

## **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**

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**Abstract:** ADHD is the most common neurobehavioral disorder that affects large number of children world-wide. It characterized by three main symptoms; inattentiveness, hyperactivity and impulsivity. Caring of children with ADHD can be challenging for the whole family, Parents may be hurt by their children's behavior as well as by the way other people respond to it. The purpose of this study was to enhance the awareness of parent caregivers about caring of their ADHD children's through the Implementation of the research Program, quasi-experimental design was selected for this study. Subjects were consists of (30) mothers caregivers of ADHD children's. The study was conducted in the General Administration of Intellectual Education Centers in the city of Abha. Data were collected by using two tools, the first was an interview questionnaire used to assess the family care givers Knowledge, attitude & practice toward their ADHD children behaviors in daily living activities, and the second was concerned with Attention deficit hyperactivity disorders scale. The results denoted that there was highly statistical significant relation between pre and post program implementation regarding family caregivers positive attitude and practice. So the study recommended that further studies should be done on large group of family caregivers to improve the parenting skills in managing their ADHD children behaviors.

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### **1.Introduction:**

Attention deficit hyperactivity disorder is the most common childhood behavioural disorder. It characterized by excessive restlessness, inattention, distraction, and impulsivity, it Like other developmental condition if diagnosis and intervention started early enough short and long term outcomes will be favorable (Millichap,2010). Approximately 3-5 % of children suffer from the disorder(Child and Youth Psychiatric Society, 2008), ADHD prevalence in Saudi Arabia is not accurately known, it may affects all aspects of a child's life. Indeed, it impacts not only on the child, but also on parents and siblings, causing disturbances to family (Saleh,2013). There are many reasons why children with ADHD may affect parental outcomes. The arrival of a disabled child can be seen as an unanticipated shock to the relationship. This incidence may lead to conflicts that challenge the parents' relationship thereby imposing higher psychic costs on the parents than in families without a child affected by ADHD (Wehmeier *et al.*, 2010).

The impact of ADHD upon children and their families changes from the preschool years to primary school and adolescence, with varying aspects of the disorder being more prominent at different stages through interferes with a child's ability to perform in school and capacity to develop and maintain social

(peer) relationships (Wilens, 2002and Katragadda, 2007) The previous study explained that 50% to 65% of attention deficit hyperactivity disorder's children have at least one additional psychiatric disorder as poor self esteem in 25% to 33% and experience at least one episode of major depression during their childhood years, Anxiety disorders up to 25% and 50 % of those diagnosed in childhood continuing to have symptoms into adulthood. ADHD may persist into adulthood causing disruptions to both professional and personal life. In addition, it has been associated with increased healthcare costs for patients and their family members (Pressman 2006& Prince,2008)

Most parents of a child suffering from ADHD display more negative reactions around their children's behaviors, have lower self-esteem, and feel their child has negatively impacted multiple areas in their lives. The ongoing struggles that parents with children diagnosed with ADHD encounter lead to great frustration as they attempt to manage their children's behaviors at school and at home (Kaidar, 2003 & Conor,2006).

Managing ADHD child is never about addressing attention or impulsivity alone. ADHD represents a deficit in executive function, a skill set that includes attention, impulse control... and far more. Seen as a disorder of self-regulation, Provide parents with a frame work for understanding their

children with ADHD, preventive measures are emphasized to minimize disruption and over stimulation focusing on accomplishing age - appropriate tasks that raises child self esteem (Jonston, 2000 & Taylor, 2006).

So., implementation of behavioral awareness program as helps families and Their children to gain self control, positive esteem use their energy productively, finding the child's strengths perhaps in sports or creative arts and focusing on skills and accomplishment in that arena is another source of self-pride (Mohr,2003 & Charles,2004)..Parents of children with ADHD need support often they are frustrated that there are much stress on them, which feel emotionally,physically, financially, and perhaps spiritually stressed and upsetting, therefore they can learn more about the disorder to help them to reduce their blame and guilt about the children problem and to cope,accepted their children with ADHD(Chris, 2006). Parents also need to take time for themselves and model this for their children, and to take time to go out with friends, join a club or exercise, Children who see their parents take care of themselves are more likely to be independent and do it down the road (Andrews,1995 & Shaw & et al., 2007)

#### **Significance of the Study:**

Attention-Deficit/ Hyperactivity-Disorder is the most common mental health disorder among young children. which is characterized by attention deficiencies, hyperactivity, and impulsiveness but often children with ADHD also suffer from co morbidities and learning problems (Child and Youth Psychiatric Society, 2008). It affects not only the child who experiences the symptoms but also the child's family system and social networks, families of children with ADHD have to contend with a greater number of behavioral, developmental and educational disturbances (Loe,2007, Spencer,2006, Kaidar, 2003). Parents of children with ADHD experience greater stress that goes beyond that found in normal child development. The more problematic the behaviors presented by the diagnosed child, the greater the stress experienced by the parents that may lead to ineffective and negative parenting responses such as blaming the child for his/her difficulties, becoming overly-protective and overly-involved in the child's life, or display unhealthy communication patterns. families of children with ADHD also encounter greater difficulties such as family conflict, negative parent- child relationship and higher rates of parent stress (Mash, 2001). The effects of ADHD don't end with the child. Treating the child with ADHD is very important. But the treatment plan is even better when it includes parental behavior management too(CHADD, 2005). So, This awareness program designed to be useful to achieve long-term

benefits, to build upon appropriate skills for family caregiver, to reduce problems that are often co morbid to their children with ADHD, and to assist families that as they may serve as primary change agents in their children's behavior, which reduces stress directly or indirectly, improves parental confidence and enhances family relations which reflect positively on enhancement of caring their ADHD children.

#### **Aim of the Study:**

The aim of this study was to enhancement the awareness of family caregivers about their ADHD children's through the Implementation of the awareness program.

This aim achieved through:

1. Assessment of what are family care givers of ADHD children needs regarding their knowledge, attitude, and practices.
2. Assessment of the different behavioral manifestation of ADHD children regarding (inattention, hyperactivity & impulsivity).
3. Develop & Implement of the awareness Program for Family Care givers.

#### **Methodology:**

##### **Sampling and Setting:**

A purposive sample were include all available family care givers (n.= 30) accompanying their school age children with attention deficit hyperactivity disorder, and the study done at the theater of the General Administration of intellectual education centers in the city of Abha weekly on Saturday for two months from (October to December).

- Inclusion criteria for caregivers in the current study included:
- Mothers caring ADHD children without any other medical or psychiatric disorder.
- Mothers residing with their ADHD children's after diagnosis for at least 6 months at the time of the study.

##### **Research Design**

Quasi- experimental study design was used.

##### **Tools of Data Collection**

Data will be collected by two questionnaire sheets.

##### **1<sup>st</sup> tool:**

An interviewing questionnaire was designed by the researcher in the light of relevant references for collecting data related to socio demographic data about family care giver including four parts. *Part one* was used to identify personal characteristics of family caregivers as: age, type of care givers, educational Level, family size and marital status,. *Part two* was developed to assess demographic characteristics of ADHD children as: age, sex, rank and order of birth. *part three* : The family care givers knowledge and

attitude about ADHD, as related to family care givers knowledge it was written in the form of closed and open ended questions concerning ADHD as(definition, causes, manifestation, associated feature, associated disturbance, treatment of ADHD). Meanwhile about the attitude of family caregivers it divided into positive and negative attitude, The positive as(providing more closeness, encouragement the child performance, giving the child a chance to play, preparing a favorite dishes to encourage eating and understanding a destructive behaviors as a part of child diagnosis) but the negative attitudes including (feeling despair about the child future, leaving the child study alone without guidance, neglecting school follow up& the refusal of eating and punishing the child for any behavioral mistake). *Part four* was developed to assess family care givers practices towards their ADHD children (action taking by family care givers when dealing with their ADHD in daily living activities concerning inattention, hyperactivity and impulsivity through the following responses:(a)-helping the children by directing, guiding &encouraging or (b)-neglecting them and doing the right instead of the child and or (c)-punishing them by beating, depraving or humiliating.

**2<sup>nd</sup> tool,**

Concerned with Attention deficit hyperactivity disorders scale which formed by (El sayed Ahmed, 1999). it consist of 45 statement answered by family caregivers regarding the child's (inattention, hyperactivity, impulsivity) at home before and after the program

#### **Scoring System:**

A scoring system were calculated to obtain the outcomes of family caregivers knowledge, attitude and practice as follows:

1. For the first tool (interviewing questionnaire):

According to family caregivers knowledge there was 7 questions, each question rated as correct /complete answer=2

Correct/incomplete answer=1 and Incorrect answer=0  
So the total scores = (14) categorized as the following:

From(0 to< 4) =poor knowledge

From (4 to<8) =average in knowledge

8 and more =good knowledge

Regarding positive and negative attitude of family care givers

It consist of 30 question.related to positive attitude, the answer of done=1 and for not done=0.Respectively, in negative attitude the answer of done=0.Meanwhile for not don =1

Relating to family caregivers practices, it consists of 46 questions, the maximum score for each question was 3 and the minimum score was 1 arranged as the following:

The answer with helping by directing, guiding and encouraging= 3

The answer with neglecting &doing the right instead of the child= 2

The answer with punishing by beating, depraving and or humiliating= 1

2<sup>nd</sup> tools (Attention deficit hyperactivity disorders scale):

Attention deficit hyperactivity disorders scale for children, it Consisted of several groups of questions for family care givers about their ADHD children behavioral manifestation at home and it included 54statement for inattention it was from number (1: 28), for hyperactivity from(29 : 44)and impulsivity from(45 : 54) and scoring at 4 degree Always= 3,sometimes =2,rarely=1 and never=0

So, the total score ranged as :

Mild =(0-< 18)

Moderate = (18-<36)

Severe = more than 36

#### **Pilot study**

A pilot trial was carried out on 10% of the studied patients to test the clarity and practicability of the tools in addition to the subjects and setting. Pilot subjects were later included in the study as there was no radical modifications in the study tools.

#### **Ethical considerations:**

Explanation of the aim of the study was done to family caregivers to obtain their permission to participate.

Subjects were assured about confidentiality of the information gathered and its use only for their benefits and for the purpose of the study.

#### **Procedure:**

An administrative approval from the agency was received from the Vice President of the General Administration of intellectual education centers in the city of Abha, and written permission for the study was taken from mothers caring their ADHD children. All caregivers were interviewed in the Theater room of the General Administration of intellectual education centers in the city of Abha by the researcher. Data were collected in 8 weeks period. Each interview lasted from 30 minutes to one hour.

#### **Statistical analysis:**

Data collected were checked for accuracy and completeness and were coded and entered into statistical package for social science(SPSS)software version 12.

Description of quantitative variables as mean and SD.

Description of qualitative variables as number and percentage.

Description of qualitative variable between pre& post program through chi- square and P value were used.

$P > 0.05$  insignificant,  $p < 0.05$  significant,  $p < 0.01$  highly significant

### Limitation of the Study:

All the studied family care givers were female according to the policy of the kingdom of Saudi Arabia.

Some of mother refuse to share self -disclosure among other mothers and refuse to answer some question about their children's behavior because they afraid from exclude child from academic study.

Also some of mother left session early due to social circumstance.

### 3.Results.

Table(1): it was shown from this table that all family caregivers accompanying their ADHD children were mothers and (66.7%) of them were in age from 20-<30y, and illiterate, Meanwhile, more than half of them(56.7%) were married and live in family consisted of more than 11 persons and they were obtained their Knowledge from doctor.

Figure (1): revealed that(43.3%) of the ADHD children in this study were in age from 6-<8Y.

Table(2): Pointed to there was a highly statistical significant relation between pre and post program implementation among ADHD children's regarding to their level of illness.

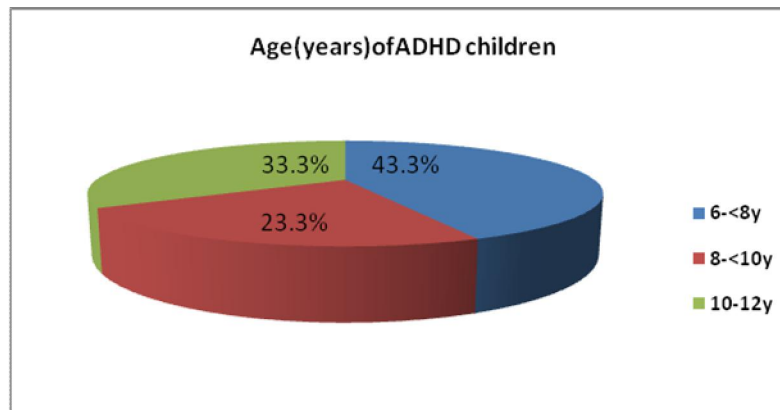
Table (3): illustrated that, (16.6%) of the family caregivers were in a good knowledge in pre-program, meanwhile they become (46.7%) in post- program implementation.

Table(4): Clarifies that there was (10%) of family caregivers done in a positive attitude in pre program, meanwhile they became (66.6%) in post program implementation, on the other hand there was (70%) of family caregivers behave or done in a negative attitude in pre program, meanwhile they decreased to (10%) in post program implementation.

Table(5): Indicated that (63.4%) apply the practice with their ADHD children in the form of punishing them in pre program, meanwhile (76.7%) of them became help them in post program implementation.

**Table(1):** Socio-Demographic Characteristics of the Studied Family care givers

| %                           | No.=30 | Items              |
|-----------------------------|--------|--------------------|
| Types of family caregivers: |        |                    |
|                             | 30     | 100                |
| Mothers                     |        |                    |
| Sister                      | 0      | 0                  |
| Grandmother/Grandfather     | 0      | 0                  |
| Age of mothers(years):      |        |                    |
| 66.7                        | 20     | 20-<30y            |
| 33.3                        | 10     | 30-<40y            |
| 0                           | 0      | More than40y       |
| Mean± S.D                   |        | 27.6±3.9           |
| Educational Level:          |        |                    |
| 66.7                        | 20     | Illiterate         |
| 23.3                        | 7      | Secondary level    |
| 10                          | 3      | University         |
| Marital Status:             |        |                    |
| 56.7                        | 17     | Married            |
| 33.3                        | 10     | Widow              |
| 10                          | 3      | Divorced           |
| Family Size:                |        |                    |
| 26.7                        | 8      | 3-<7               |
| 16.6                        | 5      | 7-<11              |
| 56.7                        | 17     | More than 11       |
| Source of Knowledge:        |        |                    |
| 56.7                        | 17     | Doctor             |
| 33.3                        | 10     | TV &Radio          |
| 10                          | 3      | Friends &Relatives |



**Figure(1):** Distribution of the ADHD Children under study according to their Age

**Table(2):**Distribution of ADHD children according to their level of ADHD

| Items         | Pre-Program |      | Post-Program |      | Chi-Square | P-value      |
|---------------|-------------|------|--------------|------|------------|--------------|
|               | No.         | %    | No.          | %    |            |              |
| Level of ADHD |             |      |              |      | 7.300      | 0.026<br>H.S |
| 1. Mild       | 3           | 10   | 8            | 26.7 |            |              |
| 2. Moderate   | 11          | 36.7 | 17           | 56.7 |            |              |
| 3. Severe     | 16          | 53.3 | 5            | 16.6 |            |              |

H.S =Highly Significant

**Table(3):** Total knowledge score between pre and post program implementation

| P value     | Chi-square | Post-Program |     | Pre-Program |     | Items   |
|-------------|------------|--------------|-----|-------------|-----|---------|
|             |            | %            | No. | %           | No. |         |
| .951<br>N.S | .100       | 46.7         | 14  | 16.7        | 5   | Good    |
|             |            | 43.3         | 13  | 26.7        | 8   | Average |
|             |            | 10           | 3   | 56.6        | 17  | Poor    |

N.S=not significant

**Table (4):** comparison between total score of attitude of family caregivers ADHD children before and after the Program Implementation

| P value     | Chi-square | Post-Program |     | Pre-Program |     | Items                        |
|-------------|------------|--------------|-----|-------------|-----|------------------------------|
|             |            | %            | No. | %           | No. |                              |
| .000<br>H.S | 133.16     | 66.7         | 20  | 10          | 3   | a)Positive attitude:<br>Done |
|             |            | 33.3         | 10  | 90          | 27  | Not Done                     |
|             |            |              |     |             |     | b) Negative attitude:        |
| .051<br>S   | 267.3      | 10           | 3   | 70          | 21  | Done                         |
|             |            | 90           | 27  | 30          | 9   | Not Done                     |

H.S =Highly Significant ----S =Significant

**Table(5):**comparison between total score of practice of family caregivers before and after the Program Implementation

| P Value     | Chi-square | Post-Program |     | Pre-Program |     | Items               |
|-------------|------------|--------------|-----|-------------|-----|---------------------|
|             |            | %            | No. | %           | No. |                     |
| .002<br>H.S | 600.12     | 76.7         | 23  | 13.3        | 4   | Help The child      |
|             |            | 10           | 3   | 23.3        | 7   | Neglect The child   |
|             |            | 13.3         | 4   | 63.4        | 19  | Punishing The child |

H.S =Highly Significant

#### 4. Discussion

The current study aimed to enhancement the awareness of family caregivers about their ADHD children's through the Implementation of the awareness program. In the present study, The result indicated that all percentage of family care givers accompanying their ADHD children were mothers. This could be due to the mothers traditionally take more responsibility of care, spend more time with their children, show more interest in their children social interaction, academic achievement and more about their children future. Also it reflects the strong emotional ties between mothers and their children besides mothers are able to tolerate the responsibility of caring those children especially during a childhood period with more patiently to their ADHD children. this explanation supported by ( Ward,2013) who stated that the mothers usually bear the brunt of managing their children with ADHD than other family members. Similar finding was found in the study of (Mourad, 2004),who found that the highest percentage of the parent accompanying their children with ADHD were mothers.

Finding of the present study revealed that, more than half of ADHD children founded in the larger family size >11person and their mothers ranged in age between(20-<30y).This results is agreement with Jamal (2008) who studied the prevalence and associated factors of ADHD among Saudi children in Dammam and found that the high prevalence of ADHD children founded in the larger family size > 9 persons, and had a young age mother.

The present study revealed that the more than one third of ADHD children under this study ranged from (6 -8y). This result agrees with (Hechtman, 2000, Mourad, 2004 & Spencer,2009) who founded that, ADHD is occurring in early childhood mainly before the age of 7 years and The most common age for diagnosis is between the ages of 7 and 9years.

The result of the present study Pointed to, there was a highly statistical significant relation between pre and post program implementation in ADHD children regarding to their level of their illness as represented in the form of reduce their percentage level of ADHD from a severe level in pre program to mild in post program. It may be due to the accurate application of mothers caregivers to the awareness program as well as they learn it, which reflected positively on improvement of their children's level of the ADHD in post program implementation.

The finding of the current study pointed to that about one eights of the family caregivers were in a good knowledge in pre-program, While, they become increased to more than one third with a good knowledge in post- program implementation. This could be due to the fact that the mothers have a

curiosity of asking continuously about the recovery of their children from their illness. Besides, their desire to overcome the confusion and guilty feeling toward their ADHD children and their trail to be a good caregivers who offer praise, consequence feedback and to care their children without obstacles depending on a scientific basis. This explanation is supported by :( Ghanizadeh,2007; Zarei, 2010) ) who found that there was adequate knowledge among families about their children ADHD and also found that they insisted on increase their knowledge about ADHD to be more equipped with some knowledge to be play a more active role with their children.

Finding of the present study clarifies that the minority of family caregivers done in a positive attitude in pre program, meanwhile they became increased to more than two third in post program implementation, on the other hand there was about three quarter of family caregivers done in a negative attitude in pre program, and became decreased to one tenth in post program implementation. it may be due to the success & ability of mothers in changing their attitude depending on the acquired knowledge and skills about how did they should be behave with their children and their desires to be in a good appropriate manner to reach to the possible peaks of usefulness from this acquired knowledge and to manage their children problem.

The result of the present study Indicated that more than half of mothers caregivers apply the practice with their ADHD children in the form of punishing them in pre program. Meanwhile only the minority of them became found in post program implementation, This may be due to the majority of mothers in pre program used to punish their children for refusing orders, refusing to keep quiet, noisy, refusing to study and for refusing to maintain home clean and inability of mothers to handle this actions or to deal with those children. But in post program the mothers improved their knowledge & skills about dealing with their children by the help of the simplicity and clarity of the content of the awareness program in addition to frequent feed back during the program session that help mothers to be more concentrated with the different methods of coping with their ADHD children's behaviors and challenges. This results agreement with Jacobs(2002) who mentioned that parents of children with ADHD face more challenges than other parents in helping their children complete every day task which leading them to always used a punishment approach when dealing with their children.

The present study result also show that, more than three quarter of mothers became helper to their ADHD children in post program implementation. This improvement reflected that the good& different

skills accomplished by the mothers caregivers to help their ADHD children to practice well and handling their area of deficiency through guidance and motivation to perform a desired behaviors and face the challenges of growing up to become a productive person in society. This result consistent with Glickman(2004) who suggested that parents should avoid repetition of commands the child and follow a disciplinary actions with praise when the child adheres to the rules and behaves appropriately.

#### Conclusion:

In the light of the current study, it can be concluded that. The awareness program for family caregivers of ADHD children is effective and enhanced the level of ADHD in children.

#### Recommendations:

Further studies should be done on large group of family caregivers to increase parenting skills in managing their ADHD children behavior.

Awareness program should be done for teachers to help the ADHD children overcome their peers and academic challenge.

Psycho education programs are essential for caregivers to overcome their psychological problem resulting from caring their children with ADHD.

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#### References:

- Andrews J,(1995): Effects of educating parents about ADHD. *The ADHD Reports*;3:12-3
- Barker A, (2009):** "Review of pediatric attention deficit/hyperactivity disorder for the general psychiatrist". *Psychiatr. Clin. North Am.* 32 (1): 39–56.
- Charles B, (2004): *A Book for Kids About ADHD*.3<sup>rd</sup> ed., Lippincott company, London. Pp:560
- Child and Youth Psychiatric Society (2008) : Reference Program for Diagnosing and Treating Children and Adolescents with ADHD. A Systematic Review and European Treatment Guideline. *European Child and Adolescent Psychiatry*, 15, 476-495.
- Children and Adults with Attention Deficit Disorder (CHADD), (2005): CHADD Information and Resource Guide to ADHD. Landover, MD: Children and Adults with Attention Deficit Disorder (CHADD).
- Chris D, (2006) :*Teenagers with ADHD: A Guide for Parents and Professionals*.1st ed. Philadelphia. Mosby Elsevier.Pp:231
- Connor D (2006):*Attention-Deficit Hyperactivity Disorder: A Handbook for Diagnosis and Treatment*. New York: Guilford Press; pp. 608-37.
- Ghahizadeh A,(2007): Educating and counseling of parents of children with Attention Deficit Hyperactivity Disorder.*Patient Educ Cous*,V68(1):23-28.
- Glickman R,(2004): Attention Deficit Hyperactivity Disorder., retrieved from,<<http://mercy.winningit.com/ADAM/AlternativeMedicine/conditions/attentiondeficithyperactivitydisordercc.asp#Signs>.
- Hechtman, L. (2000): Assessment and diagnosis of Attention Deficit/Hyperactivity Disorder. *Child and Adolescent Psychiatric Clinics of North America*, 9(3), 481-498.
- Jacobs L,(2004):*Teaching Children with Attention Deficit Disorder.*, retrieved from Error! Hyperlink reference not valid..
- Jamal H. Attia Z. Amr A. Hassan B, (2008): Attention Deficit Hyperactivity Disorder (ADHD) among primary school children in Dammam, Saudi Arabia: Prevalence and Associated Factors.
- Johnston C(2001): Families of children with attention-deficit/hyperactivity disorder: review and recommendations for future research. *Clin Child Fam Psychol Rev.* Sep;4(3):183–207.
- Kaidar I, (2003): The attributions of children with Attention-Deficit/ Hyperactivity Disorder for their problem behaviors. *J Atten Disord.* Apr; 6(3):99–109.
- Katragadda S, (2007): ADHD in children, adolescents, and adults. *Prim Care Clin Office Pract*; 34(2): 317-41.
- Loe I,( 2007): Academic and educational outcomes of children with ADHD. *J Pediatr Psychol.*; 32(6): 643-54.
- Mash, E. (2001): Families of children with attention-deficit/hyperactivity disorder: Review and recommendations for future research. *Clinical Child and Family Psychology Review*, 4, 183-207.
- Mohr W,(2003): *Johnson's Psychiatric Mental Health Nursing*.5<sup>th</sup> ed., A wolters kluwer co., Philadelphia, p.658
- Millichap JG, (2010): *Attention Deficit Hyperactivity Disorder Handbook: A Physician's Guide to ADHD*. New York: Springer.
- Mourad G.(2004): Social and Technical coping skills for School age children with Attention

- Deficit Hyperactivity Disorder. Doctorate thesis. faculty of nursing. Ain Shams University.pp 114 -115.
21. Pressman LJ, Loo SK, Carpenter EM, Asarnow JR, Lynn D, McCracken JT, *et al*, (2006): Relationship of family environment and parental psychiatric diagnosis to impairment in ADHD. *J Am Acad Child Adolesc Psychiatry*.: 45(3); p.346
  22. Prince JP,(2008): Pharmacotherapy of attention-deficit/hyperactivity disorder a cross the life span. In: Stern TA, Rosenbaum JF, Fava M, Biederman J, Rauch SL, eds. *Massachusetts General Hospital Comprehensive Clinical Psychiatry*. 1st ed. Philadelphia, Pa: Mosby Elsevier, chap 49. [1stahd-symposium.com](http://1stahd-symposium.com)
  23. Saleh A, (2013):1<sup>st</sup> Saudi ADHD Conference Posted on May 11,2013
  24. Shaw P, Gornick M, Lerch J, (2007): Polymorphisms of the dopamine D4 receptor, clinical outcome and cortical structure in attention-deficit/hyperactivity disorder. *Archives of General Psychiatry*, Aug; 64(8):921-931.
  25. Spencer T, (2006): ADHD and co morbidity in childhood. *J Clin Psychiatry*; 67 Supp 1 8:27-31.
  26. Taylor JF, (2006): The Survival Guide for Kids with ADD or ADHD.2nd ed. Lippincott company, London. Pp:1160.
  27. Ward, (2013): Parenting Difficulties with ADHD & ADHD and parental behavior, *Journal of Consulting and Clinical Psychology*, 65, 337-342.
  28. Wehmeier, P. M., Schacht, A., and Barkley, R. A. (2010): Social and emotional impairment in children and adolescents with ADHD and the impact on quality of life, *Journal of Adolescent Health*, 46(3): 209-217.
  29. Wilens TE (2002): Attention deficit/hyperactivity disorder across the lifespan. *Annual Review of Medicine*, 53:113-131.
  30. Zarei N (2010): Are Gps adequately equipped with the knowledge for educating and counseling of families with ADHD children?.J of B M C family practice.pp5-

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