

# ATTITUDES OF PSYCHIATRISTS TOWARDS THE DIAGNOSIS AND TREATMENT OF ATTENTION DEFICIT AND HYPERACTIVITY DISORDER IN ADULTS: A SURVEY FROM TURKEY

Umut Mert Aksoy<sup>1</sup>, Özge Doğanavşargil Baysal<sup>2</sup>, Şennur Günay Aksoy<sup>3</sup>, Ali Evren Tufan<sup>4</sup>, Fulya Maner<sup>5</sup>

<sup>1</sup> Bakırköy Research and Teaching Hospital for Psychiatry, Dep. for Adult Attention Deficit Hyperactivity Disorder, Istanbul

<sup>2</sup> Akdeniz University Medical Faculty, Psychiatry Department, Antalya

<sup>3</sup> Bakırköy Research and Teaching Hospital for Psychiatry, Psychology Department, Istanbul

<sup>4</sup> Abant İzzet Baysal Medical Faculty, Child and Adolescent Psychiatry Department, Bolu

<sup>5</sup> Bakırköy Research and Teaching Hospital for Psychiatry, Istanbul

## ABSTRACT

**Objective:** The aim of this descriptive study was to explore the attitudes of adult psychiatrists toward the diagnosis of adult attention deficit hyperactivity disorder (ADHD).

**Material and Method:** A questionnaire was mailed to all participants. The percentage of adults diagnosed with ADHD in the largest and oldest psychiatry hospital in Turkey within a year was calculated from hospital records.

**Results:** Half of the participants displayed negative attitudes toward psychostimulants: 40% of participants reported that prescribing stimulants was a chore, 40% reported a fear of

abuse, and 40% reported prescribing a non-stimulant agent. A majority of participants were unclear on the prevalence of ADHD. Records from the general psychiatry outpatient setting revealed only four patients (0.02%) diagnosed with adult ADHD.

**Conclusion:** The results reflect an urgent need for education of psychiatrists about adult ADHD diagnosis and treatment.

**Keywords:** Attention deficit hyperactivity disorder, health knowledge, attitudes, practice. *Nobel Med 2015; 11(3): 28-32*

## ERİŞKİNLERDE DİKKAT EKSİKLİĞİ VE HİPERAKTİVİTE BOZUKLUĞUNUN TANI VE TEDAVİSİNE KARŞI PSİKİYATRİSTLERİN TUTUMLARI: TÜRKİYE'DEN BİR ARAŞTIRMA

### ÖZET

**Amaç:** Bu çalışmanın amacı ülkemizde erişkin psikiyatristlerinin Dikkat Eksikliği ve Hiperaktivite Bozukluğu (DEHB) tanısının erişkinlikteki görünümü ve tanısına yönelik tutumlarını araştırmaktır.

**Materyal ve Metot:** Tüm katılımcılara erişkinlerde DEHB tanısına yönelik tutumlarını inceleyen bir anket uygulanmıştır. Ülkemizin en büyük ruh sağlığı hastanesinde bir yıl boyunca konmuş olan tanı oranları incelenmiştir.

**Bulgular:** Katılımcıların yarısı psikostimulanlara karşı olumsuz bir tutum göstermektedir, %40 katılımcı

stimulan reçetesini yazmayı bir angarya olarak değerlendirmiş, %40 katılımcı stimulan reçetesinden kötüye kullanım dolayısı ile korktuğunu, %40 katılımcı ise stimulan olmayan tedaviyi seçtiklerini belirtmiştir. Katılımcıların önemli bir bölümü erişkinlerde DEHB tanısının varlığı konusunda kuşkularını dile getirmiştir. bir yıllık hastane kayıtların incelenmesinde erişkin olgularda olguların yalnız dördüne (%0,02) bu tanının konduğu tespit edilmiştir.

**Sonuç:** Bu sonuçlar, erişkinlerde DEHB tanısı konusunda mesleki eğitimin acil olarak artırılması gerektiğini ortaya koymuştur.

**Anahtar kelimeler:** Dikkat eksikliği ve hiperaktivite bozukluğu, sağlık bilgisi, tutumlar, tıp pratiği. *Nobel Med 2015; 11(3): 28-32*

## INTRODUCTION

Attention deficit/hyperactivity disorder (ADHD) is one of the most prevalent neuropsychiatric disorders of childhood. Until recently, it was thought that the symptoms and signs of this disorder were limited to childhood and that they commonly remitted in adulthood, obviating the need for treatment.<sup>1</sup> Psychiatric curricula in Turkey also reflected this conception of the disorder, including such tenets as “ADHD is a psychiatric entity of childhood”, “this hyperkinetic condition that is mostly seen in boys responds well to treatments with psychostimulants”, and the belief that “the signs and symptoms remit in adulthood”. When the results of recent studies and the available evidence were evaluated, however, it was observed that ADHD continues into adulthood, fulfilling either all or, more frequently, some of the criteria.<sup>2</sup> Most prospective studies begun in childhood have demonstrated that the signs and symptoms of the disorder continued either unabated or with partial remission in approximately two-thirds of patients. A recent study reported that approximately 15% of 25-year-old ADHD patients fulfilled all criteria while 66% met some of the criteria for the disorder.<sup>3</sup> Another study reported that 50% of patients experienced dysfunction while meeting some of the criteria.<sup>4</sup>

An epidemiological study conducted among 10,000 people in the United States found that the prevalence of ADHD among those older than 18 years was 4.4%. The weighted means of ADHD prevalence among adults in various countries varied between 2%-5%, with a mean prevalence of 3.4%.<sup>5</sup> Consistent results from studies conducted in such diverse populations argue against the position that the diagnosis of ADHD is a cultural and social construct of the times and support the position that it is universal and disabling.

Although recent studies stress the importance of diagnosing and treating ADHD in adults, it remains controversial among Turkish psychiatrists, despite increasing awareness.<sup>6</sup> Debates center on the relative importance of attention deficit and cognitive problems, which are frequently comorbid with other psychopathologies (an “umbrella diagnosis”) rather than relatively “obvious” findings such as hyperactivity, the finding that most patients with ADHD apply to psychiatrists for psychiatric problems secondary to ADHD, the most appropriate methods of screening and diagnoses, and, last but not least, unsubstantiated beliefs about and stigma of diagnosing ADHD among mental health professionals.<sup>6-13</sup> Despite the presence of a rapidly expanding literature on the diagnosis and treatment of ADHD in adulthood and despite guidelines

reflecting a consensus on good medical practice for diagnosis and treatment, psychiatrists working with patients with ADHD are still few in number, in Turkey or in Europe.<sup>12-14</sup> In addition, a vocal subgroup of psychiatrists questions the validity of this diagnosis. Such individuals express their concern about treating a “questionable diagnosis” with such “dangerous substances” such as stimulants.<sup>15,16</sup> Probable causes for such controversies may include a historical trend for evaluating ADHD as a disorder of childhood, a lingering relic from Victorian times for attributing it to a disorder of the “will”, and inadequate communication among child and adolescent and adult psychiatrists. Another probable cause of doubt among mental health professionals in Turkey may be the requirement for using stimulants, which are controlled substances, for the treatment of ADHD and anxieties about their potential for dependence and abuse.<sup>6</sup>

Our current study was undertaken to further evaluate the conceptions of psychiatrists practicing in Turkey regarding the diagnosis and treatment of ADHD in adulthood.

Because there have been no such previous studies, all of our analyses were planned as exploratory.

## MATERIAL AND METHOD

This study was conducted at Bakırköy Research and Teaching Hospital for Psychiatry in Turkey between December 2011 and May 2012. The ethics board of the hospital reviewed (date: 03.07.2012, number: B.10.4.ISM.04.34.26.08-217) and approved the study protocol and all study procedures were performed in accordance with the Declaration of Helsinki and local laws and regulations. In the first phase of the study, a questionnaire including 19 Likert-type questions and an informed consent form was mailed to all psychiatrists working in Turkey. The questionnaire has been constructed by author Aksoy according to the data obtained from literature. The psychiatrists were advised to answer the questions but to withhold identifying information and the questions were designed to protect their anonymity. At the end of the study period, 85 forms were returned. In the second phase of the study, the prevalence of adult patients with ADHD who were diagnosed and treated at Hospital of Psychiatry within a year was calculated from hospital records.

The data were entered into a database and analyzed with Statistical Package for Social Sciences (SPSS) for Windows™ Version 19.0 (SPSS Inc., Chicago, IL). Quantitative data were analyzed for assumptions of normality by the Kolmogorov-Smirnov Test. Parametric and non-parametric tests were used for

variables with normal distribution and those violating the normality assumption, respectively. Numerical variables between independent groups were compared with a Student's t-test for independent groups and bivariate correlations were analyzed with Pearson and Spearman tests depending on whether they were continuous or discrete/ordinal in nature. Categorical variables were compared with a chi-square test and Fisher's correction was used as needed. Reliability analyses were conducted to determine the reliability and validity of questions. The analyses were two-tailed and reported with 95% confidence intervals. Statistical significance was set at  $p < 0.05$ .

## RESULTS

The sample consisted of 85 psychiatrists who were mostly male. Most (75%) were experienced physicians who reported working for 5 or more years as a mental health professional. Forty-three percent of the sample reported that they were working at a university hospital.

The results of items in the questionnaire evaluating the conceptions of Turkish psychiatrists on ADHD in adulthood are presented in Table. Most of the contacted psychiatrists accept the presence of this diagnosis and its influence on daily functioning but 4.7% reported that they did not accept the diagnosis. Although 54% of the participants reported that they prescribed stimulants as their first choice in the treatment of adult ADHD, approximately half of the sample displayed reluctance or negative attitudes toward such agents. Of the sample, 40% reported that using and renewing prescription folders for controlled substances in their working environment, as well as using them for prescribing stimulants, was a chore that they would rather avoid. In addition, 40% of the psychiatrists who responded reported that a considerable part of the problem they experienced with prescribing these agents was due to their potential for abuse.

Most participants were ambivalent of whether the prevalence of ADHD was less than 1%, and 16% of the sample reported that the prevalence was less than 1%. Nearly half of the sample (40%) reported that they would consider prescribing a non-stimulant agent to a patient they diagnosed with ADHD, and 40% of the sample also reported that the classification of stimulants under controlled substances and the requirement for using special prescription folders for these agents significantly affected their treatment choices. The participants reported that they evaluated a mean of 323 patients/month and that they diagnosed an average of 2 patients/month with ADHD. The monthly prevalence of ADHD was thus found to be 0.6%.

Some of the items also addressed when the psychiatrists screen for ADHD (Table). It was observed that 60% of the psychiatrists screen for ADHD when the patient specifically asks for it. One-fifth of the sample was reticent or unwilling to screen for ADHD even when ADHD diagnosis was reported among the first-degree relatives of the patient. Seventy-five percent of the sample was also reticent or unwilling to screen for ADHD among patients diagnosed with anxiety or depression. One-fifth of the sample admitted that they did not screen for the diagnosis of ADHD while 40% of the sample declared that they screened for ADHD as part of the routine interview in patients applying for the first time.

When the records of Bakırköy Research and Training Hospital for Psychiatry were evaluated for the study year, it was observed that 194,200 outpatients were evaluated in polyclinic settings for general psychiatry; only four of them were diagnosed with ADHD, giving a prevalence of 0.02%.

## DISCUSSION

This study is the first to evaluate the conceptions of psychiatrists practicing in Turkey on the diagnosis and treatment of ADHD in adulthood. We found that most Turkish psychiatrists accepted the diagnosis of ADHD and agreed on its effects. A minority of approximately 5%, however, question the validity of the diagnosis. The views of participants on the treatment of ADHD in adults were more controversial, with 46% reporting that they are reticent/unwilling to prescribe stimulants, despite the wealth of studies conducted supporting their effectiveness in treating ADHD.<sup>17</sup> The classification of stimulants as controlled substances and the fact that they necessitate special prescription forms and folders in our country seem to be factors affecting their use, with 40% of participants reporting that such requirements are a chore and a similar number reporting fears of abuse by patients.

The sample consisted mostly of psychiatrists working in university and state hospitals, with a minority of psychiatrists working in private practice. This distribution of psychiatrists may prevent generalization of our findings to all psychiatrists working in Turkey. On the other hand, it may be argued that the participants were more motivated to participate in a study on ADHD due to professional interest in ADHD and because those working at training hospitals require more knowledge on the diagnosis of ADHD. Regardless of these positions, despite an abundance of studies from various countries reporting the prevalence of ADHD, between 3% and 5% of our participants were unsure about its prevalence being less than 1% and only 16% agreed with this figure, reflecting a divergence from the international consensus.

The views of participants on the prevalence of ADHD among adults seem to influence their daily practice, with a reported monthly prevalence of 0.6% among their patients. Evaluation of the records of the study center prior to the opening of a specialized outpatient department for ADHD among adults gave a more extreme prevalence of 0.02%.

These figures contrast sharply with those reported by Duran and Ozdemiroglu. In the former study, an evaluation of 246 psychiatric outpatients with Wender-Utah and Atilla-Turgay Attention Deficit Hyperactivity Scales, along with SCID-I and SCID-II, revealed a prevalence of 15.9%. In contrast, in the latter study, the prevalence was 1.6% among 508 psychiatric outpatients evaluated with SCID-I, DSM-IV-TR criteria for ADHD modified for adults, and the Atilla-Turgay Attention Deficit Hyperactivity Scale.<sup>7,8</sup> The true prevalence is probably between those figures and is similar to those reported from other populations. It may also be argued that the daily workload of psychiatrists will prevent them from evaluating their patients with structured interviews and scales. Regardless, these results highlight the need to educate psychiatrists practicing in Turkey on the prevalence, incidence, and clinical features of ADHD among adults, as well as existing treatment options and the potential for abuse of available agents. The lack of a consensus guideline on the evaluation and treatment of adult patients with ADHD may also play a role in our results.

We also found that 60% of the psychiatrists who participated in our study only screen for ADHD when the patient specifically asks for it, requiring a prior knowledge of ADHD and its treatment on the part of the patient. Most adult patients with ADHD may not be aware of their condition, leading to missed diagnoses and inappropriate treatments. On the other hand, recent reports of abuse of stimulants, especially among college students, underline the risk of depending solely on subjective accounts of patients for diagnosing ADHD.<sup>18</sup> In addition, despite reports on the heritability of ADHD, 20% of our study participants were reticent/unwilling to screen for this diagnosis, even when the disorder was present in first-degree relatives. Adult patients with ADHD frequently present to psychiatry departments with complaints other than attention problems.<sup>1</sup> Results of previous studies of Turkish patients support the position that the most common comorbidity among these cases was dysthymia/depression and anxiety disorders. However, 75% of the practitioners in our study sample were reticent/unwilling to screen for ADHD in patients with depression/anxiety and 20% reported that they never screen for ADHD. These figures also support the need to educate psychiatrists practicing in Turkey on ADHD among adults, preferably with some guidelines.

**Table.** Attitudes of Turkish psychiatrists to diagnosing ADHD in adults

	Strongly Agree	Agree	Ambivalent	Disagree	Strongly Disagree
There is no such disorder as ADHD.	2.4%	2.4%	3.5%	21.2%	70.6%
Signs of ADHD do not affect life and as such are unimportant.	0.0%	3.5%	0.00%	28.2%	68.2%
I prescribe stimulants as the first choice in treating signs of ADHD.	17.6%	36.5%	31.8%	11.8%	2.4%
Filling prescriptions for stimulants and keeping special folders for them is a chore for me.	3.5%	25.9%	11.8%	45.9%	12.9%
I fear of the abuse potential of stimulant prescriptions and am uneasy in prescribing them.	1.2%	34.1%	12.9%	42.4%	9.4%
Stimulant drugs lead to dependence.	4.7%	22.4%	17.6%	38.8%	16.5%
ADHD is a disorder of childhood and its signs and symptoms usually remit in adulthood.	0.0%	12.9%	5.9%	52.9%	28.2%
The prevalence of ADHD among adults in the community I live in is less than 1%.	1.2%	15.3%	37.6%	24.7%	21.2%
If possible, I start treatment with a non-stimulant agent in a patient I diagnose with ADHD.	1.2%	20.0%	20.0%	44.7%	14.1%
ADHD is a disorder that is hard to discern from others.	8.2%	41.2%	17.6%	28.2%	4.7%
Side effects of stimulants are very dangerous and hard to cope with.	1.2%	3.5%	16.5%	62.4%	16.5%
The fact that stimulants are controlled and require special prescriptions affects my choice very much.	5.6%	23.5%	14.1%	45.9%	10.6%

ADHD: Attention deficit/hyperactivity disorder

The main limitations of our study were the low response rate, i.e. corresponding to only 5.2% of psychiatrists practicing in Turkey, its cross sectional nature, and the disproportionate subgroups that precluded generalizations, especially for psychiatrists in private practice. A larger sample would have allowed us to use more advanced statistical methods rather than simple descriptive analyses. Retrospective evaluation of hospital records for ADHD diagnoses may also not reflect the prevalence of diagnoses in the study center. Despite its limitations, our current study is the first to determine the attitudes of a subgroup of Turkish psychiatrists on the diagnosis and treatment of ADHD among adults, and our results reflect an urgent need for dissemination of current good clinical practice concerning this disorder.

\* The authors declare that there are no conflicts of interest.



## REFERENCES

1. Biederman J, Faraone SV. Attention Deficit Hyperactivity Disorder. *Lancet* 2005; 366: 237-248.
2. Lara C, Fayyad J, de Graaf R, et al. Attention-Deficit/Hyperactivity Disorder: Results from the World Health Organization World Mental Health Survey Initiative. *Biol Psychiatr* 2009; 65: 46-54.
3. Faraone SV, Biederman J, Mick E. The age-dependent decline of attention deficit hyperactivity disorder: a meta-analysis of follow-up studies. *Psychol Med* 2006; 36: 159-165.
4. Kessler RC, Adler L, Barkley R, et al. The prevalence and correlates of adult ADHD in the United States: results from the national comorbidity survey replication. *Am J Psychiatry* 2006; 163: 716-723.
5. Fayyad J, De Graaf R, Kessler R, et al. Cross-national prevalence and correlates of adult attention-deficit hyperactivity disorder. *Br J Psychiatry* 2007; 190: 402-409.
6. Tufan AE, Yalug I. Attention Deficit/ Hyperactivity Disorder in adults: a review of Turkish data. *Anatolian Journal of Psychiatry* 2010; 11: 351-359. (Turkish)
7. Duran S. The prevalence of Attention Deficit/ Hyperactivity Disorder in adulthood and comorbid conditions among patients applying to Outpatient Department of Psychiatry. Unpublished Dissertation. Haydarpasa Training and Research Hospital. Istanbul 2006. (Turkish)
8. Ozdemiroglu F. The prevalence of Attention-Deficit/ Hyperactivity Disorder in adulthood and other psychiatric disorders accompanying Attention-Deficit/ Hyperactivity Disorder in the general outpatient department of psychiatry. Unpublished Dissertation. Istanbul University Medical Faculty, Department of Psychiatry. Istanbul 2006. (Turkish)
9. Tamam L, Karakus G, Ozpoyraz N. Comorbidity of adult attention-deficit hyperactivity disorder and bipolar disorder: prevalence and clinical correlates. *Eur Arch Psychiatry Clin Neurosci* 2008; 258: 385-393.
10. Tamam L, Tuğlu C, Karatas G, Ozcan S. Adult attention deficit hyperactivity disorder in patients with bipolar I disorder in remission: preliminary study. *Psychiatry Clin Neurosci* 2006; 60: 480-485.
11. Semiz UB, Basoglu C, Oner O, et al. Effects of diagnostic comorbidity and dimensional symptoms of attention-deficit-hyperactivity disorder in men with antisocial personality disorder. *Aust N Z J Psychiatry* 2008; 42: 405-413.
12. Oncu B, Olmez S, Senturk U. The reliability and validity study of Turkish version of the Wehder-Utah Scale among adult patients with ADHD. *Turk J Psychiatr* 2005; 16: 252-259. (Turkish)
13. National Institute for Health and Clinical Excellence 2008 "Attention deficit hyperactivity disorder: diagnosis and management of ADHD in children, young people and adults." [www.nice.org.uk/CG072fullguideline](http://www.nice.org.uk/CG072fullguideline).
14. Kooij SJ, Bejerot S, Blackwell A, et al. "European consensus statement on diagnosis and treatment of adult ADHD: The European Network Adult ADHD" *BMC Psychiatry* 2010; 10: 67.
15. Spencer T, Biederman J, Wilens TE, Faraone SV. Adults with attention-deficit/hyperactivity disorder: a controversial diagnosis. *J Clin Psychiatry* 1998; 59: 59-68.
16. McGough JJ, Barkley RA. Diagnostic Controversies in Adult Attention Deficit Hyperactivity Disorder. *Am J Psychiatry* 2004; 161: 1948-1956.
17. Rösler M, Fischer R, Ammer R, Ose C, Retz W. A randomized, placebo-controlled, 24-week study of lowdose extended-release methylphenidate in adults with attention-deficit/hyperactivity disorder. *Eur Arch Psychiatry Clin Neurosci* 2009; 259: 120-129.
18. Bright GM. Abuse of medications employed for the treatment of ADHD: results from a large-scale community survey. *Medscape J Med* 2008; 10: 111.