Educational intervention program for psychosocial problems, and coping strategies of parents of children with attention deficit hyperactivity disorder.

Mawaheb Mahmoud Zaki & Naglaa Fathi Mohamed Elattar.

Lecturer of Psychiatric Nursing and Mental Health, Faculty of Nursing, Benha University

ABSTRACT

Background: Parent education is one of the family-based treatments that has been shown to be effective in managing many of the disruptive behaviors displayed by children with ADHD. **Purpose of the study:** It was aimed to assess the effectiveness of an educational intervention program on psychosocial problems, and coping strategies of parents of children with attention deficit hyperactivity disorder. **Hypothesis: ١-** Parents will have lower level of psychosocial problems on posttest than pretest. ٢- Parents will have more coping strategies on posttest than pretest. **Design:** A quasi experimental research design was utilized in this study. **Setting:** This study was conducted at the out-patient of the Psychiatric &Mental Health Hospital in Benha City. **Subjects:** This study was carried on ٣٠ parents of ADHD children. **Instruments of data collection:** Two instruments were used for data collection: **Instrument One:** consists of two parts: Part one: Social characteristics, Part Two: Psychosocial Problems of Parents Scale. **Instrument Two:** Parental Coping Strategies Scale. **Results:** On posttest psychosocial problems of parents differ significantly at pre and post intervention session ($p>٠.٠٥$) , a highly statistically significant difference was observed between the pre and post-test mean score of Coping Strategies Scale ($p<٠.٠٠١$).**Conclusion:** Parents education is important help parent to have less psychosocial problems than before and improve their coping strategies . **Recommendations:** Collaboration between parents, teachers, health care services, and the community should work to prepare a correct environment for children in their developmental stages

Key words: Psychosocial, Coping, Attention deficit; Hyperactivity; ADHD, Nursing, Benha .

Attention Deficit Hyperactivity Disorder (ADHD) is considered the most common psychiatric disorder affecting ٦-٩٪ of children worldwide. Once considered to occur only in children, ADHD has now been well documented to persist into adolescence and adulthood in approximately half of childhood cases.

Recent data suggests that the prevalence of ADHD in adults ٤.٤٪. Although recognition of it in adults has grown in recent years. It remains vastly under-recognized and undertreated as only ١٠–٢٥٪ of adults with the disorder are diagnosed and adequately treated (Adler et al., ٢٠١٥).

The individual societal and familial costs due to untreated ADHD across life span are vast and result in higher rates of academic underachievement, unemployment, under employment, divorce, marital separation, early-onset substance abuse, cigarette smoking and more vehicle accident. All these factors highlight the importance of making an accurate diagnosis of ADHD in children, adolescence and adulthood (Adler et al., ٢٠١٥).

There are numerous considerations to bear in mind in the management of ADHD. Whilst drugs are a mainstay of treatment, changes in psychological and other domains of functioning are essential if patients are to capitalize on the improvements in the core symptoms of ADHD with treatment (Schellack &Meyer ٢٠١٢).

For Pre-school children; drug treatments are not recommended in this age group due to the unknown long term effects on brain development. They take longer to clear the drug from their body, and have higher rates of adverse effects. Referral to a parent training program for behavioral management should be the first treatment, ideally with specially trained facilitators. Group-based parent training for conduct disorder should be available whether a child has a diagnosis of conduct disorder or not. Parents should have access to eight to ١٢ sessions. With consent, nursery or pre-school careers should be informed about ADHD and any special requirements (Bolea-Alamañac et al., ٢٠١٤).

In relation to School-age children**;** for those with moderate impairment, parent education either alone, or with group CBT for the child, should be considered. Those who continue to suffer significant impairment despite intervention should be offered pharmacological intervention. Those

diagnosed with severe ADHD should be offered stimulants as a first-line treatment, though not if there is a history or family history of cardiac problems. Teachers trained regarding ADHD should help to provide interventions in school as improvement in behavior at home do not correlate with an improvement in behavior at school (Scottish Intercollegiate Guidelines Network, ٢٠٠٩).

There are various treatment interventions to ADHD, but parents play a key role in modifying maladaptive behaviors of the children; hence, it is notable that relieving parental stress—particularly mothers—in the first step may elaborate mental health of parents and prepare them to do their parental roles better. One of the most influential programs to control such behaviors is "positive parenting program" (triple P). This therapeutic method derived from clinical experiences and studies is related to a division of family therapy for parents of children (aged two to ١٤ years) who are now at risk of emotional/behavioral disorders.

According to Mulqueen, ٢٠١٣, parental interventions are effective treatments for preschool ADHD children. Moreover, parent training and medication management have more effect on ADHD children. Parent training has a positive effect on ADHD children's behaviors and may reduce parents' stress and increase their confidence. Furthermore, combination of behavioral parent training and medication therapy was more effective leading to significant improvement in subjects (Zwi et al., ٢٠١١).

Parents must learn to use stress management methods, such as meditation, relaxation techniques, and exercise to increase their own tolerance for frustration so that they can respond more calmly to their child's behavior (Ball, ٢٠٠٦) when parents have a thorough understanding of ADHD management strategies, they can plan and provide day activities that successfully include the child with ADHD. Therefore, parents' education programs must be carried out in groups to help children as

well as their parents how to deal with their difficulties (Al-Mahmoud,٢٠١٣).

Purpose of the Study

This study aimed to assess the effectiveness of an educational intervention program on psychosocial problems, and coping strategies of parents of children with attention deficit hyperactivity disorder..

Research Hypothesizes

١- Parents will have lower level of psychosocial problems on posttest than pretest.

٢- Parents will have more coping strategies on posttest than pretest.

Sampling

Research design

A quasi experimental research design was utilized (pre and posttest)

Setting

The study was carried out in the out-patient of the Psychiatric &Mental Health Hospital in Benha City, which is affiliated to General secretariat in Egypt.

Sampling

The studied sample was is a convenient sample that included ٣٠ parents and their children with ADHD has been selected from psychiatric out-patient clinic in according to:

Inclusion criteria

- Both mother / or father

- The age of the children is between ٦-١٢ years old.

Instruments of data collection: The following tools were used for data collection:

Instrument One: consists of two parts:

Part one includes:: Social characteristics of parents and children

This part was developed by the researchers included data about children's age, sex, order in the family, number of siblings, level of education of parents, children's level of education, history of any psychiatric disorder, onset of ADHD, parent consanguinity.

Part two:- Psychosocial Problems of Parents Likert Scale. It was developed by Pruyn(١٩٨٣)**,** It included ٦٨ items with seven subscales as follows: data about uncertainty about prospect of disease, uncertainty about access to help and about how to solve problems, fear for negative consequences for the child, fear of negative consequences for the parents, loss of control, self-esteem, and depression with four respond Likert scale, response was coded into

rarely	٤
a little bit	٣
quite a lot	٢
very much	١.

Instrument two:

Parental Coping Strategies Likert Scale developed by Yeh (٢٠٠١). This scale was used to evaluate the used coping strategies for parents. The scale included (٦٨ items) grouped into ١٢ subscales , namely : learning (٩ items) , struggling (٤ items) , interaction with patient (٦ items) , interaction with spouse (٦ items) , interaction with healthy sibling (٥ items) , Emotional support (٤ items) , (information support (٥ items) , Actual support (٤ items), maintaining stability(٨ items) , maintaining an optimistic state of mind (٦ items) , searching for spiritual meaning (٤ items) , increasing religious activities (٤ items).

Reliability analysis of the scales for psychosocial and the role of education for their child and about problems and coping strategies reveals satisfactory prevalence's and life expectancies. On many issues Cronbach's alphas, ranging from ٠.٧٤ for 'fear for more than half of the parents up to nearly all of the negative consequences for the child' to ٠.٩٥ for parents have these needs for information. Comparing coping: 'cognitive and behavioral avoidance'

Procedures

A consent to conduct the study was taking from the hospital director, the researchers contacted to the parent to explain the purpose and procedure of the study and determine the available time to demonstrate the educational session.

- Parents were interviewed individually to collect pre-assessment data related to socio-demographic, psychosocial problems and coping scales for ٢ weeks twice /week.
- Eight sessions distributed on ٨ weeks twice /week, it were provided for each parents individually , each session was from ٣٠ to ٤٥ minutes
- Each session had its own title and objective according to its content.
- Parent was interviewed individually to collect post-assessment data related to anxiety and coping scales for ٢ weeks twice /week.

Ethical Consideration

- Ethical approval has been obtained before data collection from the Dean of the faculty of nursing.
- An official permission to conduct the current study was obtained from the director of psychiatric out – patient's clinic, the from the general secretariat for mental health in Egypt.
- Confidentiality of each subject was protected by putting code for each one instead of using subject's name.

A pilot study has been carried out on ٥ parents selected from the previously mentioned setting according to the chosen inclusion criteria to ascertain the applicability and time needed to accomplish the assessment. Parents in the pilot study have been excluded.

Field work

This study has been carried out through three phases: preparatory, program implementation and evaluation.

Phase I: preparatory phase:

This phase was concerned with obtaining an official permission from the hospital director of the selected setting. This was to explain the purpose of the study and to facilitate data collection and assessment of parents' needs.

Phase II:

Program development

Based on the results obtained from the previous phase (phase one), and review of the related literature, the educational

program was developed in order to provide the parents with needed information and enhance their coping strategies with their children.

Program implementation

The program was implemented to all the studied subjects. They were classified into ٥ groups and each group composed of ٦ subjects. The program was implemented in the form of sessions which lasted for about ٣٠-٤٥ minutes and ١٠ minutes for break. Each group attended٨ sessions, scheduled as ٢ sessions per week (Sunday-Wednesday) for duration of about ٤ weeks**.** The program was extended for ٥ months and, started from February ,٢٠١٦ to the end of September ,٢٠١٦.

The first session included parents' and children assessment. The rest of the sessions of the program covered the following according to the parents' needs: Parents orientation regarding the disease (signs and symptoms), behavior management strategies, and behaviors modifications concerning; school intervention, common drugs used, and stress management.

Session title

The ١st session: Clear the session purpose, gain parent permission to participate, and collect pre-assessment data related to socio-demographic, psychosocial problems and coping scales

The ٢nd session: Definition, prevalence and types of ADHD.

The ٣rd session: Causes of ADHD and recognize signs and symptoms of ADHD.

The ٤th session: Identify the ways of prevention of ADHD and different treatment modalities.

The ٥th session: recognizing coping methods with ADHD children.

The ٦th session: Carrying out child behavioral modification plan

The ٧th session: Methods and strategies of child behavioral modification

The ٨th session: Summarize the content of all previous session, and collect post-

assessment data related to psychosocial problems and coping scales

Phase III: Evaluation phase

This phase concerned with the evaluation of the implementation of the program immediately after the program implementation (Phase ٢) by reapplying the questionnaire of the research tool.

Statistical analysis : Data were analyzed using SPSS windows statistical package version ١٤. Numerical data were expressed as mean ±SD, and range. Qualitative data were expressed as frequency and percentage.

Results

Table (١): Sociodemographic characteristics of children with ADHD.

Sociodemographic characteristics of childr	N	%
Age		
٦-	١١	٣٦.٦٧
٩-	٨	٢٦. ٦٧
≥١٢	١١	٣٦.٦٧
Range	٦ -١٢	
Mean±SD	٧.٣٣±١.٧٠٨	
Gender		
Male	٢٥	٨٣.٣٣
Female	٥	١٦.٦٧
Grade		
The first	٥	١٧.٢٤
The second	٥	١٣.٧٩
The third	٣	١٠.٣٤
The fourth	١	٣.٤٥
Fifth	١٦	٥٥.١٧
School Type		
Government	٢٥	٨٦.٢١
Government by Merging classes	٥	١٣.٧٩
Birth order		
The first	٢٠	٦٦.٦٧
The middle	٦	٢٠.٠٠
The last	٤	١٣.٣٣
Number of brothers \ sisters:		
One	١٤	٤٦.٦٧

Two	١٦	٥٣.٣٣

Table (٢): Sociodemographic characteristics of parent children with ADHD.

Social characteristics of pare	N	%
Parent		
Marital status of the parents		
Married	٣٠	١٠٠.٠٠
Father's education		
Illiterate	٨	٢٦.٦٧
Secondary	١٤	٤٦.٦٧
University education	٨	٢٦.٦٧
Father's job		
Employee	٢٧	٩٠.٠٠
Worker	٣	١٠.٠٠
Mother's education level		
Illiterate	١	٣.٣٣
Reads and writes	٣	١٠.٠٠
Basic education	١	٣.٣٣
Secondary	١٣	٤٣.٣٣
University education	١٢	٤٠.٠٠
Mother's job		
Employee	٤	١٣.٣٣
House wife	٢٦	٨٦.٦٧
Residence		
Rural	٢٦	٨٦.٦٧
Urban	٤	١٣.٣٣

Table (٣): Clinical data of children with ADHD.

Clinical data of children	N	%
Age at onset of the disease		
From ١ year	١٣	٤٣.٣٣
From ٢-٥ year	١٣	٤٣.٣٣
From ٦y	٤	١٣.٣٣
Positive family history		
No	٣٠	١٠٠.٠٠
Parent consanguinity		
First degree	٥	١٦.٦٧
Second degree	٤	١٣.٣٣
Non-relatives	٢١	٧٠.٠٠
What are the symptoms that have appeared on the child?		

Hyperactivity	١٨	٦٠.٠٠
Speech delaying	٨	٢٦.٦٧
Continuous crying	١	٣.٣٣
Difficulties on attention	١٨	٦٠.٠٠
Hostility	٨	٢٦.٦٧
Convulsions	٨	٢٦.٦٧
Aggressive behaviors	٨	٢٦.٦٧
Delaying in walking	٤	١٣.٣٣

Table (٤): Mean score differences of psychosocial problem scale between pre and post intervention sessions

Total psychosocial problems scale	Pre-intervention			Post intervention			Paired t-test	
	Mean	±	SD	Mean	±	SD	T	P-value
•Uncertainty about prospects of disease and treatment	٣٦.١٠٠	±	٧.٨٨٠	٢٤.١٦٧	±	١٠.٤٨٢	٥.٤١٥	<٠.٠٠١*
•Uncertainty about access to help and about how to solve problem	٢١.٣٣٣	±	٧.٥٥٨	١٧.٠٣٣	±	٤.٨٣٩	٢.٣٠٦	٠.٠٢٨*
• Fear for negative consequences for the child	١١.٨٦٧	±	٣.٩٩٨	٨.٠٦٧	±	٣.٤٢٣	٣.٤٤٥	٠.٠٠٢*
•Fear for negative consequences for themselves (the parent)	٣٢.٤٦٧	±	٧.٠٨٠	٢٥.٦٠٠	±	٩.٥٥١	٣.٦٨٣	٠.٠٠١*
•Depression	٣٢.٨٦٧	±	٤.٥٠٨	٢٥.٣٦٧	±	٨.٥٦٤	٤.٢٩٩	<٠.٠٠١*
•Loss of control	٣٧.٢٠٠	±	٧.٧٣٠	٢٩.٢٣٣	±	٩.٦٩٤	٣.٥٤٦	.٠٠١*
•Self esteem	٣٣.٢٠٠	±	٧.٩١٥	٢٢.٩٠٠	±	٦.٦٢٥	٧.٤٨٣	<٠.٠٠١*

Table (٥): Mean score differences of parent coping strategies scale pre and post intervention sessions

Total coping scale	Pre-intervention			Post intervention			Paired t-test	
	Mean	±	SD	Mean	±	SD	T	P-value

• Learning scale	٢٨.٧٣٣	±	٧.٠٣٧	٣٧.٣٣٣	±	٤.٤٩٨	-٥.٥٠٢	<٠.٠٠١*
• Struggling scale	١١.١٦٧	±	٣.١٩٦	٨.١٠٠	±	٣.١٨٨	٣.٦٢١	<٠.٠٠١*
• Interaction with patient scale	١٧.٣٦٧	±	٤.٦٠٥	٢٢.٥٦٧	±	٣.٤٦١	-٤.٤٩٤	<٠.٠٠١*
• Interaction with spouse	١٧.٦٠٠	±	٤.٣٤٤	٢٣.٤٦٧	±	٣.٣١٩	-٥.١٣١	<٠.٠٠١*
• Interaction with healthy sibling	١١.٩٣٣	±	٢.٩٨٢	١٦.٣٣٣	±	٢.٢٤٩	-٦.٤٩٦	<٠.٠٠١*
• Emotional support	١٠.٣٠٠	±	٢.٦٥٤	١٤.٢٣٣	±	١.٣٨٢	-٧.١١٥	<٠.٠٠١*
• Information support	١٠.٤٣٣	±	٢.٥٤٢	١٦.٩٠٠	±	١.٩٧١	-١٠.٦٠٥	<٠.٠٠١*
• Actual support	٨.٣٦٧	±	١.٠٦٦	١٣.٧٣٣	±	١.٤٣٧	-١٨.٢٨٢	<٠.٠٠١*
• Maintaining stability	١٦.٤٦٧	±	٥.١١٧	٢٣.٦٠٠	±	٣.٢٥٥	-٦.١٢٦	<٠.٠٠١*
• Maintaining an optimistic state of mind	١٥.٣٣٣	±	٤.٠٤٦	١٩.٤٠٠	±	٣.٦٧٣	-٣.٨٦٠	٠.٠٠١*
• Searching for spiritual meaning	٧.٩٣٣	±	١.٨٥٦	١٢.٣٠٠	±	١.٨٩٦	-٨.٧٠٤	<٠.٠٠١*
• Increasing religious activities	٩.٣٠٠	±	١.٩٨٥	١٢.٩٣٣	±	١.٩٨٢	-٦.٣٧١	<٠.٠٠١*

Table (٦): Correlation between parent psychosocial problems and coping strategies at pre intervention sessions

Pre	Uncertainty about prospects of disease and treatme	Uncertainty about access to help and about how to	Fear for negative consequences for the child	Fear for negative consequences for themselves (the parent)	Depression	Loss of control	Self esteem	Total problem

		nt	solve problem					
Learning scale	R	-٠.٣١٩	-٠.٥٩١	-٠.٤٦٧	-٠.٣٠٥	٠.١٣٤	-٠.٠٢٨	-٠.٢٤٢	٠.٣٠٦
	P-value	٠.٠٨٦	٠.٠٠١*	٠.٠٠٩*	٠.١٠٢	٠.٤٨١	٠.٨٨٣	٠.١٠١	٠.١٩٨
Struggling scale	R	٠.١٤٤	-٠.٠٤٢	-٠.١١٧	٠.١٥٥	-٠.٢١١	-٠.٠٧٠	٠.١٠١	٠.٠٢٢
	P-value	٠.٤٤٦	٠.٨٢٤	٠.٥٣٨	٠.٤١٤	٠.٢٦٢	٠.٧١٤	٠.٥٩٦	٠.٩٠٧
Interaction with patient scale	R	٠.٤٦٦	-٠.١٨٧	-٠.٣٩٤	٠.٤٦٠	٠.٢٧٦	٠.٤١٢	٠.١١٤	٠.٢٧٣
	P-value	٠.٠٠٩*	٠.٣٢٣	٠.٠٣١*	٠.٠١١*	٠.١٣٩	٠.٠٢٤*	٠.٥٤٨	٠.١٤٤
Interaction with spouse	R	٠.٣٣٠	-٠.٢٧٩	-٠.٤٠٨	٠.٣٦١	٠.٠٣٩	٠.١٦٩	-٠.٠٢٢	٠.٠٨٠
	P-value	٠.٠٧٥	٠.١٣٥	٠.٠٢٥*	٠.٠٥*	٠.٨٣٦	٠.٣٧٢	٠.٩١٠	٠.٦٧٤
Interaction with healthy sibling	R	٠.٣٧٣	-٠.٢٤١	-٠.٣٩٤	٠.٤٠٠	٠.٥٧٩	٠.٥٣٠	٠.٢٣٧	٠.٣٢٣
	P-value	٠.٠٤٢*	٠.٢٠٠	٠.٠٣١*	٠.٠٢٨*	٠.٠٠١*	٠.٠٠٣*	٠.٢٠٧	٠.٠٨٢
Emotion support	R	-٠.١٤٥	٠.٣٧٥	٠.٤٩٨	-٠.١٢٩	-٠.٠٢٢	-٠.٠٤٨	-٠.٠٩٧	٠.٠٤٥
	P-value	٠.٤٤٥	٠.٠٤١*	٠.٠٠٥*	٠.٤٩٧	٠.٩٠٦	٠.٧٩٩	٠.٦١٢	٠.٨١٣
Information support	R	-٠.٠٨٨	-٠.٥٩٥	-٠.٦٨٦	-٠.١٤٢	-٠.٤٠٧	-٠.٢٩٨	٠.٢٤٧	-٠.٣٢٧

	P-value	٠.٦٤٣	٠.٠٠١*	٠.٠٠٠*	٠.٤٥٤	٠.٠٢٦*	٠.١١٠	٠.١٨٧	٠.٠٧٧
Actual support	R	-٠.٠٩٥	-٠.٥١٦	-٠.٥٣٨	-٠.٠٦٠	٠.١٠٤	٠.٠٦٢	٠.١٧٥	-٠.١٤٤
	P-value	٠.٦١٨	٠.٠٠٣*	٠.٠٠٢*	٠.٧٥٣	٠.٥٨٥	٠.٧٤٥	٠.٣٥٥	٠.٤٤٧
Maintaining stability	R	٠.٤٥٥	٠.٠٦٧	-٠.١٠٥	٠.٥٤٢	٠.٥١٧	٠.٥٣٣	-٠.٠٦٤	٠.٣٩٦
	P-value	٠.٠١١*	٠.٧٢٤	٠.٥٨٢	٠.٠٠٢*	٠.٠٠٣*	٠.٠٠٢*	٠.٧٣٨	٠.٠٣*
Maintaining an optimistic state of mind	R	-٠.٣٨٣	-٠.٦٥٩	-٠.٥٥١	-٠.٤٧٠	-٠.٣٨٣	-٠.٤١٩	٠.٠٩٥	-٠.٥٢٣
	P-value	٠.٠٣٧*	٠.٠٠٠*	٠.٠٠٢*	٠.٠٠٩*	٠.٠٣٧*	٠.٠٢١*	٠.٦١٨	٠.٠٠٣*
Searching for spiritual meaning	R	-٠.٣٩٦	-٠.٤٣٨	-٠.٣٣٦	-٠.٤٣٩	-٠.٥٨٦	-٠.٤٩٤	٠.٠٤٣	-٠.٥٠١
	P-value	٠.٠٣٠*	٠.٠١٥*	٠.٠٧٠	٠.٠١٥*	٠.٠٠١*	٠.٠٠٦*	٠.٨٢١	٠.٠٠٥*
Increasing religious activities	R	-٠.٤٩٨	-٠.٤٠٩	٠.١٠٩	-٠.٤٦٧	-٠.١٤٦	-٠.٤٥٦	-٠.٤٦٥	-٠.٥٢٢
	P-value	٠.٠٠٥*	٠.٠٢٥*	٠.٥٦٥	٠.٠٠٩*	٠.٤٤٣	٠.٠١١*	٠.٠١٠*	٠.٠٠٣*
Total Coping	R	٠.٠٦٧	-٠.٦٤٣	-٠.٦٧٠	٠.٠٨٥	٠.١١٥	٠.١١٦	٠.١٨٠	-٠.١٠٥
	P-value	٠.٧٢٦	٠.٠٠٠*	٠.٠٠٠*	٠.٦٥٧	٠.٥٤٤	٠.٥٤٢	٠.٣٤١	٠.٥٨٠

Table (٧): Correlation between parent psychosocial problems and coping strategies at post intervention sessions

Post		ncertainty about prospects of disease and treatment	ncertainty about access to help and about w to solve problem	ear for egative conseq uences for the child	Fear for Negative Consequences for themselves (the parent)	pression	oss of ontrol	Self steem	Total
Learning scale	r	-٠.٠٢٧	٠.٣٢١	٠.٣٢٥	٠.١٠٣	٠.٠٨٠	٠.٢٢٠	٠.١٤١	٠.١٧٦
	P-value	٠.٨٨٨	٠.٠٨٤	٠.٠٧٩	٠.٥٨٩	٠.٦٧٤	٠.٢٤٢	٠.٤٥٧	٠.٣٥٣
Struggling scale	r	-٠.١٣٠	-٠.١٤٨	٠.١٠٠	-٠.٢٢٦	-٠.٢٧٢	-٠.٢٩٨	-٠.٠٤٢	-٠.٢٣١
	P-value	٠.٤٩٥	٠.٤٣٦	٠.٥٩٧	٠.٢٢٩	٠.١٤٦	٠.١١٠	٠.٨٢٦	٠.٢١٩
Interaction with patient scale	r	-٠.٢٩٣	-٠.٢٨٩	-٠.٣٤١	-٠.٢٤٦	-٠.١٥٥	-٠.١٥٥	٠.٠٧٩	-٠.٢٥٤
	P-value	٠.١١٧	٠.١٢١	٠.٠٦٥	٠.١٨٩	٠.٤١٣	٠.٤١٣	٠.٦٧٧	٠.١٧٦
Interaction with spouse	r	-٠.١٥١	-٠.٤٥٢	-٠.٣٧٣	-٠.٢٨٣	-٠.٢٨٤	-٠.٤٠١	-٠.١٨١	-٠.٣٧٧
	P-value	٠.٤٢٦	٠.٠١٢*	٠.٠٤٢*	٠.١٢٩	٠.١٢٨	٠.٠٢٨*	٠.٣٣٨	٠.٠٤٠*
Interaction with healthy	r	-٠.١٣٤	٠.٠١٢	-٠.١٤٦	-٠.٠٨٧	-٠.٠٤٤	٠.٠١٧	٠.١٩٤	-٠.٠٤٠
	P-	٠.٤٨٠	٠.٩٥١	٠.٤٤٠	٠.٦٤٩	٠.٨١٧	٠.٩٢٩	٠.٣٠	٠.٨٣٦

sibling	value							٣	
Emotion support	r	-٠.٠٩٣	-٠.٢٤٤	٠.٠٤٠	-٠.٠٣٢	-٠.٠٨٣	-٠.١٠٢	-٠.٠١٦	-٠.١٠٢
	P-value	٠.٦٢٤	٠.١٩٥	٠.٨٣٢	٠.٨٦٧	٠.٦٦٢	٠.٥٩٢	٠.٩٣٢	٠.٥٩٢
Information support	r	-٠.١٠٨	٠.٠٤٤	٠.٠٥٢	٠.٠٨٨	-٠.٠٦٥	-٠.١٥٩	-٠.٣١٠	-٠.١٠٠
	P-value	٠.٥٧١	٠.٨١٨	٠.٧٨٤	٠.٦٤٦	٠.٧٣٢	٠.٤٠٠	٠.٠٩٦	٠.٥٩٩
Actual support	r	-٠.٠٩٨	-٠.٠٣٣	٠.٣٢٦	-٠.٠٠١	-٠.٠٩٠	-٠.١١٧	-٠.١١٥	-٠.٠٦٨
	P-value	٠.٦٠٨	٠.٨٦١	٠.٠٧٩	٠.٩٩٨	٠.٦٣٧	٠.٥٣٩	٠.٥٤٤	٠.٧٢٣
Maintaining stability	r	٠.٠٧٥	-٠.٠٥٦	-٠.٠٨٤	٠.٢٢٥	٠.٢٤٣	٠.٢٥٧	-٠.١١٧	٠.١٥٢
	P-value	٠.٦٩٤	٠.٧٦٩	٠.٦٥٨	٠.٢٣١	٠.١٩٦	٠.١٧١	٠.٥٣٨	٠.٤٢٢
Maintaining an optimistic state of mind	r	-٠.١٩٧	٠.٠١٥	٠.٠٧٥	-٠.٠١٩	-٠.٠٨٣	-٠.٠٣٩	-٠.٣١٣	-٠.١٢٥
	P-value	٠.٢٩٧	٠.٩٣٨	٠.٦٩٥	٠.٩٢١	٠.٦٦٤	٠.٨٤٠	٠.٠٩٢	٠.٥١٠
Searching for spiritual meaning	r	-٠.٠٤١	٠.١٠٠	٠.٢٩٤	-٠.٠٥٢	-٠.٠٦٢	-٠.٠٥٦	-٠.١٧٣	-٠.٠٤١
	P-	٠.٨٣١	٠.٥٩٨	٠.١١٤	٠.٧٨٤	٠.٧٤٤	٠.٧٦٧	٠.٣٦	٠.٨٣٠

	value							٠	
Increasing religious activities	r	-٠.٢١٠	٠.٠٤٧	-٠.٢٢٣	-٠.٠٢٠	-٠.١١٦	-٠.١٣٦	-٠.١٢٩	-٠.١٥٠
	P-value	٠.٢٦٥	٠.٨٠٥	٠.٢٣٦	٠.٩١٨	٠.٥٤٠	٠.٤٧٥	٠.٤٩٦	٠.٤٢٨
Total Coping	r	-٠.٤٠٤	-٠.١٧٥	-٠.٠٢٣	-٠.١٦٩	-٠.٢٤٦	-٠.٢٢٢	-٠.٢٤٥	-٠.٣١٢
	P-value	٠.٠٢٧*	٠.٣٥٥	٠.٩٠٣	٠.٣٧١	٠.١٨٩	٠.٢٣٧	٠.١٩٢	٠.٠٩٣

Table (١): It is clear that, the majority of the children ٢٥(٨٣.٣٣٪) were males, with mean age ٧.٣٣. half of them ١٦(٥٥.١٧٪) were in the ٥th grade. Two third of the children were the first birth order ٢٠ (٦٦.٦٧٪).

Table (٢): Shows that nearly half of parents were secondary education ١٤ (٤٦.٦٧٪). As regard mother job, the majority ٢٦(٨٦.٦٧٪) of them were house wives and live in rural areas.

Table (٣): Shows that the ADHD begin at the first ٣ years of life. As regard positive family history, there was no one of them٣٠ (١٠٠.٠٠٪)had positive family history. Regarding parent consanguinity , more than half of parents ٢١ (٧٠.٠٠٪) have no relative relation.

Table (٤): it is clear that there was a highly significant differences in psychosocial problem scale at pre and post intervention session ($p<٠.٠٠١$).

Table (٥): This table shows that, there was a highly significant differences in parent coping strategies scale at pre and post intervention session ($p<٠.٠٠١$).

Table (٦): this table reveals that psychosocial problems subscales were not correlated significantly with total

psychosocial problem score of parent at pre educational session (p>٠.٠٥) except with maintaining stability, maintaining an optimistic state of mind, searching for spiritual meaning and increasing religious activities domain .

Table (٧): This table shows that, coping strategies domain were not correlated significantly with total psychosocial problem score of parent at post educational session (p>٠.٠٥) except with interaction with suppose domain .

DISCUSSION:

Attention deficit hyperactivity disorder (ADHD) is the most commonly diagnosed behavioral disorder of childhood. Birth-cohort based surveys show a prevalence of approximately ٧.٥٪. School and office based surveys are somewhat lower. The aim of this study was to identify the effectiveness of psychoeducational educational program on parents' improving coping strategies toward their children with Attention Deficit Hyperactivity Disorder. The results of the present study demonstrated that, the age of studied children was ranged between ٦ and ١٢ years. The maximum age was ١٢ years. points out that majority of them were males. These results are congruent with ***Al-Mahmoud , (٢٠١٣)***,Who stated that Attention-deficit/hyperactivity disorder (ADHD) is a highly prevalent disorder in childhood. Prevalence rates between ٣٪ and ١٢٪ have been reported for schoolchildren who reported that boys are more frequently affected than girls. Two thirds of the studied children were the first children in their birth order. This is in the same line with ***Abusaad& Elmasri (٢٠١١),*** who found that half of the studied children were the first birth order. Regarding the parent job, the majority of children's fathers were employees while mothers were housewives and who revealed that half of fathers were employees and half of mothers were housewives. As for positive family history, this study revealed that all the studied children have no positive family history for ADHD. This is in the same line with ***Shakir & Sulaiman (٢٠١٦),*** who stated that the majority of subjects weren't had positive family history for ADHD. The current study revealed that there is a highly statistically significant difference between the total psychosocial problems of parents

at pre and post education sessions as($p<٠.٠٠١$).This may be due to parents have knowledge deficit regarding the ADHD pre-program intervention. This is corresponding to ***Al-Mahmoud(٢٠١٣) and (Mahmud, ٢٠٠٨),*** who reported that , there are a statistical significant differences between pre-, immediate, and ٣ weeks later post program assessments of psychosocial problems of parents of children with ADHD. This may be due to , majority of parents didn't know the nature and cause of the child problem, feeling of uncertainty about prospects of disease and treatment, uncertainty about access to help and about how to solve problems . This is also corresponding with the study result of ***Abusaad& Elmasri (٢٠١١)***, which revealed that all mothers described emotional reactions of despair , uncertainty, feeling of disgust, non-acceptance, insecurity and disappointment. This is also consistent with ***(Richard, ٢٠٠٨),*** who stated that the results of the present study revealed that , there are a statistical significant differences between pre-, immediate, and ٣ weeks later post program assessments. Parents are responsible for the child's treatment generally felt overwhelmed, owing to the redistribution of roles or their strategy of coping with the matter. Not knowing how to deal with the difficulties presented by the child's condition, the caregiver may choose to leave decisions and the continuity of therapy under the responsibility of the doctors or the other parent. Most of parents with ADHD children suffer from "Loss of control " over the situation . As regarding coping strategies of parents of children with ADHD, the present study demonstrated that there is a highly statistically significant difference between the total coping strategies of parents at pre and post education sessions as($p<٠.٠٠١$). this is corresponding with ***Abusaad& Elmasri (٢٠١١)***, who revealed that the mean score were differ after counseling session compared to before. This may be due to the parent at pre educational session don't know the natural and cause of their children disease or even how to deal with him and because the goal of coping strategies is to improve or maintain individual resources, reduce the source of stress or negative emotions and achieve a balance in individual functioning. This

emphasis on the importance of the role of education on decreasing the psychosocial problem resulting from ADHD. This is corresponding to ***Kumar (٢٠٠٨),***who stated that the present study parents with higher educational status had low psychological stress and high coping strategy scores. This is because most of the mothers who are educated seek professional help for coping. Educated parents are also able to provide appropriate and timely treatment for various problems of the child. This reveals the importance of increase parents' awareness about the disorder, how to deal effectively with their children, Regarding the correlation between psychosocial problems subscales and total coping strategies scale , they were not correlated significantly with each other's at pre educational session (p>٠.٠٥) except with maintaining stability, maintaining an optimistic state of mind, searching for spiritual meaning and increasing religious activities domain . This is similar to ***Abusaad& Elmasri (٢٠١١) and Lecendreux et al.,(٢٠١١).*** This study also revealed that they were no correlation significantly between correlation between psychosocial problems subscales and total coping strategies scale at post intervention sessions.

CONCLUSION:

Parents education is important help parent to have less psychosocial problems than before and improve their coping strategies .Parents education is important for increasing parents' awareness about the disorder, how to deal effectively with their children. Burden of care for the child appear to have the strongest impact on the mothers, educating the fathers as well as the mothers may contribute to less avoidance of problems by fathers and a better way of coping with problems and support for the child by the family.

RECOMMENDATIONS:

- Collaboration between parents, teachers, health care services, and the community should work to prepare a correct environment for children in their developmental stages.
- Parents contacts with other parents with a child with the same condition may help them to learn

that they are not the only ones with a child with special challenges.

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