

Developing and Evaluating Counseling Program for Caregivers to Cope with their Children Suffering from Autism at Makah Al Mukramah

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Abstract: Background: Parents, as the main care providers for the children whose are suffering from autistic disorder need to meet the needs of their children, as well as the need to be healthy and able to assist their children development. The **aims** of this study were to assess caregivers' coping strategies with their children suffering from autism, develop a counseling program according to caregivers' needs and evaluate the effect of counseling program on caregivers' coping strategies. **Subjects and methods:** A quasi experimental design was used. A Purposive sample composed of 97 caregivers of children suffering from autism (mild to moderate autism spectrum disorder (ASD) were recruited from El Amal-Al Manshood and Tafaoul Centers at Makkah Al Mukkramah in KSA. **Tools of data collection:** data were collected through using the following tools; A self-administered questionnaire for the caregivers, Family Adaptability and Cohesion Evaluation Scales (FACES), Family Impact of Childhood Disability (FICD) Scale and Family Crisis Oriented Personal Evaluation Scale (F-COPES). **Results:** The present study revealed that, there were a statistically significant differences between mean scores of acquiring social support and passive appraisal domains of, Family Crisis Oriented Personal Evaluation Scales, pre and post counseling program (T. test =2.85 and 2.75, at P value at 0.01 for both domains respectively). Meanwhile there was no statistically significant difference regarding the rest of other domains such as reframing, seeking spiritual support, mobilizing family to acquire and accept help. Additionally, the family cohesion and adaptation categories were clearly positively modified after counseling program, the percentage of family disengaged was decrease from 94.7% to 44.7%. While very connection and connected pattern were increase to 10.5% & 15.8% pre and post respectively. **Conclusion:** The present study concluded that counseling program improved the caregivers' coping patterns of children suffering from ASD, in addition to their families cohesion and adaptation. **Recommendations:** The present study recommended that continuous counseling programs are needed to improve the caregivers' of child suffering from autism for their coping patterns. Also, policy makers should integrate supportive counseling programs in the routine programs provided in all healthcare centers for children with special needs. Finally, attention should be paid to raise the public awareness about available community resources for caring child with autism in KSA.

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Key words: Child with autistic disorder, Counseling Program Caregivers' adaptation Cohesion, Family coping

1. Introduction

Generally, many people have an idea of what autism is, and to a lesser extent, know how it affects an individual's communication and social skills?. The media paints a picture of child suffering from autism through movies and characters, and one can find many articles pertaining to autism in the news. However, what most people don't see in the media, or even be considered when dealing with autistic disorder is the effect it has on families, especially parents. Of course,

the main effects of autistic disorder are on the child, but the parents are greatly affected as well. ⁽¹⁾

Autism spectrum disorder (ASD) is a neuro - developmental disorder mainly characterized by social and communication impairments, and stereotyped, repetitive behaviors and interests⁽²⁾. Approximately one in 68 children have an ASD⁽³⁾, Highlighting the importance of research investigating the impact of these complex disorders on families. Moreover, delays in diagnosis, the inevitable changes in family life, the educational needs, and the often limited community

support means that raising a child with an ASD increases the risk for negative family outcomes across childhood and adult life⁽⁴⁾. Researches have had focused predominately on the construct of caregivers burden, with highlighting the negative impact of raising a child with an ASD on parent, particularly mothers.⁽⁵⁻⁸⁾

Parents are especially affected by the psychological and emotional stress imposed by autism. When parents are stressed, they can become easily irritated and frustrated. It is not surprising then that parents raising a child with autism child are significantly more likely to experience elevated levels of anger and depressed mood.^(9,10)

It is believed that, which could be due to their increased sense of personal burden because of the child's constant need for care. At the root of all of this anger, stress, and depression in families is autism⁽⁹⁾. Coping with the stresses of autism is essential for establishing a strong family support system, and this system is necessary for the child to have as happy a life as possible. To cope, many parents, especially mothers (who experience more personal burden than fathers), work to find time to be alone, plan a head, educate themselves about autism, reframe difficulties in a more positive light, and work in a close, supportive relationship with their husbands. Even though these methods will not work for every family and require a great amount of effort on the parents' part, they are a significant way to begin reducing the burden of autism on the family.⁽¹⁰⁾

This is important because the parents, as the main care providers for the child, need to be healthy and able to assist their child's development. Also, more trained caregivers would allow parents to get the time away they want and need to keep a healthy relationship. Programs tailored for parents dealing with ASD could help alleviate some of the stress by identifying the causes of stress and making the parents aware⁽¹¹⁾.

Meanwhile, although with successful coping and substantial supportive resources, families with child suffering from autism can live a happy and full life. More supply of and access to therapists and counselors, along with autism-supportive programs, would give families a much better way of coping with autism. Even with the financial and emotional burdens that autism brings to families, there is hope that autism will bring a family closer, be happier, be more open-minded, and be better off from the influence of autism in their lives.⁽¹²⁾

Indeed, that attending center camp has considerable benefits for children with disabilities as well as for their parents. With advances in medical care for chronically ill child. These advances have enabled families to care for their children in the home

as opposed to a hospital setting, which places increased burdens on the family unit. These burdens affect important areas of family functioning, including family cohesion, conflict, and problem-solving skills.⁽¹³⁾

Family stressors as Regards their child suffering from Autism:

Parenting stress has been discussed as the difficulty emerging from the demands of being a parent, affecting behavior, well – being and children's adjustment. Parental stress therefore demands extra effort from parents in dealing with the demands of everyday living in raising their children⁽¹⁴⁾. Negative psychological outcomes are greater for mothers of children with ASD than mothers of typical children and mothers of children with other disabilities. In a large population-based study, mothers of children with autism reported higher stress and poorer psychological outcomes compared to mothers in the general population, even after accounting for the child's social skills and demographic variables⁽¹⁵⁾.

Significance of the problem

Parents of a child with autism have to bear a lot of stress owing to complicated therapy schedules, home treatments, and juggling job responsibilities and family commitments. There is also financial stress coming from the expensive therapies and treatments. Such stress may affect family life in various adverse ways. Parents of children suffering from autism need to meet the children's needs, as well as address the needs of their family⁽¹⁵⁾. Coping with the stresses involved in being parents to a child with ASD can strengthen family's cohesion and adaptation⁽¹⁶⁾. So, provided counseling program may make the caregivers acquainted with the required knowledge, communication skills and effective coping patterns.

Aims of the study:

- Assess caregivers' coping strategies with their children suffering with autism.
- Develop a counseling program according to caregivers' needs.
- Evaluate the effect of counseling program on coping patterns for caregivers of child suffering with autism.

Research hypothesis:

- Counseling program will improve the coping patterns of caregivers of children suffering with autism and their family's cohesion and adaptation.

2. Subjects and Methods

Research design:

A quasi experimental design was utilized to conduct this study through pre and post counseling program fit for the nature of the present study.

Research settings:

The study was conducted in two governmental handicap centers caring for children suffering from autism named; Al Amal al Manshood and Tafaoul Centers at Makkah Al Mukkramah in KSA.

Research subjects:

A Purposive sample composed of 100 caregivers of children suffering from autism (mild to moderate Autism Spectrum Disorder (ASD), were recruited in the study, while 97 of them shared and complete attending the counseling program. they were attending to the handicap center with their children. They were selected according to the following inclusion criteria for their children.

- Children age ranged between 3 - 10 years.
- Boys and girls child.
- Children condition from mild to moderate autism level according to medical record diagnosis.

Exclusion criteria applied were known neurodevelopmental (e.g., Fragile X Syndrome) or neurological (e.g., epilepsy) disorders, and significant vision, hearing, motor or physical problems.

Tools of data collection:

Data were collected through using the following tools:

I: A self-administered questionnaire (pre/post counseling program):

It was designed by the researchers after reviewing relevant literatures. It included questions regarding child's age, gender, presence of other medical disorder and siblings' history of autism. Caregivers' socio- demographic characteristics, as relation between parents, financial status, and caregivers needs. It took 10 – 15 minutes to fill out the questionnaire by the child's caregiver on an individual base.

II: Family Adaptability and Cohesion Evaluation Scales (FACES): It was adopted from **Olson, et al. (1985) and Olson (1983)** ^(16,17). It was used to measure family cohesion (degree to which family members are separated from or connected to their family); family adaptability (extent to which the family system is flexible & able to change); and family type / functioning (extreme, mid-range, moderately balanced, balanced).

The FACES composed from of 10 cohesion items and 10 adaptability asks for the respondents to indicate how frequently the described behavior occurred in his / her family on a Likert scale from 1 (almost never) to 5 (almost always). The total scores of cohesion and adaptability respectively was ranged from 10 points to 50 points. Internal consistency was also tested (Cronbach = 0.78 for family α adaptability; = 0.86 for family cohesion) that was deemed acceptable. Compared with α Value and it was deemed (Cronbach α = 0.72 for family α adaptability; = 0.81 for family cohesion).

A variety of reliability & validity studies have been completed in order to increase the scientific rigor of the model scales. FACES has internal /consistency that are fairly high ($r=.68$) as well as high test-retest reliability ($r = .8$) as for validity, there is very low correlation between scales ($r=.03$). Over 500 research projects have utilized the FACES surveys. FACES consists of 20 statements, and is easy to administer and score (**Daikon. 2003**). ⁽¹⁸⁾ To compute cohesion, the score of the ten odd-numbered statements are add together; adaptation is computed by adding the scores of the 10 even –numbered questions. Both total scores are placed in the corresponding box on the FACES linear scoring and interpretation sheet.⁽¹⁹⁾ Family type/functioning is computed by adding the cohesion and adaptability score and dividing by two.

III. Family Impact of Childhood Disability (FICD) Scale:

It was originally adopted from **Trute, and Hiebert-Murphy (2002)** ⁽²⁰⁾. It aimed to assess subjective interpretation or primary appraisal of parent regarding to child with developmental disabilities into family systems and its impact on the family as an entity. It consists of 15 items such as child disability needs more time for caring, disruption of normal family routines, the experience of caring for child brought family closer to God, additional financial costs etc. Each item was rated on a four points Likert Scale: 1= Not at all, 2= Mild degree, 3= Moderate degree, and 4= Substantial degree. The positive statement that involve items no.3, 5, 7, 11, 15. Reliability of the scale was tested (Cronbach α = 0.88).

IV. Family Crisis Oriented Personal Evaluation Scales (F-COPES):

It was used to measure family coping level and to determine if the family uses effective coping and behavioral strategies for problem-solving in crisis situations. It was adopted from **Trute and Hiebert - Murphy. (2002)** ⁽²¹⁾ and **Hammond et al., (2011)** ⁽²²⁾ The F-COPES scale is composed of a 30 items, which can reflect the ability of the family to adapt to stressful situations. Family resources are identified as the family's (a) **personal resources**, such as finances, education, and psychological attributes; (b) **social supports**, such as extended family members, coworkers; and community; and (c) **family system resources**, such as problem solving, managerial ability, and family cohesion. The tool focuses on two levels of family interaction: in the form of how the family internally handles difficult situations between its members and how the family externally handles the difficult situations which emerge outside its boundaries and which affect its members. The participants used a 5-point scale to complete the F-COPES. The scores are ranged from 1 - 5, whereas 1

= strongly disagree, 2 = moderately disagree, 3 = neither agree nor disagree, 4 = moderately agree, and 5= strongly agree.

The five subscales designed in the F-COPES included acquiring social support, reframing, seeking spiritual support, mobilizing family to acquire and accept help, and passive appraisal. The acquiring social support subscale is a nine items subscale that measures a family's ability to acquire support from friends, relatives, neighbors, and extended family. The reframing subscale is an eight items subscale that assesses the family's ability to redefine stressful events to help them be manageable by the family. The seeking spiritual support subscale is a four items subscale that examines the family's ability to acquire spiritual support. The mobilizing family to acquire and accept help subscale is a four items subscale that measures the family's ability to seek community resources and accept help from others. The passive appraisal subscale is a four items subscale that assesses the family's ability to accept difficult issues minimizing reactivity. The F-COPES subscales are calculated and then totaled together. Some of the items in the scales need to be reversed when scoring. The higher the scores, the better the problem solving and behavioral responses found during difficult situations & also, they indicate more positive coping and problem solving strategies during times of crisis. The F-COPES was tested for its internal consistency reliability of 0.87. This ranges from 0.62 to 0.88 on the various subscales ⁽²³⁾.

Phases of study application:

1. Preparatory Phase:

A. A review of the past, current local & international related literature covering all aspects of the study using available books and journals articles was done to get acquainted with the research problem and develop the study tools and guided the researchers in tools preparation process used in the study. In addition to developing the counseling program that its' general objective was for improving mothers' coping patterns for their children suffering from autism.

B. Construction of Guidelines Booklet for Caregivers of Children with ASD:

- Definition of autism.
- Predisposing factors of autism.
- Causes of autism.
- What does child with ASD look like? (Characteristics of child with ASD).
- How to diagnose and detect a child with ASD.
- Prevention of ASD in children.
- Treatment of child with ASD.
- Importance of play with ASD child.
- How to discipline child with ASD?

- How to communicate with child with ASD?
- Potty Training of child with ASD.
- Challenges facing caregivers of children with ASD.

- Teaching Children with ASD in School

2. Exploratory Phase:

A. Pilot study:

A pilot study was carried out on 10% of study sample (10 children with autistic disorder and their caregivers) at the previously mentioned settings to test the study tools for its clarity, validity and time required to fill each tool. The necessary modifications were done through addition of questions or omission of unneeded questions prior to data collection according to the pilot study results. The subjects in the pilot study were excluded from the study sample.

B. Field work:

The actual field work was carried out over a period of 3 months starting at the beginning of October 2015 to the end of December 2015. Whereas, the pilot study took one and half month followed by six weeks for the four groups of caregivers of studied children for application of counseling program sessions as group intervention. The total number of sessions were six sessions for each group. The first session was starting with pre- test and distributing to caregivers the guidelines booklet and the last session was involving post -test.

Procedures:

A. Preparing for applying for counseling program:

The researchers and data collectors were available for 2 hours, from 8-10am at Sunday and Tuesday/week. Sunday in Al Amal al Manshood center and Tuesday in Tafaoul center whereas, each session took about two hours duration.

All care givers were divided into 4 groups according to the center they attended (two groups in each center), and each group number was ranged between 15-20 children.

One group in the first session (8-9am) and then the next group in the second session (9-10am) whereas, counseling for each group was applied in a separate quite class.

At the beginning, the researchers were introduced themselves and briefly explained the nature and the purpose of the study. All caregivers had been informed that their participations are voluntary. After their acceptance obtained, the researchers meet each caregiver for individually and make time schedule for application of counseling program.

B. Applying for counseling program sessions:

Pre-test

The first session: A pre -test was performed in the first session for determination of the existing coping strategies, impact of child disability on the family, family adaptability, cohesion and their coping

patterns. The researchers were clarified each questionnaire and each assessment tool was consuming approximately 10-15 minutes to fill. Following the application of pretest and assessing the caregivers' needs, and distributed the ASD caregivers' guidelines booklet.

- **The second session:** the researchers were providing the caregivers with knowledge regarding causes etiological factors, manifestations & early signs and the affected area for child suffering from autism.

- **The third session** was concerning with caregivers' communication skills to improve way of communication with their children and its guidelines to enhance the children's ability to express their needs "verbally and nonverbally".

- **The fourth session** was focusing on presenting strategies that raise and motivate child linguistic skills and different ways to help children express their emotions.

- **The fifth session** was concerning with the effective family coping patterns and the main qualities to be balanced and connected with families.

Post-test

- **The sixth session** Post-test was carried out to evaluate the effect of the counseling program on family coping patterns implication of child's disorder on the. At the end of the last session the researchers thanked all caregivers, teachers and the managers of the centers.

Administrative design:

An official permission for data collection was obtained from the Vice dean of medical scientific researchers at Um Al-Qura university to the managers of both Al Amal al Manshood and Tafaoul Centers at Makkah Al Mukkramah in KSA

Statistical analysis:

The collected data were organized, revised, tabulated and analyzed by using SPSS version 20. Descriptive statistics was calculated percentages, and frequencies. Appropriate statistical testes as Chi-square (X^2), T. and Fisher's Exact tests were used to estimate the statistical significant differences between pre and post counseling. Statistical significant difference consider at $P. \text{value} \leq 0.05$, meanwhile statistical insignificance consider at >0.05 .

Ethical considerations:

Needed permissions were obtained through the appropriate channels. The aims of the study were also explained to all participants. A voluntary written informed consent was obtained from the study subjects to participate in the study. Code number for each participant was applied to protect their rights for confidentiality of their personal data.

Limitations of the Study:

Three families withdrew from the study during the implementation of counseling program; also, there were some instances of missing data due to families not completing measures within the necessary timeframes.

3. Results:

Table 1: showed that the more than half of children (56.7%) their age is equal to more than 6 years, and 67 % of children were boys and the rest of them (33%) were girls. meanwhile regarding the child's birth order, it was found that 22.7% of children were the first child and less than half (44.3%) of them were as the fourth child and more, slightly less than half (45%) of the studied children as regards the duration for their suffering from autism is equal to more than 3 years, while 57.7% of them were suffering from moderate autism level, in addition to (82.5%) of studied children hadn't have any other medical health problems.

Table (2) showed that the mean ages of studied children fathers and mothers 41.60 ± 1.05 and 33.75 ± 4.72 years respectively. This table also revealed that 66.2% and 85.5% of children's fathers and mothers had secondary school university education respectively, and 54.6% of their parents having a consanguinity. Meanwhile, 67% of families their socio-economic condition was moderately.

Table 3 revealed that there were statistical significant differences ($P. \text{value} \leq 0.05$) whereas the majority (83.5%, 75.3%, & 82.5%), studied children's caregivers didn't know about the etiological factors of autism, signs and symptoms & areas affected respectively. Additionally, 74.2%, 87.6%, 79.4% & 69.1% of them, needed to learn skills for; communication, ways for improving child linguistic ability, and motivating child's emotional expression respectively compared to 18.6%, 10.3%, & 9.3% and 77.3%, 65.1%, 74.2% and 78.4% post counseling program respectively.

Figures (1): showed that nearly half of children's families (47%) were having negative implication from their children's disorder had a moderate level and 30% of them had a high level.

Tables 4 & 5 demonstrated that, there was a highly significant statistical difference between negative implication of child disability on family levels and duration of illness (at $P. \text{value} \leq 0.05$). Also, there were statistical significant differences between negative implication of child disability on the family and their caregivers' needs for social & communication skills (at $P. \text{value} \leq 0.00$).

Table 6: showed that there showed that the total mean scores of studied children caregivers' as regards family coping strategies for acquiring social support and passive appraisal domains in pre counseling program as reported by their caregivers were 21.84 ± 6.05 and

13.0 ± 3.34 compared to 28.26 ± 7.18 and 10.42 ± 2.71 post counseling program respectively. Also, this table reported that there were a statistical significant differences (T. test = 2.85 and 2.75, at *P*. value ≤ 0.01) for both domains respectively.

Table 7: revealed that there wasn't statistical significant difference (f. test = 5.77 at *P*. value 0.494) pre and post counseling program as regards families adaptation categories of studied children, whereas 47.3% and 13.2% of families adaptation categories were very flexible and flexible compared with 53.9% and 34.6% pre and post counseling program respectively.

Table 8: clarified that the family cohesion categories were clearly modified post counseling program, whereas, 94.7% of family disengaged pre counseling program was decreased to 44.7% post counseling program. While, 10.5% & 15.8% of them were having very connected & connected patterns post counseling program respectively.

Table 9: clarified that there was a change in family type pre and post counseling program whereas, 0 %

and 26.3% of family type were balanced and moderate balanced pre counseling program compared to 18.4 % & 50% of them post counseling program respectively, while mid-range family type decreased to 31.6% & rigid family type was disappeared pre counseling program.

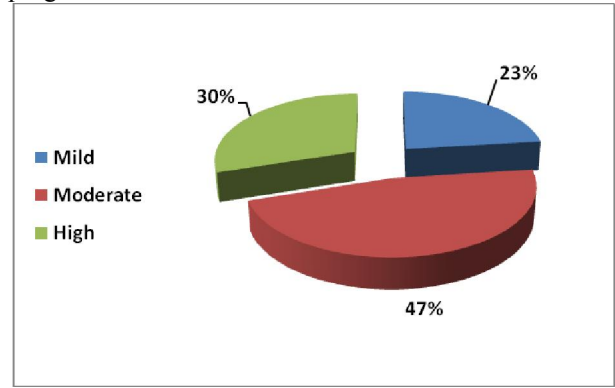


Figure (1): Negative Implication levels of Children Disability on their Families (n = 97)

Table (1): Distribution of the Studied Children according to their Socio-Demographic Characteristics (No. = 97).

Socio-Demographic Characteristics	No.	%
I. Child's age:		
≤ 6 Yrs.	55	56.7
> 6 Yrs.	42	43.3
Mean = 4.75		
II. Gender:		
Boys	65	67
Girls.	32	33
III. Child birth order:		
1 st	22	22.7
2 nd	14	14.4
3 rd	18	18.6
4 th and more.	43	44.3
IV. Duration of illness:		
≤ 3 Yrs.	44	45.4
4 - 6 Yrs.	23	23.7
> 6 Yrs.	30	30.9
V. Autism level::		
- Mild	27	27.8
- Moderate	56	57.7
- High	13	13.5
VI. Presence of other medical diseases:		
- yes	17	17.5
- No	80	82.5

Table (2): Distribution of the Families / Caregivers of Studied Children According to their Socio-demographic Characteristics

Items	Total No. 97=100%	
	No.	%
I. Father's Age (years):		
25- < 35	31	31.9
35- < 45	46	47.4
≤ 45	22	22.7
Mean = 41.60		
II. Mother's Age (years):		
25- < 35.	49	50.5
35- < 45.	38	39.2
≤ 45.	10	10.3
Mean = 33.75		
III. Father's educational level:		
Read & write	16	16.5
Preparatory	20	20.6
Secondary	31	32
University	30	30.9
IV. Mother's educational level:		
Read & write	17	2.5
Preparatory	15	12.5
Secondary	38	45
University	27	40
V. Consanguinity:		
- Yes.	52	54.6
- No.	45	45.4
VI. Socio-economic condition:		
Low	10	10.3
Moderate	65	67
High	22	22.7

Table (3): Distribution of the Families/ Caregivers of Studied Children according to their Knowledge and Needs Pre and Post Counseling Program

Items	Total No.=97(100%)								X2 Test P. Value
	Pre				Post				
	Know		Don't know		Know		Don't know		
	No.	%	No.	%	No.	%	No.	%	
I. Care givers' knowledge:									
Autism etiological factors	16	16.5	81	83.5	79	81.4	18	18.6	3.07 0.05*
Signs and symptoms	24	24.7	73	75.3	87	89.7	10	10.3	
Areas affected	16	16.5	80	82.5	88	90.7	9	9.3	
II. Need for learning skills:									
	Yes		No		Yes		No		2.09 0.05*
	No.	%	No.	%	No.	%	No.	%	
Social & Communication Skills	72	74.2	25	25.8	22	22.7	75	77.3	
Child's Emotional expression	67	69.1	30	30.9	34	35.1	63	65.1	
Improve child's linguistic ability	85	87.6	12	12.4	15	15.5	72	74.2	
Educational & learning aids skills	77	79.4	20	20.6	21	21.7	76	78.4	

P. value at ≤ 0.05 * statistical significant difference. P. value at > 0.05 no statistical significant difference.

Table (4): Percentage Distribution of Negative Implication of Child's Disability on their Family Levels as regards Child's Clinical Characteristics

Clinical Characteristics		Less than 29 (Mild)	30-39 (Moderate)	40 and above (high)	X ² P. Value
Duration of illness (Years)	≤ 3	6	20	12	8.39 0.05*
	4 - 6	17	15	8	
	≥ 6	0.0	12	10	
Autism level	Mild	9.6	8	6	9.13 0.05*
	Moderate	2.0	17	11	
	Severe	11.4	22	13	
Presence of other diseases	Yes	15.1	21	21	2.63 0.268
	No	7.9	26	9	

P. value at ≤ 0.05 * statistical significant difference. P. value at > 0.05 no statistical significant difference.

Table (5): Percentage Distribution of Negative Implication of Child's Disability on their Family levels according to their caregivers' needs

Caregivers' Needs		Less than 29 (Mild)	30-39 (Moderate)	40 and above (Severe)	X2 P. Value
Social Communication Skills	Yes	13.5	28	22	5.38 0.05*
	No	9.5	19	8	
Child's emotional expression	Yes	14	26	20	
	No	9	21	10	
child's linguistic ability	Yes	13	31	24	4.69 0.11
	No	10	16	6	

P. value at ≤ 0.05 * statistical significant difference. P. value at > 0.05 no statistical significant difference.

Table (6): Comparison Between Mean Scores of Studied Children as Regards Family Coping Strategies Scale Domains Pre & Post Counseling

F-COPES Subscale	Pre- counseling Mean \pm SD	Post- counseling Mean \pm SD	T. test	P. Value
Acquiring social support	± 6.05 21.84	28.26 \pm 7.18	2.859	0.01*
Reframing	± 4.38 22.15	25.58 \pm 7.57	1.675	0.11
Seeking spiritual support	8.15 \pm 3.09	9.58 \pm 3.18	1.340	0.19
Mobilizing family to accept help	10.31 \pm 3.63	11.84 \pm 3.61	1.14	0.26
Passive appraisal	13.0 \pm 3.34	10.42 \pm 2.71	2.75	0.01*

P. value at ≤ 0.05 * statistical significant difference. P. value at > 0.05 no statistical significant difference.

Table (7) Studied Children's Families' Adaptation categories Pre & Post Counseling Program

Adaptation Categories	Pre - counseling		Post- counseling		Fisher's Exact test
	No.	%	No.	%	P. value
- Very flexible (30-50)	18	47.3	22	53.9	5.77 0.494
- Flexible (25-29)	5	13.2	13	34.6	
- Structured (20-24)	10	26.3	3	11.5	
- Rigid (10-19)	5	13.2	0	0.00	

P. value at ≤ 0.05 * statistical significant difference. P. value at > 0.05 no statistical significant difference.

Table (8): Studied Children Families' Cohesion Categories Pre & Post Counseling Program

Cohesion Categories	Pre - counseling		Post- counseling		Fisher's Exact test
	No.	%	No.	%	P. value
- Very connected (46-50)	0	-	4	10.5	2.829 1.00
- Connected (41-45)	0	-	6	15.8	
- Separated (35-40)	2	5.3	11	28.9	
- Disengaged (10-34)	36	94.7	17	44.7	

P. value at ≤ 0.05 * statistical significant difference. P. value at > 0.05 no statistical significant difference.

Table (9): Studied Children Families' Types Pre & Post Counseling Program

Families' Types	Pre		Post		Fisher's Exact Test
	No.	%	No.	%	P. value
- Balanced	0	-	7	18.4	6.755 0.115
- Moderate balanced	10	26.3	19	50	
- Mid - range	24	63.2	12	31.6	
- Rigid	4	10.5	0	-	

P. value at ≤ 0.05 * statistical significant difference. P. value at > 0.05 no statistical significant difference.

4. Discussion:

Autism Spectrum Disorder (ASD) is a life-long neuro developmental disorder characterized by impairments in social interaction, verbal and non-verbal communication, and a restricted repertoire of activities and interests. The prevalence of ASD is rising worldwide, with ASD estimated to affect around 1 in every 100 children. Therefore, the main concerns of this study were to assess caregivers' coping strategies with their children suffering from autism, develop a counseling program according to caregivers' needs and evaluate the effect of counseling program on coping patterns for caregivers of children suffering from autism.

According to the characteristics of studied children with ASD and their caregivers, the present study revealed that more than half of children their ages were 6 years and more, approximately two thirds of children were boys and the one third of them were girls. less than one fourth of them their child's birth order were the first child of them and more than one third of them were as the fourth child and more, the mean ages of studied children fathers and mothers were 41.60 and 33.75 years respectively. Results finding also revealed that more than two thirds of children's fathers and mothers had secondary school university education respectively, slightly more than

half of their parents having consanguinity and were moderately socioeconomic condition.

These results were in consistent with the American Academy of Pediatrics (AAP) recommendations that children be screened for ASD from around 18 months of age to aid in early intervention efforts ^[23]. The average age of children with Autistic Disorder at the time of study commencement was 49.6 months (SD 6.08, range: 36-to-58 months) ^(23,24). In another study, all parents were belonged to middle socioeconomic status. ⁽²⁵⁾. Additionally, the average age of the participating children's mothers was 39.2 years (range: 28-to-52 years). Twenty-two percent of primary caregivers had completed postgraduate education, 52% tertiary, 22% secondary, and 4% primary only.

As regards duration of Autism disorder and the level of disease, the results of the current study demonstrated that, slightly less than half of the studied children the duration for their suffering from autism was equal to more than 3 years, while more than half of them were suffering from moderately autism level, in addition to the most of them hadn't have any other medical health problems. These results were contradicted with **Eapen. Et al., (2013)** ⁽²⁴⁾ whom mentioned that ASD is a life-long disorder, having a major impact on quality of life, both for the

individuals affected and their families, and producing a disproportionate burden on the public health and education systems. Furthermore, 75% of those with ASD also have associated intellectual disability, further compromising educational and future vocational opportunities. While there is no known cure, the most promising avenue to improve outcomes and avert this disease burden is early intervention. The findings of this study offer promise for center-based early intervention programs that can be both cost-effective and accessible to the wider ASD community.

Furthermore, to strengthen support to parents seeking care for their children with ASD and to devise intervention plan sensitive to their needs it was envisaged to prepare a module incorporating elements of psycho-education and home-based interventions.⁽²⁵⁾ Accordingly, A 20-week parent education and skills training program for parents of young children newly diagnosed with autism provides a statistically significant improvements in parents' mental health and adjustment, justifying and confirming its addition to early intervention programs at least for parents suffering from mental health problems⁽²⁶⁾.

On investigating the caregivers' knowledge as regards ASD pre and post counseling program, the results of the present study revealed that the majority of studied children's caregivers didn't know about the etiological factors of autism, signs and symptoms & areas affected respectively, and child mothers/caregivers needed to learn skills for; communication, ways for improving child linguistic ability, and motivating child's emotional expression respectively compared with post counseling program. Additionally, nearly half of children's families were having negative implication from their children suffering from autistic disorder and had a moderate level and slightly more than one fourth of them had a high level. These results were consistent with **Tonge et al., (2014)**⁽²⁶⁾ who stated that parent education and behavior management resulted in significant improvement in adaptive behavior and autism symptoms at 6 months follow-up for children with greater delays in adaptive behavior. Whereas, a 20 week parent education program including skills training for parents of young children with autistic disorder provides significant improvements in child adaptive behavior and symptoms of autism for low-functioning children.

The current study demonstrated that there was highly significant statistical differences between negative implication of child disability and duration of illness (P. value at ≤ 0.05) on the family and their caregivers' needs for social & communication skills. According to **Melissa et al., (2011)**⁽²⁷⁾ focused on tested the efficacy of a new social skills intervention, social skills group intervention for the high functioning autism (S.S.GRIN-HFA) and proved that,

children who participated in S.S.GRIN-HFA exhibited significantly greater mastery of social skill concepts compared to children in the control group. Parents of S.S. GRIN-HFA group participants reported a significant improvement for the sense of social self-efficacy, whereas parents of control participants reported a decline.

Additionally, young children with ASD have impairments in the areas of communication and social interaction and often display repetitive or non-compliant behaviour. This early pattern of difficulties is a challenge for parents. Therefore, approaches that help parents develop strategies for interaction and management of behaviour are an obvious route for early intervention in ASD^(25,28). However, parents are important collaborators in planning for and implementing interventions for ASD. Training of parents as a therapist has been known to decrease parental stress and improve child intelligence quotient (IQ), adaptive behavior, language, and socialization-communication. Evidence base of the effectiveness of parent mediated interventions in the well-educated and resourceful community has been established resulting in recommendations of their involvement.^(26,29)

On studying the family cohesion categories of studied children pre and post counseling program, the results of the current study clarified that most of family cohesion categories were disengaged that clearly modified to less than half of them post counseling program, while few of them were having very connected & connected patterns post counseling program. These results were consistent with **Brereton. (2009)**⁽²⁸⁾ who mentioned that autism is associated with burden and stress for parents. The demands placed upon parents caring for a child with an ASD contributes to a higher overall incidence of parental stress, depression, anxiety and adversely impacts upon family functioning and marital relationships compared to parents of children with other intellectual, developmental or physical disabilities. Also, **Oono et al., (2013)**⁽²⁹⁾ investigated levels of parental concern and worry and found that parents of young people with special needs had more concern about their children than parents who did not have children with special needs. Moreover, parent psycho-education intervention module on ASD decreases parenting stress, and improves knowledge about ASD. Psycho-education intervention module is a feasible and acceptable way of parent empowerment.^(25,28)

The results of the current study clarified that there was a change in the studied children's family type pre and post counseling program the counseling program, whereas, less than one quarter of them were balanced and moderate balanced pre counseling program compared to approximately half of them post counseling program while, mid-range family type

decreased to slightly more than one quarter and the rigid family type was disappeared.

These results in agreement with **Oono et al., (2013)⁽²⁹⁾** and **Kasari et al., (2013)⁽³⁰⁾** whom stated that families with children with ASD often experience more stress than other families. On the other hand, families reported several reasons for this, including: coming to terms with the diagnosis, feeling overwhelmed by the things they don't yet know or understand about ASD and what it means for their child, feeling uncertainty or little control over the future for their child with ASD, having trouble handling a child's challenging behavior, including how the child interacts with others, eats or sleeps, having trouble navigating the ASD service system, which is quite complex, managing daily life with a child with ASD & doing things with a child with ASD can simply take longer and can often be quite frustrating.^(17,31)

Conclusion:

The present study concluded that counseling program improved the caregivers' coping patterns of children suffering from ASD, in addition to their families cohesion and adaptation with child suffering from autism level and duration of illness and communication difficulties are significantly communication difficulties affecting variables result in the more worse implication of child's disability on their family. Additionally, there was improvement after the counseling program implementation family coping strategies, cohesion, adaptation and family types in addition improvement also be confirmed for caregivers' coping patterns.

Recommendations:

Based on the results of the present study, it was recommended that:

- Continuous counseling programs are needed to improve the caregivers' of child suffering from autism for their coping patterns through:
 - Paying attention for raising the public awareness about available community resources for caring child with autism in KSA.
 - Policy makers should integrate supportive counseling programs in the routine programs provided in all healthcare centers for children with special needs.
 - Establishing special schools for children who are suffering from ASD in different provinces in KSA.
 - Further researches are needed to provide continues counseling and support for caregivers.

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