

## Hyperactivity Disorder/Attention Deficit Disorder in Adults: A Position Statement by Portuguese Experts on Diagnosis and Treatment

### Attention Deficit/Hyperactivity Disorder in Adults: Position of Portuguese Experts on Diagnosis and Treatment

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**Acta Med Port** 2025 Mar;38(3):187-196 • <https://doi.org/10.20344/amp.22149>

#### SUMMARY

Attention deficit hyperactivity disorder (ADHD) is a neurodevelopmental disorder that often persists into adulthood, affecting approximately 1.5% - 3% of the adult population in Portugal. Untreated ADHD in adults is linked to an increased risk of substance abuse, criminality, poor academic and professional performance. Less than 20% of adults with ADHD are diagnosed and treated, due to overlapping symptoms with other mental disorders, the existence of comorbidities, or ignorance and prejudices about this disorder. This position paper is the result of expert meetings involving six Portuguese psychiatrists experienced in the management of ADHD in adults. It aims to guide diagnostic and treatment strategies, as well as to address the main barriers and in the follow-up of these patients in the Portuguese context, in terms of diagnosis and treatment. This document also aims to clarify and demystify prejudices, increase medical awareness and promote discussion in order to draw up guidelines to improve the diagnosis, treatment and quality of life of adults with ADHD in Portugal.

**Keywords:** Adult; Attention Deficit Hyperactivity Disorder/diagnosis; Attention Deficit Hyperactivity Disorder/treatment; Portugal

#### INTRODUCTION

Attention deficit hyperactivity disorder (ADHD) is a may have a fluctuating evolution, with periods of absent or

#### ABSTRACT

Attention deficit/hyperactivity disorder (ADHD) is a neurodevelopmental disorder that often persists into adulthood, affecting approximately 1.5% - 3% of the adult population in Portugal. Untreated ADHD in adults is associated with increased risks of substance abuse, criminality, poor academic and professional performance. Less than 20% of adults with ADHD are properly diagnosed and treated due to overlapping symptoms with other psychopathological comorbidities, lack of awareness, and prejudice surrounding this disorder. This position paper results from expert meetings involving six Portuguese experts in managing adult ADHD. It aims to guide diagnostic and treatment strategies, as well as address the main barriers and limitations in managing these patients within the Portuguese context, specifically regarding diagnosis and treatment. Furthermore, it seeks to clarify and demystify associated misconceptions, increase medical awareness, and promote discussion for the development of guidelines to improve the diagnosis, treatment, and quality of life of adults with ADHD in Portugal.

**Keywords:** Adult; Attention Deficit Disorder with Hyperactivity/diagnosis; Attention Deficit Disorder with Hyperactivity/therapy; Portugal

neurodevelopmental disorder that begins in childhood and has a worldwide prevalence in the adult population estimated at 2.5% (1.5% - 3% in Portugal) and a multifactorial etiology with a strong associated genetic component.<sup>1,(X)(4)</sup> Despite appearing in childhood with subsequent persistence of symptoms in adulthood (15% - 65% of patients), the diagnosis of ADHD in adulthood can appear without a previous diagnosis in pediatric age.<sup>5,(X)(8)</sup> In , new evidence points to the fact that ADHD

mild symptoms with preserved functionality, followed by periods of obvious symptomatology and aggravated dysfunction - which may explain adult ADHD patients with no history of sufficiently intense or disruptive symptoms in childhood/adolescence.<sup>9</sup> There are also clinical pictures of secondary ADHD in adults that are sub-sequent to situations such as viral encephalitis or traumatic brain injury, with different pathophysiological mechanisms from the primary condition.<sup>10,11</sup>

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**Received:** 05/08/2024 - **Accepted:** 20/12/2024 - **Published:** 03/03/2025 Copyright © Ordem dos Médicos 2025



Untreated ADHD patients have an increased risk of substance abuse and dependence, accidents, crime, poor academic and professional performance, social rejection by peers and family conflicts, compared to the general population.<sup>12-)(15)</sup> In addition, these patients have an increased risk of obesity, suicide and premature death.<sup>16</sup> Despite the profound functional, psychosocial and economic impact, less than 20% of adults with ADHD are correctly diagnosed and treated.<sup>17-)(19)</sup> Under-diagnosis, and consequently under-treatment, is mainly the result of the existence of overlapping symptoms between ADHD and other psychiatric disorders, as well as the frequent occurrence of comorbidities and prejudices about this condition.<sup>18</sup> Early recognition by health professionals and effective treatment of adult ADHD and its complications are crucial to altering the natural course of this disorder and reducing the likelihood of comorbidities arising during adulthood. In this way it will be possible to minimize the risk and suffering of these patients.

To this end, six Portuguese psychiatrists with extensive experience in the management of adult ADHD held a series of expert meetings with the aim of drawing up a document to guide diagnostic and treatment strategies for this condition, addressing the main barriers encountered in the follow-up of these patients in the Portuguese context. This document, based on scientific evidence and the clinical experience of the experts, aims to provide information on reference practices, training the medical community in management of adult ADHD, in order to improve the follow-up and quality of life of these patients.

## CLINICAL MANIFESTATIONS AND DIAGNOSIS OF PHDA IN ADULTS

Similarly to pediatric age, the central symptomatic core of ADHD includes symptoms of inattention, hyperactivity and impulsivity. However, their phenotypic expression varies throughout the person's development and ageing, in a complex interaction with social and contextual factors. In adulthood, the symptoms of hyperactivity tend to decrease in intensity, and are evidenced by

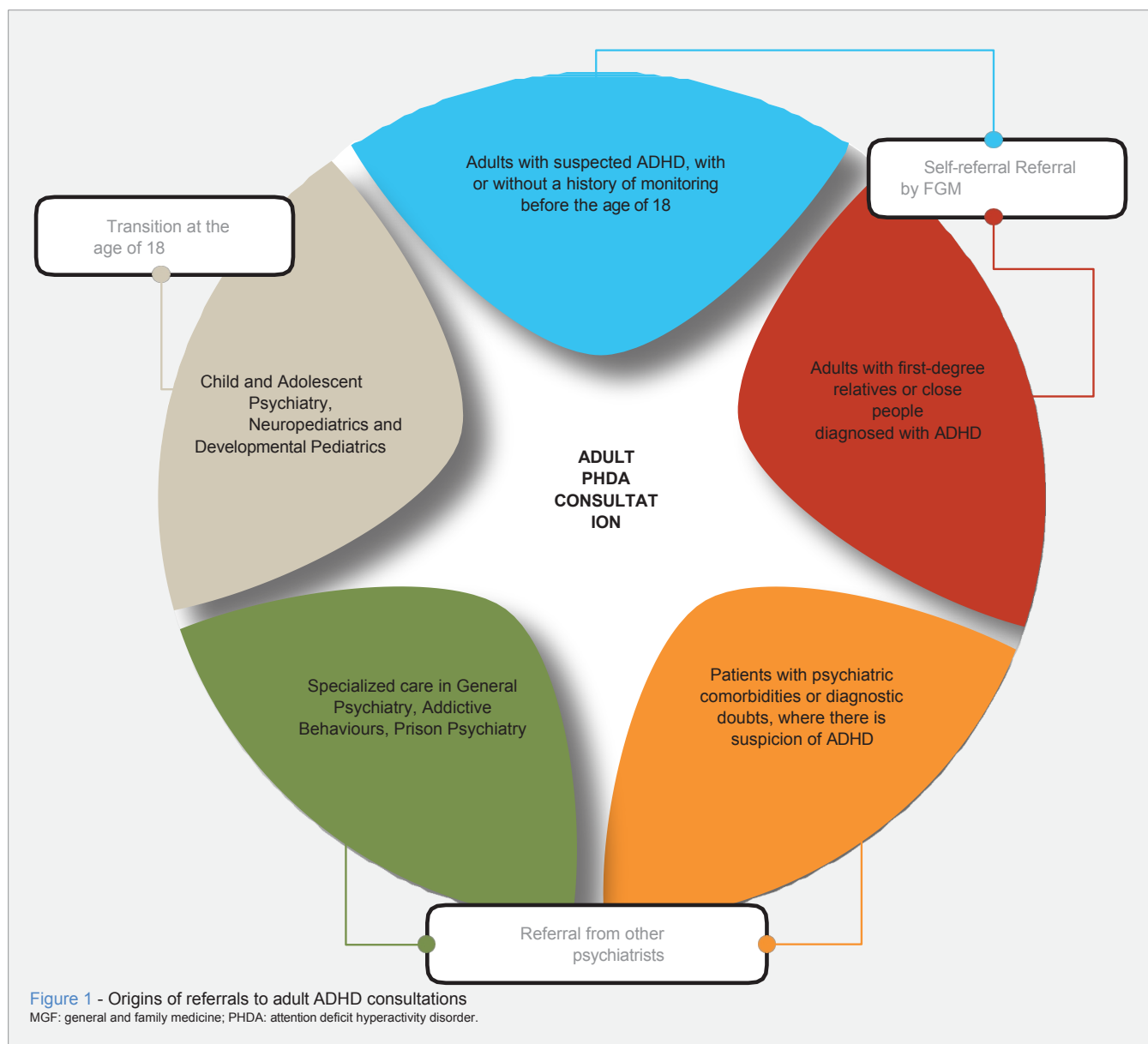
<sup>(20)</sup> The common complaints of these patients include restlessness (mental and inner), attentional and mnemonic difficulties, difficulties in managing time, activities and routines, procrastination - the combined impacts of which often result in low self-esteem, compromised self-efficacy and marked emotional swings.

The most common origins for ADHD consultations, according to the experts, are summarized in Fig. 1. In hospital settings, a significant proportion of patients

With ADHD, there is a direct transition from child psychiatry or neuropsychiatry and developmental psychiatry services when they reach the age 18. These patients may have a more severe clinical presentation and a greater risk of comorbidities (with other neurodevelopmental conditions, for example). However, a large number of these patients do not come back for a consultation after reaching the age of majority.<sup>21</sup> Another group of patients is made up of adults who may be self-referred or, in primary health care, referred by their general practitioner because they have symptoms that affect their academic or work performance, and who are suspected of having ADHD. Another common group is made up of patients whose first-degree relatives or close people have been diagnosed with ADHD and, having had their own symptoms confirmed, also seek a formal assessment.

## Establishing a diagnosis of ADHD in adults

Currently, several international clinical guidelines provide detailed guidance on the methods of diagnosing ADHD in adults.<sup>22-)(25)</sup> There is a consensus that the best diagnostic strategy for ADHD in adults is a thorough clinical interview, which makes it possible to ascertain the existence of signs and symptoms dysfunction since childhood, with an assessment of the dysfunction and impact caused by these symptoms in the different domains of the patient's life. These signs should be researched retrospectively and their presence identified before the age of 12, and are mirrored in the criteria contained in the "Diagnostic and Statistical Manual of Mental Disorders" (DSM-5).<sup>26</sup> However, these criteria are sometimes considered insufficient, and the division into just two symptomatic dimensions (attention deficit and hyperactivity/impulsivity) deserves to be reviewed. Impulsivity and hyperactivity are now considered to be distinct symptomatic dimensions, and there is growing consensus that a fourth dimension - emotional dysregulation - should be considered part of the core symptom of ADHD, rather an associated comorbidity.<sup>25</sup> It is also essential to consider the combined impact of the symptoms, even if the individual does not meet all of the DSM-5 diagnostic criteria.<sup>26</sup> This is particularly important in patients with atypical clinical pictures or with comorbidities (such as intellectual development disorder or autism spectrum disorder) that can make symptomatic assessment difficult. The use of the semi-structured *Diagnostic Interview for ADHD in Adults* (DIVA; Portuguese version available at: <http://www.divacenter.eu>) in the clinical interview is essential.



It provides psychiatrists with a standardized framework for symptomatological assessment and provides patients with practical examples to reflect on the presence of the disorder in childhood and adulthood. Another example of a semi-structured interview is the *ADHD Child Evaluation* (ACE/ACE+/ACEv.2; Brazilian Portuguese version available at: <https://www.psychology-services.uk.com/adhd>), which although more detailed in assessing aspects of childhood and adolescence, is not currently validated in Portuguese in Portugal. There are also scales available for symptomatic (self-)assessment and screening for ADHD in adults<sup>28,29</sup> - however, experts emphasize that their use should be cautious and always complemented with a more detailed assessment.

clinical interview to ensure an accurate diagnosis.

It is crucial to investigate the presence of symptoms in childhood, their persistence and their manifestation in various social contexts and individual functioning in adulthood (Table 1). In addition to the specific investigation of ADHD symptoms, it is also important to investigate other frequently associated signs and symptoms, such as mood lability, alterations in emotional regulation, changes in eating behavior and sleep-wake cycle dysregulation, as well as low frustration tolerance and the presence of psychiatric comorbidities. Possible memory biases, impairment of factual memory and these patients' great capacity for adaptation and compensation may compromise the accuracy of the information.

Table 1 - Main red flags for suspecting the diagnosis of ADHD in adults

Substance use disorder, refractory to various medical and psychological interventions.
Depressive disorders and anxiety disorders, resistant to various psychopharmacological, psychotherapeutic or neuromodulation interventions.
Persistent cognitive symptoms, possibly not reflected in a formal neuropsychological assessment, and not explained by another neurological disease (e.g. <i>minor</i> neurocognitive disorder, multiple sclerosis) or mental disorder (e.g. depression).
Atypical psychopathology in the presence of neurodevelopmental disorders and/or first-degree family history of neurodevelopmental disorders.
Pattern of academic and/or work instability.
Personality characterized by an avoidance of boredom and disinterest in repetitive tasks, and by <i>novelty-seeking</i> .
Difficulties in driving activities, reflected in several traffic accidents or frequent fines.
Pattern of instability in love relationships, difficult to fit into the individual's personality.
Disruption of personal performance (notion of a dissociation between a person's subjective potential and their achievement).
Paradoxical responses to caffeine and recreational drugs with stimulant properties.
A pattern of interpersonal violence, predominantly in an impulsive context, and a history of offenses.

collected during the clinical interview. Therefore, a hetero-anamnesis with a family member or someone close to them should be considered. This validation also reduces the risk of simulation.<sup>30,31</sup> In some cases, neuropsychological assessment can be useful, particularly in adults with cognitive impairment or learning difficulties.<sup>32</sup>

Comorbidities as confounding factors in diagnosis

ADHD in adults is often associated with the presence of comorbidities, which makes it difficult to recognize and diagnose. Up to 80% of adults with ADHD have at least one psychiatric comorbidity,<sup>33,34</sup> which can include anxiety disorders (34%), mood disorders (22%), personality disorders (15%) and substance use disorders 11%).<sup>35</sup> The authors consider it essential to identify and effectively manage comorbidities (e.g. mood anxiety eating, sleep, somatic and substance use disorders), mood, anxiety, eating, sleep, somatic and substance use disorders, as well as personality disorders, ti-ques and autism spectrum disorders).

The issue of underdiagnosis can be particularly acute in adult women with ADHD. In these cases, the clinical picture may show a predominance of attentional and emotional symptoms, in a presentation that is fundamentally felt by the patient herself, as well as comorbidities with depressive and anxiety disorders, which may be confused with other psychiatric conditions and make diagnosis difficult or delayed.

These symptoms are often confused with dysthymia, cyclothymia, bipolar affective disorder and *borderline* personality disorder. Daily mood fluctuations can be common in some ADHD patients, typically appearing with an identifiable trigger and representing emotional dysregulation, as opposed to longer periods of mood fluctuation, with depressive or hypomanic/manic episodes without an obvious trigger, usually present in bipolar spectrum patients. ADHD and *borderline* personality disorder can share symptoms of impulsivity, mood instability, outbursts of anger and feelings of boredom. However, in the adult with ADHD, as opposed to the patient with *borderline* personality disorder, impulsivity and anger are characteristically fleeting and impulsive rather than directed, and conflicts in relationships, suicidal ideation, self-mutilation, identity disturbances and feelings of abandonment are generally less intense. Another clinical condition that may be confused or overlap with ADHD in adults is obsessive-compulsive disorder, due to the possible existence of compensatory repetitive behaviors (developed by patients to cope with attention difficulties), which should be distinguished from compulsive rituals.

In addition to psychiatric comorbidities, physical comorbidities should also be assessed, in particular metabolic syndrome, obesity and cardiovascular diseases - given the known link between ADHD and

**Table 2** - Main barriers and challenges to diagnosing ADHD in adults

The stigma and ignorance surrounding ADHD in adults, given the insufficient literacy in society and the lack of specialized training for health professionals.

The absence of a complete medical history of the individual in the different areas of their life, from childhood to adulthood, as well as family history.

Difficulty in accessing specialized consultations in public health services.

The high costs associated with monitoring in private health services.

Low awareness among the medical community, especially among general practitioners and adult psychiatrists, of proper diagnosis and treatment.

The presence of 'comorbidities' which are often consequences of the functional impact of ADHD and whose presentation is often sometimes prioritized by health professionals, to the detriment of ADHD itself.

Insufficient awareness and adequate training of primary health care to identify and refer patterns family members with ADHD.

The development of compensatory strategies by adult patients to deal with symptoms present since childhood and adolescence.

These conditions.<sup>37</sup> Screening for allergies/asthma, autoimmune diseases, sleep apnea, and baseline assessment of body weight, blood pressure and cardiac function provide additional added value, also in terms of monitoring the tolerability and safety of drug treatment.

### Main barriers and challenges to diagnosis identified by experts

Despite the growing recognition of this disorder, ADHD continues to be widely undervalued and underdiagnosed - Table 2 lists the main barriers and challenges to diagnosing this condition encountered in the authors' clinical practice.

### MANAGING PHDA IN ADULTS

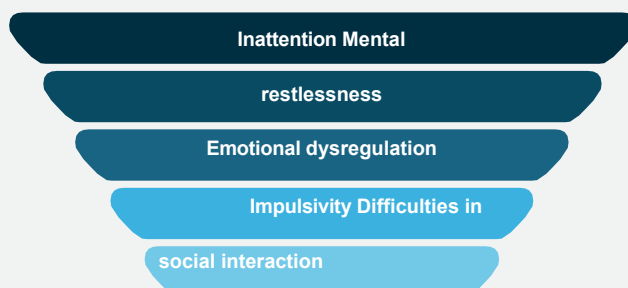
The treatment of ADHD in adults involves a multifaceted approach, encompassing various therapeutic modalities.<sup>14</sup> Therapeutic interventions include psychotherapeutic approaches, including behavioral and cognitive therapies, and psychosocial and occupational approaches. However, the first line of treatment, widely recognized for its effectiveness, is pharmacological treatment.

The selection of treatment for these patients should be informed first and foremost by efficacy in terms of functional outcomes, which include symptom reduction and improved daily functioning, interpersonal relationships and quality of life. Regardless of the therapeutic strategy chosen, its objectives should always be aligned with the patient's expectations and should prioritize the main areas of dysfunction or impact of the reported symptoms (Fig. 2). It is worth highlighting the wide-ranging beneficial effect of pharmacological therapy on symptoms that are neither perceived nor reported by the patient, causing a

improving the patient's overall well-being in different areas of life.

The pharmacological therapeutic options currently available for the treatment of ADHD in adults include psychostimulants, such as methylphenidate and amphetamines, which are generally prescribed as first-line drugs due to their efficacy, tolerability and safety,<sup>22</sup> and non-psychostimulants, such as atomoxetine and  $\alpha 2$  agonists (Table 3). Among the psychostimulant drugs, amphetamines have been a preferred choice by both health professionals and patients themselves, due to their superior efficacy in controlling symptoms compared to methylphenidate and similar tolerability, as reported in two recent meta-analyses.<sup>38,39</sup> Due to their recognized efficacy, amphetamines are currently considered the first choice of treatment by the "European Consensus for the Diagnosis and Treatment of ADHD in Adults".<sup>25</sup>

Before starting pharmacological treatment, it is important to discuss with each patient the benefits and adverse effects of the available options, the importance of healthy habits (e.g. physical exercise), the presence of other symptoms, etc.



**Figure 2** - Hierarchy of complaints frequently reported by adult ADHD patients and expected to be treated

**Table 3** - Pharmacological strategies available in Portugal for ADHD, according to the authors' clinical experience and based on the *Maudsley Prescribing Guidelines*<sup>44</sup>

Drug	Start of action	Most common initial daily dose	Most common maximum daily dose	Duration of effect
<b>Lisdexamfetamine dimesylate</b>	20 - 60 minutes	30 mg	70 mg	Up to 14 hours
<b>Long-acting methylphenidate</b> (extended release)	30 min - 2 hours	18 mg	54 mg	12 hours
<b>Methylphenidate medium action</b> (modified release)	30 - 60 minutes	20 mg	60 mg	8 hours
<b>Short-acting methylphenidate</b> (immediate release)	20 - 60 minutes	10 mg x 3	30 mg x 3	4 hours
<b>Atomoxetine</b>	4 - 6 weeks	40 mg	80 mg	Constant after three weeks of stabilization of the effect

or psychiatric comorbidities, the importance of good management and adherence to treatment, and assessment of personal preferences and concerns.<sup>22</sup> The drugs approved for the treatment of ADHD in adults have a diverse set of advantages and disadvantages, allowing for a personalized choice for the patient. Lisdexamfetamine dimesylate, generally used as a first-line drug, stands out for its longer-lasting effect and lower abuse potential compared to other amphetamine formulations (not available in Portugal). Long-acting and medium-acting methylphenidate formulations (extended-release and modified-release, respectively) provide longer-lasting effects, although their duration of action is shorter than the daily journey (particularly important in the case of adults who need to maintain performance in the family environment after working hours). Short-acting methylphenidate (immediate release) offers a rapid onset of action and is useful as a short-acting therapy, but has a potential for abuse and a short duration of effect. Finally, atomoxetine is an alternative for patients who can't tolerate psychostimulants, but it can cause noradrenergic side-effects which should be duly considered and is less effective in treating symptoms.

Doctors initiating pharmacological treatment for ADHD should be familiar with the pharmacokinetic profiles of the various available formulations of psycho-stimulants, tailoring their choice to the individual needs of the adult patient (e.g. situations of complex family management, with a double shift after a day's work; after-work students with full-time jobs, with the necessary demands of very prolonged treatment, safeguarding the time needed to get over it without insomnia due to possible iatrogeny).<sup>22</sup> When prescribing psychostimulants, preference should be given to the use of prolonged-release formulations, administered once a day, due to their favorable pharmacokinetic profile, convenience, better adherence, reduced stigma

(by avoiding constant administration in the professional or teaching context) and lower risk of abuse (e.g. for cognitive performance, appetite suppression or recreational use) compared to immediate-release preparations. Immediate-release formulations may be appropriate if more flexible dosage regimens are required, or during initial titration to determine the correct dosage levels. Dosage titration should be done gradually, under frequent monitoring, especially if there are associated comorbidities, whether psychiatric (e.g. anxiety, mood or psychotic disorders, among others) or physical (e.g. heart disease, epilepsy, etc.), <sup>(e.g. heart disease, epilepsy or a history of traumatic brain injury).</sup><sup>22</sup> In addition, in the pharmacological management of ADHD for prolonged periods of time (more than 12 months), experimental periods without medication can be considered, in a thoughtful way and adapted to the patient's context, to assess their functioning without pharmacotherapy (preferably during school or work vacations).

#### Non-pharmacological strategies for managing ADHD in adults

Non-pharmacological strategies play a fundamental and complementary role to the pharmacological treatment of ADHD, and should be considered by all health professionals. Psychotherapy focused on skills training, carried out individually or in groups, aims to provide the necessary support so that the patient can recognize and face the challenges of daily life.

%0-d ia. It is crucial that the patient learns to set realistic goals, define priorities, manage time and money, find solutions to problems and adopt adaptive behaviors. Planning, scheduling, creating routines, filtering out external stimuli and using memory aids are all effective ways of dealing with problems of inattention, disorganization and impulsivity. In addition, providing practical tips, making agreements, presenting modifications and



and promoting self-discipline and resilience are important measures in the clinical follow-up of these patients. Other strategies involve psycho-therapeutic interventions focused on the basic symptoms of ADHD and its consequences, in order to increase and strengthen the patient's self-control and change behavioral and thinking patterns characteristic of the disease.

exclusive use of these non-pharmacological strategies can be considered in adults with ADHD who: i) make an informed choice not to start medication; ii) show difficulties in adhering to medication; iii) consider medication to be ineffective or intolerable.<sup>22</sup> Opting for non-pharmacological treatment reinforces the need for regular monitoring and psychological intervention geared towards ADHD, ideally structured and cognitive-behavioral based.<sup>22</sup> However, these non-pharmacological approaches, when combined with appropriate pharmacological treatment, can offer an integrated and comprehensive approach to the management of ADHD in adults, contributing to a significant improvement in quality of life and functionality.

### Treatment of ADHD in the presence of comorbidities

The therapeutic plan must take into account both ADHD and possible comorbid disorders, and is essentially determined by the severity and nature of the various conditions. The treatment hierarchy should prioritize comorbidities with transient symptoms that have the potential to recover, and severe psychotic or affective conditions that cause high levels of dysfunction.

ADHD represents a significant risk factor for the abuse of psychoactive substances in adulthood as a form of self-medication, given their potential to relieve symptoms such as agitation, inattention and sleep disturbances associated with mental restlessness, but also due to the functioning of the reward circuit resulting from dopaminergic dysfunction. In this context, the treatment of ADHD can actively contribute to the reduction of consumption and impulsivity, thus enhancing the maintenance of abstinence. However, the con-

he controversy over the use of psychostimulants in individuals with a history of substance use (especially cocaine or amphetamines) persists, with some professionals advocating postponing the start of treatment for ADHD with psychostimulants and only starting after a period of abstinence of several weeks. However, untreated ADHD is *per se* a known risk factor for relapse into substance use and has a negative impact on adherence to treatment. Consequently, abstinence from substances may be an unrealistic goal to achieve in the case of individuals with marked ADHD symptoms. It is therefore crucial to seek motivation in these patients, and to involve them in integrated treatment programs, in which the treatment of ADHD emerges as the primary goal, along with specific strategies for substance use disorder. These patients particularly benefit from long-acting formulations (such as lisdexamfetamine, modified/prolonged-release methylphenidate and, possibly, atomoxetine), and the health professional needs to pay particular attention to signs of abuse, such as missing appointments, requesting higher doses or more prescriptions.

### Suboptimal treatment of ADHD in adults: concerns and barriers

The under-treatment of ADHD in adults is a significant concern, due to the increased risk of accidental injuries, personal, academic and work failure, risky sexual behavior, traffic accidents, crime, substance abuse and suicide, which translates into increased rates of premature death.<sup>40,41</sup> The under-treatment of this condition results from a variety of reasons, compiled in Table 4, which co-occur in many cases, putting patients at particular risk and suffering. The fear and lack of knowledge on the part of health professionals in dealing with these patients and their pharmacological approach is a critical factor, which requires an enhanced educational approach.<sup>21</sup> The erroneous preconception of the increased risk of mortality with the use of psychostimulants in these patients, despite their proven safety,<sup>42</sup>

Table 4 - Main reasons for the suboptimal treatment of adult ADHD in Portugal

Fears, difficulties and a lack of specialized training on the part of clinicians on the mechanisms of action, efficacy and safety, times of action and ways of achieving the therapeutic doses of psychostimulants needed to stabilize the patient, resulting in insufficient doses.
Irregular adherence to psychopharmacological treatment, often motivated by stigma and fear of addiction.
Inappropriate choice of drug, which may not be adapted to the patient and their context.
Shortage of specialized professionals and consultations in the National Health Service.
Lack of multidisciplinary teams and transition protocols for developmental pediatrics/psychiatry consultations in most psychiatry services.

is also a concern for health professionals. The success of the treatment is impacted by the very organizational issues of healthcare in Portugal, given the lack of specialized consultations and multidisciplinary teams to follow up these patients in their first consultation or in transition.<sup>21</sup>

Transition of ADHD treatment from child to adult

Despite the clear need for continuous monitoring of ADHD patients during the transition from childhood to adulthood, and the frequent need to maintain pharmacological treatment, it is clear that the transition from developmental pediatrics/psychiatry services to mental health services is still very limited in Portugal. This observation is corroborated by the national study by Costa Alves *et al*, which revealed that only 4.8% of transfers to adult psychiatry consultations were carried out with a transitional consultation in the presence of a developmental pediatrician/ child psychiatrist and a psychiatrist.<sup>21</sup>

The Directorate-General for Health's 2019 standard "Diagnostic Approach and Intervention in Autism Spectrum Disorder in Pediatric and Adult Age" advocates the development of protocols for coordination between specialty/subspecialty hospital consultations for pediatric patients.

These measures aim to offer support during the transition to adulthood and follow-up in hospital specialty consultations for adults.<sup>43</sup> However as shown by Costa Alves *et al*, the lack of specialized training in this area for the health professionals involved and the absence of specialized multidisciplinary teams are evident. However, as shown by Costa Alves *et al*, the lack of specialized training in this area for the health professionals involved and the absence of specialized multidisciplinary teams are evident, promoting the therapeutic gap and hindering the transition of care.<sup>21</sup> In this sense, this document seeks to encourage the discussion of approaches of a specialized training nature for health professionals, and of an organizational nature so that specialized consultations and teams capable of supporting the patient in the transition to adulthood can be effectively implemented.

CONCLUSION

Adult ADHD is often under-diagnosed and under-treated, which can have a considerable impact on patients' quality of life. Lack of diagnosis and adequate treatment results in significant difficulties in various areas of life, including professional and academic performance and interpersonal relationships. This position paper, drawn up by Portuguese experts in adult ADHD, is designed to address and attempt to

Table 5 - Summary of the Portuguese experts' recommendations for overcoming the main barriers and limitations in the management of ADHD in adults

Organization of health services: primary health care
Developing continuous and specialized training programs for general practitioners and adult psychiatrists on the diagnosis and treatment of ADHD.
Distribution and encouragement of the use of <i>screening</i> instruments (such as the ASRS self-assessment scale) in primary health care.
Organization of health services: specialized care
Improve access to specialized consultations by increasing the availability of professionals trained in ADHD.
Establish multidisciplinary teams and develop protocols for the transition from developmental pediatrics/psychiatry to adult psychiatry.
Train health professionals to recognize and treat ADHD as the underlying condition, differentiating it from comorbidities that are consequences of the functional impact of ADHD.
Diagnosis of ADHD
Increasing society's literacy through awareness campaigns and education on adult ADHD.
Promote the collection of a detailed clinical history, in a structured way, covering all areas of the individual's life since childhood, as well as family history.
Treating ADHD
Addressing the stigma and fears of dependence on stimulant medication, educating patients about the importance of regular adherence to treatment and the benefits of appropriate medication.
Ensure that the choice of drug is adapted to the patient and their context, in a shared clinical decision.
Taking a personalized and integrated approach to the psychiatric and medical comorbidities associated with ADHD.

ASRS: Adult ADHD Self-Report Scale<sup>®</sup>



to overcome some of these barriers and problems in the management of these patients in the national context (Table 5). It is essential to recognize the importance of an accurate diagnosis and comprehensive treatment, which includes both pharmacological and non-pharmacological approaches, in order to improve the functionality and general well-being of these patients. Only through greater awareness and training of health professionals, as well as the implementation of effective transition strategies from paediatric to adult care, will it be possible to minimize the negative impact of this disorder and provide a better quality of life for ADHD patients.

## ACKNOWLEDGMENTS

The authors would like to thank BIAL - Portela & Ca, S.A. for the support in writing the manuscript and the editorial process provided by Evidenze Portugal, Lda.

## AUTHORS' CONTRIBUTION

NM, GF, GJ, JMF, SSA: Conception, writing and critical review of the manuscript.

CNF: Supervision, conception, writing and critical revision of the manuscript.

All the authors have approved the final version to be published.

## CONFLICTS OF INTEREST

NM has worked as a consultant for BIAL, Janssen, Lundbeck and Rovi; and as a lecturer for Janssen, Lundbeck, Rovi and Tecnifar.

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## FUNDING SOURCES

Support for the writing and editing of the manuscript was provided by BIAL - Portela & Ca, S.A., and by Evidenze Portugal, Lda.

The funding body had no influence on the opinion expressed by the experts or on the drafting of the document.

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