



## Assessment of Attitudes and Parenting Styles of Caregivers having Children with Attention Deficit Hyperactivity Disorder

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### Abstract

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**Background:** ADHD is one of the most common neurodevelopment disorders of childhood.

Parents of children with ADHD and related disorders report experiencing such as: shock,

denial, guilt, isolation, panic, anger, bargaining, acceptance, and hope. **Aim of the Study**

This study aimed to assess attitudes and parenting styles of caregivers having children with ADHD

**Subjects and methods:** A descriptive design was used to achieve the aim of the current study. The study was conducted in child psychiatric Out-Patient Clinic at Abbassia hospital for psychiatric and mental health. A convenient sample was selected from the child psychiatric Out-Patient patient clinics at Abbassia hospital who accepted to participate in the study. Three data collection tools were used to carry out the current study namely, Socio demographic and clinical characteristics data sheet for children and their parents, questionnaire for parent's attitude, and questionnaire for parent's styles. **Results:**

There is a highly statistically significant relation between Parenting attitude for children with ADHD and their Parenting style. There is a statistically significant relation between parenting attitude for children with ADHD with Age, Educational level, Duration of marriage, Economic level, Occupation. **Conclusion and recommendations:** More than half of parents with ADHD children had positive attitude, less than half of parents with ADHD children had negative attitude. More than half of parents with ADHD children had high parent's style; one quarter of parents with ADHD children had low parents' style. Providing sufficient training program for parents that had children with ADHD to enhance relation and communication skills between parents and their children with ADHD; Enhance self- care for children that suffering from ADHD through awareness program, and Counseling clinics for parents of children with ADHD are needed to minimize their burdens and inform them about the coping strategies for dealing with their children.

**Keywords:** Attitudes, Caregivers, Children, ADHD, Parenting styles

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## INTRODUCTION

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Attention deficit hyperactivity disorder (ADHD) is a condition that affects children's behavior. Children with ADHD can seem restless, may have trouble concentrating and may act on impulse. ADHD is one of the most common neurodevelopment disorders of childhood. It is usually first diagnosed in childhood and often lasts into adulthood. Children with ADHD may have trouble paying attention, controlling impulsive behaviors (may act without thinking about what the result will be), or be overly active (**Holingue,etal.,2021**).

Caring for children with ADHD is challenging and affects family life. Meeting the high care demands of affected children requires much time, effort, and patience. Parenting stress is theoretically defined as a psychological phenomenon that results from an imbalance between the demands of the parenting role and the available resources required to fulfill the parenting responsibility. Parents stress can be defined as the aversive psychological reaction to the demand of being a parent (**Carpnaetal., 2019**).

The negative impact experienced by parents is not supported and addressed overtime; it can lead to many difficulties for parents. These include increased parenting stress, physical and mental health problems, family and couple problems, as well as decrease parenting efficacy and worse quality of life. The difficulties experienced by caregivers have been observed to have a reciprocal effect as researchers have found that the negative effects experienced by parents of children with ADHD are reported to also negatively impact the child diagnosed with ADHD by diminishing the positive effects of intervention (**Nielsen, etal., 2021**).

Parenting styles have been characterized by dimensions of parental responsiveness and demandingness. Parenting style in four dimensions such as: authoritarian, authoritative, permissive, and uninvolved parenting styles; Authoritarian parent maintains strict control via rigid rules, without debate, high expectations for the children and is often interfering. Authoritarian parent constantly issues commands, criticism, and only very occasional praise. Lacks warmth frequently uses emotional pressure (e.g. guilt, shame)(**García,etal.,2021**).

Role of nurses in primary care are expected to carry out screening for ADHD, nurses screening for ADHD, and then planning and implementing care. The claim to follow a social model of disability, and consistent with this claim, nurses do mention nurses developing strategies to accommodate the environment to the child; but nurses also describe people with ADHD as patients with symptoms, and ADHD itself as a growing public health problem “, which seems to indicate a medical model possibly reflecting local assumptions of normalcy(**Petlovanyi,&Tsarkov,2020**).



## Significance of the Study

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Attention-deficit/hyperactivity disorder (ADHD) is a common behavioral condition affecting 11 percent of school-age children **Visser et al., (2014)**. The estimated prevalence of ADHD worldwide is 5.5% **Gurevitz et al., (2014)** and 7.48% in Egypt **Romer et al., (2009)**. However, the prevalence of ADHD is higher in the Arab region than the prevalence of ADHD in other parts of the world **Bener et al., (2006)**. Symptoms continue into adulthood in more than three-quarters of cases which can affect and/or damage everyday interaction of the family members or even community around them. Children with ADHD can sometimes behave in ways that are very challenging and hard to manage. They can be very exhausting for parents and siblings – the whole family may become much stressed and this can lead to further problems. In addition to elevated levels of parenting stress are associated with disruptions to the parent–child relationship and disruptions in parent psychological functioning. Many parents whose children with ADHD resort to violence and coercion as a reaction to their children's negative behaviors. So, this study will be beneficial in identifying the levels of stress among parents who have children with ADHD and identifying the coping patterns used by parents who have children with ADHD.

## Aim of the study

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This study aimed to assess attitudes and parenting styles of caregivers having children with ADHD.

## Research Question:

What are attitudes and parenting styles of caregivers having children with ADHD?

## Materials and methods

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### 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 included(100)

$$n = \frac{N}{(N-1)B^2+1}$$

Parents according to the following equation

**Tools of data collection:****I –Socio demographic and clinical characteristics data sheet for children and their parents:**

This tool was developed by the researcher after review in related, literature to assess attitudes and parenting style of caregiver shaving children with ADHD it included (20) items for socio-demographic data divided into two parts which included data about ADHD children and their parent.

**II) Questionnaire for parent 'attitude: (Mourad,2004)**

This was constructed by the researcher based on *Mourad (2004)*. Used to assess the different manifestation of behavior of their children related to positive and negative attitude included 30 items. Positive were 14 items(2-3-4-5-9-11-14-15-16-20-21-23-28-29) and negative attitude were 16 items (1-6-7-8-10-12-13-17-18-19-22-24-25-26-27-30). These were on a three-point Likert scale ranging from “never” to “always”. For each area, the scores were summed up and the total divided by the number giving a mean score.

Scoring system: the items were scored zero to three from "never dependent “to” fully dependent "for each area, the scores were summed–up and the total divided by the number of the items, giving a mean score. the total score was gained by summing the marks given for the statement then, the score was converted into a percentage score.

**III) Questionnaire for parent’s styles:(AbdEL-Fattah,2002)**

Deal with their children having ADHD it included 30 items divided to negative parent’s styles included 15 items were (3-4-5-9-11-14-16-19-21-24-25-26-28-29-30)and positive parent’s styles included 15itemwere (1-2-6-7-8-10-12-13-15-17-18-20-22-23-27)

Scoring system: the items were scored zero to three from "never dependent “to” fully dependent "for each area, the scores were summed up and the



Total divided by the number of the items, giving a mean score. These scores were converted in to a percent score, and a higher scored was indicative high parenting style if the percent score was 60% or more and low if the percent score less 60%.

### **Validity of the tool:**

To achieve the criteria of trust-worthiness of the tool of data collection in the study, the tools were tested and evaluated for their face and content validity, by a jury group consists of five experts, from faculty members of Ain Shams University in two different specialties : psychiatric nursing and public health nursing. To ascertain relevance, clarity, and completeness of the tool, experts" elicited responses that were either agree or disagree for the face and content validity. The items in which 85% or more of the professors have agreed were included in the proposed tool. The required corrections and modifications were done.

### **Reliability of the tool:**

The reliability of the tools was assessed through measuring their internal consisted by Cronbach's Alpha coefficient test, and retesting. Tool reliability test carried out on ten parents having children with ADHD, and after two weeks carried out- testing on another ten of parents.

To achieve the criteria of trust worthiness of the tool reliability, reliability among the studied parents was (85%) according to Cronbach's alpha.

### **Pilot study:**

A pilot study was conducted on 10% of the study sample to assess the feasibility of the study as well as clarity and objectivity of the tools and applicability of the tools the time needed to complete them and perform the required modifications according to the available resources. Subjects who shared in the pilot study were excluded from the main study sample.

### **Fieldwork**

Data collection of this study was carried out at the end of November 2018 and finished at the end of July 2019, after acceptance of permission from the ethical and scientific research committee at the general secretariat of mental health and addiction treatment. There searcher met patients who agreed to be involved in the study sample. Subjects involved in the study were interviewed and assessed two times per week (Monday and Thursday).

The researcher visited the selected setting two times per week on Sunday and Wednesday from 10:00 am to 12:00 pm and the researcher collecting the data from each patient separately in an organized time and date. The researcher explained the purpose of the study before collecting the data and gave the tool to the patient to be filled in, while the researcher was present to assure that all questions were completed. Filling the tools lasted from 20-40 minutes for each subject included in the study.

### **Ethical considerations:-**

- Ethical approval obtained from the Scientific, Ethical Committee of Nursing Faculty.
- Ethical approval obtained from the Ethical and Scientific Research Committee at the General Secretariat of Mental Health and Addiction treatment.
- The researcher assured for every selected patient involved in the study sample, that participation is voluntary and that they have the right to withdraw from the study at any time without giving any reason.
- There searcher assured confidentiality of data for every patient involved in the study sample.
- The researcher clarified that all information would be used for scientific research and for the patient's benefits.

### **Statistical analysis**

Statistical presentation and analysis of the present study was conducted, using the mean, standard Deviation, un paired student t-test, Linear Correlation Coefficient and chi-square tests by *SPSSV20*.

$$\text{Mean} = \frac{\sum x}{n}$$

Where  $\sum$  = sum &  $n$  = number of observations.

### **Standard Deviation [SD]:**

$$SD = \sqrt{\frac{\sum (x-x)^2}{n-1}}$$

### **Chi-square**

The hypothesis that the row and column variables are independent, without

indicating strength or direction of the relationship. Pearson chi-square and Likelihood-ratio chi-square. Fisher's exact test and Yates' corrected chi-square are computed for 2x2 tables.

### Linear Correlation Coefficient[r]:

Linear Correlation coefficient was used for detection of correlation between two considered as follows:

- Not Significant  $p > 0.05$
- Significant  $p < 0.05$
- Highly Significant  $p > 0.00$

### Results

**Table (1):** regarding socio demographic characteristics of parents having children with ADHD, the current study revealed that more than two thirds of the parent are female (73%), and married (75%) adding to that mean and standard deviations of parents age are  $(32.74 \pm 4.62)$ , and more than half are from rural area (56%), and one third are University education. Besides, more than half moderate economic level.

**Table (2)** Demon states that mean and standard deviation of children age are  $(6.3 \pm 2.57)$ . Adding to that more than two third of children are male (67%) the table shows that less than half (42%) of the more second children. Two thirds of the child's ranking among his siblings are one (1).

**Table (9):** This table shows highly statistically significant relation between Parenting attitude for children with ADHD and Parenting style with p-value was  $< 0.001^{**}$ .

**Table (12):** This table shows positive correlation ( $r = 0.648$ ) between Parenting attitude for children with ADHD and Parenting style with p-value was  $< 0.001^{**}$

**Fig. (1):** This figure shows that more than half of children with ADHD are positive attitude (56%), less than half of children with ADHD are negative attitude (44%).

**Fig. (2):** This figure shows that more than half of children with ADHD are high parent's style (74%), one quarter of children with ADHD are low parents style (26%).

**Table (1):** Socio demographic characteristics of parents having children with ADHD (n=100)

| Items                               | N          | %  |
|-------------------------------------|------------|----|
| <b>Age</b>                          |            |    |
| <30                                 | 15         | 15 |
| 30-<40                              | 44         | 44 |
| 40-<50                              | 33         | 33 |
| 50 or more                          | 8          | 8  |
| Mean± SD                            | 32.74±4.62 |    |
| <b>Educational level</b>            |            |    |
| Illiteracy                          | 23         | 23 |
| Primary education                   | 11         | 11 |
| Preparatory education               | 13         | 13 |
| Secondary education                 | 16         | 16 |
| University education                | 37         | 37 |
| <b>Marital status</b>               |            |    |
| Married                             | 75         | 75 |
| Divorced                            | 25         | 25 |
| <b>Duration of marriage</b>         |            |    |
| 6                                   | 25         | 25 |
| 7                                   | 23         | 23 |
| 9                                   | 28         | 28 |
| 11                                  | 24         | 24 |
| <b>Economic level</b>               |            |    |
| Low                                 | 34         | 34 |
| Moderate                            | 51         | 51 |
| High                                | 15         | 15 |
| <b>Occupation</b>                   |            |    |
| Work                                | 46         | 46 |
| Not work                            | 54         | 54 |
| <b>Residential area</b>             |            |    |
| Rural                               | 56         | 56 |
| Urban                               | 44         | 44 |
| <b>the relation to the child</b>    |            |    |
| Mother                              | 55         | 55 |
| Father                              | 30         | 30 |
| Grand father                        | 15         | 15 |
| <b>Who are caring for the child</b> |            |    |
| Mother                              | 73         | 73 |
| Father                              | 17         | 17 |
| Grandfather                         | 10         | 10 |



**Table (2):** Distribution of the child's according to their socio demographic characteristics (n=100)

| Items   | N               | %  |
|---|-----------------|----|
| <b>Age</b>  |                 |    |
| 5   | 26              | 26 |
| 6   | 24              | 24 |
| 7   | 27              | 27 |
| 9   | 23              | 23 |
| <b>Mean ±SD</b>                                   | <b>6.3±2.57</b> |    |
| <b>Gender</b>                                     |                 |    |
| Male  | 67              | 67 |
| Female  | 33              | 33 |
| <b>Number of the child's brothers and sisters</b> |                 |    |
| 1   | 18              | 18 |
| 2   | 42              | 42 |
| 3   | 23              | 23 |
| 4   | 17              | 17 |
| <b>The child's ranking among his siblings</b>     |                 |    |
| 1   | 46              | 46 |
| 2   | 45              | 45 |
| 3   | 9               | 9  |

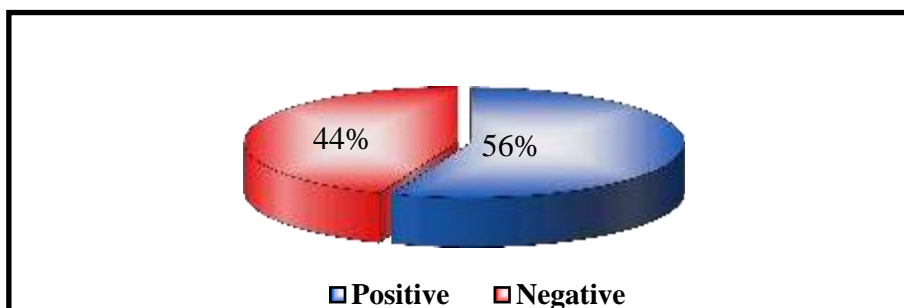
**Table (3):** Relation between Parenting attitude for children with ADHD and Parenting style(n=100)

| Parenting style questionnaire | Parenting attitude for children with ADHD |    |          |    |       |     |
|-------------------------------|---|----|----------|----|-------|-----|
|                               | Positive                                  |    | Negative |    | Total |     |
|                               | N   | %  | N        | %  | N     | %   |
| <b>High</b>                   | 48  | 48 | 16       | 16 | 64    | 64  |
| <b>Low</b>                    | 8   | 8  | 28       | 28 | 36    | 36  |
| <b>Total</b>                  | 56  | 56 | 44       | 44 | 100   | 100 |
| <b>Chi-square</b>             | $X^2$                                     |    | 26.046   |    |       |     |
|                               | <b>P-value</b>                            |    | <0.001** |    |       |     |

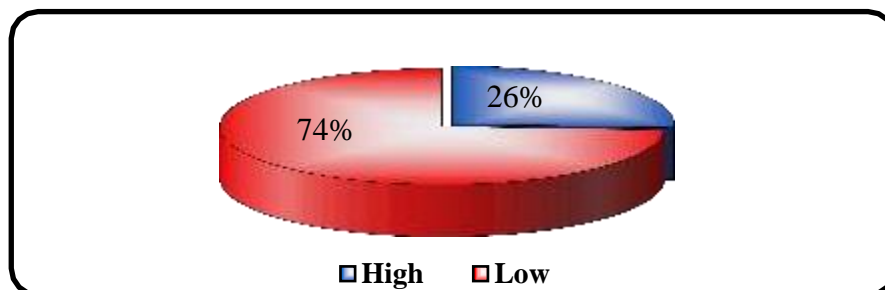
**Table (4):** Correlation between Parenting attitude for children with ADHD and Parenting style

| Items                  | Parenting attitude for children with ADHD |          |
|------------------------|---|----------|
|                        | R   | P-value  |
| <b>Parenting style</b> | 0.648                                     | <0.001** |

**Figure(1):**Level of the parenting attitude for children with ADHD



**Figure(2):** Level of the Parenting style for children with ADHD





## DISCUSSION

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Attention deficit hyperactivity disorder (ADHD) is one of the most common neurodevelopment disorders in children and adolescents. Symptoms of ADHD are associated with disturbances in cognitive, behavioral, emotional, social and developmental function and impaired academic achievements.

ADHD is a heterogeneous disorder with genetic factors and deficits in brain structure and neuronal functioning and connectivity. In 2 studies in Egypt, prevalence ranged from 6.5% among primary school children in grades 3–5 aged 8–10 years to 7.5% among children aged 4–12 years. The prevalence of ADHD based on DSM-V among children aged 6–14 years in Fayoum City, Egypt reached 20.5%. In western countries, the prevalence ranged from 7.3% in Italy to 10.6% in France and the United States of America (KAREEM, et al, 2019).

Regarding child's socio demographic characteristics the current study demonstrated that mean and standard deviation of children age are  $(6.3 \pm 2.57)$ . Adding to that more than two third of children are male, less than half of them are second children.

Regarding parenting positive attitude for children with ADHD, the current study revealed that more than three fifths of the parents. Responded with always toward that they do the most that they can to modify child bad behavior, Also, responded with sometimes they pampered and foreplay are the best ways to make child not refuse to eat, more than three quarters of them never responded with child should act freely with in the home even if he is in front of strangers. From the researcher point of view, this result may be due to enhance behaviors of children that suffering from attention deficit hyperactivity disorder (ADHD).

This result is supported with Lee, et al., (2019) who conducted a study entitled "Meta-analysis of comparisons between children with attention deficit hyperactivity disorder and children with typical development using the PedsQLTM" and found that majority of children with ADHD had bad behavior.



Conversely, this result is in disagreement with Tong, et al., (2018) who conducted a study entitled "The moderating roles of bedtime activities and anxiety/depression in the relationship between attention-deficit/hyperactivity disorder symptoms and sleep problems in children" and found that majority of children were freely in their home.

Regarding level of the parenting attitude for children with ADHD, the current study showed that more than half of children with ADHD are positive attitude, less than half of children with ADHD are negative attitude. From the researcher point of view, this result may be due to parents were interested that their children adapted with ADHD to help them on practice their live with normal.

This result is congruence with Öztekin, I., Finlayson, M. A., Graziano, P. A., & Dick, A. S. (2021) who conducted a study entitled "Social functioning in children with or at risk for attention deficit/hyperactivity disorder" and found that more than half of children with ADHD had positive attitude. Conversely, this result is in disagreement with Diamanduros, T., Tysinger, P. D., Tysinger, J. A., & Fenning, P. A. (2022). who conducted a study entitled "Attention-deficit/hyperactivity disorder symptoms in mothers and fathers: family level interactions in relation to parenting" and found that more than half of children with ADHD had negative attitude.

Regarding level of the parenting style for children with ADHD, the current study showed that more than half of children with ADHD are high parent's style, one quarter of children with ADHD are low parents' style. From the researcher point of view, this result may be due to parents were careful to learn all instructions that help their children with ADHD and adapt with their disease.

This result is supported with Beauchamp, E. (2022). Who conducted a study entitled "Attention deficit– hyperactivity disorder and month of school enrollment" and found that majority of parent's children with ADHD are high style.



Conversely, this result disagrees with Elshorbagy, et al., (2018) who conducted a study entitled "Impact of vitamin D supplementation on attention-deficit hyperactivity disorder in children" and found that one third of parent's children with ADHD are low style.

Regarding correlation between Parenting attitude for children with ADHD and Parenting style, the current study showed that positive correlation between Parenting attitude for children with ADHD and their Parenting style.

This result agrees with Uçar, &Vural, (2018) who conducted a study entitled "Irritability and parenting styles in children with attention-deficit/hyperactivity disorder" and found that positive correlation between Parenting attitude for children with ADHD and Parenting style.

Conversely, this result disagrees with McRae, et al., (2019) who conducted a study entitled "Predicting child behavior: A comparative analysis between autism spectrum disorder and attention deficit/hyperactivity disorder" and found that negative correlation between Parenting attitude for children with ADHD and their Parenting style.

### **Limitation of the study**

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

### **CONCLUSION**

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The current study concluded that more than half of parents with ADHD children are positive attitude, less than half of parents with ADHD children are negative attitude. More than half of parents with ADHD children are high parent's style, one quarter of parents with ADHD children are low parents' style.



There is a highly statistically significant relation between Parenting attitude for children with ADHD and Parenting style questionnaire with p-value was  $<0.001^{**}$ . Also, there is a positive correlation between parenting attitude for children with ADHD and their parenting style with p-value was  $<0.0001^{*}$ .

## RECOMMENDATIONS

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- Providing sufficient training program for parents that had children with ADHD to enhance relation and communication skills between parents and their children with ADHD
- 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.

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