

Viewpoint Article

A Critical Viewpoint About the Legal Analysis of the Attention-Deficit and Hyperactivity Disorder (ADHD) in the Spanish Criminal Justice System

Marta Maria Aguilar-Carceles*

Department of Legal History, Criminal Law and Criminological Sciences, Faculty of Law, University of Murcia, Murcia, Spain

*Corresponding author: Marta María Aguilar-Carceles, Department of Legal History, Criminal Law and Criminological Sciences, Faculty of Law, University of Murcia, Murcia, Spain, E-mail: maguilarcarceles@um.es

Received Date: 30 June, 2017; Accepted Date: 02 August, 2017; Published Date: 26 August, 2017

Abstract

This paper focuses its aim in the explanation on the link between the Hyperactivity Attention Deficit Disorder (ADHD) and the future criminal career by the analysis of how Spanish Courts understand this disorder. The ADHD diagnosis is characterized by attention-deficit, hyperactivity, and impulsivity, but there are some external symptoms like hyperactivity-impulsivity, mainly impulsiveness, which is the most related to the criminal career. This relationship is frequently explained by the clinical comorbidity or concurrence, where the presence of other severe mental disorders could explain the link between ADHD and the antisocial behaviour and its contact with the Criminal Justice System. In this regard, one of the main worries concern to the fact of how understanding this disorder in order to assess the criminal responsibility and raises a reduction in the subsequent criminal sanction.

Keywords

Attention-Deficit and Hyperactivity Disorder (ADHD); Clinical Comorbidity; Criminal Responsibility; Impulsivity; Criminal Career; Spanish Courts

Conceptual Delimitation

ADHD is considered the most prevalent neurodevelopmental disorder worldwide, whose nuclear symptomatology is established by the lack of attention, hyperactivity, and impulsiveness. Specifically, with the meaning of psychopathologies of the neurodevelopment, it refers to the establishment of certain illnesses with more probability in certain stages of life and the possible continuity of this kind of disorders and their symptomatology in later stages.

Furthermore, the inclusion under the neurodevelopmental disorders in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM), let us appreciate the importance given to biological aspects. It has been considered that have been noticed by different research studies when they associate ADHD with an atypical brain development [1,2].

The prevalence indicates that, in Europe, approximately 1 of 20 children and adolescents are affected by ADHD [3], although some studies indicate that in the first years the rate can be estimated on average 5% all over the world [4], or even define it as the prevalent neurobiological condition that affects the 4.4% of the general population [5]. Following DSM-5, the estimation would be on average 5% in the first years, while the prevalence in adult population would be represented in the 2.5%. Nevertheless, we must consider that general prevalence of ADHD decreases with the years [6].

ADHD is considered as a multifaceted disorder that can have a significant impact in different aspects of the individual's quality of life, such as academic achievements, social functioning (i.e., peer rejection), or even the involvement in the criminal career. Regarding to this last point, the hyperactive and impulsive signs define the most ADHD subtype related to behavioral problems, being the external symptomatology the main cause of clinical comorbidity. So, if we know that 50% of children and adolescents with ADHD will continue to have ADHD as adults and that ADHD may persist throughout the lifespan [7], we should add that only a minimum of this percentage will develop antisocial behaviors and criminal trajectories in the future. According to these, [8] state that one of the biggest problem facing by ADHD people is that, despite accumulating evidence of its substantial impact on individuals, families and society, this disorder that not

feature highly on the current national and EU policy agendas, being necessary to develop some practical recommendations to improve the support to people with ADHD.

In short, ADHD is a clinical neurodevelopmental disorder whose lack of early diagnosis and prevention could result in several consequences, but as we have seen the trajectories are not the same for all the people. However, there is no doubt that the results given by different research studies suggest that young people diagnosed with ADHD are vulnerable to committing crime in later years, with a high proportion of these individuals involved in the criminal justice system, and many more arrested [9]. Concerning this last point, following the decisions of the Spanish Courts about ADHD people, and knowing that the probability of binding this disorder with other antisocial conducts, this paper will focus the interest in the way Spanish Courts treat this kind of situations.

Understanding the Legal Treatment in the Spanish Courts

It is evident that the worst consequences of the ADHD are related to the disruptive and antisocial conducts as well as its origin for illicit acts, being necessary to understand if the disorder has or not any kind of influence in the criminal responsibility from a legal approach.

The typical conduct against the Law would define the criminal responsibility (“imputability”) as a key element of guilt, understanding that this requirement only could have effect on whom know the ban and act recklessly against it [10,11]. This is why the incapacity of understanding and self-directing the conduct implicate the non-imputability by the action that has taken place. In this regard, the Spanish Criminal Code follows a negative approach of identification, this is, by the definition of non-imputability. Specifically, in the Articles 20 and 21 are described the causes of circumstances that modify the criminal responsibility, both excluding (Articles 20) or reducing it (Article 21). In particular, in the Article 20 are described the characteristics to consider this reduction, focusing on the faculties of cognition and volition.

In general, and regarding to the diagnosis of ADHD, the Spanish Criminal Law mentions that there is no malfunction on will, either in cognition, that means they are not causal criteria enough by themselves to apply Articles 20 or 21 of the Criminal Code about exemption or reduction in criminal liability. According to that, the individual with ADHD would be able to understand the possible unlawfulness of the actions the same as any other individual, understanding that without important differences regarding the Article 20.1 of the Spanish Criminal Code more than due to the co-occurrence with other mental pathologies. The best example would be the therapeutical probability of controlling responses given to certain stimulus motivated by the reward, as some jurisprudence indicate (i.e., Provincial Court Sentence of Toledo 58/2007, 4th December [JUR 2007\73195]).

It is understood that the response to the previous question could be directed more to the explanation related to symptomatology rather than to the classification of the disease, where there would also come symptomatology from other disorders that could be legally discussed but to be more benefited they would be already mentioned in some sections of the Criminal Code. An example of this would be the Personality Disorder (PD) or the Substance-Related and Addictive Disorder, commonly associated to ADHD but with an evident correspondence regarding its criminal discernment [12-15].

It could be admitted that the ADHD is unnoticed by the Spanish Courts regarding its relation to non-responsibility, being normally associated with other disorders, and concluding that the full, incomplete, or mitigated exemption is not observed, except when the co-occurrence with other disorders exists. Thus, many few cases exist in which ADHD appears with a reduction in the criminal responsibility by a single diagnosis.

Nevertheless, it could be possible to focus on the understanding of the analogic mitigation consider under the Article 21.7 of the Spanish Criminal Code if we would like to consider or observe the ADHD as a possible circumstance of modification of the criminal responsibility. Once again, the own diagnosis of the disorder will be insufficient, so we should consider its convergence with other mental diseases or pathognomonic symptoms to justify a reduction in the criminal sanction or for the implementation of a security measure.

Impulsiveness and Self-Determination in the Comprehension of the Legal Determination

The symptoms of lack of attention and impulsiveness are described as the most relevant in the chronicity of the illness opposite to hyperactivity [16]. Not only this, the comorbidity itself allows to see the feature impulsiveness as the clinical and criminal aspect which could have more responsibility regarding the legal term of criminal liability or criminal responsibility, like it would be the example of this disorder. Furthermore, the impulsiveness is described as one of the most relevant characteristics by the American Psychiatric Association (APA) in the DSM [17]. In this Manual, it is the second most repeated symptomatic aspect after the clinical significance, because it can be appreciated in mental disorders as different as the Oppositional Defiant Disorder (ODD), Conduct Disorder (CD), Antisocial Personality Disorder (APD), Borderline Personality Disorder (BPD) or even the Substance-Related and Addictive Disorder, between others.

Some studies indicate that during childhood and adolescence can appear between 1-3 comorbidities at the time of ADHD diagnosis [18], existing a high risk or of concurrence with other distinct mental conditions (CD, ODD, anxiety, depression) [19] both in adult and non-adult population.

The previous points explain the high comorbidity between the psychopathologies, mainly when we talk about ADHD and its related trajectory to criminal behavior [20-22]. For instance, [23] indicate that ADHD diagnosis could be considered the prelude for later psychopathologies such as APD, CD or ODD, sharing between them not only the lack of planning about their acts, but also the underestimation of the resulting consequences [24]. Even more, some authors state that there is an increased risk for children with ADHD with or without comorbid CD to develop later onset of antisocial personality disorder, not being necessary the presence of a CD [25].

In this regard, the diagnostic concurrence is higher when the predominant type is hyperactivity-impulsiveness, defining the impulsiveness as a clear risk factor in the prediction of future criminal behaviours [26,27]. It is shown that the problematic of clinical comorbidity has a huge repercussion in the legal field, mainly because an incorrect or erroneous clinical conclusion could lead to an inadequate judicial decision.

According to that, impulsiveness would be a symptom to define a wide variety of mental illnesses, which are shown in the permanent malfunctions and disturbances described by the APA. Nevertheless, which is its effect in the Spanish Criminal Justice System?

In a more specific way and related to the development of disruptive and antisocial behaviours or against the Law, the most important legal consideration in individuals that present ADHD could be considered in relation to impulsiveness, lack of inhibition, search for new sensations, aggressiveness, hyperactivity, anxiety, and things that we have described before. All of these aspects do not mean the unequivocal presence of a clinical diagnosis, but they usually warn about the possibility and propensity of committing antisocial acts.

The impulsiveness of the person with ADHD could be not aggressive nor intentional, but this would not mean that it can be always controlled, afterwards this incapacity of self-determination would come at the moment of experiencing rage or hostility with violent responses which, in these cases, would be more instant and instinctive.

In most of the legal assumptions there is no detail regarding this, although it is noticed that the investigation in this sense should have into account the assessment of the capacity of self-determination. As it has been seen before, there is a deficit or malfunction regarding certain capabilities, in particular attention and the bound with hyperactivity-impulsiveness, not a malfunction or psychic disturbance of the level required by the Spanish Courts. That is, according to the changeable assumptions of criminal liability that observes the Criminal Code. This way, it would be extremely difficult to notice the first paragraph of the Article 20 of the Criminal Code. Besides, ADHD would be mostly identified as criminal factor or risk due to the presence of impulsiveness, but not only by the diagnosis of ADHD itself.

Talking about awareness and will, the consideration of criminal

responsibility implicates that they know what they do and what they want to do. If the individual would be in every moment completely aware of the illicit action, maybe we should ask if the deficit that has major consequences at criminal level would be related to self-determination. So the effect on willingness would be the only possibility to lay out the modification of criminal responsibility in this disorder. It should also assess if they would be able or not to orient his knowledge to this will. In this regard, the biggest controversy would be based on self-determination.

It would be this impulsiveness the one that would be foster by comorbidity more than the disorder itself. In any case, certain mitigations -or reduction in criminal liability-, could be admitted in the consideration of the criminal sanction but very often, as the Law observes, it will not be done under the excuse of the presence of the diagnosis of the ADHD, but due to the co-occurrence of circumstances and being the impulsiveness the common factor [28]. For example, the comparison of the ADHD with the APD shows the poor limits in this field between the pathologies. That should be seen with precaution because we know that, although noticing changeable of the criminal liability circumstances in individuals with certain Personality Disorders is very difficult, it is true that they could have more criminal privileges than other mental illnesses. This is, under the group psychopathies, although it is very controversial in its denomination, the Spanish legal doctrine has preserved a special criminal requirement with neurosis, oligophrenia and psychosis. All this group of mental alterations has had a greater consideration inside the field of Criminal Law in order to reduce or exempt from criminal responsibility. Mainly the group of psychosis or in people with diagnosis of schizophrenia and other Schizophrenia Spectrum Disorder (SSD).

It is exactly the debate and the ambiguity that could define the application of these circumstances in a special way because not only the definition of a pathology as severe would be precise but also the effect of understanding (cognition) and self-determination in a certain moment. In this context, it would be more difficult to include illnesses that, not denying their influence as a possible criminal factor -for example the ADHD from the impulsive symptomatology-, would not be mentioned in the Criminal Code as are the permanent group of psychopathologies defined by the Criminal Law doctrine (neurosis, oligophrenia and psychosis). In this regard, psychopathies usually tend to be mentioned from a theoretical viewpoint, although in a practical way they are not in consideration for the reduction or exemption of the criminal responsibility, except for the presence of severe symptomatology and clinical comorbidity.

The Importance of the Presence of other Psychopathologies for Reducing the Criminal Liability

There is no doubt that ADHD have been associated with high rates of driving offences, arrests, and imprisonments [29], but most of the studies agree with the idea that the main cause of

this would be the development of comorbid psychopathologies such as Substance Use or PD [30]. According to that, and in its comparison with the legal analysis of other pathologies with more probability of non-responsibility or reduction of criminal responsibility based on what it has been said, it would be admit that the protection the ADHD by the Legal System is established by its relation with the use of drugs, Personality Disorders and impulsive symptomatology in general. For instance, APA (2013) indicate that children with ADHD have a significant higher probability than their schoolmates without it of developing a CD during adolescence and APD during adulthood increasing the risk of use of drugs and imprisonment.

In spite of that, the legal assessment is still very controversial when analysing the psychic condition of the individual just at the moment of illicit action, because from observing the possibility of planning, the impulsiveness of the subject would diminish. This is exactly what would happen with the APD, Borderline Personality Disorder (BPD) or the old known as Intellectual Disorders. Regarding the Personality Disorders (Group B), characterised among other aspects, by the high levels of unpredictability, irregularity or impulsiveness, it would be complex to think about the non-imputability of the ADHD regarding other illnesses in which the structure of the personality would be much more rigid and inflexible, and even so the criminal liability is questioned [31,32]. For example, the possibility of self-harm by who suffers from BPD has been remarked, a behaviour which is clearly pathologic and should make us thinking about the disorder, although the process of self-victimisation is not classified in the Criminal Code.

The true problem is about the assessment of willingness about its link with impulsiveness and the existence of comorbidity. As we saw before in the theoretical analysis, we would have to say that there are few mentions to the link of the ADHD and delinquency due to comorbidity and main diagnosis with the causes mentioned in Article 20 of the Criminal Code that could question criminal liability (they mainly are psychosis, oligophrenia, and neurosis). Following this, the Sentence of the High Court of 16th October 2000 is very remarkable because it refers to “the mere presence of psychic malfunction can be irrelevant to determine non-imputability of the person who suffers from it and, as a consequence, his criminal liability”, and continues “it is also necessary that the author of the criminal offence, as a cause of the disturbance he suffers, cannot understand the illicit action or the fact of acting according to this”. It is necessary that the disturbance was between the subject and the action which establishes it as illicit and explain if he can or cannot be motivated by it. In this regard, it would important to take into consideration the four criteria establish by [33] when they refer that the reduction or annulment of the culpability should previously assess the qualitative, quantitative, chronological, and causal characteristic of the disorder. This is, the diagnosis, the severity, the duration or presence of the psychopathology in the person at the moment of the antisocial conduct, and the link between the disorder and the illicit act, because it should be strong enough to explain the behaviour.

Further Considerations

As it can be observed, the inclusion of ADHD in the fifth edition

of the DSM under the neurodevelopmental disorders suggests that further interventions can be carried out at any time [9], which confirm the chronicity of the disorder across the life-span. Although there are sometimes in which it would be the symptom and not the disorder itself which will remain.

Besides that, the presence of the diagnosis does not always confirm the dysfunction throughout life, and with less probability its relationship with the criminal career, so ADHD is not always synonymous with social dysfunction, criminality or antisocial behaviour.

Nevertheless, when the diagnosis occurs, it is important to considerer that comorbid circumstances can be the cause in the explanation of the link between ADHD and criminal trajectory. In this sense, it would be important to warn professionals about the need of knowing the characteristics and manifestation of the disorder, as well as the possible implications in the arrest or even in the judicial procedure. For instance, they are in general more vulnerable of being involved in the Criminal Justice System under the following considerations: i) they to be reactive or impulsive instead of organized at the moment of arrest, ii) they seem to avoid confessing but truly they cannot sustain attention when they are arrested, so it can result in false confessions, iii) they usually have serious difficulties in coping with prison life, and iv) they are more likely to offend when family or community support does not exist, so recidivism can increase [9].

As we can see, the disadvantages of ADHD people can be appreciated not only in the interview with the police but also during the criminal procedure. As a neuropsychological dysfunction, it should have influence in the judgment of the Court, so the clinical situation and prognosis should have be considered in order to improve the procedure [34] and adapt it to the necessity of people that can declare by itself with the measures needed.

In short, increasing awareness about ADHD is essential for every single step in the criminal procedure [35].

Acknowledgements

This paper has been developed thanks to the initiative of setting up a specific and inaugural Journal of Forensic Sciences and Digital Investigations. In the same way, the in-depth study on the subject addressed is due to the granting of the research project entitled “The criminal responsibility of people with Attention Deficit Disorder and Hyperactivity” (Ref. DER2016-80604-P), conferred by the Government of Spain and whose main responsible is David L. Morillas Fernández.

References

1. Shaw P, Eckstrand K, Sharp W, Blumenthal J, Lerch JP, et al. (2007) Attention-deficit/hyperactivity disorder is characterized by a delay in cortical maturation. *Proc Natl Acad Sci USA* 104: 19649-19654.
2. Valera EM, Faraone SV, Murray KE, Seidman LJ (2007) Meta-analysis of structural imaging findings in attention-deficit/hyperactivity disorder. *Biological Psychiatry* 61: 1361-1369.
3. Lara C, Fayyad J, de Graaf R, Kessler RC, Aguilar-Gaxiola, et al. (2009) Childhood predictors of adult attention-deficit/hyperactivity

- disorder: results from the World Health Organization World Mental Health Survey Initiative. *Biol Psychiatry* 65: 46-54.
4. Esperon CS, Suarez AD (2007) Manual de Diagnóstico y Tratamiento del TDAH, Editorial Medica Panamericana, Madrid, Spain. Pg no: 1-175.
 5. Kolar D, Keller A, Golfopoulos M, Cumyn L, Syer C, et al. (2008) Treatment of Adults with Attention-Deficit/Hyperactivity Disorder. *Neuropsychiatr Dis Treat* 4: 389-403.
 6. Simon V, Czobor P, Balint S, Mészáros A, Bitter I (2009) Prevalence and Correlates of Adult Attention-Deficit Hyperactivity Disorder: Meta-Analysis. *Br J Psychiatry* 194: 204-211.
 7. Manor I, Rozen S, Zemishlani Z, Weizman A, Zalsman G (2011) When does it end? Attention-Deficit/Hyperactivity Disorder in the middle aged and older populations. *Clin Neuropharmacol* 34: 148-154.
 8. Young S, Fitzgerald M, Postma MJ (2013) ADHD: Making the invisible visible. An Expert White Paper on attention-deficit hyperactivity disorder (ADHD): policy solutions to address the societal impact, costs and long-term outcomes, in support of affected individuals. Project initiated, facilitated and funded by Shire AG, and supported by the European Brain Council (EBC) and GAMIAN-Europe (Global Alliance of Mental Illness Advocacy Networks), Brussels, Belgium.
 9. Harpin V, Young S (2012) The challenge of ADHD and youth offending. *Cutting Edge Psychiatry in Practice (CEPiP)* 1: 138-143.
 10. Olivares GQ (1999) *Locos y culpables*, Navarra, Aranzadi, Spain.
 11. Muñoz F, García M (2010) *Derecho penal Parte especial*. (8th edn), Tirant lo Blanch, Valencia.
 12. Barkley RA, Fischer M, Smallish L, Fletcher K (2003) Does stimulant treatment of ADHD contribute to drug use/abuse? A 13-year prospective study. *Pediatrics* 111: 97-109.
 13. Fossati A, Novella L, Donati D, Donni M, Maffei C (2002) History of childhood attention deficit/hyperactivity disorder symptoms and borderline personality disorder: a controlled study. *Compr Psychiatry* 43: 369-377.
 14. Martínez Y, Bosch R, Gomá-I-Freixanet M, Valero S, Ramos-Quiroga JA, et al. (2010) Variables diferenciales de personalidad en los subtipos de TDAH. *Psicothema*, 22: 236-241.
 15. Piquero AR, Farrington DP, Fontaine NMG, Vicent G, Coid J, et al. (2012) Childhood risk, offending trajectories, and psychopathy at age 48 years in the Cambridge Study in Delinquent Development. *Psychology Public Policy and Law* 18: 577-598.
 16. Esperón CS (2008) *Convivir con niños y adolescentes con Trastorno por Déficit de Atención e Hiperactividad (TDAH)*. (2nd edn), Editorial Medica Panamericana, Madrid, Spain. Pg no: 1-137.
 17. American Psychiatric Association (APA) (2013) *Diagnostic and Statistical Manual of Mental Disorders*. 5th edn, (DSM-5), American Psychiatric Pub, Washington DC, USA.
 18. Hodgkins P, Setyawan, J, Mitra D, Davis K, Quintero J, et al. (2013) Management of ADHD in children across Europe: Patient demographics, physician characteristics and treatment patterns. *Eur J Pediatr* 172: 895-906.
 19. Steinhouse HC, Novik TS, Baldursson G, Curatolo P, Lorenzo MJ, et al (2006) Co-existing psychiatric problems in ADHD in the ADORE cohort. *Eur Child Adolesc Psychiatry* 15: 25-29.
 20. Johnston HF, Ohan JL (1999) Externalizing disorders. In: Silverman WK, Ollendick TH (eds.). *Developmental issues in the clinical treatment of children*. Allyn and Bacon, Boston, USA.
 21. Nolan M, Carr A (2000) Attention deficit hyperactivity disorder In: Alan Carr (ed.). *What Works with Children and Adolescents? A Critical Review of Psychological Intervention with Children, Adolescents and Their Families*. Biddles LTD, Guilford and King's Lynn, London, UK.
 22. Popper CW, Gammon GD, West SA, Bailey CE (2003) Disorders Usually First Diagnosed in Infancy, Childhood and Adolescence. In: Hales RE, Yudofsky SC (eds.). *Textbook of Clinical Psychiatry*. 4th edn, The American Psychiatry Publishing, Washington, USA.
 23. Loeber R, Burke JD, Lahey BB (2002) What are adolescent antecedents to antisocial personality disorder? *Criminal Behaviour and Mental Health* 12: 24-36.
 24. Forcada R, Pardo N, Bondía B (2006) Impulsividad en dependientes de cocaína que abandonan el consumo. *Adicciones* 18: 111-118.
 25. Storebo OJ, Simonsen E (2016) The Association Between ADHD and Antisocial Personality Disorder (ASPD). *J Atten Disord* 20: 815-824.
 26. Farrington DP (2009) Psychosocial causes of offending. In: Gelder MG, Andreasen NC, López-Ibor JJ, Geddes JR (eds.). *New Oxford Textbook of Psychiatry*. 2nd edn, Oxford University Press, Oxford, UK.
 27. Jolliffe D, Farrington DP (2009) A systematic review of the relationship between childhood impulsiveness and later violence. In: McMurran M, Howard R (eds.). *Personality, personality disorder and violence*. John Wiley & Sons Ltd, Chichester, UK. Pg no: 39-41.
 28. Tiffon BN, Arroyo A, Sarrato L (2009) The challenge of ADHD and youth offending. *Cutting Edge Psychiatry in Practice (CEPiP)*. In: Tiffon Nonis BN (ed.). *Manual de actuación profesional en Psicopatología Clínica, Criminal y Forense: una dimensión Jurídico-Legal*. Bosch-Penal, Barcelona, Spain.
 29. Mannuzza S, Klein RG, Moulton JL (2008) Lifetime criminality among boys with ADHD: a prospective follow-up study into adulthood using official arrest records. *Psychiatry Res* 160: 237-246.
 30. Ramos MA, Kelin RG, Mannuzza S, Belsky ER, Hutchison JA, (2013) Does Childhood Attention-Deficit/Hyperactivity Disorder Predict Risk Taking and Medical Illnesses in Adulthood? *J Am Acad Child Adolesc Psychiatry* 52: 153-162.
 31. Philipsen A (2006) Differential Diagnosis and Comorbidity of Attention-Deficit/Hyperactivity Disorder (ADHD) and Borderline Personality Disorder (BDP) in Adults. *Eur Arch Psychiatry Clin Neurosci* 256: 142-146.
 32. Speranza M, Revah-Levy A, Cortese S, Falissard B, Pham-Scottet A (2011) ADHD in Adolescents with Borderline Personality Disorder. *BMC Psychiatry* 11: doi: 10.1186/1471-244X-11-158.
 33. Carrasco JJ, Maza JM (2010) *Tratado de Psiquiatría Legal y Forense*. La Ley, Madrid, Spain.
 34. Gudjonsson GH, Young S, Bramham J (2007) Interrogative suggestibility in adults diagnosed with attention-deficit hyperactivity disorder (ADHD). A potential vulnerability during police questioning. *Personality and Individual Differences* 43: 737-745.
 35. Young S, Wells J, Gudjonsson GH (2011) Predictors of offending among prisoners: the role of attention-deficit hyperactivity disorder and substance use. *J Psychopharmacol* 25: 1524 - 1532.
 36. Aguilar-Cárceles MM, Morillas-Fernández DL (2015) Criminal Liability in ADHD subject under the Spanish Criminal Law. *BLR* 6: 232-271.