobiological-based developmental disability estimated to affect between 3-5% of the school age population (Professional Group for Attention and Related Disorders, 1991). No one knows exactly what causes ADD. An important study by the National Institute of Mental Health indicated that glucose is the main energy source of brain which is lower in subjects with ADD than in subjects without ADD (Zametkin et al., 1990). Even though the exact cause of ADD remains unknown, we do know that ADD is a neurologically-based medical problem. It is also known that parents and teachers do not cause ADD.

Adverse effect of ADD/ ADHD: students are soft targets

Attention related disorder is the tendency towards low self-esteem that can affect targets of all ages, and students in particular. Most of the affected students can face difficulties in reading. Some children may be affected by additional issues such as anxiety, depression, and conduct disorder (a tendency to be chronically disruptive, disobedient, often aggressive).

1.3. Treatments of ADD/ADHD

Psychologists, doctors and institutional heads have successfully dealt with ADHD challenges in their specific context(s). Available treatments or medical interventions are adapted following a bio-psychosocial assessment, however after a thorough assessment of the child's needs. Some interventions follow: medications, psycho-education, social skills training, special supervision at school, psychotherapy etc.

1.3.1. **How to Diagnose**

As mentioned that ADD is basically a disability which can lead to complications if not handled properly and timely. The diagnosis can't only be done by the medical doctors/specialists. On the other hand, parents and teachers can also contribute to a great extent in the diagnostic process.

The ADD diagnosis is made on the basis of observable symptoms in different settings. This means that the observation must be done via multiple sources to collect required information and data. In sum, A proper ADD diagnostic evaluation includes the following elements.

- 1- A medical history including family background
- 2- a physical examination and minute observation of the child,

- 3-face to face interaction with the parents, the child, and the teacher(s),
- 4-assessment scales completed by parents and teacher(s),
- 5-some specific test such as I.Q. and social and emotional adjustment and specific learning disabilities (if any).

In order to assure the above mentioned criteria, an expert diagnostician knows not to arrive at a haste conclusion based on the child's apparent behavior. There are many sophisticated assessment tools are available in medical and educational/psychological settings.

1.3.2. Symptoms of ADHD

The primary symptoms of ADHD are focusing difficulties, hyperactivity (excessive activity), and impulsivity (acting before considering the consequences). The behavior must be excessive, appear before or around 7 years of age which may be noticed from different activities and responses against activities.

2. ADHD TYPES

Three important types are as follow:

2.1. Inattention

A child with ADD is usually described as having a short attention span and as being distractible. Distractibility refers to the short attention span while attention is a process that has different parts: focus, select and sustain. Focus is something like picking something on which to pay attention while we select or pick something that needs attention at a special moment. On the other hand, to 'sustain' is to pay attention for as long as is needed.

Following is an example of an inattentive driver who is focusing on everything but driving. She is perhaps having ADHD disorder id inattention type.

Image-2



2.1.1. Symptoms of inattention:

According to American Psychiatric Association (1994, pp.83-84), following are major symptoms of inattentive disorders:

- -students often makes careless mistake due to insufficient attention to the task,
- -they have even difficulty due to inattention in activities;
- often does not seem to listen even if communicated directly;
- -often does not follow important instructions leading to unfinished school/class tasks and home assignment,
- -often faces problems in organizing activities, so avoids assigned tasks,
- -often loses important things such as toys, school assignment, pencils, books etc);
- -often gets distracted by extraneous variables,
- -is often forgetful in daily activities as he does not memorize well due to lack of attention.

(source: (American Psychiatric Association, 1994, pp.83-84)

Image-3



Take a look how the person on the left is working on something else. computer, but playing with

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https://i2.wp.com/www.additudemag.com/wpcontent/uploads/2016/11/ 61 5 Treat 7-types-ofadhd_Slideshow_61_man-toy-plane_ts-84464718.jpg?resize=1280%2C720px&ssl=1

2.1.2. Treatment

Image-3



https://i0.wp.com/www.additudemag.com/wp content/ uploads/2016/11/61_4_Treat_7-types-of-adhd_ Slideshow_61_adults-running-woods_ts-544604724.jpg?resize=1280%2C720px&ssl=1

The goal of treatment here is to boost dopamine levels, which increases focus. Some stimulating medications such as Ritalin or stimulating supplements like green tea, ginseng, and the amino acid L-tyrosine can be used to treat inattention issues. Getting lots of physical activity also helps increase dopamine apart from using, cod liver/ fish oil that is higher in EPA than DHA.

2.2. Hyper ADD

Excessive activity is the most visible sign of ADHD. The hyperactive toddler/babies/preschooler is generally described as 'activity driven'. Such traits may disappear with time, however cases may vary. By adolescence, the over activity may be converted as a restless behavior (American Psychiatric Association, 1994, p.84).

Image-4



https://www.helpguide.org/images/addadhd/child-standing-on-head-in-grass-500.jpg

A hyper active child is up to unwanted activities. He may injure himself or disturb his parents at home and trouble teachers in

2.2.1. Symptoms of hyperactivity

Some crucial symptoms are enlisted as under:

- The subject may often fidgets with hands or feet or squirms in seat;
- often leaves seat in classroom or in other situations in which remaining seated is expected;
- -often runs about or climbs excessively in situations in which it is inappropriate (in adolescents or adults, may be limited to subjective feelings of restlessness);
- -often has difficulty playing or engaging in leisure activities quietly;
- -is often "on the go" or ready to engage in hyper activities that are mostly unwanted,
- -often talks excessively even without reasons.

2.2.2. Treatment of Hyperactivity

Stimulants such as Ritalin and Adderall are often prescribed for attention deficit hyperactivity disorder (ADHD or ADD), but they might not be the best option for each child as the case might differ from case to case. Medications may help a child focus more on the desired activity. On the other hand, there are concerns about the side effects of the medications on the fragile mind and body of youngsters and even teenagers. In addition, they might get used to like addictions and later they can't find their life peaceful without the medicines they have been using. Moreover, we should keep the following points in view:

Each child responds differently some medication. Medication may be more effective when combined with other treatments or interventions. The target child will be benefitted more if he or she is utilising other treatments for learning 'coping skills' etc. In addition, ADHD medication should always be closely monitored for best results.

2.3. Impulsivity

Cognitive impulsivity is usually conceived as acting without thinking, but the impulsivity of ADHD children may vary in nature and action. Such children act before thinking, because they can't delay attainment. The impulsivity disturbs them so much that they speak out of turn, interrupt others, and attain attention by demonstrating even risk-taking behavior. Image-5



According to Barkley (1990), hyperactivityimpulsivity is a pattern stemming from an overall difficulty in inhibiting behavior. In addition to problems with inattention or hyperactivity-impulsivity, the disorder is often seen with associated features.

2.3.1. Symptoms

Following are some of most significant symptoms:

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- 1-acting without thinking,
- 2-impatient about the outcome,
- 3- can't delay waiting,
- 4-disturbing nature,
- 5- attention seeking acts
- 6-risky actions etc

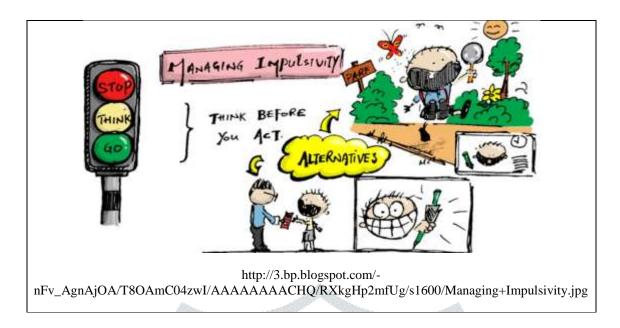
2.3.2. Treatment of Impulsivity

Impulsivity does require some medications if the extent is too much, but other interventions are equally important. Since it is a psychological issue, only clinical approach may not work, however advising, guidance, counseling, mentoring and follow up will also be useful.

Though 'Impulsivity' can manifest in many different ways, here's five general tips to be tried out:

- 1. Understand the actual nature of ADHD with special reference to impulsivity.
- 2. Be mindful: be attentive to the present moment and observe what is happening without judging it," said Zylowska (2012),
- 3. Challenge negative thoughts, and take action. (Perlman, 2005),
- 4. Make it harder to act impulsively. For example, one's impulsivity leads to unlimited costly shopping so one need to restrict to go to market places and have fun with the wallet. In that case, don't buy by cards. Put your shopping zeal on hold for a couple of hours and better postpone and finally decide if you really do need them," Matlen (2014) said.
- 5. Engage in calming activities.

It has been quite commonly noticed that sometimes 'impulsivity' is an outcome of certain stress Perlman (2005) said, therefore a 'relaxing experience' might be very productive in dampening impulsive urges. Therefore the researcher suggested to trying certain relaxing techniques such as muscle relaxation, soothing music, deep breathing and similar exercises. Management of 'impulsivity' is not an easy task. But, by developing greater insight and better understanding of the issue one can stop or minimize 'impulsivity' by controlling one's over all behavior, checking life styles and activities. Image-6



3. CONCLUSION, RECOMMENDATIONS & SUGGESTIONS

3.1. Conclusions

Based on the literature review and above discussions, it can be concluded that ADD or ADHD is quite common in general children, school going children and even teenagers. Sometimes, the symptoms of ADHD are noticed at even later stages of life, however, people can manage by their knowledge, experience and maturity. In some cases, medication is needed based on symptoms, but other interventions are also very effective. Teachers and parents can work together in management of ADHD as a whole. Attention deficiency disorder, if found in students can lead to no destination, consequently a brilliant child may lose a maiden change of education. Thus, careful systematic observation is needed prior to any treatment.

3.2. Recommendations

ADHD of all three types (inattention, hyperactivity and impulsivity) needs extra care in order to deal with students suffering from such problems. Moreover, certain symptoms of these disorders are not always indicative of these issues, therefore an expertise is needed to watch and act.

3.3. Suggestions for future researches

An empirical study or a case study is needed in Saudi context so that an accurate conclusion is drawn for further research.

REFERENCES

- [1] Alberts-Corush J, Firestone P, Goodman J.T. 1986. Attention and impulsivity characteristics of the biological and adoptive parents of hyperactive and normal control children. Am J Orthopsychiatry. 56(3):413-423.
- [2] American Psychiatric Association. 1994. Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), 4th edn. American Psychiatric Association, Washington, DC, USA
- [3] Barkley, R. A., Fischer, M., Edelbrock, C. S. & Smallish, L. 1990. The adolescent outcome of hyperactive children diagnosed by research criteria: I. An 8-year prospective follow-up study. Journal of the American Academy of Child and Adolescent Psychiatry, 29, 546-557.
- [4] Barkley, R. A., Fischer, M., Smalllish, L. & Fletcher, K. 2002. The persistence of attention-deficit/hyperactivity disorder into young adulthood as a function of reporting source and definition of disorder. Journal of Abnormal Psychology, 111, 279–289.
- [5] Cantwell, D.P. 1975. Genetics of hyperactivity. J Child Psychol Psychiatry. 16(3):261-4.
- [6] Cunningham L, Cadoret RJ, Loftus R, Edwards J.E.1975. Studies of adoptees from psychiatrically disturbed biological parents: psychiatric conditions in childhood and adolescence. Br J Psychiatry. 126():534-49.

- [7] Daley, D., Jones, K., Hutchings, J. & Thompson, M. 2009. Attention deficit hyperactivity disorder (ADHD) in pre-school children, current findings, recommended interventions and future directions. Child: care, health and development, DOI: 10.1111/ j.1365-2214.2009.00938
- [8] Dennis, O., Sandie, C., and Ricky B. 2010. Attention deficit hyperactivity disorder (ADHD): Review for Primary Care Clinicians, London J Prim Care (Abingdon). 3(1): 45–51. London Journal of primary care.
- [9] Faigel, H., Sznajderman, S., Tishby, O., Turel, M., & Pinus, U. 1995. Attention deficit disorder during adolescence: A review. Journal of Adolescent Health, 16, 174-184. Hatfield, A. B., & Lefley
- [10] Harold GT, Rice F, Hay DF, Boivin J, van den Bree M, Thapar A. 2011. Familial transmission of depression and antisocial behavior symptoms: disentangling the contribution of inherited and environmental factors and testing the mediating role of parenting. Psychol Med. 41(6):1175-85.
- [11] Lavigne, J. V., Gibbons, R. D., Christoffel, K. K., Arend, R., Rosenbaum, D., Binns, H., Dawson, N., Sobel, H. & Isaacs, C. 199. Prevalence rates and correlates of psychiatric disorders among preschool children. Journal of the American Academy of Child and Adolescent Psychiatry, 35, 204-214
- [12] Lewis G, Rice F, Harold GT, Collishaw S, Thapar A. 2011. Investigating environmental links between parent depression and child depressive/anxiety symptoms using an assisted conception design. J Am Acad Child Adolesc Psychiatry. 50(5):451-459.e1.
- [13] Matlen, T. 2014. The Queen of Distraction: How Women with ADHD Can Conquer Chaos, Find Focus, and Get More Done Paperback
- [14] Mannuzza, S., Klein, R. G., Bessler, A., Malloy, P. & LaPadula, M. 1993. Adult outcome of hyperactive boys: educational achievement, occupational rank, and psychiatric status. Archives of General Psychiatry, 50, 565-576.
- [15] Morrison JR, Stewart MA. 1973. The psychiatric status of the legal families of adopted hyperactive children. Arch Gen Psychiatry. 28(6):888-91.
- [16] Nigg, J. T. 2001. Is ADHD a disinhibitory disorder? Psychological Bulletin, 127, 571–598.
- [17] Nigg J, Nikolas M, Burt SA. 2010.Review Measured gene-by-environment interaction in relation to attentiondeficit/hyperactivity disorder. J Am Acad Child Adolesc Psychiatry. 49(9):863-73.
- [18] Rhee SH, Waldman ID. 2002. Genetic and environmental influences on antisocial behavior: a meta-analysis of twin and adoption studies. Psychol Bull; 128(3):490-529
- [19] Schachar, R., Mota, V. L., Logan, G. D., Tannock, R. & Klim, P. 2000. Confirmation of an inhibitory control deficit in attention deficit/ hyperactivity disorder. Journal of Abnormal Child Psychology, 28, 227-235
- [20] Safren S, Perlman C, Sprich S, Otto M. Mastering your adult ADHD: Therapist guide. 2005. New York: Oxford University
- [21] Sagvolden, T., Aase, H., Zeiner, P. & Berger, D. 1998. Altered reinforcement mechanisms in attention-deficit/hyperactivity disorder. Behavioural Brain Research, 94, 61-71.
- [22] Silberg JL, Maes H, Eaves LJ. 2012. Unraveling the effect of genes and environment in the transmission of parental antisocial behavior to children's conduct disturbance, depression and hyperactivity. Journal of Child Psychology and Psychiatry. 53:668-677.
- [23] Sonuga-Barke, E. J. S., Williams, E., Hall, M. & Saxton, T.1996. Hyperactivity and delay aversion. III: the effects on cognitive style of imposing delay after errors. Journal of Child Psychology and Psychiatry, and Allied Disciplines, 37, 189-194
- [24] Taylor, E. 2011. Antecedents of ADHD: a historical account of diagnostic concepts. Atten Defic Hyperact Disord. 3(2):69-75.
- [25] Sprich S, Biederman J, Crawford MH, Mundy E, Faraone SV. 2000. Adoptive and biological families of children and adolescents with ADHD. J Am Acad Child Adolesc Psychiatry. 39(11):1432
- [26] Silberg JL, Maes H, Eaves LJ. 2012. Unraveling the effect of genes and environment in the transmission of parental antisocial behavior to children's conduct disturbance, depression and hyperactivity. J Child Psychol Psychiatry. 53(6):668-77.

[27] Tully, E.C., Iacono, W.G., McGue, M. 2008. An adoption study of parental depression as an environmental liability for adolescent depression and childhood disruptive disorders. American Journal of Psychiatry.165:1148–1154.

[28] Van Loo, K.M.J., G.J.M Martens, G.J.M .& Genomics, C. 2007. Genetic and Environmental Factors in Complex Neurodevelopmental Disorders 8(7): 429–444.

[29] Weiss G, Hechtman L.(1993). Hyperactive children grown up: ADHD in children, adolescents and adults. New York: Guildford.

[30] Wolraich, M. L., Wibbelsman, C. J., Brown, T. E., Evans, S. W., Getlieb, E. M., Knight, J. R., Ross, E. C., Shubiner, H. H., Wender, E. H. & Wilens, T. 2005. Attention-deficit/hyperactivity disorder among adolescents: a review of the diagnosis, treatment, and clinical implications. Pediatrics, 115, 1734-1746

[31] Zametkin AJ, Nordahl TE, Gross M, King AC, Semple WE, Rumsey J, et al. 1990. Cerebral glucose metabolism in adults with hyperactivity of childhood onset N Engl J Med 3231361-1366

[32] Zylowska, L. 2012. The Mindfulness Prescription for Adult ADHD, Trumpeter books

