

Review

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Review

Key Points in Attention Deficit Hyperactivity Disorder

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Abstract: ADHD is a specific pathology in children but may persist to youth and also not so hard to find to adults. Till now, hard to find the curative treatment knowing ADHD as a neuropsychiatric disorder with enlarge unknown scientific points. Genetic and environmental component play an important role in diagnosis. Patients life style, a relevant history of individual genetics and environmental factors are important in diagnosis. The management of ADHD, is also an important part together with future trends.

Keywords: ADHD; childhood; diagnosis; brain; functional connectivity

1. Introduction

The specific particularities of children and young people relevant for healthy include disease and their health-risk profiles. There are known age vulnerability to demographic factors, social status, and their human right. In this direction, adulthood, play a significant signal referring to affecting individual human healthy. [1] Pregnancy and early childhood, are period of life, with different stressors points. as poverty, violence, but not only. In this field, bad results founds in research studies, referring to human healthy, including previously mentioned stressors factors. [2] [3] Individual person diagnosed with ADHD, creates a burden for the human individ, for their family, and for enlarge community. This is why need attention patients. [4] There are plans and strategies for study, for evaluate and for management and future trends in this neuropsychiatric disorder which nowadays exist. Strategies and policy include womens as vulnerable gender, children and adolescents. This political strategies include specific programmes and services. [5,6] Diagnostic in this neuropsychiatric disorder is possible clinically. In ADHD at least 6 of the 9 symptoms are mentioned by medical specialists. This pathology does not have specific tests as laboratory or imagistically investigations. More than, we can mention that the neuropsychological tests are not sensitive for diagnosis. Individis at early child period of life, including youth as a risk group, represent a enlarge segment of persons in research studies. [7]

2. Analytic strategy

Is possible to use a cumulative logistic model. This model is consider being proper.

$$\log(fj1-fj)=a+\beta X,$$

In the previous formula, are explanatory variables. There are known models used for establishing affected key points to human individis diagnosed with ADHD. So, from model one to model six till now. (Figure1)

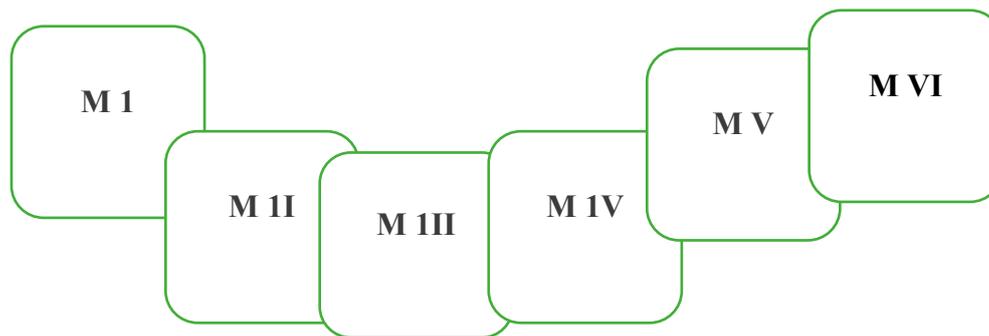


Figure 1. Models used for evaluation the association between early-life conditions and adults status in ADHD.

Models I to VI, following step by step, concure to establishing a medical profile of patients diagnosed with ADHD. Monte Carlo technique is a well known method. [8] Within research techniques curentlly used, is possible to establish particularities in ADHD, depending of poit of view on this pathology. [9] There are known different and various types of objectives used in ADHD studies, knowing from historical researchers (Figure 2):

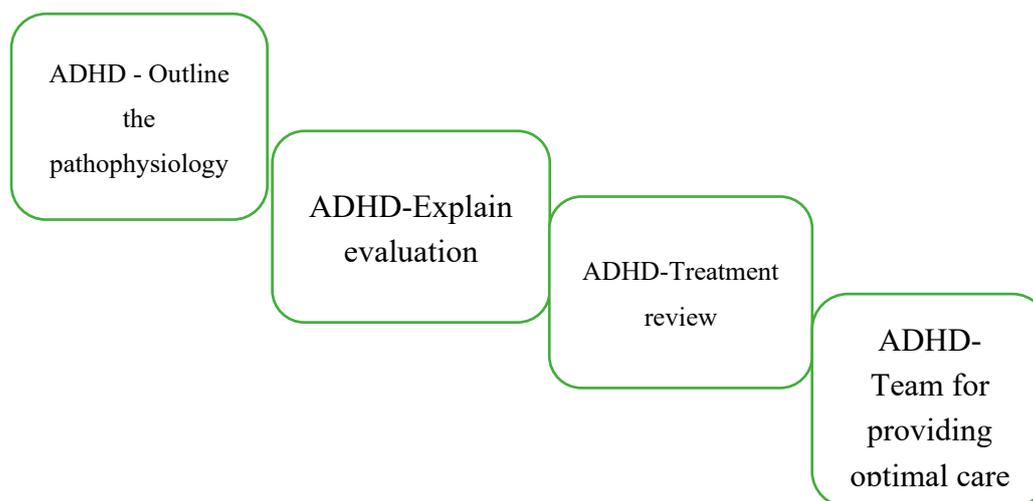


Figure 2. Analyse strategies in ADHD.

3. Specific key points in attention deficit hyperactivity disorder

One of specific objective in ADHD pathophysiology, consist of molecular genetic profile. So are known different research studies where was found a considerable number of genes with implications in ADHD diagnostic. Candidate genes were also found with implications in ADHD, as. *DBH*, *MAOA*, *SLC6A2*, *TPH-2*, *SLC6A4*, *CHRNA4*, *GRIN2* and also more than with next group including, genes coding for *DRD4*, *DRD5*, *SLC6A3*, *SNAP-25*, and *HTR1B* with implications in the etiology of this disorder. Beside this, also important to apply in practicum, the pharmacotherapy for treat simptoms to patient diagnosed with ADHD. [10,11] There are known seven types of ADHD, knowing from previously research studies conclusions. So, patient from each type need particulary medical abordation.

4. Key points in diagnosis

There are known to be two different relatively similar disorders. Has been diagnoses Attention Deficit Disorder (ADD) vs. Attention Deficit Hyperactivity Disorder (ADHD). Subtypes ADHD are predominantly inattentive, predominantly hyperactive, or combined type. During history, in ADHD, has been studied and developing in medical concepts. So that nowadays is not a new condition. As

'minimal brain dysfunction', in the 1930s, scientists changed names in ADD and ADHD. The symptoms in persons diagnosed with ADHD, begin at a young age.

5. Differential diagnosis

In differential diagnosis of ADHD from other disorders, medical interdisciplinary team must establish diagnostic, knowing specific symptoms. More than, psychiatric disorders, implicate a complex medical specialty and in this direction, and for a proper diagnosis must be honest and highly qualified medical team. Individual signs and symptoms which diagnosed depression or anxiety can be false diagnosed in a patient with ADHD. Symptoms as memory loss, could be observed in individuals with ADHD disorder but must be very good established for differential diagnosis from other psychiatric disorder. Substance abuse disorders should be examined in children with ADHD and differentiate from other psychiatric disorders. [10]

6. Treatment key points

ADHD treatment, such as actually it is known, with limits or doubts, is important to apply practice for symptoms diminution.

In this direction, untreated ADHD can cause greatest dysfunctions in human life.[11,12]

In patients diagnosed with ADHD, pharmacological therapy is important to apply. Medical curative drugs are divided into two major categories. Medicines include typical drugs. The bad effect of medicines in ADHD treatment is dependency. This is why the treatment for patients diagnosed with ADHD, must be proper. [17,18] The long-term goals of the ADHD treatment can be achieved. Also an integrated healthcare plan should be followed for the treatment of ADHD. [19] It is better known that in patients diagnosed with ADHD, without a good treatment, their status continue to deteriorate and more than, possible for patients, a non integration status, social and financial. [20–22] MTA Cooperative Group in 1999 refer to the ADHD treatment, as monotherapy or combination treatment, as a common first-line medication. [23] "New Formulations of Stimulants for Attention-Deficit Hyperactivity Disorder" was published in 2004. [24,25] Genetical profile and biomolecular mechanism are described in related drugs administration in ADHD. [26–28] Research studies, show us genetic profile in patients. diagnosed with ADHD. [29,30] Adherence to treatment in youth, is one of the important rule for best results with implications on human health. stimulants is modest, especially in adolescents who often discontinue medication, despite persistence of symptoms. [31–33] In the last years, as a results of various studies, new ADHD medication formulations have appeared. In this direction, IR formulations have been FDA approved from 2004. [34] In 1930 was approved for clinical use by the FDA specific therapy in ADHD and published in 1976. [35–38]

"An adhesive-based matrix transdermal system (MTS)" patch were established and published by FDA.[39–41] and also in 2010 by Arnold et al [42] in 2014 by Findling and Dinh [43] and in 2015 by Pastore et al.[44] In transdermal treatment, the *dl*-MPH is incorporated into an adhesive, for a proper transcutaneously effect. ADHD treatment has different scientifically directions. Finally, hope to have good results in patients diagnosed with ADHD, for their benefits in human life.

7. Management directions

The management in ADHD involves previously mentioned interprofessional team. Collaborative team includes the specialist psychiatrist, pediatrician, pharmacist, and others specialists. Beside the interprofessional team, play a role nurse practitioners with warm helpfull. Family become important in ADHD management, because know the exactly history of the events in patient life.

Each clinician from the ADHD management team, must be able to decide about diagnosed status in ADHD patient. [13]

More important to avoid noncompliance to treatment using medications including also paleative treatments. Without a proper individual treatment, following personalized medicine principles, ADHD symptoms will be not treat for promote a healthy life of patients. [14–16]

8. Conclusion

Psychiatric disorder namely ADHD is sometimes controversy treated. There are known comorbidities beside ADHD, which including anxiety, depression but not only from psychiatric disorders, that need attention in drugs administration. Also metabolic or endocrine alterations held together in ADHD. So, the treatment of ADHD can treat as well, the symptoms for comorbidities in patients with ADHD. Untreated ADHD can cause long-term inability to work, from diagnosed patients, with a negative impact in youth patients. We look for establishing globally future research directions.

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