

## Coping patterns among parents of Children with Attention Deficit Hyperactivity Disorder

Nabila Atallah Attia Moawad, Ghada Mohamed Mourad, Fatma Ata

Department of Psychiatric / Mental Health Nursing, Faculty of Nursing, Ain Shams University-Cairo-Egypt.

### Abstract

**Background:** Families of children with ADHD encounter greater difficulties such as family conflict, negative parent- child relationship, higher rates of parent stress and ineffective coping. **The aim of study:** was to identify the coping patterns and assess the level of stress among parents having children with ADHD. **Study design:** This study was exploratory descriptive. **Setting:** This study was conducted at Pediatric Out-Patient Clinic at El-Abbassia hospital for psychiatric and mental health. **Subject:** convenient sample of 50 parents were chosen for conducting this study. **Data collection tools:** (1) Socio demographic and clinical characteristics data for children and their parents (2) Parental stress scale (3) Ways of coping Questionnaire. **Results:** the present study revealed that three quarters of parents having children with ADHD had high level of stress and more than half of parents had negative coping patterns. **Conclusion:** In the light of the current study, it can be concluded that, the majority of the studied parents have children with ADHD were mothers, and more than three quarters of children sex were male. The study findings revealed that three quarters of parents of children with ADHD had high level of stress, and more than half of the parents had negative coping patterns. In addition to there was highly statistical significant positive correlation between total score of Parental Stress and their total score of ways of coping. **Recommendations:** Counseling clinics for parents of ADHD children are needed. Design a training Programs for parents of children with ADHD such as stress management technique methods, such as meditation, relaxation techniques, and exercise to increase their own tolerance for frustration .

**Keywords:** Parents, Children with ADHD, Stress, Coping patterns.

### Introduction

Attention Deficit Hyperactivity Disorder (ADHD) is a common neurodevelopmental disorder with an estimated worldwide prevalence of approximately 5% (American Psychiatric Association, 2013).

Attention-deficit hyperactivity disorder (ADHD) is one of the most commonly diagnosed chronic childhood disorders. Usually, the condition presents in childhood before the age of seven, but is also seen in adolescence and often extends to the adult years. Children with ADHD find it difficult to control their behavior

within their social and school environment. Normally, this interferes with their ability to live normal lives and often results in them not being able to achieve their full potential academically (Schellack, Meyer, and Chigome, 2019).

Parents having children with ADHD had higher levels of conflict and low levels of family organization. Parents of children with ADHD are also more likely to experience problems in their relationship with their partner or spouse and greater mental health problems themselves. In terms of parent's relationship with each other, parents of children with ADHD are more likely to experience disagreements about child-rearing and have higher rates

of marital conflict, separation, and divorce than parents of children without ADHD (Cappe et al, 2017).

Coping patterns can be considered adaptive or maladaptive (that is, healthy or unhealthy), adaptive coping methods (e.g., information seeking and problem solving) and maladaptive coping strategies (e.g., efforts to deny, minimize, or escape the stressful situation). Adaptive coping strategies are directly aimed at coping with the source of stress, whereas maladaptive strategies indirectly help reduce a person's awareness of the stress (Tsfaye, 2016).

Parents practice various coping patterns in response to stress. Increased levels of parents stress could hinder the parent's judgment of the child's disability. When a parent's stress reaction persists, the parent's sense of helplessness and anxiety is exacerbated and subsequently the child's situation might be perceived as being more serious than it really is. This perception may impair the parent's ability to manage the stressor in a constructive manner (Moawad, 2017).

Nurses should be an integral part of the process of increasing the level of awareness about ADHD through improving the service delivery model for affected children and their families; the nurse can assess the global influence of the child's mental health disorder on the child's social functioning, education, and also family life. Furthermore, nurses help parents understand the rationale for the diagnostic process, the process of treatment, and the importance of follow-up to re-evaluate their child's case and make sure that the diagnosis and treatment are appropriate over time. Ultimately, nurses also help families understand and cope with the inevitable uncertainties (Abd El Moneam, 2018).

### **Significance of the Study**

Attention-deficit/hyperactivity disorder (ADHD) is a common behavioral condition affecting 11 percent of school-age children (Visser, et al., 2014). The behavior of children with ADHD is often perceived by parents as challenging to manage, and research has shown that parents of children with ADHD experience more stress than do those of children without disabilities (Ringer, Wilder, Scheja, and Gustavsson, 2019). Parents of children with ADHD often frustrated that there are much stress, which make them feel emotionally, physically, financially, and perhaps spiritually stressed and upsetting. In addition to elevated levels of parenting stress are associated with disruptions to the parent-child relationship and disruptions in parent psychological functioning. So, this study will be beneficial in identifying the level of stress and the coping patterns used by parents have children with ADHD.

### **The aim of the study**

---

The study aimed to:

- Assess coping patterns among parents of children with ADHD.
- Assess level of stress among parents of children with ADHD.

### **Materials and Method**

#### **The study design**

This study was exploratory descriptive

#### **Setting**

This study was conducted at Pediatric Out-Patient Clinic at El- Abbassia hospital for psychiatric and mental health.

#### **Subject of the study:**

**Sample type:** A convenience sample.  
**Sample size:** The sample was chosen as the number of available parents of children with ADHD and the parents of the present

study included (50) parents who meet the following criteria: **A- For parents:** Both sexes (mothers and fathers). All ages. Parent who living in the same dwelling and responsible for caring ADHD child. **B- For children:** Males and females. Ages from 6 to 12 years (school age). Free from any physical disease and without mental retardation or neurological disorders.

#### **Tools of data collection:**

### **1- Socio-demographic and clinical characteristics data sheet for children and their parents:**

This tool was designed by the researcher, it included (13) items for socio-demographic data divided into two parts which included: part one was used to identify personal characteristics of parents as: age, sex, marital status, job of parents, level of education, and monthly income. Part two was developed to assess clinical and demographic characteristics of ADHD children: age, sex, diagnosis, number of sibling, family birth order, and family history of ADHD.

### **2- Parental stress scale (Berry and Jones, 1995):**

This scale was developed by *Berry and Jones (1995)*. After adaptation of this scale by researcher, it consists of 24 items answered by parents. The scale was divided into three subscales as: psychological stress, physical stress, and social and financial stress. Scoring system: Scoring system was done using three points Likert scale ranging from Zero to 2 respectively as: "agree=2, uncertain=1, and disagree = Zero". Items 1,5,6,10,11 and 18 were reverse scored as "agree= zero, uncertain= 1, disagree= 2". Parents with a total score reach or more than 60% were considered to have high level of stress and those with less than 60% were considered to have low level of stress.

### **3- Ways of coping Questionnaire (Folkman & Lazarus, 1986):** This scale was developed by **Folkman & Lazarus**

**(1986)** after adaptation of this scale by researcher; it consists of 50 items answered by parents, the questionnaire was divided into three parts as: Patterns of avoidance adaptation, patterns of seek support, and patterns of effective adaptation. Parents are presented with three graded response: used, used somewhat, and not used. **Scoring system:** Scoring system was done using three points Likert scale ranging from Zero to 2 respectively as: "used =2, used somewhat=1, and not used = Zero". Items 1,2,3,4,5,6,7,9,10,11,12,13,14,15,17,18 and 30 were reverse scored as used = Zero, used somewhat=1, and not used = 2". Subjects with a total score reach or more than 60% were considered to have Positive coping and those with less than 60% were considered to have Negative coping.

**Validity of the tool:** A panel of five experts in three different specialties: Psychiatric nursing, Pediatric nursing and Public health nursing validated the tool. They assessed the tool for relevance, comprehensiveness, and clarity. The tool was finalized based on their comments and suggestions.

**Reliability of the tool:** The reliability of the tools was assessed through measuring their internal consistency by Cronbach's Alpha coefficient test, and re-testing. Tool reliability test carried out on ten parents having children with ADHD, and after two weeks carried out re-testing on another ten of parents. To achieve the criteria of trustworthiness of the tool reliability, reliability among the studied parents was (85%) according to Cronbach's alpha.

**Pilot study:** A pilot study was carried out on 10% of the studied parents to test the clarity and applicability of the tools, and the feasibility of the research process. The pilot study was also used to estimate the time required to respond to the questionnaire. The results obtained from.

The pilot study was excluded from the study results. The pilot study was conducted over a period of one month starting from first of November 2019.

### **Fieldwork**

Once permission was granted to proceed with the study, the researcher visited the study setting and met with parents having children ADHD who fulfilled the inclusion criteria. The purpose of the study was explained to parents. The researcher started the interview with the parents individually using the data collection tools. The researcher read, explained the steps of the study and choices were recorded for illiterate parents, while educated parents read and full the questionnaire by themselves.

The time consumed to fill out the full questionnaire ranged from 20 to 25 minutes, each Saturday, and Tuesday from 9:30 Am to 11:30 Am in outpatient of EL-Abbassia hospital for psychiatric and mental health. Data collection lasted for 3 months from the beginning of October 2019 to the end of December 2019.

### **Ethical considerations:**

The ethical research considerations in this study include the following:

1. A written initial approval was obtained from the research ethical committee at the faculty of nursing, Ain Shams University.
2. Individual oral consent was obtained from each participating parents after explaining the nature and benefits of the study.
3. The researcher cleared the objectives and aim of the study to participating parents.
4. The researcher maintained anonymity and confidentiality of participating parents.

5. Participating parents were allowed to choose to participate or not in the study, and given the right to withdraw at any time from the study without giving reasons.

### **Statistical analysis**

Data collected were checked for accuracy and completeness and were coded and entered into statistical package for social science (SPSS) software version 20. Describe of quantitative variables as mean and SD. Description of qualitative variables as number and percentage. Measure, including frequency; percentages, arithmetic mean and standard deviation were presented and r-Pearson tests for Correlation. P value was used.

### **Results**

**Table (1):** shows that, half of parents (54%) were in the age group 31-40 years with a mean age of  $37.81 \pm 6.25$ , and more than three quarters (82%) of parents was mothers. Regarding to marital status the majority (90%) of parents was married, and more than half of the parents 58% were not working, and 58% had Intermediate education level. Besides, more than three quarters of studied sample (82%) had enough monthly income.

**Table (2):** reveals that, three quarters of children (76%) were in the age group  $6 > 9$  years with a mean age of  $8.43 \pm 1.90$ , and more than three quarters of children sex (80%) were male and 20% were female. Regarding to child diagnosis 88% was Combined Type (ADHD). According to number of siblings were (44%) of children had two of sibling, and less than half (42%) of the child arrangement between siblings were second, 38% were first. According to the presence of ADHD in family slightly three quarters (74%) of the sample have not.

**Table (3):** clears that, three quarters of studied sample (76.0%) had high level of stress, and more than half of the parents (60%) had negative coping patterns.

**Table (1):** Socio-demographic and clinical characteristics of ADHD child (n=50).

Items	N	%
<b>Child age (years)</b>		
6>9 Years	38	76%
9>12 Years	12	24%
<b>Mean± SD</b>	<b>8.43 ± 1.90</b>	
<b>Child sex</b>		
Male	40	80%
Female	10	20%
<b>Diagnosis</b>		
ADHD	44	88%
HD	3	6%
ADD	3	6%
<b>Number of siblings</b>		
NO	1	2%
One	18	36%
Two	22	44%
More than Two	9	18%
<b>Family birth order</b>		
First	19	38%
Second	21	42%
Third or more	10	20%
<b>Family history of ADHD</b>	13	26 %
Yes	37	74%
No		

**Table (2):** Level of stress and coping patterns among parents having children with ADHD (n=50).

Items	No	%
<b>Level of stress among parents having children with ADHD</b>	<b>Low</b>	12 24.0%
	<b>High</b>	38 76.0%
	<b>Total</b>	50 100.0%
<b>Total coping patterns among parents having children with ADHD</b>	<b>Negative</b>	30 60.0%
	<b>Positive</b>	20 40.0%
	<b>Total</b>	50 100.0%

**Table (3):** Correlation between total stress and total coping patterns among parents having children with ADHD (N=50).

Items	Total score of coping	
Total score of stress	R	.607**
	p-value	0.001**
	N	50

\*\*p-value <0.01 HS

r-Pearson Correlation Coefficient

## Discussion

The current study aimed to assess level of stress and the coping patterns among parents of children with ADHD. In the present study, the findings showed that, more than half of parents were in the age group 31-40 years with a mean age of  $37.81 \pm 6.25$ . This result is similar to that of Hussein, (2019) in study entitled "Relation between Attention Deficit Hyperactivity Disorder among School Age Children and Parent's Stress and Sense of Competence" who found that, about half of parents were between the ages 31-40 years old. While this finding was in contrast with Zaki, (2013) who stated that age of mothers of ADHD children was ranged between 20-30 years.

The findings of the present study reveals that, majority of the studied parents have children with ADHD were mothers, and the majority of parents were married. These findings may be due to the care given is often expected performed by mothers because the mothers traditionally take more responsibility of children care, observe any behavioral changes in their children and spend a part of their effort and time to meet the demands of medical treatment and they are caring their child such as, periodical visits to psychiatric clinic, giving medication on time and follow up the child condition. Moreover, it reflects the strong emotional ties between mothers and their children. The finding of the present study reveals that, more than half of parents in the

studied sample had Intermediate education level while illiterate parents in the studied sample were lowest percentage. Based on the present study finding, this might be due to the fact that ADHD as a disease is difficult to be noticed by uneducated parents. Meanwhile, this generally the education might have a positive impact on the care and management of the ADHD child.

The finding of the present study indicates that, more than half of the parents were not working and more than three quarters of them had enough monthly income, These results might be due to different reasons; unemployment, unavailable job, low level of education, inability to work . Or due to that majority of the parents were mothers, this means that they preferred to stay at home to taking care of their children. This finding is in agreement with study carried out by Ahmed, (2017) who showed that the majority of participant mothers were not work.

Concerning Socio-demographic and clinical characteristics of children with ADHD the present study findings show that, about three quarters of children were in the age group 6>9 years with a mean age of  $8.43 \pm 1.90$ , It might be due to that this age characterized by pervasive developmental changes and ADHD begin in early childhood and the main complain in this

age is impulsivity, hyperactivity and lack of attention in duties of schools.

The finding of the present study reveals that, about more than three quarters of children sex were male. This might be due to the prevalence of ADHD more common in the boys than girls. In addition, the girls may also develop the symptoms of ADHD at a later age than boys and girls sometimes show symptoms of ADHD in less obvious ways, such as being inattentive. This result was supported by **Harold, (2018)** in study entitled "Prevalence of attention deficit hyperactivity disorder" who found that, the majority of the studied samples were boys while the minority was girls.

Concerning the types of ADHD, the current study showed that, the majority of the children included in the study had combined type (ADHD), while the minority was predominantly inattentive type and Hyperactive –Impulsive type. This result was supported by **Aboul-ata& Amin, (2018)** who conducted a study about the prevalence of attention-deficit/hyperactivity disorder in Fayoum city (Egypt) among school age children found that the combined ADHD subtype was the most prevalent.

In this respect, **Abd-Elsamad, (2017)** found that, in a sample of Egyptian children, the distribution of the subtypes of ADHD was combined type the first, then hyperactivity predominant type and lastly attention deficit predominant type.

The findings of the present study revealed that, slightly three quarters of parents had a negative family history of ADHD, while less than one quarter had positive family history of ADHD. Based on the finding of the current study, high

negative family history in Egypt may be due to that most of parents do not say to anyone about the status of their children for their thinking it is a stigma for going to psychiatry hospital.

The findings of the present study clear that, less than half of the child arrangement between siblings are second. Based on the finding of the current study, high positive family history in Egypt may be due to no tendency for families to stop reproduction after the diagnosis of an affected child.

The study findings revealed that three quarters of parents had high level of stress. This might be due to parents of children of with ADHD are frequently confronted with various kinds of psychosocial and practical problems that cause high levels of parental distress, these include emotional problems such as

Fear, depression and worry, reduced satisfaction in their marriage, financial problems, and problems related to educational tasks.

This result was consistent with **Leitch et. al., (2019)** in study entitled "Experience of stress in parents of children with ADHD". The study stated that, Parents attribute their high stress to their children's behavior.

The study findings revealed that more than half of the parents 60% had negative coping patterns. This might be due to the majority of parents of children with ADHD have more of stress. So, stress can lead to use negative adaptation by parents.

these results came in agreement with **Harazni& Alkaissi (2016)** who showed that the parents of ADHD children perform less positive parenting, including a lack of warmth and positive parental

involvement, as well as reports of more negative discipline strategies and parental intrusiveness.

The present study represented that there was highly statistical significant positive correlation between total score of Parental Stress and their total score of ways of coping ( $P \leq 0.001$ ).

The result of the current study could be due to Parental Stress and ways of coping among parents of children with ADHD are correlated to each other. Parents who have high level of stress cannot cope effectively. This result nearly in agreement with (Tefaye, 2016) he showed that there was a significant relation between parental stress level and coping strategies.

#### Limitation of study

Some parents' withdrawal from the study (5 parents) and they were replaced by other parents.

#### Conclusion

---

In the light of the current study, it can be concluded that, the majority of the studied parents have children with ADHD were mothers, and more than three quarters

#### References

---

**Abd El Moneam N., (2018):** Evaluation of Psycho Educational Intervention for Children Having Attention Deficit Hyperactivity Disorder and Their Parents. (IOSR) Journal of Nursing and Health Science (IOSR-JNHS). e- ISSN: 2320-1959.p- ISSN: 2320-1940 Volume 7, Issue 4 Ver. VIII (Jul.-Aug. 2018), PP 15-24

**Abd-elsamad, S., (2017):** Relationship between Brain Derived Neurotropic

of children sex were male. The study findings revealed that three quarters of parents of children with ADHD had high level of stress, and more than half of the parents had negative coping patterns. In addition to there was highly statistical significant positive correlation between total score of Parental Stress and their total score of ways of coping.

#### The study recommendations

---

- Education programs are important to improve parents' adjustment toward care of their ADHD children.

-A hotline must be available to solve immediate problems of parents having children with ADHD.

-Counseling clinics for parents of children with ADHD are needed.

-Further researches about the social stigmatization among parents of children with ADHD are important in support of the parents.

**Financial support:** No funding was received

**Conflict of interest:** No

Factor and Attention Deficit Hyperactivity Disorder in A Sample of Egyptian Children in Ain shams university.;P, 123-134.

**Aboul-ata M., & Amin, F., (2018):** The prevalence of ADHD in Fayoum City (Egypt) among school-age children: Depending on a DSM-5-based rating scale. Journal of Attention Disorders, p, 1-7.

**Ahmed A., (2017):** Psychosocial problems and Coping patterns among parents



- having children with ADHD. Cairo University.
- American Psychiatric Association, (2013):** Diagnostic and statistical manual of mental disorders. (5th ed.). Arlington, VA: American Psychiatric Publishing.
- Berry J.D., & Jones W.H., (1995):** The Parental Stress Scale: initial psychometric evidence. *Journal of Social and Personal Relationships*, 12, 463 – 472.
- Cappe E., Bolduc M., Rouge M.C., Saiag M.C., & Delome R., (2017):** Quality of life , psychological characteristics, and adjustment in parents of children with attention- deficit /hyperactivity disorder. *Quality of life Research* 26(5),1283 - 1294.
- Folkman, S., Lazarus, R. S., Dunkel-Schetter, C., DeLongis, A., & Gruen, R. (1986):** Dynamics of a Stressful Encounter: Cognitive Appraisal, Coping, and Encounter Outcomes. *Journal of Personality and Social Psychology*, 50: 992–1003.
- Harazni, L., Alkaissi A., (2016):** The Experience of Mothers and Teachers of Attention Deficit / Hyperactivity Disorder Children, and Their Management Practices for the Behaviors of the Child A Descriptive Phenomenological Study. *Journal of Education and Practice* ISSN 2222-1735 (Paper) ISSN 2222-288X (Online) Vol.7, No.6.
- Harold, F. ,(2018):** Prevalence of attention deficit hyperactivity disorder thesis, From the Department of Medicine, King Abdul-Aziz University, Jeddah, Kingdom of Saudi Arabia P, 44-
- 47.Mohammad A. Seleem, Tarek M. El-Gohary, Manal A. Eid, Esraa A. Sroor..
- Hussein S.(2019):** Relation between Attention Deficit Hyperactivity Disorder among School Age Children and Parent's Stress and Sense of Competence. Minia University
- Leitch S.& Sciberras E, pots B., Gerner B., Rinehart N., Nicholson J.M., Evans S.,(2019) :**Experience of stress in parents of children with ADHD: A qualitative study. [International Journal of Qualitative Studies on Health and Well-being](#).14(1),1690091.
- Moawad, N., (2017):** *Stress and Coping Patterns among Parents of Children with Attention Deficit Hyperactivity Disorder, master thesis ,Faculty of Nursing, Ain Shams University*
- Omar, E., (2016).** Comorbid Mental Health Problems in Children with Intellectual Disabilities. Institute of postgraduate childhood studies, Ain Shams University. P, 25.
- Parks A.M., (2018):** Relationships among parenting stress, parenting practices, and conduct problems in African American mothers of children with and without ADHD. *Virginia Commonwealth University VCU Scholars Compass*.
- Ringer N., Wilder J., Scheja M., Gustavsson A., 2019:** their children’s ADHD diagnosis, *International Journal of Disability, Development and Education*, ISSN: 1034-912X (Print) 1465-346X
- Ringer, N., Wilder, J., Scheja, M., & Gustavsson, A., (2019):** Managing children with challenging behaviours. Parents’ meaning-making processes in

relation to their children's ADHD diagnosis. *International Journal of Disability, Development and Education*, DOI: 10.1080/1034912X.2019.1596228

**Schellack N., Meyer J., Chigome A.,(2019):** The management of attention-deficit hyperactivity disorder in children. *S Afr Pharm*;86(5):17-27

**Tesfaye R., (2016):** Stress and Coping Strategies of parents of children with developmental disabilities.

**Thomas R, Sanders S, Doust J, Beller E, Glasziou P.( 2015):** Prevalence of attention-deficit/hyperactivity disorder: a systematic review and meta-analysis. *Pediatrics*; 135: e994–1001.

**Visser S. N., Danielson M.L., Bitsko R.H., et al. (2014).** Trends in the Parent-Report of Health Care Provider Diagnosis and Medication Treatment for ADHD disorder: United States, 2003–2011. *Journal of the American Academy of Child & Adolescent Psychiatry*, 53(1):34–46.

**Zaki R., (2013):** Enhancement the Awareness of Family Care givers Caring their Children With Attention Deficit Hyperactivity Disorder of the General Administration of Intellectual Education Centers in the city of Abha. *Journal of American Science* 2013;9(8).