

**Review Article**

**EVALUATION OF THE EDUCATIONAL PROGRAM FOR MOTHERS AND ITS EFFECT ON KNOWLEDGE AND PRACTICE TOWARDS THEIR CHILDREN WITH AUTISM IN QASSIM REGION**

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**Abstract**

**Introduction:** One of the greatest popular neurodevelopmental disorders global is autism spectrum disorder (ASD), which is described by language postponement, reduced communication interactions and repetitive patterns of behavior produced by ecological and genetic factors. So that, autism is linked with great cost to families, individuals, societies and government.

This study aimed to identify the effect of health instructions guidelines on improving knowledge and practices of mothers regarding care of their children with autism.

**Methods:** This quasi-experimental study was conducting at Ali Al - Tamimi Center for Autism in Oniazah at Qassim region in kingdom Saudi Arabia. A convenient sample of 60 mothers and their children with autism. Data was collected through three tools were used to collect data **include** structured interview questionnaire consisted of two main parts include socio-demographic data related mothers, personal characteristics of the children, Mothers' knowledge regarding autism and mother practice regarding care of children with autism.

**Results:** The result of the study displayed that the post-test of knowledge and practice among mothers of children with autism were significantly adequate when compared to pre-test. The study finding revealed that Educational Program was effective in enhancing the knowledge and good practice among mothers regarding care of children with autism.

**Conclusion:** the educational program statistically significantly improved the knowledge and practice of the studied mothers.

**Recommendation:** Emphasize the significance of carrying out educational programs to increase knowledge, practice and improve the coping designs of the family caregivers taking children with autism.

**Keywords:** autism spectrum disorder (ASD), ecological and genetic factors.

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**INTRODUCTION**

Childhood is a difficult and arduous period for all families and once the child has difficulty, challenges and demands are exaggerated. While the difficult is autism, single of the maximum overwhelming and smallest understood intellectual disorders of childhood, it is difficult to visualize how family and relatives cope (1 & 2). The term autism originates from double Greek words "aut" (significance self) and "ism" (significance state) and is used to describe a individual who is bizarrely immersed in himself (1).

Autism is a neural developmental illness that can be detected about the age of two (3, 4 & 5). It is characterized by impair nonverbal and verbal communication, diminished socialization and monotonous patterns of performance and limited interests. It contains of a sparger's syndrome, autism disorder, and pervasive developmental disorder. Autism is more popular in boys and children born early and it has a highest connection to the hereditary disorder, fragile X (6 & 7). Currently distressing as numerous as 1 out of 91 persons in the United States; and Saudi Arabia is no exclusion (8). There are not any authorized statistics for the occurrence of autism in Saudi Arabia. (9)proposes there were 40,000 established cases in 2002 and the study by (10) recommends a frequency of 18 out of every 10,000 children. The lack of consciousness of autism within this kingdom global though may be prominent to important underreporting (9). There is considerable suggestion that displays the incidences of ASD has enlarged all over the world as diagnostic and screening methods become well developed. Approximately 52 million persons have been described to be on the spectrum globally (11). As the prevalence of persons with ASD has enlarged, a new population of families has emerged which presents further challenges as our knowledge increases.

Despite that the characteristics of ASD being frequently initiate crossways cultures, the family experiences of helpful for a child with ASD could be diverse (12).

There essentials to be sufficient awareness of autism condition. The aim for people to be good knowledgeable is all members of family of children autistic undertake excessive economic and intellectual load and the additional ignorant they are, the greater the danger of bad diagnoses, thus creating their child extra challenging and hardy to therapy. Earlier diagnosis and identification will support mothers in creating a well-constructed and efficient treatment plan, serving relief pressure, as they will be capable to explain and share their problem with the suitable specialist and investigation a right diagnosis (13 & 14). There is a great chance of bad diagnosis or late diagnosis if there is an absence of awareness or alertness about the signs of this condition, particularly among mothers since they will be the initial to detect any uncommon manners compared to other children or siblings of the same age group. An early and accurate diagnosis plays a massive role in consequences and enhancement of performance in the child. If the mother distinguishes the indicators of autism in their child, such as absence of eye interaction, more activity, high attachments to toys, absence response to oral signals, etc., they can seek medical help, consequential in an enhancement in their identified child's communication abilities, etc (3).

In addition to, Autism is develop frequently and there is no sufficient knowledge about it in our culture in Saudi Arabia. And there is no additional educations that directing to assess mothers knowledge about autism, Because of the significant role of the mother in primary care to unusual conduct of the child which is the core feature that leads to the enhancement of

the child state through initial intervention, then, to a light shed on such problem.

**Significance of the problem**

Autism is well-defined as a constant disorder that utmost of the mothers have to aware and carefulness for their children on their own persistently. So, they are commonly confronted with problems and exclusive everyday stressors connected with their children’s autism syndrome. Ever since the 1970s, there has been a affected increase in the amount of reports recording increasing rates of autism cases, Very scarce reports have been published about the occurrence

**Aim of the study**

Identify the effect of health instructions guidelines on improving knowledge and practices of mothers regarding care of their children with autism.

**Research Hypotheses**

1. Mothers and their children with autism will have better knowledge about autism and its care after health instruction guidelines.
2. Mothers will give their autistic children better care after health instruction guidelines.

**SUBJECTS AND METHODS**

**Study design**

A quasi-experimental research design was used in this the study.

**Setting**

This study was conducted at Ali Al - Tamimi Center for Autism in Oniazah at Qassim region in kingdom Saudi Arabia.

**Subjects**

A convenient sample of 60 mothers and their children with autism was recruited for the study according to the following inclusion criteria include age from 3 to 12 years, both sex and free from congenital anomalies and chronic physical disease. While, exclusion criteria for mothers have more one child with any kind of disabilities. Be present beforehand mentioned settings repeatedly. Mothers who give direct care to the child. The study was implemented from January 2018 – December 2019.

**Tools for Data Collection**

Three tools were used to collect data pertinent for this study: **include** structured interview questionnaire consisted of two main parts:

**Tool I**

**First part** was concerned with characteristics of the studied mothers and their children with autism include personal characteristic related mothers such as age, level of education, job .**Second part** consist of characteristics of the children include age, sex, weight, height, child in the family order, education level. Child medical history as onset and behavioral problem.

**Tool II**

**This tool** was used to assess the Mothers’ knowledge regarding autism include definition, sign and symptoms, factors lead to autism (16) . Scoring system: - multiple choice questions were each right answer was given one score and the false answer code was (0) this to assess mother knowledge. While those who obtained score <60% were measured having unsatisfactory mother knowledge and satisfactory score of ≥60%.

**Tool III**

**RESULTS**

**Table (1): Distribution of Demographics data of studied Mother’s and their Autism Children**

Items		
	NO	%
<b>Age mother</b>		
≤20years	0	00.0

Mother practice regarding care of children with autism. It was adopted from (15), and adapted by the researcher. It included 11 items classified as the following self-care ( 5 points), social skills(3 points ), motion skills (3 points ) concentration skills (4 points ), difficulty in feeding ( 6 points ), failure to use toilet (6 points ), sleep disorder (3 points ) no fear from risks and accident of autistic child (6 points ) ,self-harm , tantrums and screaming (9 points ), isolationism ( 6 points ),loss of sense of self-esteem and self-confidence ( 3 points ) stereotype behavior and frequent talk ( 2 point ) , linguistic disorder (6 points ) , changing resistance of autistic child (2 points ).The mother answer used the 3 point Likert scale for all items from never, sometimes and always. While some items the mother practice must be response through yes or no includes self-care, social skills, motion skills and concentration skills. These score respectively 0,1and 2 score. While, higher scores indicate greater satisfaction with the practice is ≥60percentage and the lower scores <60% indicate un-satisfaction with the practice.

**Educational program.**

Educational program were developed to educate mothers have autistic child and aimed to improve knowledge and practices of mothers regarding care of their children with autism. The content of Educational program were planned and developed according to careful study of mother educational needs discovered from the assessment phase, and studying the literature review. The re-searchers requested mothers to answer the questionnaire tool I , ( tool II) to assess. mother knowledge and performance of mothers through (Tool III) before apply Educational program (pretest) . . Then apply educational program through teaching methods were designated to outfit teaching small groups’ learners in the method of lectures, demonstration, group discussion, and re-demonstration. Teaching materials were arranged as brochures, booklet and colored posters that enclosed knowledge and practical information. . It consists of one session every week for 4 weeks to mothers. The interval of each session approximately 35- 45 minutes. Mother alienated into small groups; each group contained of 3 to 5 participants a after there, the contents of the health instruction was given to the mothers after assessment knowledge and observe their performance and explain any queries with them through booklet. Then mothers ` knowledge and performance were assessed after 2 month of given educational program as posttest.

**Pilot study**

Pilot study was conducted on the month of January 2018 after obtaining permission from the authorities of Ali Al - Tamimi Center for Autism directors. After pilot study assessment has been done after making necessary corrections in the questionnaire.

**Ethical considerations**

Ethical approval from the dean of the college and Ali Al - Tamimi Center for Autism directors obtained. The aim of the research clarified to the participants. After instructive the procedures of the study, a verbal consent from each participant in the study attained. Participants informed about their right to reject participation and to withdraw at any time without giving reasons and with no consequences. Total privacy of any given data.

**Data Analysis and Findings**

Data were revised, coded, analyzed and tabulated using the number and percentage distribution and carried out using SPSS version 20. The statistical tests used are chi-square test and correlation. A value of p<0.05 was considered to be statistically significant.

21-29 years	26	43.3
30-39 years	27	45.0
≥40years	7	11.7
<b>Total</b>	60	100
<b>Mother Education level</b>		
illiterate	4	6.7
Read or write only	5	8.3
Moderate education	21	35.0
Above moderate education	12	20.0
University	18	30.0
<b>Total</b>	60	100
<b>Mother occupation</b>		
Work	28	46.7
Housewife	32	53.3
<b>Total</b>	60	100.0
<b>Children</b>		
<b>Gender</b>		
Male	18	30.0
Female	42	70.0
<b>Total</b>	60	100.0
<b>Education level</b>		
Nursery	14	23.3
Preparatory	46	76.7
<b>Total</b>	60	100.0

The table (1) illustrated that 45% of the studied mothers' age were ranged between (30-39) years. While 35% of them have a moderate education and 53.3% was house wife. Also, the table showed that the majority of studied autism children were female and 70% of them in preparatory education level.

**Table (2) Number &percentage of the knowledge score of mothers regarding autism pre and post educational program implementation**

Items		Satisfaction		Dissatisfaction		2 X	P value
		No	%	No	%		
Definition of autism	Pre intervention	27	45.0	33	55	19.172 <sup>a</sup>	.000
	Post intervention	50	83.3	10	16.7		
predisposing factors	Pre intervention	33	55.0	27	45.0	11.293 <sup>a</sup>	.001
	Post intervention	50	83.3	10	16.7		
Signs and symptoms warning for autism	Pre intervention	41	68.4	19	31.6	.657 <sup>a</sup>	.544
	Post intervention	45	75.0	15	25.0		

The table (2) reflects that there is a highly satisfactory knowledge of Autism mothers regarding Autism after implementation of educational program compared with pre implementation. Also, the table shows that highly statistically significant difference of Autism definition and predisposing factors.

**Table (3): practice score of mothers' regarding developing child skills of self-care, social Motor and attention pre and post educational program implementation**

practice score of mothers'		Satisfaction		Dissatisfaction		2 X	P value
		No	%	No	%		
self-care	Pre intervention	3	5.0	57	95.0	61.250 <sup>a</sup>	.000
	Post intervention	45	75.0	15	25.0		
Social skill	Pre intervention	22	36.7	38	63.3	17.877 <sup>a</sup>	.000
	Post intervention	45	75.0	15	25.0		

<b>Motor skill</b>	Pre intervention	17	28.3	43	71.7	26.162 <sup>a</sup>	.000
	Post intervention	45	75.0	15	25.0		
<b>skill of attention and concentration of the autism child</b>	Pre intervention	23	38.3	37	61.7	16.425 <sup>a</sup>	.000
	Post intervention	45	75.0	15	25.0		

**Table (3)** reveals that there are satisfactory levels of autism child skills regarding self-care, social Motor and attention after the educational program implementation for their mothers compared with unsatisfactory level before educational program implementation. Also, the table indicates that there are statistically significant differences for all skills.

**Table (4): practice score of mothers' regarding developing child skills of Meal time, Toilet and sleep disorder pre and post educational program implementation**

practice score of mothers'		Satisfaction		Dissatisfaction		2 X	P value
		No	%	No	%		
<b>Meal times</b>	Pre intervention	25	41.7	35	58.3	13.714 <sup>a</sup>	.000
	Post intervention	45	75.0	15	25.0		
<b>failure to use the toilet</b>	Pre intervention	19	31.7	41	68.3	22.634 <sup>a</sup>	.000
	Post intervention	45	75.0	15	25.0		
<b>Sleep disorder</b>	Pre intervention	26	43.3	34	56.7	12.452 <sup>a</sup>	.000
	Post intervention	45	75.0	15	25.0		

**Table (4)** reflects that there are satisfactory levels of autism child skills regarding Meal time, Toilet and sleep disorder after the educational program implementation for their mothers compared with unsatisfactory level before educational program implementation. Also, the table indicates that there are statistically significant differences for all skills.

**Table (5): Comparison of the skills taken by the mother to develop the different skills of her autism child regarding Risk, self-harm and Isolation pre and post educational program implementation**

Practice Score Of Mothers'		Satisfaction		Dissatisfaction		2 X	P value
		No	%	No	%		
<b>Don't Fear of risks and accidents in the child</b>	Pre intervention	45	75.0	15	25.0	3.562 <sup>a</sup>	.059
	Post intervention	53	88.3	7	11.7		
<b>Self-harm and tantrums and screams in the child</b>	Pre intervention	27	45.0	33	55.0	9.968 <sup>a</sup>	.002
	Post intervention	44	73.3	16	26.7		
<b>Treating isolationism by encouraging the child</b>	Pre intervention	17	28.3	43	71.7	24.307 <sup>a</sup>	.000
	Post intervention	44	73.3	16	26.7		

**Table (5)** indicates that there are satisfactory levels of autism child skills regarding Risk, self-harm and Isolation after the educational program implementation for their mothers compared with unsatisfactory level before educational program implementation. Also, the table indicates that there are statistically significant differences for all skills.

**Table (6): Comparison of the skills taken by the mother to develop the different skills of her autism child regarding Self-esteem, Behavior, communication and Resistance change pre and post educational program implementation**

Practice Score Of Mothers'		Satisfaction		Dissatisfaction		2 X	P value
		No	%	No	%		
<b>The loss of a sense of self-esteem and self-confidence by encouraging the child</b>	Pre intervention	17	28.3	43	71.7	24.307 <sup>a</sup>	.000
	Post intervention	44	73.3	16	26.7		
<b>Behavior, stereotypes and frequent talk of the child</b>	Pre intervention	14	23.3	46	76.7	21.121 <sup>a</sup>	.000
	Post intervention	39	65.0	21	35.0		
<b>Communication disorder</b>	Pre intervention	23	38.3	37	61.7	16.425 <sup>a</sup>	.000
	Post intervention	45	75	15	25.0		
<b>Resistance change</b>	Pre intervention	16	26.7	44	73.3		

	Post intervention	45	75	15	25.0	28.041 <sup>a</sup>	.000
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**Table (6)** reflects that there are satisfactory levels of autism child skills regarding Self-esteem, Behavior, communication and Resistance change after the educational program implementation for their mothers compared with unsatisfactory level before educational program implementation. Also, the table indicates that there are statistically significant differences for all skills.

**Table (7): Comparison between Means and standard deviations for the Total skills taken by the mother to develop her autism child regarding different skills, Meal time, Toilet and sleep disorder pre and post educational program implementation**

Items		Mean	SD	$\frac{2}{X}$	P value
<b>Mean&amp; SD of Total Skills</b>	Pre intervention	6.2333±2.73933		t -8.317	.000
	Post intervention	11.0000±3.49334			
<b>Mean&amp; SD of Total Meal</b>	Pre intervention	6.8000±2.34918		t -8.144	.000
	Post intervention	10.5000±2.62000			
<b>Mean&amp; SD of Bathroom</b>	Pre intervention	5.6333±3.98713		t -7.901	.000
	Post intervention	10.5000±2.62000			
<b>Mean&amp; SD of sleep</b>	Pre intervention	6.2000±4.07473		t -8.371	.000
	Post intervention	12.0000±3.49334			

**Table (7)** demonstrates that an improvement of total scores of autism child skills regarding different skills, Meal time, and Toilet and sleep disorder after the educational program implementation for their mothers compared with total mean scores before educational program implementation. Also, the table indicates that there are statistically significant differences for all total scores of skills.

**Table (8): Comparison between Means and standard deviations for the Total skills taken by the mother to develop her autism child regarding risks, self-harm, isolation and self-esteem pre and post educational program implementation**

Items	program	Mean	SD	$\frac{2}{X}$	P value
<b>Mean&amp; SD of Total risks</b>	Pre intervention	9.7333±3.65396		t -1.293	.198
	Post intervention	10.4833±2.61347			
<b>Mean&amp; SD of Total harm</b>	Pre intervention	8.5833±6.16522		t -4.906	.000
	Post intervention	12.9833±3.20218			
<b>Mean&amp; SD of isolation</b>	Pre intervention	4.0667±4.55798		t -9.041	.000
	Post intervention	10.2000±2.61547			
<b>Mean&amp; SD of self-esteem</b>	Pre intervention	2.0333±2.49723		t -8.579	.000
	Post intervention	5.1667±1.32980			

**Table (8)** demonstrates that an improvement of total scores of autism child skills regarding risks, self-harm, isolation and self-esteem after the educational program implementation for their mothers compared with total mean scores before educational program implementation. Also, the table indicates that there are statistically significant differences for all total scores of skills.

**Table (9): Comparison between Means and standard deviations for the Total skills taken by the mother to develop her autism child regarding behavior, communication, resistance of change pre and post educational program implementation**

Items	program	Mean	SD	$\frac{2}{X}$	P value
<b>Mean&amp; SD of Total behavior</b>	Pre intervention	2.9667±3.28823		t -7.954	.000
	Post intervention	6.6833±1.51257			
<b>Mean&amp; SD of Total communication</b>	Pre intervention	4.7667±4.96212			

	Post intervention	10.4833±2.61347	t -7.896	.000
<b>Mean&amp; SD resistance of change</b>	Pre intervention	1.4000±1.59661	t -8.938	.000
	Post intervention	3.5000±.87333		

**Table (9)** illustrates that an improvement of total scores of autism child skills regarding behavior, communication, resistance of change after the educational program implementation for their mothers compared with total mean scores before educational program implementation. Also, the table indicates that there are statistically significant differences for all total scores of skills.

**Table (10) Number and percent of Autism mothers scores according to their level of knowledge regarding autism pre and post educational program implementation**

Knowledge level	pre		Post	
	No	%	No	%
Poor	27	45.0	10	16.6
Moderate	6	10.0	10	16.6
Good	27	45.0	40	66.8
Total	60	100	60	100

Table (10) reflects that good level of knowledge (66.8%) to Autism mothers post educational program implementation compared with (45%) pre educational program implementation

**Table (11) Number and percent of Autism mothers scores according to their children practice regarding different skills pre and post educational program implementation**

Practice level	pre		Post	
	No	%	No	%
Adequate	21	35.0	45	75.0
Inadequate	39	65.0	15	25.0
Total	60	100	60	100

**Table (11)** shows that adequate practice (75%) to Autism children post educational program implementation for their mothers compared with (35%) pre educational program implementation

**Table (12) Correlation between autism children skills and their mothers Knowledge toward Autism at pre and post educational program implementation for mothers**

Items	Total autism children Skills development			
	Pre		post	
	R	P- value	R	P- value
Knowledge of mothers	-.717**	.000	.503**	.000
Practice of the autism children	.852**	.000	.477**	.000

**Table (12)** reflected that negative correlation between autism children Skills and their Mother Knowledge at pre educational program implementation. Also, the table indicates positive correlation between their Mother Knowledge and their children skills post educational program implementation for mothers have Autism children.

**Table (13): Correlation between age and education level of autism mothers among their children skills**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
<b>Age mother (1)</b>															
<b>Education mother(2)</b>	.044														
<b>Mother job(3)</b>	.306*	-.441**													
<b>Child gender(4)</b>	.016	.230	.262*												
<b>Education child(5)</b>	.121	.044	.077	-.062											
<b>Totals kills(6)</b>	.114	.118	-.116	.110	.014										
<b>Total meal(7)</b>	.023	.114	-.066	-.025	.111	.942**									
<b>Total bathroom(8)</b>	.057	-.061	.023	.004	.068	.901**	.875**								
<b>Total sleep(9)</b>	.109	-.170	.021	.014	-.021	.803**	.781**	.782**							
<b>Total risk(10)</b>	.006	.001	-.124	-.259*	.034	.500**	.528**	.462**	.442**						
<b>Total harm(11)</b>	-.028	-.070	-.004	-.128	-.057	.725**	.729**	.734**	.577**	.576**					
<b>Total isolation(12)</b>	.095	.105	-.068	.058	.182	.883**	.859**	.875**	.731**	.466**	.773**				

<b>Total self-esteem(13)</b>	.107	.033	-.041	-.035	.189	.872**	.860**	.908**	.709**	.428**	.747**	.929**			
<b>Total typical(14)</b>	.033	.074	-.112	-.018	.094	.782**	.795**	.849**	.671**	.396**	.757**	.884**	.910**		
<b>Total communication(15)</b>	.048	.092	-.058	.050	.149	.874**	.854**	.880**	.700**	.487**	.805**	.949**	.933**	.905**	
<b>Total change(16)</b>	.135	.106	-.017	.051	.127	.876**	.875**	.842**	.710**	.461**	.783**	.936**	.899**	.849**	.943*

**Table (13)** shows that strongly positive correlation between all skills of autism children. Also, the table indicates that negative correlation between autism mothers' education and their job. Also, it reflects negative correlation between autism mothers' education and their children skills regarding toilet, Sleep and self-harm. While, autism mothers job reflects negative correlation regarding all skills of autism children.

**DISCUSSION**

Mothers of autistic children may feel frustration, depression and anger because of their children's infirmity and changes. Such Mothers are in essential for precise knowledge, teaching and being conscious of all features of their children's infirmity, in adding to replacing information and skills with others taking alike difficulties for earlier involvement, suitable education planning, and preparation of family support facilities (16 and17) So that, the existing study is strength to identify the effect of health instructions guidelines on improving knowledge and practices of mothers regarding care of their children with autism .

According to mothers' characteristics. It was found that the majority of the mothers in the age ranged between (30-39) years. These findings were not in the line with by (18) found that more than half of the mothers were in the age group 16-30 years. While, (7) consistent with finding found that the maternal age to the danger of autism and additional psychiatric illnesses in children. The fact that sperm accrues mutations with age might clarify the source of the danger for older fathers. But it is fewer clear how a female's age might increase autism risk. Regarding mother's occupation, more than half were housewives. This finding disagreement with (19) proposed that the most of autism mother worked out. May be due to mothers of autistic children had trouble in following their professional jobs, due to extreme period need for caring the child. One third of the mother reported moderate educational level. The results of the present study opposed with (20) who described that little educational level of mother, \ father.

Regarding gender of the children found that the majority of them were female. This result not corresponding with (7) showed that most of the studied subject were male which is considered other approve for all preceding American Journal of Nursing Research 298 researches which is specify that boys high common to have autism than girls. While, 70% of them in preparatory education level this result in the same line (7) stated that due to problematic to diagnosis autism before the 3 years greatest of the time autism can be judgement when child inter the school wherever the communication without side occur, and intellect is reproduce abnormal performances .

Concerning knowledge score of mothers regarding autism found that highly satisfactory knowledge of Autism mothers regarding Autism after implementation of educational program compared with pre implementation. The findings of the present study were congruent with (21 and 22) who showed a significant statistically difference regarding the definition and sign and symptoms autism before and after-intervention (P < 0.05).In addition to, numerous international studies also

described low levels of teacher knowledge concerning causes of Autism(23 , 6). Also, other results displayed that moderate level of the knowledge parents of autistic children (24).

Considering total scores of autism child skills regarding different skills, meal time, and toilet and sleep disorder after the educational program implementation for their mothers compared with total mean scores before educational program implementation. This finding is consistent with (25, 26). Some programs dedicated sessions to precise issues that were significantly affecting upon family lifespan, including sleeping and eating difficulties. Local systems negotiating and facilities was also recognized as being of significance, and this was an part where distribution knowledge and learning from other parents' practices could be mainly helpful. General, programs that emphasis on the practical application of knowledge seem mainly appreciated by parents.

This study presented that improvement of total scores of autism child skills regarding risks, self-harm, isolation and self-esteem after the educational program implementation for their mothers compared with total mean scores before educational program implementation. These findings were contrast with (27) proposed that concentrated primary intervention can prime to better consequences for children with Autism (. Also Developing results recommend that mothers may also help from their child's sharing in concentrated initial intervention lead to a positive result for greatest parents, including augmented parental skills, knowledge, and performance.

The current study revealed that improvement of total scores of autism child skills regarding behavior, communication, resistance of change after the educational program implementation for their mothers compared with total mean scores before educational program implementation. In agreement with this, (28) Exploratory study examined whether the providing of an education program in Jordan for mothers of children with Autism augmented mothers' tolerant of their child's behavior, better the mothers', reduced their stress levels and coping skills. Subsequent the teaching program, the mothers described a significant statistically decrease in strain levels, an high in coping skills, and an enhancement in mother child collaboration. Compared to mothers, fathers' strain levels were significantly developed and their coping skills were lower significantly.

As regard to communication illustrated that an improvement of total scores of autism child skills regarding communication after the educational program implementation for their mothers compared with total mean scores before educational program implementation. These findings were supported by (29) who found that the children confirmed positive variations in social communication measured crosswise settings and measures. These results are particularly significant assumed the social and communicative problems of greatest children with autism and the probability that they will essential sustained provision from their mothers to obtain and practice useful communication skills.

While, other study in the same line (30) showed that indicating that mutual simulated training is actual for instruction imitation abilities to young children with autism in a real setting and spread the findings to parents. In addition to, this finding in contrast with (31) found that Enhancements were perceived for "Communication Abilities" on the children's Social Skill-scale ( $p = 0.029$ ). Improvements Significant were perceived in the mothers. Also, the present study disagreement with (32) found that communication children and behavior symbolic did not progress following contribution in the Program.

The current study illustrated that the mothers scores according to their level of knowledge regarding autism post educational program implementation is good level compared with pre educational program implementation. This finding is congruent with (33) reported that the post-test level of knowledge, and practice amongst principal caregivers of children with autism was significantly great ( $p < 0.0001$ ) when linked to pre-test level.

These findings were supported by (34) revealed that a great number of mothers existing in two capitals in Turkey were deficient in knowledge of when basic growing skills of babies and young children appear and once they should start to deliver simple chances that maintenance child development. Also, other researcher (35) determined that more than half of the studied mother had poor awareness concerning autism and extremely significant relation between psychological wellbeing and awareness amongst mothers with autism children.

These findings contradict with the findings average, teachers seeming themselves to be well-informed about autism and described that they distinguish causes and symptoms of autism how it is diagnosed. This means that what teachers believe to be accurate about symptoms, diagnosis, and causes of autism may really be improper. This permits further the necessity for teacher teaching on autism

Regarding mothers scores according to their children practice regarding different skills showed that adequate practice (75%) to Autism children post educational program implementation for their mothers compared with (35%) pre educational program implementation. This result agreement with (36) proposed that, children with autism may be at danger for slower Skills of the Daily Living progress than children with other developing disabilities, this is attributable mostly to children with autism having additional nonverbal problem delayed solving and/or language abilities receptive. As such, interventions targeting Skills of the Daily Living would help young children with early mental interruptions, irrespective of diagnosis.

This finding consistent with (37) who recommends that a parent intervention teaching parents to additional efficiently interact with and show their young child with autism may have had a secondary, encouraging consequence on parents and facilitated to keep parental modification in the period soon afterward an autism diagnosis. These results are reinforced by a study showed in (1) which evaluated the awareness level regarding autism among mother's awareness before and after program was said, with a better level of knowledge seen among parents subsequently the program.

While, many teachers who participated in the study recognized practices determined to be recognized or developing by the (38) as evidence-based (e.g. language training, behavioral interventions, social training skills, and communication practical training). Even though several teachers cannot be directly accountable for by means of these performances to explain children by Autism, having precise and up-to-date information about them is significant in notifying mothers about practices that work for children with autism.

(39) showed a study amongst 471 Chinese before-school teachers to evaluate knowledge and perception of autism. congruent to the current study, a developed number of before-school teachers (83 per cent) were not having satisfactory

knowledge concerning autism and nearly all contributors expressed that children with autism should obtain improved and more care.

Also, (40) conducted a study to evaluate the efficiency of planned instruction program on information of caregivers concerning care of autistic children. The author experiential that the after-test knowledge score in the experimental group ( $15.63 \pm 2.076$ ) was s higher significantly than the after-test score in the control group ( $13.13 \pm 2.446$ ). All these studies display the significance of educational programs proposed to improve the knowledge and practice of caregivers concerning care of children with Autism, which, in chance, augment the general progress of such children.

Positive correlation between their Mother Knowledge and their children skills post educational program implementation for mothers have Autism children. This finding in the same line with (37) has stated that primary rigorous behavioral intervention can main to better consequences for children with autism, but a fewer well-understood usual of results suggests that mothers may also assistance from their child's contribution in primary rigorous behavioral intervention. Studies using a numerous standard design provided initial evidence of a positive consequence for many parents, including augmented parental knowledge, skills, and performance.

Besides, other researchers in the same line (41) showed that mothers with early children age with Autism and characteristic development who contributed in an early intervention inclusion program applying Training for at least 6 months presented decreases in stress on the Child Domain. While, the present finding disagreement with (32) found that parent factors and Child that may have reduced satisfaction for these two mothers included the child's deficiency of enhancement, goal performance child's after-intervention, parenting stress and reduced parenting skill. Both mothers also had reduced awareness of the family-centeredness of the service and expressed worries with establishing cooperative partnerships.

In addition to other study is similar to result of the present research by (42) found that mothers are able, afterward contributing in a parent training package, to attain the skill of showing video demonstrating intervention, to keep the skill of making videos for this purpose, and to simplify this skill to the training of videos on additional tasks. Children are able, after the involvement showed by their mothers, to attain the target skill, to keep the target skill once the involvement is over, and to simplify this skill to other locations and other people.

Concerning Correlation between age and education level of autism mothers among their children skills found that negative correlation between autism mothers' education, job and their children skills regarding toilet, Sleep and self-harm. This finding disagreement with (43) displayed the level of educational increased in the community, frequency of awareness autism risen significantly. Education lead to the increasing trends in awareness autism, and allows diagnosis early, and treatment between educated persons, and their environment.

Our findings that congruent with (43) showed that housewives more often account that their children showed additional symptoms of autism and expressing difficulties compared to the mothers working. It has been revealed that children with autism whose mothers were employed might have additional economic resources, well thoughtful about autism and arrive to interventions therapeutically and employment in steady or superior education schools in Egypt. Other result in the same with (44).

This result disagreement with (24) who found that there are differences significant in mothers' knowledge of modification behavior due to mother's gender in errand of mothers however agreement for there were no differences significant due to mothers' education, , child's age and child's gender.



Finally negative correlation between Mother Job and their level Knowledge and their children practice pre educational program implementation. The researcher's view was reinforced by that of (45) who found that the housewives supposed developed strain than the employed mothers. This may have been due to that the housewives had no chance for Care children's conditions with autistic and aeriation from the home activities.

#### CONCLUSION

Revealed that good level of knowledge (66.8%) to Autism mothers post educational program implementation compared with (45%) pre educational program implementation. Adequate practice (75%) to Autism children post educational program implementation for their mothers compared with (35%) pre educational program implementation. Also, negative correlation between autism children Skills and their Mother Knowledge at pre educational program implementation. Moreover, positive correlation between their Mother Knowledge and their children skills post educational program implementation for mothers have Autism children. In addition to, negative correlation between autism mothers' education and their job. Negative correlation between autism mothers' education and their children skills regarding toilet, Sleep and self-harm. Negative correlation between mother job and their level Knowledge and their children practice pre educational program implementation.

#### RECOMMENDATION

So, we recommend that the broad public and caregivers should be knowledgeable about this syndrome by professionals and media content should be confirmed prior to release. Also recommended occupational therapy should consider including parental and family outcome measures in intervention studies completed with children

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