

Original Article

An Examination of the Perceived Social Support, Burnout Levels and Child-Raising Attitudes of Mothers of Children Diagnosed with Attention Deficit Hyperactivity Disorder in Turkey

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Abstract

Purpose: The aim of this study is to examine the perceived social support levels, burnout levels and child-raising attitudes of mothers with children diagnosed with ADHD.

Design and Methods: This study was conducted descriptive. Sample group consisted of 159 mothers of children with ADHD. The data were collected with sociodemographic information form and the results of the Maslach Burnout Inventory (MBI), the Multidimensional Scale of Perceived Social Support (MSPSS) and the Parental Attitude Research Instrument (PARI).

Findings: It was determined that mothers of children with ADHD displaying negative child-raising attitudes perceived their level of social support as low and experienced greater burnout ($p < 0.01$).

Practice Implications: The results of this study emphasize the importance of supporting families while providing care for children diagnosed with ADHD.

Keywords: attention deficit hyperactivity disorder, child-raising attitudes, burnout, mother, social support

Introduction

Attention deficit hyperactivity disorder (ADHD) is one of the most common psychiatric disorders encountered in children and adolescents (Uysal Ozaslan & Bilac, 2015). According to the American Psychiatric Association (APA) (2013), Attention Deficit Hyperactivity Disorder (ADHD) is a neurodevelopmental disorder of which three basic symptoms are lack of attention, over-activity that is improper to the age and impulsivity, all of which appear in childhood. The worldwide prevalence of ADHD has been found to vary according to the quality of the sample, the diagnostic criteria and the information sources used. A meta-analysis revealed that the worldwide prevalence of ADHD is 5.29% (Polanczyk et al., 2007). In Turkey, however, the prevalence of ADHD is reported to vary between 8.6% and 8.1% in the community

samples, 8.6% and 29.4% in the clinical samples (Cam & Engin, 2014).

ADHD affects both the children diagnosed with it and their parents (Starck et al., 2016). In fact, it affects families as negatively as terminal illnesses in childhood (Guclu & Erkiran, 2005). Sudden changes in the moods of children with ADHD and their failure to control anger and inconsiderate behaviors caused by impulsivity and the repetition of the same mistakes without learning a lesson negatively affects these children's peer relationships, social skills and ability to communicate with authority figures (Yildiz et al., 2010). Therefore, it is very difficult for many parents to live with and to control a child with ADHD and behavioral problems (Ercan, 2013). Children with ADHD are often a source of uneasiness due to their problematic behaviors both at home and elsewhere, and people develop negative attitudes toward them

(Akfirat et al., 2017). This disorder can cause considerable stress, particularly for mothers. Therefore, mothers need more comprehensive social support from society (Alpan, 2013). It is likely that mothers with children diagnosed with ADHD have less tolerance and become exhausted more easily than other mothers (Akfirat et al., 2017).

Parents of children with ADHD have a greater responsibility for care than the parents of children with normal development (Alpan, 2013). In Turkish society, the childcare role is assigned to mothers, and they spend more time with their children than other family members. In addition to the excessive of primary childcare responsibilities, mothers may suffer from symptoms such as chronic fatigue, and various psychological and physical ailments (Duygun & Sezgin, 2003). Various studies have reported that parents experience burnout due to excessive stress resulting from caring for their children and inadequate support (Arman, 2009; Duygun & Sezgin, 2003). Burnout is defined as an intensive emotional collapse in individuals due to the duration and progress of a stressful condition (Coskun & Akkas, 2009). A social support system is a network through which care is provided to help individuals cope with the difficulties of daily life (Gumusdas & Ejder Apay, 2016). In the most general sense, social support can be defined as interpersonal relationships involving the presence of reliable individuals who love and care for a person in need, emotional and financial support and approval. This network involves social service experts, psychologists, neighbors, friends and relatives (Gumusdas & Ejder Apay, 2016). Families need companionship, friendship and emotional support (Gozun Kahraman & Cetin, 2015). It has been found that as the level of social support provided to parents increases, the mental health of families improves, which causes them to adopt more positive attitudes, have more opportunities to engage with their children and affect children's behavior and development positively (Ersoy & Curuk, 2009).

For ADHD, nursing care is based on supporting families (Gol & Bayik, 2013). Nurses should provide care for patients and their families using a holistic approach to enable patients and family members to participate in patient care to meet their needs, in line with nursing ethical codes and patient rights (Ozgursoy & Akyol, 2008).

Today, the prevalence of ADHD is increasing, and the attitudes and problems of parents have become even more important (Yildiz at al., 2010). Even though there are studies on the child-raising attitudes of parents, we have not found any studies examining the social support, burnout and child-raising attitudes of parents of children with ADHD. However, the behavioral problems of the children who are diagnosed with attention deficit hyperactivity disorder (ADHD) cause problems for their mothers. Similarly, these problems affect the seriousness of the children's behavioral problems. This interaction leads to an increase in the severity of children's ADHD symptoms (Alpan, 2013). For all these reasons, the researchers believe that the attitudes displayed by the mothers, their burnout levels and the social support they perceive play an important role in the treatment and care of children with ADHD. Thus, we believe this study fills a gap in the literature of this field. This study was conducted to examine the perceived social support levels, burnout levels and child-raising attitudes of mothers with children diagnosed with ADHD.

Materials and Method

Design

This is a descriptive and correlational study. The study was conducted at the Child and Adolescent Psychiatry Outpatient Clinic of the Mental Health and Diseases Hospital Turkish city of Elazig between January 2014 and June 2015.

Participants: The study population consisted of mothers with children and adolescents diagnosed with ADHD by a child and adolescent psychiatrist at the outpatient clinic according to the criteria of DSM-IV TR (Diagnostic and Statistical Manual of Mental Disorders, 4th Edition, Text Revision). At the hospital, DSM-IV diagnostic criteria were used during the study period. ADHD at the outpatient clinic between January 2014 and June 2015, and 159 mothers who met the study criteria and agreed to participate in the study were selected as the sample.

Inclusion Criteria; The inclusion criteria were as follows. Only mothers were included in the study. For the sample group, mothers of children diagnosed with ADHD according to the diagnostic criteria of DSM-IV TR Mothers of children diagnosed with ADHD and severe/moderate mental retardation according to

the diagnostic criteria of DSM-IV TR were not included due to the negative effect of mental retardation on burnout syndrome. Mothers of children aged 6–16 were included.

Outcomes and Measures: The data were collected from the mothers of children diagnosed with ADHD. The descriptive information form and the Maslach Burnout Inventory (MBI), the Multidimensional Scale of Perceived Social Support (MSPSS) and the Parental Attitude Research Instrument (PARI) were administered to 159 mothers of children with ADHD. The data collection tools were filled in by the researcher during 20–25-minute face-to-face interviews with the mothers of children with ADHD in the waiting room of the clinic.

Sosiodemographic Questionnaire: The descriptive information form consisted of personal information questions about the mothers, such as age, where they had lived for the longest time, marital status, educational level and number of children, as well as information about the children diagnosed with ADHD, such as age, gender and school achievement levels. It has 17 questions.

The Maslach Burnout Inventory (MBI): The validity of the Turkish form of the MBI, which was developed by Maslach and Jackson (1981), was determined by Ergin in Turkey (Ergin, 1992; Maslach and Jackson, 1981). Maslach and Jackson (1981) found that the reliability coefficients for each subscale of the Maslach Burnout Scale were .89 for emotional exhaustion, .86 for personal accomplishment and .74 for depersonalization. An examination of the factor structure determined that the three factors on the original scale were also valid for the Turkish form. The scale evaluates burnout using three subscales. There are nine items on the emotional exhaustion subscale, eight items on the personal accomplishment subscale and five items on the depersonalization subscale, for a total of 22 items. While the emotional exhaustion and depersonalization subscales involve negative statements, the personal accomplishment subscale involves positive statements. Higher emotional exhaustion and depersonalization subscale scores signify burnout, and lower personal accomplishment subscale scores signify burnout (Ergin, 1992). The phrase, “people I meet due to my job,” and the term, “occupation,” in the Turkish form of the MBI adapted by Ergin were replaced with “my child” and “the care of

my child,” similar to what was done in a study that examined the validity of the MBI for a sample of mothers. Ergin’s study (1992) determined these Cronbach’s alpha values: emotional exhaustion subscale, 0.83; depersonalization subscale, 0.65, and personal accomplishment subscale, 0.72.²⁰ In this study, the Cronbach’s alpha value of the MBI subscales were found to be: emotional exhaustion subscale, 0.76; depersonalization subscale, 0.66, and personal accomplishment subscale, 0.60.

The Multidimensional Scale of Perceived Social Support (MSPSS): The MSPSS is a 12-item instrument developed by Zimet et al. to determine the perceived social support of individuals. The test-retest correlation coefficient in the reliability study should be 0.85 (Zimet et al., 1988). The scale was translated into Turkish by Eker and Arkar (1995). It measures the perceptions of support from three sources: family, friends and a significant other. There are four items pertaining to each source of support, and each item is rated using a seven-point scale ranging from definitely no to definitely yes. The subscale scores are obtained by adding the scores for each subscale, and the total score is obtained by adding all the subscale scores. The lowest possible score is 12, and the highest is 84. High scores indicate the more perceived social support. Eker and Arkar’s study determined the Cronbach’s alpha value of MSPSS to be 0.89 (Eker & Arkar, 1995). In this study, the Cronbach’s alpha value of MSPSS entire scale was determined to be 0.90, for the family subscale, 0.78; for the friends subscale, 0.67, and for the significant other subscale, 0.82.

The Parental Attitude Research Instrument: PARI was developed by Schaefer and Bell (1958). It was adapted for use in Turkey by Le Compte, Le Compte and Ozer (1978). The test-retest correlation coefficient in the reliability study should be between 0.58 and 0.88 (Le Compte et al., 1978). It is a four-point Likert scale, and each statement has the options: very appropriate (4), rather appropriate (3), somewhat appropriate (2) and not appropriate at all (1). However, the answers for items 2, 29 and 44 are reverse scored. The scale has five subscales: overreager motherhood (overprotectiveness), democratic attitude and egalitarianism, rejection of the homemaking role, marital conflict and pressure and discipline attitude. The score for each subscale indicates the degree to which the attitude is expressed. In this study, the

Cronbach's alpha values of the PARI subscales were: overeager motherhood (overprotectiveness) subscale, 0.82; democratic attitude and egalitarianism subscale, 0.40; rejection of the homemaking role subscale, 0.72; marital conflict and pressure subscale, 0.60, and discipline attitude subscale 0.84.

Statistical Analysis: The data obtained in the study were assessed using version 16 of the Statistical Package for Social Science (SPSS). The data were assessed using percentages and Pearson's correlation analysis.

Ethical Considerations: The study was approved by the Ethics Committee of Ataturk University Faculty of Health Sciences, and permissions from all relevant institutions were obtained. Participation was voluntary. All mothers were informed about the purpose and

requirements of the study. Confidentiality and the protection of confidentiality was guaranteed, and informed consent was obtained. Any questions on the part of the mothers were answered prior to data collection.

Results

Of the mothers of children with ADHD, 60.4% were in the 31-40 age range, and 91.8% were married. Of them, 63.5% had medium income levels, 75.5% had a male child, and 56.6% had no childcare support from their spouses. The children of 39.6% had medium school achievement levels, and 68.5% had problems at school, of which 61.5% were related to their peers. The children of 56.6% was found to provoke a reaction from the community (Table 1).

Table 1. Sociodemographic characteristics of the mothers of children with ADHD

Features	Mothers of Children with ADHD (n=159)	
	n	%
Age		
30 years and ↓	22	13.8
31-40	96	60.4
41-50 years	38	23.9
51 years and ↑	3	1.9
Marital status		
Married	146	91.8
Divorced	13	8.2
Education		
Literate	18	11.3
Primary school	66	41.5
Middle School	16	10.1
High school	34	21.4
University	25	15.7
Family type		
Core	102	64.2
Wide	53	33.3
Divorced	4	2.5
Income level perception		
Good	47	29.6
Middle	101	63.5
Bad	11	6.9
Working status		
Working	32	20.1
Inoperative	127	79.9
Job	(n=32)	
Officer	19	59.4
Worker	4	12.5
Private sector	6	18.8
Free	3	9.3
Child sex		
Girl	39	24.5
Male	120	75.5
The presence of physical problems in children		

Yes	4	2.5
No	155	97.5
Spousal support, child care		
Yes	69	43.4
No	90	56.6
Support to help child care		
Yes	29	18.2
No	130	81.8
The child's success in school		
Bad	33	20.8
Middle	63	39.6
Good	41	25.8
From time to time good	22	13.8
Living condition of the child's problems at school		
Live	109	68.5
Non- living	50	31.5
Problems at school (n=109)		
Dating relationship	67	61.5
Teacher relationship	18	16.5
The success of the course	24	22.0
Response from the environment for their children		
Positive	69	43.4
Negative	90	56.6

Table 2. MSPSS, MBI and PARI scores of mothers of children with ADHD

SCALES		Mothers of Children with ADHD $\bar{X} \pm SD$	Min-Max
MSPSS	Family	19.96±7.40	4-28
	Friend	17.32±8.07	4-28
	Significant Other	19.60 ±7.50	4-28
	Total	56.91±18.51	12-84
MBI	Emotional Exhaustion	16.32±6.74	0-36
	Depersonalization	5.44±3.72	0-20
	Personal Accomplishment	22.84±5.04	0-32
	Overeager Motherhood, Overprotective Attitude	51.50±7.50	16-64
PARI	Democratic Attitude and Egalitarianism	27.28±3.23	9-36
	Attitude of Rejection of the homemaking role	33.59±6.88	13-52
	Incompatibility	17.35±3.19	6-24
	Pressure and Discipline Attitude	42.95±8.75	16-64

Table 3. The Correlation between PARI and MBI Mean Scores of Mothers of Children with ADHD

Scales	MBI						
	Emotional Exhaustion		Depersonalization		Personal Accomplishment		
	r	p	r	p	r	p	
PARI	Overeager Motherhood (Overprotectiveness)	0.312**	0.000	0.154	0.054	-0.087	0.281
	Democratic Attitude and Egalitarianism	-0.216**	0.007	-0.246**	0.002	0.361**	0.000
	Rejection of the homemaking role	0.397**	0.000	0.379**	0.000	-0.359**	0.000
	Conflict	0.223**	0.005	0.311**	0.000	-0.206**	0.009
	Pressure and Discipline Attitude	0.277**	0.000	0.231**	0.003	-0.148	0.063

* p<0.05 significant ** p<0.01 significant *** p<0.001 significant

Table 4. The Correlation between PARI and MSPSS Mean Scores of Mothers of Children with ADHD

Scales	MSPSS								
	Total		Family		Friend		Significant Other		
	r	p	r	p	r	p	r	p	
PARI	Overeager Motherhood (Overprotectiveness)	-0.126	0.116	0.017	0.831	-0.312**	0.000	0.003	0.975
	Democratic Attitude and Egalitarianism	0.195*	0.015	0.213**	0.007	0.119	0.138	0.246**	0.002
	Rejection of the homemaking role	-0.162*	0.042	-0.148	0.063	-0.196*	0.014	-0.100	0.213
	Conflict	-0.157*	0.048	-0.076	0.342	-0.128	0.108	-0.154	0.052
	Pressure and Discipline Attitude	-0.130	0.103	0.025	0.754	-0.327**	0.000	-0.001	0.985

* p<0.05 significant ** p<0.01 significant *** p<0.001 significant

Table 2 shows the mean MSPSS, MBI and PARI scores of mothers of children with ADHD. Their mean score on the entire MSPSS was 56.91±18.51, and their highest score was on the family subscale at 19.96±7.40. Their mean MBI scores were 16.32±6.74 on the emotional exhaustion subscale, 5.44±3.72 on the depersonalization subscale and 22.84±5.04 on the personal accomplishment subscale (Table 2). Their highest PARI mean scores were on the

overeager motherhood and overprotective attitude subscales (51.50±7.50) and the pressure and discipline attitude subscales (42.95±8.75) (Table 2).

Table 3 illustrates the correlation between the mean PARI scores obtained by mothers of children diagnosed with ADHD and the mean MBI scores. There was a negatively significant correlation between emotional exhaustion and the democratic attitudes of the mothers and a

positively significant correlation between emotional exhaustion and other child-raising attitudes ($p < 0.01$). No correlation was found between the MBI depersonalization subscale and the PARI overreager motherhood subscale, but there was a negatively significant correlation with the democratic attitude subscale and a positively significant correlation with the other attitudes ($p < 0.01$). There was a negatively significant correlation between mothers' attitudes regarding personal accomplishment and rejection of the homemaking role and conflict and pressure and discipline and a positively significant correlation with democratic attitude ($p < 0.01$).

Table 4 shows the correlation between the mean PARI scores obtained by mothers of children diagnosed with ADHD and the mean MSPSS scores. There was a positively significant correlation between the total scores obtained by mothers for the MSPSS and the democratic attitude and egalitarianism PARI subscales and a negatively significant relationship between rejection of the homemaking role and conflict attitudes ($p < 0.05$). There was a positively significant correlation between the support received by mothers for the MSPSS family subscale and the PARI democratic attitude subscale ($p < 0.01$). There was a negatively significant correlation between the support received by mothers for the MSPSS friend subscale and the PARI overreager motherhood (overprotectiveness), pressure and discipline attitude ($p < 0.01$) and rejection of the homemaking role ($p < 0.05$) subscales and a positively significant correlation between the support they received for the MSPSS significant other subscale and the PARI democratic attitude subscale ($p < 0.01$).

Discussion

ADHD in children can often lead to impaired family relationships and family management problems. Parents experiencing family management problems often feel inadequate, experience a higher rate of stress and report greater psychological impairment and psychopathology (Alpan, 2013).

The mean scores for the multidimensionally perceived social support scale in this study (Table 2) indicate that mothers receive the greatest support from their families and have a moderate level of perceived social support. In Turkey studies about the mothers of children with different special needs have also shown that

mothers receive the greatest support from their families Duygun & Sezgin, 2003; Karpat & Girli, 2012).

This study determined that mothers of children with ADHD experience burnout (Table 2). Akin et al. (2009) found that mothers of children with ADHD experience more burnout than a control group, and that medical treatment did not decrease this burnout (Akin et al., 2009). Similarly, the studies conducted with mothers of children with different special needs in Turkey indicated that these mothers experience burnout (Duygun & Sezgin, 2003). It was also determined that mothers of children with ADHD score highest on the personal accomplishment subscale (Table 2). Children with ADHD need more parental care than normal children (Akin et al., 2009). The reason mothers of children with ADHD experience slight burnout according to the personal accomplishment subscale may be that they interpret meeting the increasing care needs of their children as a success, and therefore answer the items about personal accomplishment more positively. Relevant studies conducted abroad have also determined that ADHD causes parents to have stress and a negative mood (Chen, Tsai & Chou, 2015; Gordon & Hinshaw, 2015). The results of this study have been compared with those of other studies, and it has been determined that, like mental disability and autism, ADHD is a source of burnout for mothers (Akin et al., 2009; Arman, 2009; Huang et al., 2014). Burnout in mothers is thought to be the direct result of common ADHD behaviors in their children, such as attention deficit and hyperactivity and the resulting social and academic problems. The literature contains studies of the burnout of mothers with children with different disorders (Lindström, Åman & Norberg, 2011). In Turkey, there are a limited number of studies measuring the extent of burnout for mothers of children with ADHD (Akin et al., 2009). This study therefore adds to the knowledge base.

This study determined that mothers of children with ADHD mainly display overreager motherhood and overprotective attitudes and pressure and discipline attitude (This child-raising attitudes are among the negative child-raising attitudes). In Turkey and foreign country studies also show that mothers of children diagnosed with ADHD have negative motherhood attitudes (Cop et al., 2017; Miranda-Casas et al., 2007; Miranda et al., 2009).

Alizadeh, Applequist and Coolidge found that parents of children with ADHD resort to physical punishment of their children more often than a control group (Alizadeh, Applequist & Coolidge, 2007). Relevant studies in Turkey have determined that mothers of children with ADHD display negative child-raising attitudes, which is similar to the results of this study (Keser, Kapcı & Ozer, 2012). The results of the relevant studies emphasize to intervene in this situation by informing families.

This study determined that mothers with positive child-raising attitudes experience less burnout. Foreign studies conducted with families of children diagnosed with a psychiatric disorder have reported that negative child-raising attitudes cause negative feelings in families, such as burnout and stress (Milshtein et al., 2009; Ozturk, Riccadonna & Venuti, 2014). Studies of different groups in Turkey have shown that the negative child-raising attitudes of parents are associated with their burnout (Yurdusen, Erol & Gencoz, 2013). There have been no studies of the child-raising attitudes and burnout in families of children diagnosed with ADHD. The results of our study show that the negative attitudes of mothers of children with ADHD increase aggressive and destructive behaviors in children, and that these negative behaviors either increase the burnout levels of mothers or cause them to display negative attitudes as a result of burnout, resulting in a vicious cycle.

Table 4 shows that mothers receiving social support from their families and from a someone special adopt democratic attitudes at a higher rate ($p < 0.01$). Another important result of our study is that as the social support of friends decreases, mothers' negative child-raising attitudes increase. Even though there is no relevant Turkish or foreign study, studies examining the factors that affect child-raising attitudes in Turkey have shown that having a profession is a source of social support and helps decrease the negative attitudes of working mothers (Sanlı & Ozturk, 2012). Relations between family members who adopt democratic child-raising attitudes are based on love and respect. At the same time they are supervised while meeting the interests and needs of children in the democratic family attitudes. The rules are not forced upon the child, but are tried to be adopted for their own sake. Children growing up in a democratic family environment; agile, moving, creative. ADHD does not occur with negative attitudes of parents. However,

negative child-raising attitudes cause an increase in the symptoms of ADHD and difficulty of treatment ADHD. Because one of the most effective methods in the treatment of ADHD is to educate parents about their attitudes towards the child (Ercan, 2013). This is why maternal adoption of democratic child-raising attitudes is important for ADHD treatment and care. Since there are a limited number of relevant studies, this study can guide future research.

Conclusion and Recommendations

The results of our study show that mothers of children diagnosed with ADHD display overeager motherhood and overprotective attitudes and the pressure and discipline attitudes (negative child-raising attitudes), perceive their social support as low (their highest score was on the friend) yada perceive their friends social support as low and have a higher level of emotional exhaustion. Based on these results, it is recommended that training programs and enhanced support systems be implemented to increase mothers' knowledge of ADHD. Regarding the application of such training and the procurement of psychosocial support for families, it is critical that school nurses take a holistic approach when providing nursing care.

There are a limited number of studies about the child-raising attitudes, social support and burnout of parents of children diagnosed with ADHD. It is therefore recommended that more extensive studies about the difficulties experienced by the families of children with ADHD and the effect of those difficulties on children be undertaken in the future.

Clinical Nursing Implications

Children's mental health nurses have an important responsibility to include families in care for child patients. Therefore, the problems experienced by mothers of children with ADHD are thought to affect treatment and nursing care. The results of this study provide information to help mothers of children with ADHD to develop positive attitudes and reveal the importance of mobilizing social support systems to cope with burnout.

Limitations of the Study

The main limitation of the study was that it only included mothers of children diagnosed with ADHD at the Child and Adolescent Psychiatry Outpatient Clinic at the Mental Health and Diseases Hospital in Elazığ.

References

- Akfirat, O.N., Staub, D.F., & Yavas, G. (2017). Current debates in education. In C. Nuri (Ed.), *Intra-family problems and special education support in DEHB* (pp.129-141). London, UK: IJOPEC Publication.
- Akin, B.S., Saripinar, E.G., & Sener, S. (2009). Burnout syndrome of mothers of children with attention deficit and hyperactivity disorder. *Turkiye Klinikleri Journal of Pediatrics*, 18(4), 283-288.
- Alizadeh, H., Applequist, K.F., & Coolidge, F.L. (2007). Parental self-confidence, parenting styles, and corporal punishment in families of ADHD children in Iran. *Child Abuse and Neglect*, 31(5), 567-572. doi: 10.1016/j.chiabu.2006.12.005
- Alpan, F. (2013). Comparison of coping strategies and depression levels of mothers of children with attention deficit hyperactivity disorder depression in mothers of children with normal development (Unpublished Master's Thesis). Akdeniz University, Antalya.
- APA (American Psychiatric Association). (2013). *Diagnostic and statistical manual of mental disorders-5th Edition (DSM-5)*. Washington DC, American Psychiatric Association.
- Arman, N. (2009). The examination of the anxiety and burnout levels with social support levels perceived by mothers and fathers having mentally handicapped children (Unpublished Master's Thesis). Ataturk University, Erzurum.
- Chen, W.L., Tsai, S.T., & Chou, F.H. (2015). Depression and related factors in mothers of school-aged children with attention-deficit hyperactivity disorder. *Hu Li Za Zhi The Journal of Nursing*, 62(1), 39-49. doi: 10.6224/JN.62.1.39
- Coskun, Y., & Akkas, G. (2009). The Relation Which between Anxiety Level Of the Mothers Who Have Disabled Children and Social Support. *Ahi Evran University Journal of Kirsehir Education Faculty*, 10(1), 213-227.
- Cam, O., & Engin, E. (2014). *Mental health and illness nursing art*. Istanbul: Istanbul tip Bookstore.
- Cop, E., Cengel Kultur, S.E., & Senses Dinc, G. (2017). Association between parenting styles and symptoms of attention deficit hyperactivity disorder. *Turkish Journal of Psychiatry*, 28(1), 25-32.
- Duygun, T., & Sezgin, N. (2003). The effects of stress symptoms, coping styles and perceived social support on burnout level of mentally handicapped and healthy childrens mothers. *Turkish Journal of Psychology*, 18(52), 37-52.
- Eker, D., & Arkar, H. (1995). Factorial structure, validity, and reliability of the multidimensional scale of perceived social support. *Turkish Journal of Psychology*, 10(34), 45-55.
- Ercan, E.S. (2013). *Attention deficit hyperactivity disorder* (pp. 159). Istanbul: Dogan Book.
- Ergin, C. (1992). Adaptation of burnout and maslach burnout inventory in doctors and nurses. VII. *National Psychology Congress*, Hacettepe University, Ankara
- Ersoy, O., & Curuk, N. (2009). The importance of social support for the mothers of the children who have special needs. *Family and Community Journal of Educatin, Culture and Research*, 5(17), 104-110.
- Gordon, C.T., & Hinshaw, S.P. (2017). Parenting stress as a mediator between childhood ADHD and early adult female outcomes. *J Clin Child Adolesc Psychol*, (62)4, 588-599.
- Gol, I., & Bayik, A. (2013). The competency of primary school classroom teachers in the recognition of the children with attention deficit/hyperactivity disorder. *Dokuz Eylul University Electronic Journal of Faculty of Nursing*, 6(4), 207-213.
- Gozun Kahraman, O., & Cetin, A. (2015). Determining the views and needs of mothers having a baby with a developmental disability over the process they experience after diagnosis. *International Journal of Early Childhood Special Education (INT-JECSE)*, 7(1), 97-128.
- Guclu, O., & Erkiran, M. (2005). Personality disorders in parents of children with attention deficit hyperactivity disorder. *Journal of Clinical Psychiatry*, 8(1), 18-23.
- Gumusdas, M. & Ejder Apay, S. (2016). The relationship between the marital adjustment and social support in pregnancy. *Journal of Health Science and Professions*, 3(1), 1-8. doi: 10.17681/hsp.16572
- Huang, H.L., Li, S.S., Cheng, C.P., Lin, C.Y., Yang, Y.K., & Huang, J.H. (2014). The negative attribution processes of mothers of children with attention deficit/hyperactivity disorder. *Research in Developmental Disabilities*, 35(1), 87-98.
- Karpat, D., & Girli, A. (2012). The analysis of grief marital adjustment and perceived social support of parents of children with pervasive development disorder. *Ankara Universiy Faculty of Educational Sciences Special Education Journal*, 13(2), 69-85.
- Keser, N., Kapcı, E.G., & Ozer, A. (2012). Investigation of attention deficit and hyperactivity disorder in children: the analysis of the mediation and moderation model. *New Symposium Journal*, 50(1), 13-22.
- Le Compte, G., Le Compte, A., & Ozer, S. (1978). Child-raising attitudes of mothers of Ankara in three socio-economic level: A scale adaptation. *Turkish Journal of Psychology*, 1(1), 5-8.
- Linndström, C., Åman, J., & Norberg, A.L. (2011). Parental burnout in relation to sociodemographic, psychosocial and personality factors as well as disease duration and glycaemic control in children with Type 1 diabetes mellitus. *Acta Paediatrica* 100(7), 1011-1017.

- Maslach, C., & Jackson, S.E. (1981). The measurement of experienced burnout. *Journal of Occupational Behaviour*, 2, 99-113.
- Milshtein, S., Yirmiya, N., Oppenheim, D., Koren-Karie, N., & Levi, S. (2010). Resolution of the diagnosis among parents of children with autism spectrum disorder: associations with child and parent characteristics. *Journal of Autism and Developmental Disorders*, 40(1), 89-99.
- Miranda-Casas, A., Grau-Sevilla, D., Marco-Taberner, R., & Rosello, B. (2007). Discipline styles in families with children with attention deficit hyperactivity disorder: their influence on the course of the disorder. *Revista de Neurologia*, 44(2), 23-25.
- Miranda, A., Grau, D., Rosel, J., & Meliá, A. (2009). Understanding discipline in families of children with attention-deficit/hyperactivity disorder: a structural equation model. *The Spanish Journal of Psychology*, 12(2), 496-505.
- Ozgursoy, B.N., & Akyol, A.D. (2008). Needs of family members of patients in intensive care unit. *Journal of Intensive Care Nursing*, 12(1-2), 33-38.
- Ozturk, Y., Riccadonna, S., & Venuti, P. (2014). Parenting dimensions in mothers and fathers of children with Autism Spectrum Disorders. *Research in Autism Spectrum Disorders*, 8(10), 1295-1306.
- Polanczyk, G., Silva de Lima, M., Horta, B.L., Biederman, J., & Rohde, L.A. (2007). The worldwide prevalence of ADHD: a systematic review and meta-regression analysis. *The American Journal of Psychiatry*, 164(6), 942-948.
- Schaefer, E.S., & Bell, R.Q. (1958). Development of a parental attitude research instrument. *Child Development*, 29(3), 339-361.
- Starck, M., Grünwald, J., & Schlarb, A. A. (2016). Occurrence of ADHD in parents of ADHD children in a clinical sample. *Neuropsychiatric Disease and Treatment*, 12, 581-588.
- Sanlı, D., & Ozturk, C. (2012). An analysis of the factors affecting the child rearing attitudes of mothers. *Journal of Buca Education Faculty*, 32, 31-48.
- Uysal Ozaslan, T., & Bilac, O. (2015). Epidemiological aspect of attention deficit hyperactivity disorder. *Turkey Clinics J Child Psychiatry-Special Topics*, 1(1), 1-5.
- Yildiz, O., Cakin-Memik, N., & Agaoglu, B. (2010). Quality of life in children with (Attention-Deficit Hyperactivity Disorder): a cross-sectional study. *Archives of Neuropsychiatry*, 47(4), 314-318.
- Yurdusen, S., Erol, N., & Gencoz, T. (2013). The effects of parental attitudes and mothers' psychological well-being on the emotional and behavioral problems of their preschool children. *Maternal and Child Health Journal*, 17(1), 68-75. doi: 10.1007/s10995-012-0946-6
- Zimet, G.D., Dahlem, N.W., Zimet, S.G., & Farley, G.K. (1988). The multidimensional scale of perceived social support. *Journal of Personality Assessment*, 52(1), 30-41.