

Marital Adjustment and Marital Conflict in Individuals Diagnosed with ADHD and Their Spouses

Burcu KAHVECİ ÖNCÜ^{1, 2} , Şennur TUTAREL KIŞLAK² 

¹Department of Mental Health and Diseases, Ankara University Faculty of Medicine, Ankara, Turkey

²Department of Psychology, Ankara University Faculty of Languages and History-Geography, Turkey

ABSTRACT

Introduction: Attention deficit and hyperactivity disorder (ADHD) can cause many problems in adulthood, particularly in close interpersonal relationships and marriage. The aim of this study was to investigate the differences in patterns of the marital relationship between healthy couples and couples with one member previously diagnosed with ADHD.

Methods: The sample of the study included the ADHD group consisting of 28 couples one of whom was diagnosed with ADHD; and the comparison group consisting of 28 healthy couples who were reached through snowball sampling. All couples had been married for at least one year and their ages range from 22 to 61. Wender Utah Rating Scale, Adults ADHD Self-Report Scale, Marital Conflict Questionnaire, Marital Adjustment Scale, Conflict Resolution Styles Scale in Romantic Relationship, and The Birtchnell Partner Evaluation Scale were used as data collection tools.

Results: Analysis results showed that adults diagnosed with ADHD and their spouses had more unfavorable patterns in their marriages with regard to the level of conflict, marital adjustment, conflict resolution styles, and reciprocal evaluations when compared to the comparison group.

Conclusion: ADHD can lead to the termination of marriages when it is not recognized and not treated properly. In consideration of this fact, it is thought that this study will provide information about the recognition of ADHD in adults who apply with especially marital problems and directing them to appropriate treatment.

Keywords: Adult attention deficit hyperactivity disorder, marital relationship, conflict resolution

Cite this article as: Kahveci-Öncü B, Tutarel-Kışlak Ş. Marital Adjustment and Marital Conflict in Individuals Diagnosed with ADHD and Their Spouses. Arch Neuropsychiatry 2022;59:127-132.

INTRODUCTION

The main feature of attention-deficit/hyperactivity disorder (ADHD) is the continuing pattern of lack of attention and/or hyperactivity and impulsivity that are associated with the developmental process or functionality (1). ADHD is a neurodevelopmental disorder that starts in childhood and can be lifelong in the majority of cases (2). The severity of symptoms varies with an individual's development; although hyperactivity symptoms decline in adulthood, residual social and emotional problems caused by ADHD, such as problems related to social skills, adaptation and interpersonal relationships, emotional fluctuations, poor anger management, and inadequate problem-solving skills, continue to have adverse effects on an individual's adult life (2-6). Hence, the most damaging aspect of this disorder for adults has been reported to be a disturbance in the initiation and continuation of healthy interpersonal relationships in their personal and professional lives (7).

Problems in interpersonal and social relations are closely related to the neuropsychological difficulties associated with ADHD. It has been noted that there is cognitive impairment in more than one area in adults diagnosed with ADHD (8), and that disturbances in executive functions (9, 10), working memory, verbal learning, and memory are commonly encountered in these individuals (11-13). In addition, it is shown that individuals with ADHD experience difficulties in recognizing and understanding emotions from facial expressions (7), as well as attention

Highlights

- It is the first study conducted in our country on the marital relations of individuals with ADHD.
- Marital problems of individuals with ADHD are related to the severity of symptoms.
- Individuals with ADHD dispute more issues and more frequently in their marriage.
- Individuals with ADHD use dysfunctional conflict resolution styles more frequently in their marriage.
- Untreated ADHD can lead to the termination of marriages.

and diversion (14, 15), time management, and planning skills (16). Besides, it has been noted that such difficulties also have negative effects on interpersonal relationships (15, 17). ADHD symptoms; making mistakes inattentively, seeming like not listening while others are talking, having difficulty in completing the work started solving daily life problems, and stopping inappropriate reactions by providing behavioral inhibition

are associated with limited working memory capacity and inability to process excess data (12, 18, 19). These individuals have been shown to have difficulties in behavioral and emotional control (10, 20); they have lower quality of relationships, which worsen with increasing severity of symptoms; and their difficulty in emotional regulation and their hostile attitudes in relationships have been reported to have adverse effects on their relationships (21). As disturbances in executive functions, personal control, and attention processes, which are the characteristic features of ADHD, often affect close relationships such as marriage (5, 22), it is very important to recognize the disturbances occurring in these areas, which are regarded as the major source of behavioral problems observed in individuals with ADHD (10, 12).

Marital and familial relationships of individuals with ADHD are mostly characterized by dissonance and negative interactions (1). These individuals have difficulties in fulfilling their familial obligations; they have impaired familial and marital functionality and more negative perception of family and marriage compared to their spouses (23, 24); and they experience more problems in their marriages (5, 25, 26). Spouses of individuals diagnosed with ADHD also have greater psychological dissonance, and satisfaction from their family life and intimacy in their marriages are less. Studies emphasize the fact that living with a spouse diagnosed with ADHD may be challenging (3, 24, 27).

A review of the related literature shows that there is a limited number of studies examining the effects of adulthood ADHD on interpersonal relationships. Therefore, this study primarily aimed to examine whether married couples one of whom diagnosed with ADHD differ from couples in the comparison group in terms of marital adjustment, marital conflicts, and conflict resolution styles, and to understand how these couples mutually evaluate each other. In addition, it was also examined whether there is a relationship between the symptom levels of individuals diagnosed with ADHD and marital conflict and marital adjustment. In the context of the purposes of this study, it was expected that couples in the group diagnosed with ADHD would show less marital adjustment, experience more marital conflict, evaluate each other more negatively, and use more negative conflict resolution styles compared to the couples in the comparison group; in addition, as the symptom severity increased, conflicts increased and marital adjustment decreased.

METHODS

Participants

The sample of the study; in ADHD group consisted of 28 couples who presented to the adult outpatient clinic of Ankara University, Department of Mental Health and Diseases, and one of whom was diagnosed with ADHD according to DSM-5 diagnostic criteria, and the comparison group consisting of 28 healthy couples who did not describe clinically any symptoms of ADHD, did not have a history of psychiatric and/or neurological disease and were reached through snowball sampling. All couples had been married for at least one year, and their ages range from 22 to 61.

Data Collection Tools

Wender Utah Rating Scale (WURS)

This scale was designed to retrospectively query symptoms of ADHD in the childhood period and to help in the diagnosis in adult individuals. It consists of 25 items (28). In the validity and reliability study of the Turkish version, the internal consistency coefficient was calculated as 0.93 (29).

Adult ADHD Self-Report Scale (ASRS)

The Adult Attention Deficit and Hyperactivity Disorder Self-Report Scale (ASRS), which is prepared to scan ADHD symptoms in adults, is based on

DSM-IV ADHD diagnostic criteria (30). In the validity and reliability study for the Turkish version, Cronbach's alpha value was calculated as 0.82 for the inattention subscale, 0.78 for the hyperactivity/impulsivity subscale, and 0.88 for the whole scale (31).

Marital Conflict Questionnaire (MCQ)

This scale, which was designed by Hatipoğlu (1993), includes 70 items related to topics of conflict between married couples. It assesses marital conflicts by obtaining scores on the expansion and frequency of conflicts. Conflict expansion is scored between 0 and 70 points, and conflict frequency is scored between 0 and 350 points. Cronbach's alpha reliability coefficient of the scale was determined as 0.91 (32).

Marital Adjustment Scale (MAS)

This 15-item scale was designed by Locke and Wallace (1959) to assess marital adjustment. The Turkish version was studied by Tutarel-Kışlak (1999). Cronbach's alpha value for the total marital adjustment score is 0.85. The total scores that can be obtained from the scale range from 0 to 58 (33, 34).

Conflict Resolution Styles Scale for Romantic Relationships (CRSS)

This scale was developed to assess the conflict resolution styles of couples. It consists of four subscales as 'negative conflict resolution styles', 'positive conflict resolution styles', 'retreat', and 'subordination' (35). During the development process of the scale, an initial pool of 87 items was created, and the items were applied to participants over a six-grade scale. Then, items that had a factor loading less than 0.40 were excluded, and a scale consisting of 25 items with factor loadings ranging between 0.54 and 0.78 was obtained. In the primary and secondary studies conducted with married couples, internal consistency coefficients were calculated respectively as 0.82 and 0.81 for the negative conflict resolution style subscale, 0.80 and 0.77 for the positive conflict resolution subscale, 0.74 and 0.75 for the retreat subscale, and 0.73 and 0.80 for the subordination subscale. Scoring of the scale was applied only to the subscales, so the total score was not calculated.

The Birtchnell Partner Evaluation Scale (BPES)

This scale was developed by Birtchnell (1988) and adapted to Turkish by Kabakçı et al. (1993). It consists of two different questionnaires for men and women and is used to assess the reciprocal rating of partners. The items are replied to as either "yes", "I'm uncertain" or "no", and are scored on four subscales, which are "dependency", "detachment", "directiveness", and "dependability". Dependency subscale assesses need for continuous support, lack of self-reliance, and seeking too much attention; directiveness subscale assesses dominance over the partner, pushing the partner to secondary importance, and assuming too much responsibility; detachment subscale assesses the desire to be alone and inability to engage in emotional interaction; and dependability subscale assesses the ability to support the partner, ability to accept the partner as is, and ability to express emotions. In the original scale, both male and female forms consist of 90 items; however, since items that had item-total correlation below 0.25 and factor loading below 0.30 were excluded in the adaptation studies, the Turkish version includes 79 items in the female form and 72 items in the male form. Cronbach's alpha coefficients vary between 0.8 and 0.9 for the female form and between 0.74 and 0.91 for the male form (36, 37).

Procedure

Before initiation of the study, all necessary approvals were obtained from Ankara University Ethics Committee and the academic board of Ankara University, Department of Mental Health and Diseases (Dated: 21.06.2017/ Desicion no: 43647). A list of patients who had a definite diagnosis of adult ADHD between 2015 and 2017 and who were currently under follow-up was formally requested from the Chief Physician of Ankara University,

Faculty of Medicine, Cebeci Hospital. When these patients attended control visits, their diagnoses were confirmed according to DSM-5 criteria by a psychiatry resident. These patients along with patients who presented for the first time and got a definitive diagnosis of adult ADHD were included in the study. After informing the patients about the study, volunteers were requested to sign an informed consent form, and WURS, ASRS, MCQ, MAS, CRSS, and BPES were applied to individuals diagnosed with ADHD. The scales except for ASRS and WURS were applied to their spouses and the other participants in the comparison group except for ASRS and WURS. ASRS and WURS were only applied to the individuals diagnosed with ADHD in order to investigate the association of symptom severity with other study variables. In order to include the spouses of participants in the study, the absence of any major psychiatric or neurological illness was sought as a prerequisite.

Statistical Analysis

Statistical analyses were performed with Statistical Package for the Social Sciences (SPSS), version 23.0. In order to compare sociodemographic data between groups, a Chi-square (Pearson Chi-square) analysis was conducted. Distribution characteristics of the scores obtained from scales were examined by using Kolmogorov-Smirnov test. An independent sample t-test was applied to compare the normally distributed scores of individuals with ADHD and their spouses with the participants and their spouses in the comparison group. A paired sample t-test was conducted to compare the normally distributed scores of individuals with ADHD and the participants in the comparison group with their spouses. For scores that did not show normal distribution, the Mann-Whitney U test and Wilcoxon Signed Rank test were used according to whether the groups were dependent or independent. In addition, the associations between WURS and ASRS scores of individuals with ADHD and some sociodemographic variables and scores of the remaining scales were examined with Pearson correlation coefficient.

RESULTS

The gender distribution in the groups was equal, and there were 14 women and 14 men in each group. Individuals diagnosed with ADHD were aged between 26 and 57 years (Mean=35±6.7), their spouses were between 25 and 61 years (Mean=34.8±7.4), and the age range in the comparison group was from 26 to 59 years (Mean=34.9±8.3), and their spouses were between 22 and 57 years (Mean=34.6±8.3). There was no significant difference between the mean age of the groups ($p>0.05$). When the sociodemographic data were examined whether there was a difference between groups; participants in the ADHD group had higher rates in terms of smoking ($\chi^2=8.43$, $p<0.05$), getting a traffic penalty ($\chi^2=14.65$, $p<0.05$), having suicidal thoughts and attempts ($\chi^2=17.47$, $p<0.05$), and having a family member diagnosed with a psychiatric

illness ($\chi^2=10.75$, $p<0.05$). Table 1 shows information obtained with the sociodemographic data form.

Regarding information on the diagnostic and therapeutic processes of participants diagnosed with ADHD, 57% ($n=16$) of the individuals in this group reported that they were receiving medical treatment at the time of the study; 32% ($n=9$) reported that they were not receiving treatment currently but had received treatment in the past, and 11% ($n=3$) reported that they had no medical treatment yet. Of those who were receiving treatment at the time of the study or had in the past, 56% ($n=14$) reported that they were compliant with their medical treatment, and their primary medication was methylphenidate. Thirty-eight percent ($n=10$) of this group reported that they had a first-degree relative diagnosed with ADHD.

While examining the differences between groups, those diagnosed with ADHD compared to the comparison group (CG), the spouses of the participants diagnosed with ADHD (ADHD-spouse) were compared with the spouses of the comparison group (CG-spouse). Based on the independent sample t-test results, it was seen that individuals diagnosed with ADHD had higher conflict levels in their marriages compared to the comparison group in terms of conflict expansion score and conflict frequency score; in terms of marital adjustment scores. They had significantly lower marital adjustment than the participants in the comparison group ($p<0.001$). In addition, it was observed that individuals with ADHD used the positive conflict resolution style ($p<0.001$) and subordination conflict resolution style ($p<0.01$) less, negative conflict resolution style ($p<0.001$) more; they evaluated their spouses as more dependent ($p<0.05$) and directive ($p<0.001$). When the spouses of individuals diagnosed with ADHD and the spouses of individuals in the comparison group were compared, conflict expansion scores and conflict frequency scores were higher for spouses in the ADHD group; marital adjustment scores were lower ($p<0.001$). While there was no difference between the spouses of the two groups in terms of using the positive conflict resolution style, submission conflict resolution style, and withdrawal conflict resolution style, it was observed that the spouses in the ADHD group used the negative conflict resolution style more ($p<0.05$). Similar to the participants diagnosed with ADHD, their spouses evaluated them as more dependent ($p<0.05$) and more directive ($p<0.001$). The results of the analysis are shown in Table 2 and Table 3.

The researchers state that the couples' views on marriage cannot be independent of each other, and the data of married couples should be considered as a paired sample in studies on marriage (38, 39). For this reason, paired sample t-test was used to examine whether the scores of the variables in our study differ between spouses. According to the analysis results, no significant difference was found between spouses in terms of any variable in the comparison group; but in the

Table 1. Findings obtained with the sociodemographic data form

Variables	ADHD		ADHD-spouse		CG		CG-spouse		p*
	n=28	%	n=28	%	n=28	%	n=28	%	
Education level university and above	24	85.7	23	72.2	24	85.7	23	72.2	0.923
Smoking	16	37	11	39	7	7	7	25	0.038
Alcohol use	22	78.6	17	71	11	39.3	11	39.3	0.113
Substance use	3	11	0	0	1	3.6	1	3.6	0.264
Getting into trouble with the police	3	11	0	0	2	7	0	0	0.130
Getting a traffic penalty	16	57	5	18	11	39.3	5	18	0.002
Suicidal thoughts or attempts	10	36	3	11	2	7	0	0	0.001
Physical disease	4	14	1	3.6	1	3.6	2	7	0.357
Different psychiatric diagnosis in the family	9	32	5	18	1	3.6	2	7	0.013

* Comparisons were drawn between four groups. ADHD, participants who were diagnosed ADHD; ADHD-spouse, spouses of participants who were diagnosed ADHD; CG, comparison group; CG-spouse, spouses of participants in comparison group.

Table 2. Differences between participants diagnosed with ADHD and the comparison group

Variables	Mean±standard deviation / Median		t/z	p	Cohen d
	ADHD	CG			
Conflict expansion	22.86±9.86	11.10±7.46	5.03	<0.001	1.35
Conflict frequency	53.18±33.20	19.29±14.86	4.93	<0.001	1.31
Marital adjustment	37.50±7.39	48.57±6.35	-6.01	<0.001	1.61
Positive CRS	21.57±5.45	29.42±5.01	-5.61	<0.001	1.50
Negative CRS	18	11	-4.57*	<0.001	-
Subordination CRS	16.46±7.71	21.89±6.49	-2.85	0.006	0.70
Retreat CRS	20.28±7.86	21.10±8.94	-0.36	0.717	0.11
Detachment (BPES)	18.96±6.06	16.75±5.67	1.41	0.164	0.33
Dependency (BPES)	27.75±4.19	24.57±5.38	2.47	0.017	0.66
Directiveness (BPES)	37	28	-3.66*	<0.001	-
Dependability (BPES)	61.5	62	-1.34*	0.180	-

ADHD, participants who were diagnosed ADHD; CG, comparison group; CRS, conflict resolution style; BPES, Birtchnell partner evaluation scale.

* Mann-Whitney U test.

Table 3. Differences between the spouses of the diagnosed participants and the spouses of the participants in the comparison group

Variables	Mean±standard deviation / Median		t/z	p	Cohen d
	ADHD-spouse	CG-spouse			
Conflict expansion	23.6±8.58	9.89±5.82	7	<0.001	1.87
Conflict frequency	51±30.14	14.14±11.11	5.58	<0.001	1.62
Marital adjustment	40.42±8.55	49.75±6.92	-4.48	<0.001	1.20
Positive CRS	27.32±4.91	27.28±8.07	0.02	0.984	0.005
Negative CRS	14.5	10.5	-2.03*	0.042	-
Subordination (CRS)	20.07±6.62	21.89±5.63	-1.11	0.272	0.30
Retreat (CRS)	20.03±7.56	22.46±8.27	-1.15	0.256	0.31
Detachment (BPES)	20.89±6.61	18.46±6.03	1.44	0.157	0.38
Dependency (BPES)	29.39±6.1	25.86±4.63	2.44	0.018	0.65
Directiveness (BPES)	37.61±8.17	29.68±4.64	4.64	<0.001	1.19
Dependability (BPES)	60	63.5	-1.93*	0.053	-

ADHD-spouse, spouses of participants who were diagnosed ADHD; CG-spouse, spouses of participants in comparison group; CRS, conflict resolution style; BPES, Birtchnell partner evaluation scale.

* Mann-Whitney U test.

ADHD group, it was seen that participants who had been diagnosed with ADHD used more negative conflict resolution style ($t(27)=2.12$, $p<0.05$) and less positive conflict resolution style ($t(27)=3.67$, $p<0.01$), and reported lower level of marital adjustment than their spouses ($t(54)=2.50$, $p<0.05$).

The associations between WURS and ASRS scores of individuals with ADHD and other study variables were examined with the Pearson correlation coefficient. Accordingly, ASRS/inattention scores showed moderate positive correlations with conflict expansion ($r=0.61$, $p<0.01$) and frequency ($r=0.60$, $p<0.01$) scores, and a moderate negative correlation with marital adjustment score ($r=-0.47$, $p<0.05$). There was also a moderate positive correlation between ASRS/inattention scores and the directiveness subscale score of BPES ($r=0.40$, $p<0.05$). Other variables did not significantly correlate with WURS scores or ASRS/hyperactivity/impulsivity scores.

DISCUSSION

When the sociodemographic findings of the research are evaluated consistent with similar studies in the literature; rates of smoking, alcohol and substance use, getting a traffic penalty, suicidal thoughts and attempts, and having a family member diagnosed with a psychiatric illness were higher in the ADHD group (3, 5, 9, 40).

Participants diagnosed with ADHD reported that they had more discussions on more issues and were less harmonious in their marriage

than the participants in the comparison group. This result seems consistent with similar studies on this subject in the literature (23–26). In addition, looking at the comparisons between spouses, it can be said that individuals diagnosed with ADHD perceive their marital adjustment levels at a lower level compared to their spouses. This result is consistent with the finding of Eakin et al. (2004), who reported that individuals with ADHD have a more negative perceptions of their marriages compared to their spouses. Despite being a part of the same relationship, these individuals' more negative perception of marriage may be explained by the predominance of negative affect, experiencing these emotions more seriously than they are, and their difficulty in regulating negative emotions (1, 4, 23, 41).

Participants in the ADHD group used the submission conflict resolution style less in their marriage than the comparison group. They used the positive conflict resolution style less and the negative conflict resolution style more than both their spouses and the comparison group. The individuals diagnosed with ADHD are more furious, more impatient, have lower frustration threshold, weaker empathy skills, and difficulty in having appropriate reactions due to the features related to ADHD. So they display conflict resolution behaviors that are likely to have a negative influence on the adjustment of their relationships (42). Several authors have stated that unfavorable behaviors of individuals diagnosed with ADHD may be related to excessive self-confidence and feeling of self-sufficiency as well as to the lack of self-monitoring (43–46). Also, it is thought that individuals diagnosed with ADHD are less likely to display

subordination, which is stated to have an effect on increasing marital adjustment due to cultural reasons (47), because of their tendencies which are connected with ADHD towards threat and causing or pursuing conflict to provide stimulation (17, 48). The reason why there was no difference between the groups regarding retreat conflict resolution style may be because this subscale is probably associated with different personal variables (35) and also because retreat behaviors may not have been adequately assessed in this sample group.

Another important finding of the present study includes the reciprocal evaluation of spouses. While both the participants diagnosed with ADHD and their spouses evaluated each other as more dependent and directive than the comparison group, they did not differ from the comparison group in terms of reliability and disconnection evaluations. This situation suggests that the spouses diagnosed with ADHD might be supervised more by their spouses due to the fact these individuals may fail to fulfill their responsibilities in their relationship, often make mistakes, and may cause financial and emotional damage that can put their marriage in danger (42). In addition, this finding may be related to taking excessive responsibility for the spouses of individuals diagnosed with ADHD, which is another feature evaluated in this subscale. The reason why individuals in the ADHD-spouse group described their spouses (the participants who were diagnosed with ADHD) as directive might be related to the interventionist attitude of individuals with ADHD, which can be associated with the impulsive behavior seen in these individuals. At this point, excessive directive behavior of spouses displayed over individuals with ADHD may be explained by the fact that individuals with ADHD are more dependent on their spouses. An individual with ADHD who is frequently controlled and causes damage because of unfulfilled responsibilities and careless mistakes may at some point display dependent features when solving problems for the fear of making mistakes, or they may be perceived as more dependent by their spouses (17).

Consistent with studies showing that there is a negative correlation between ADHD severity and quality of relationship and that ADHD has a detrimental role in romantic relationships, it was seen in this study that there is an increase in marital conflicts and a decrease in marital adjustment as the ASRS/inattention scores increase (21). An individual who has difficulty in focusing and maintaining attention would experience problems in fulfilling his/her financial, social, and emotional responsibilities in a relationship, which would eventually lead to conflicts. Therefore, it is an expected result to observe the reduced marital adjustment and increased conflicts with worsening symptoms of attention deficit. The observation of significant relationships between the variables of this study and only ASRS/inattention scores may be related to the fact that the participants in the study were mostly in the attention deficit subtype. However, the participants were not evaluated in terms of subtypes in this study. As a matter of fact, it is known that hyperactivity symptoms disappear to a large extent in adulthood, but attention deficit symptoms exhibit a more permanent course (2).

The results of this study are in support of the study hypotheses and are consistent with the literature. However, there are some limitations, which we believe should be considered in future studies. We conducted the study with a clinical sample and performed purposive sampling. This situation resulted in a smaller sample size, which may have weakened the generalizability of our findings and affected the results. In addition, because of the number of scales applied to participants, individuals with ADHD found it somewhat difficult to complete the study due to their focus problems, while others did not participate on account of the fact that it was long and tiring. This was another factor limiting the sample size. In this regard, we recommend increasing the sample size in future studies. It is known that comorbidity is high in people diagnosed with ADHD, and this situation negatively affects their functionality (49). Individuals participating

in this study had no major comorbidity as of the date they participated in the study. However, due to the excess number of the scales used and not being among the aims and hypotheses of the study, an additional evaluation was not made to screen for the presence of different psychiatric symptoms. This is another limitation that is thought to affect the results of this research. It is thought that screening other psychiatric symptoms of these individuals may be beneficial in future studies.

In general, problems caused by ADHD symptoms that have not been a major concern until that time, become an issue in close relationships of individuals with ADHD, like marriage, and these relationship problems are often among common complaints inciting these individuals to seek treatment (17, 23). Particularly when symptom severity is low, some behavioral patterns specific to this disease may be regarded as common marriage problems, which makes it harder to recognize the disease. Most adults are unaware of their disease and how it affects their life. So, they remain untreated and in time become desperate while seeking wrong treatments and solutions, which eventually increases their despair, worsens their problems, and leads to divorce after causing permanent damage to their marriages (3, 5, 17, 27). As a matter of fact, we learned that some of the patients contacted during the data collection process of the present study had recently divorced or were about to divorce. Additionally, some individuals stated that they found it difficult to access psychological treatments that satisfied their expectations for a solution to their interpersonal problems associated with ADHD. For that matter, it is essential that mental health professionals recognize ADHD in adulthood as well as during the childhood period with regard to its manifestations and the problems that it may cause (6). The present study is believed to contribute to the recognition of ADHD in adults, particularly those presenting with marriage problems.

The best treatment for ADHD involves various psychosocial interventions and psychotherapies in addition to pharmaceutical agents (50). In the present study, we observed that the majority of the participants had ongoing marriage problems despite receiving medical treatment. This finding indicates that although ADHD symptoms improve with medical treatment, behavioral patterns manifesting in other areas of life need to be treated with psychotherapy. In addition, the spouses of these individuals are reported to be over-burdened due to excess responsibilities; because they have to deal with most things in their family alone, they become exhausted over time (27, 50). Therefore, it is important that spouses should also be assessed in terms of psychological symptoms, and psychosocial interventions should not only be made available for individuals with ADHD but to their spouses as well.

Some of the findings of this research were presented as a poster presentation at the 16th European Congress of Psychology (ECP2019), July 2019, Moscow, Russia

Ethics Committee Approval: Before initiation of the study, all necessary approvals were obtained from Ankara University Ethics Committee and the academic board of Ankara University, Department of Mental Health and Diseases (Dated: 21.06.2017/ Decision no: 43647).

Informed Consent: After informing the patients about the study, volunteers were requested to sign an informed consent form.

Peer-review: Externally peer-reviewed.

Author Contributions: Concept- BKÖ, ŞTK; Design- BKÖ, ŞTK; Supervision- BKÖ, ŞTK; Resource- BKÖ; Materials- (-); Data Collection and/or Processing- BKÖ, ŞTK; Analysis and/or Interpretation- BKÖ, ŞTK; Literature Search- BKÖ; Writing- BKÖ, ŞTK; Critical Reviews- BKÖ, ŞTK.

Conflict of Interest: As the authors of this article, we declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Financial Disclosure: Received no financial support for the research, authorship, and/or publication of this article.

REFERENCES

- American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, 5th ed. Washington DC: Author; 2013. <https://www.psychiatry.org/psychiatrists/practice/dsm>
- Sadock BJ, Sadock VA. Comprehensive Textbook of Psychiatry, 8th ed. (Aydın H, Bozkurt A, Trans.). Ankara: Güneş Tıp Kitabevi; 2007.
- Biederman J, Faraone SV, Spencer TJ, Mick E, Monuteaux MC, Aleardi M. Functional impairments in adults with self-reports of diagnosed ADHD. A controlled study of 1001 adults in the community. *J Clin Psychiatry* 2006;67:524-540. [Crossref]
- Knouse LE, Mitchell JT, Brown LH, Silvia PJ, Kane MJ, Myin-Germeys I, Kwapil TR. The expression of adult AD/HD symptoms in daily life: An application of experience sampling methodology. *J Atten Disord* 2008;11:652-663. [Crossref]
- Murphy K, Barkley RA. Attention deficit hyperactivity disorder adults: comorbidities and adaptive impairments. *Compr Psychiatry* 1996;37:393-401. [Crossref]
- Tuğlu C, Öztürk Şahin Ö. Erişkin dikkat eksikliği hiperaktivite bozukluğu: Nörobiyoloji, tanı sorunları ve klinik özellikler. *Psikiyatride Güncel Yaklaşımlar* 2010;2:75-116. <https://dergipark.org.tr/tr/download/article-file/115158>
- Rapport LJ, Friedman SL, Tzelepis A, Van Voorhis A. Experienced emotion and affect recognition in adult attention-deficit hyperactivity disorder. *Neuropsychology* 2002;16:102-110. [Crossref]
- Fuermaier A, Tucha L, Koerts J, Aschenbrenner S, Kaunzinger I, Hauser J, Weisbrod M, Lang KW, Tucha O. Cognitive impairment in adult ADHD -perspective matters! *Neuropsychology* 2015;29:45-58. [Crossref]
- Barkley RA, Murphy KR, Fischer M. ADHD in Adults: What The Science Says. New York: Guilford Press; 2008.
- Kamradt JM, Ullsperger JM, Nikolas MA. Executive function assessment and adult attention-deficit/hyperactivity disorder: Tasks versus ratings on the barkley deficits in executive functioning scale. *Psychol Assess* 2014;26:1095-1105. [Crossref]
- Brown FC, Roth RM, Katz LJ. Allocentric but not egocentric visual memory difficulties in adults with ADHD may represent cognitive inefficiency. *Psychiatry Res* 2015;228:649-658. [Crossref]
- Finke K, Schwarzkopf W, Müller U, Frodl T, Müller HJ, Möller J, Schneider WX, Engel RR, Riedel M, Möller HJ, Hennig-Fast K. Disentangling the adult attention-deficit hyperactivity disorder endophenotype: Parametric measurement of attention. *J Abnorm Psychol* 2011;120:890-901. [Crossref]
- Roth RM, Wishart HA, Flashman LA, Riordan HJ, Huey L, Saykin AJ. Contribution of organizational strategy to verbal learning and memory in adults with attention-deficit/hyperactivity disorder. *Neuropsychology* 2004;18:78-84. [Crossref]
- Forster S, Robertson DJ, Jennings A, Asherson P, Lavie N. Plugging the attention deficit: Perceptual load counters increased distraction in ADHD. *Neuropsychology* 2014;28:91-97. [Crossref]
- Segal D, Mashal N, Shalev L. Semantic conflicts are resolved differently by adults with and without ADHD. *Res Dev Disabil* 2015;47:416-429. [Crossref]
- Young S, Morris R, Toone B, Tyson C. Planning ability in adults with attention-deficit/hyperactivity disorder. *Neuropsychology* 2007;21:581-589. [Crossref]
- Pera G. Sen mi, Ben mi, Erişkin DEHB mi? Sevdiğiniz Birinde Dikkat Eksikliği Hiperaktivite Bozukluğu Olduğunda Lunapark Trenini Durdurmak (Ersay MA, Trans.). İzmir: Psikoaktif; 2013.
- Cowan N. The magical number 4 in short-term memory: A reconsideration of mental storage capacity. *Behav Brain Sci* 2001;24:87-114. [Crossref]
- Lijffijt M, Kenemans JL, Verbaten MN, van Engeland H. A meta-analytic review of stopping performance in attention-deficit/hyperactivity disorder: deficient inhibitory motor control? *J Abnorm Psychol* 2005;114:216-222. [Crossref]
- Roberts W, Fillmore MT, Milich R. Separating automatic and intentional inhibitory mechanisms of attention in adults with attention-deficit/hyperactivity disorder. *J Abnorm Psychol* 2011;12:223-233. [Crossref]
- Bruner MR, Kuryluk AD, Whitton SW. Attention-deficit/hyperactivity disorder symptom levels and romantic relationship quality in college students. *J Am Coll Health* 2015;63:98-108. [Crossref]
- Koyuncu A. Dikkat Eksikliği Hiperaktivite Bozukluğu Zemininde Gelişen İkincil Sosyal Fobi. İstanbul: Roza Press; 2016.
- Eakin L, Minde K, Hechtman L, Ochs E, Krane E, Bouffard R, Greenfield B, Looper K. The marital and family functioning of adults with ADHD and their spouses. *J Atten Disord* 2004;8:1-10. [Crossref]
- Minde K, Eakin L, Hechtman L, Ochs E, Bouffard R, Greenfield B, Looper K. The psychosocial functioning of children and spouses of adults with ADHD. *J Child Psychol Psychiatry* 2003;44:637-646. [Crossref]
- Faraone SV, Biederman J, Spencer T, Wilens T, Seidman LJ, Mick E, Doyle AE. Attention-deficit/hyperactivity disorder in adults: An overview. *Biol Psychiatry* 2000;48:9-20. [Crossref]
- Özkorurmak E, Özten HS, Tiryaki A. Ayaktan başvuran psikiyatri hastalarında erişkin DEHB yaygınlığı, eş tanı oranı ve işlevsellik düzeyi. *Anadolu Psikiyatri Derg* 2013;14:347-353. [Crossref]
- Ben-Naim S, Marom I, Krashin M, Gifter B, Arad K. Life with a partner with ADHD. The moderating role of intimacy. *J Child Fam Stud* 2017;26:1365-1373. [Crossref]
- Ward MF, Wender PH, Reimherr FW. The Wender Utah Rating Scale: an aid in the retrospective diagnosis of childhood attention deficit hyperactivity disorder. *Am J Psychiatry* 1993;150:885-890. [Crossref]
- Öncü B, Ölmez Ş, Şentürk V. Wender-Utah Derecelendirme Ölçeği Türkçe formunun erişkin Dikkat Eksikliği ve Hiperaktivite Bozukluğu'nda geçerlik ve güvenilirlik çalışması. *Türk Psikiyatri Derg* 2005;16:252-259. <https://toad.halileksi.net/sites/default/files/pdf/wender-utah-derecelendirme-olcegi-toad.pdf>
- Kessler R, Adler L, Barkley R, Biederman J, Conners CK, Demler O, Faraone SV, Greenhill LL, Howes MJ, Secnik K, Spencer T, Ustun, TB, Walters EE, Zaslavsky A. 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. [Crossref]
- Doğan S, Öncü B, Varol Saraçoğlu G, Küçüköncü S. Erişkin dikkat eksikliği hiperaktivite bozukluğu kendi bildirim ölçeği (ASRS-v1.1): Türkçe formunun geçerlilik ve güvenilirliği. *Anadolu Psikiyatri Derg* 2009;10:77-87. <https://toad.halileksi.net/sites/default/files/pdf/eriskin-dikkat-eksikligi-hiperaktivite-bozuklugu-kendi-bildirim-olcegi-asrs-v11-toad.pdf>
- Hatipoğlu, Z. The Role of Certain Demographic Variables and Marital Conflict in Marital Satisfaction of Husbands and Wives. ODTÜ, Yüksek Lisans Tezi. 1993.
- Locke HJ, Wallace KM. Short marital-adjustment and prediction tests: Their reliability and validity. *J Marriage Fam* 1959;21:251-255. [Crossref]
- Kışlak TŞ. Evlilikte Uyum Ölçeği'nin (EUÖ) güvenilirlik ve geçerlik çalışması. 3P 1999;7:50-57. <https://app.trdizin.gov.tr/publication/paper/detail/TORVMk56Yz0>
- Özen A, Salman-Engin S, Sakallı-Uğurlu N. Romantik ilişkilerde Çatışma Çözüm Stilleri Ölçeği: Geçerlik güvenilirlik çalışması. *Nesne* 2016;4:1-19. [Crossref]
- Birtchnell J. The assessment of the marital relationship by questionnaire. *J Sex Marital Ther* 1988;3:57-70. [Crossref]
- Kabakçı E, Tuğrul C, Öztan N. Birtchnell eş değerlendirme ölçeği: Geçerlik ve güvenilirlik çalışması. *Türk Psikoloji Derg* 1993;8:31-37. <https://toad.halileksi.net/sites/default/files/pdf/birtchnell-es-degerlendirme-olcegi-toad.pdf>
- Kenny DA. The effect of nonindependence on significance testing in dyadic research. *Pers Relatsh* 1995;2:67-75. [Crossref]
- Kenny DA, Kashy DA, Cook WL. Dyadic Data Analysis. NY: The Guilford Press; 2006.
- Forczyk K, Thome J. Adult ADHD and suicide. *Atten Defic Hyperact Disord* 2014;6:153-158. [Crossref]
- Fleming J, Snell WE. Emotional intelligence in adults with ADHD. *Psi Chi J Undergrad Res* 2008;15:86-95. [Crossref]
- Robin AL, Payson E. The impact of ADHD on marriage. *ADHD Rep* 2002;10:9-11. [Crossref]
- Canu WH, Carlson CL. Rejection sensitivity and social outcomes of young men with ADHD. *J Atten Disord* 2007;10:261-275. [Crossref]
- Canu WH, Tabor LS, Michael KD, Bazzini DG, Elmore AL. Young adult romantic couples' conflict resolution and satisfaction varies with partner's attention-deficit/hyperactivity disorder type. *J Marital Fam Ther* 2014;40:509-524. [Crossref]
- Evangelista NM, Owens JS, Golden CM, Pelham WE. The positive illusory bias: Do inflated self-perceptions in children with ADHD generalize to perceptions of others? *J Abnorm Child Psychol* 2008;36:779-791. [Crossref]
- Knouse LE, Bagwell CL, Barkley RA, Murphy KR. Accuracy of self-evaluation in adults with ADHD. Evidence from a driving study. *J Atten Disord* 2005;8:221-234. [Crossref]
- Soylu Y, Kağnıcı Y. Evlilik uyumunun empatik eğilim, iletişim ve çatışma çözme stillerine göre yordanması. *Türk Psikolojik Danışma ve Rehberlik Derg* 2015;5:44-54. <https://dergipark.org.tr/tr/download/article-file/200309>
- Robbins CA. ADHD couple and family relationships: Enhancing communication and understanding through imago relationship therapy. *J Clin Psychol* 2005;61:565-577. [Crossref]
- Ekinci S, Öncü B, Canat S. Erişkin dikkat eksikliği ve hiperaktivite bozukluğu: Eş tanı ve işlevsellik. *Anadolu Psikiyatri Derg* 2011;12:185-191. https://app.trdizin.gov.tr/dokuman-goruntule?ext=pdf&path=CrnWZGRsXTjRjLjWx D978OSUAL2jXitizhVYmCxNvH4j2wkTNMeLwVJIEUFqo0LDYPjUnUNZL5Kz4_Fh5A23v349ucNxQ6o2KjhrVF00_ssL0zKme1xE3IOPBnK4UnllgrZLjo6lqo5atopGHphty0L1QyL-XmC49W0iPlpAmy564Ui0f3Due5FprgTW2BGh9MKp5uFQgszLHh7zh9DEBO6cmrtuyyUQ3qj6Hlq2Fq4=&contentType=application/pdf
- Murphy K. Psychosocial treatments for ADHD in teens and adults: A practice-friendly review. *J Clin Psychol* 2005;61:607-619. [Crossref]