Nursing Intervention Program for Parents of Children with Autism
Aya Ahmed Ali, Ghada Morad, Fatma Ata

Master of Psychiatric/Mental Health Nursing, Faculty of Nursing, Ain Shams University.
e-mail: oyaahmed430@yahoo.com
Professor of Psychiatric/Mental Health Nursing, Faculty of Nursing, Ain Shams University
e-mail: dr.ghada.mourad@nursing.asu.edu.eg
Assistant Professor of Psychiatric/Mental Health Nursing, Faculty of Nursing, Ain Shams Universitye-mail: dr.fatma.ata@nursing.asu.edu.eg

ABSTRACT

Contents: Autism Spectrum Disorder (ASD) is diagnosed when there are “persistent deficits in social communication and social interaction across multiple contexts” and “restricted, repetitive patterns of behavior, interests or activities.”

Aim: The study aimed to investigate the effect of nursing intervention program for parents of children with autism.

Methods: A quasi-experimental design was used to achieve the aim of the current study. The study was conducted at the neuropsychiatric outpatient clinic affiliated to Fayoum university hospital. A convenient sample of parents (40) for children who has diagnosed with autism. Three tools were used to collect the study data namely; Socio demographic data sheet for parents having children with autism, Parent Stress Scale (PSS), and Brief COPE inventory.

Results: There highly statistically significant relation of all items of stress scale among parents having children with autism (psychological symptoms) between pre and post intervention phase. All correlations are highly statistically significant relation, Self-distraction, Active coping, Use of emotional support, Venting, Positive reframing, Planning, and Religion are all negative correlation of strategy with total stress. It means more use of these strategies decrease the stress level.

Conclusion: There highly statistically significant relation between stresses subscales and total scale among parents having children with autism in pre and post intervention phase. There highly statistically significant relation between coping strategies subscales among parents having children with autism in pre and post intervention phase. Periodic assessment for parents of children with autism, Periodic assessment for needs and problems for parents of children with autism

Keywords: Autism, Nursing intervention program, Parents of children,

1. Introduction

Autism Spectrum Disorder (ASD); Neurodevelopmental disorders (NDD) is an umbrella term for conditions arising from disruptions or extreme variations of the maturation, architecture, and functioning of the developing brain. NDD affect cognition and behavior, persistently reduce functional adaptive skills and quality of life, and are associated with increased mortality. Autism spectrum disorder (ASD) is a diagnosis under the NDD umbrella. ASD has a phenotypically heterogeneous presentation, defined by impairments in social communication and interaction alongside repetitive, stereotypic activities and interests, as well sensory processing alterations (Clements, 2020).

The children appear a lot and indifferent to others and often seem to prefer inanimate objects. The impairment in communication is severe and affects both verbal and nonverbal communication. People with autism often have trouble understanding the feelings of others and the world around. Autism is often referred to as a spectrum disorder, which means that the symptoms of autism can occur in many combinations and may range from mild to severe. Children with autism often look normal, but seem to be withdrawn into their own world (Constantino, & Charman, 2018).

Both categorical and dimensional approaches to diagnosis have been utilized, although in actual clinical practice diagnostic approaches (for many reasons) tend to be ideographic, encompassing all the complexities of the specific individual. Categorical approaches have tended to dominate in official classification schemes, but are not incompatible with dimensional ones, selection of an arbitrary “cutoff point” for hypertension or intellectual disability (Fochler, & Sigl, 2018).

About 10% of children with autism have specific genetic, neurologic or metabolic disorders which may be considered to be etiologic, although those who also have an intellectual disability are more likely to show this association. Other risk factors which have been explored include parental immigration and maternal age. In contrast one study based on parental reports found no link between maternal age and diagnosis (Ebben, 2018).
Children with autism manifest delayed and deviant language development, as evidenced by echolalia (repetition of words or phrases spoken by others) and tendency to be extremely concrete in interpretation of language. Pronoun reversals and abnormal intonation are also common (Moskalewicz, et al., 2019). Other common features of autism categorized as stereotypic behavior are self-stimulating, non-functional, repetitive behavior, such as repetitive rocking, hand flapping, and an extraordinary insistence on sameness. These children may also engage in self-injurious behavior, such as hitting, head banging, or biting (Ford, et al., 2018).

Furthermore, many children with autism display maladaptive and aggressive behaviors (e.g., hitting, throwing objects, spitting). In addition, children with autism vary in their level of functioning (i.e., adaptive and cognitive functioning), that can be viewed by their caregivers as difficult to manage and possibly embarrassing. The combination of these symptoms and the presence of problem behaviors can create varying and distinct challenges for parents of individuals with autism (Giampietro, et al., 2018).

There are two significant contributors in the field of Autism who have devoted their lives to studying various treatment strategies for children with autism. They continue to provide education and awareness to the general population in this area. These experts have translated their research into practice and have applied their visions of improving the lives of autistic children and their families. As a result, thousands of people have been provided with a new hope (Halfmann, 2017; McCabe, et al., 2020).

Treatment approaches utilizing both behavioral and sensory aspects and emphasizes the importance of early intervention. Living with autism, brings a different perspective to us. Helps the children understand better and relate to this condition, while improve the lives of those with autism. There is an increasing need within our schools to develop a high level of expertise that addresses the needs of students with autism (Stone, 2018).

2. Significance of the Study

Prevalence rate of autistic disorder among children and adolescents in the Arab Republic of Egypt is parallel to that in other areas of the world, one in every 86 children so children with autism in Egypt range from 900,000 to one million (Gaber, 2016). Although services for children and adolescents having psychiatric disorders are insufficient in Egypt till now, attention has been developing in improving such services (Hussein, Shaker, El-sheikh & Ramy, 2012).

Parents of children with autism are extremely stressed resulting in disruption in life style and relationship, deprivation of human need and failure to act in way of coping strategies to eliminate the case of psychosocial problems. They have dramatically higher levels of divorce and depression, anxiety, other negative health outcome and have lower levels of wellbeing and sense of competence.

3. Aim of the study

This study aims to investigate the effect of nursing intervention program for parents of children with autism through:

- Design nursing intervention program for parents of children with autism.
- Implementing nursing intervention program for parents of children with autism.

3.1 Research Hypotheses

Nursing intervention program will have a significant positive effect on parents of children with autism.

4. Subjects and Methods

4.1. Research design

A quasi-experimental design (one group pre/posttest and follow-up) was used in the current study. Quasi-experiment is an empirical study used to estimate the causal impact of an intervention on its target population without random assignment. Therefore, the design is most appropriate to investigate the effect of nursing intervention program for parents of children with autism.

4.2. Research setting

www.turkjphysiotherrehabil.org 27108
The study was conducted at the neuropsychiatric outpatient clinic affiliated to Fayoum university hospital; the hospital consisted of five floors. Outpatient area located in the first floor, it composed of ten outpatient clinics include the neuropsychiatric clinic, surgical clinic, pediatric clinic, internal medicine clinic, cardiovascular clinic, chest clinic, orthopedic clinic, ophthalmic clinic, ear, nose and throat, dermatology clinic.

4.3. Subjects
A convenient sample of parents for children who has diagnosed with autism. The sample was chosen as the number of available parents of child with autism and the parents of the present study were 40.

4.4. Tools of the study
Data for this study were collected by using three tools, namely, Socio demographic data sheet for parents having children with autism, Parent Stress Scale (PSS) & Brief COPE inventory.

4.4.1. Socio demographic data sheet for parents of children with autism
It was developed by the researcher and included age, sex and level of education, marital status.

4.4.2. Parent Stress Scale (PSS)
It was developed by Hosny, (2006) the parent stress scale was used as a self-report instrument to measure level of stress directly associated with the parenting role. The PPS has a (72) items, consist of six subscale: somatic symptoms (15), Psychological symptoms associated with child disability (12) items, psychological stress resulting from child communication problems (10) items, psychological stress resulting from child behavioral disturbance (17) items, psychological stress resulting from child social skills deficit (13) items, psychological stress resulting from financial aspect (5) items.

Scoring system:
Each item of the parents’ stress scale that requires participants to respond on a 5 points Likert-type scale, ranging from (never) = zero, (rarely) = 1, (sometimes) = 2, (often) = 3, (always) = 4.

Parents with a total score reach 60% or more were considered to have low stress and those with less than 60% were considered to have high stress.

4.4.3. Brief COPE inventory
It was originally developed by (Carver, 1997) and adapted by the researcher to assess coping strategies among parents having children with autism. Include (14) items divided into two parts: Emotion focused coping strategies and problems focused coping strategies.
Emotion focused coping strategies include (10) coping strategies as the following: (self-destruction, denial, substance use, uses of emotional support, behavioral disagreement, venting, humor, acceptance, religion and self-blame). While problem focused coping strategies include (4) coping strategies as the following: (active coping, use of instrumental support, positive reframing and planning). Each coping strategy in both emotion focused and problem focused coping strategies include two statements.

Scoring system:
The COPE inventory contains a 14 items that requires participants to respond on a 3-points Likert-type scale, ranging from 2 (always) to 1 (sometimes) and 0 (never).

4.5. Procedures
It includes reviewing of literature and different studies related stress that faced parents having children with autism and their coping strategies by using books, articles, periodicals, magazines and internet. After reviewing of recent, current, national and international related literature in various aspects of the problems, the study tools were designed and translated into Arabic language by language experts and back translated to ensure its accuracy.

Pilot study
A pilot study was under taken after the adaptation of the tools and before starting the data collection. It was conducted on 4 parents having children with autism.

The purpose of the pilot study was to test the applicability, feasibility and clarity of the tools. In addition, it served to estimate the approximate time required for interviewing the parents as well as to find out any problems that might interfere with data collection.

www.turkjphysiotherrehabil.org
After obtaining the result of the pilot study, the necessary modifications of tools as, excluded questions, added questions & revised were done then final format was developed under the guidance of supervisors. Parents who participated in the pilot study were excluded from the main study sample.

The fieldwork:

The study was started and finished through the following phases:

A) Assessment and planning phase

The researcher attended the neuropsychiatric outpatient clinic two days per week, from 9.00 AM. To 1.00 PM. The data collection lasted over three months starting from the beginning of June to August 2019. A number of interviewed parents per week two time. The researcher interviewed each parents individually and briefly explained the nature and the purposes of the study, and asked for participation. All parents were informed that participation is voluntary.

After obtaining the acceptance of parents to participate in the present study. Collection of data as begun with the socio-demographic questionnaire, and it was completed by the researcher within 10 minutes for each parent. After that, the parent stress scale (PSS) was also completed by the researcher within about 10 minutes for each parent; in the end, the COPE inventory scale took about 10 minutes for each participant .So, each parent need about 30 minutes to complete the questionnaire.

Filling the previous mentioned tools was done by the researcher before implementation of the nursing intervention program according to the parents understanding. All information gathered through data collection tools was interpreted to identify the individualized learning needs. The researcher set up a teaching session plan based on identified needs covering all objectives, these objectives were categorized into general and specific objectives and the program resources, facilities were allocated (printed material and location of session that best serve the parents).

In addition, the researcher determined the teaching strategy (timetable of sessions, teaching methods, media used and parent’s activities). The appointment for starting teaching sessions was detected and scheduled with the parents for the following weeks within the same previously mentioned days.

Implementation phase:

The teaching sessions were conducted in a classroom located at the ground floor of the outpatient clinic. The classroom was air conditioned, quiet, well ventilated, well furnished, and had adequate lighting and adequate spacing for implementing nursing intervention program activities. The program content and its objectives were developed by the researcher in the form of 12 sessions in addition to introductory and evaluation session each session take about 30- 90 minutes according to the parents understanding and span of attention.

The parents were divided into 10 groups and each group didn’t exceed four parents. Implementation of nursing intervention program lasted over a period of 5 months, starting from September 2019 to January 2020 for all parents under the study.

Every session of the program has general and specific objectives; these were achieved through several teaching methods and media as lecture, group discussion, role playing, booklet, video, and posters. At the beginning of the first session, an orientation of the nursing intervention program and its purpose took place. The importance and benefits of the program were explained to all the parents under the study to motivate them to follow instructions which were included in it.

Each session started by greeting the parents, assessing the parent motivation for learning, getting feedback about what was given through the previous session, and present the objectives of the new topic, taking into consideration using simple language to suit the educational level of the parents. The researcher emphasized the importance of adherence to each step of the nursing intervention program, and the rationale for and the benefits of engaging in each new behavior were explained.

Motivation, problem solving and reinforcement techniques were used to enhance active participation for all parents in the program plan. The booklet was handed for every parent. The researcher encouraged the parents to express their readiness for changing their behavior. After finishing of the program sessions, the researcher thanked the parents for participation and asked for any inquiries unclear points.

Follow up phase

After implementation the program, the researcher evaluate effect of the program on parents of children with autism

Program sessions

<table>
<thead>
<tr>
<th><strong>Introductory Session</strong>: (Time: 30 min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>During the initial session the researcher explained the program objective, the expected outcome and determine the meeting time that was one time / week.</td>
</tr>
</tbody>
</table>

**Session 1: Theoretical session** (Time: 45 min)

The main objective of this session was: to help each parents will be able to acquire basic information about autism

**Session 3: Theoretical session** (Time: 60 min)
The main objective of this session was: to help each parent to acquire a general guide lines about need and problems of autism.

**Session (4): Practical Session (Time: 60)**
The main objective of this session was: to help each parent will be able to train their child acquire new skills to face needs.

**Session (5): Practical Session (Time: 60)**
The main objective of this session was: to help each parent will be able to developing personal plan of time management to cope with the tasks of autistic child.

**Session (6): Practical Session (Time: 60)**
The main objective of this session was: to help each parent will be able to healing the feeling of stigma.

**Session (7): Practical Session (Time: 60)**
The main objective of this session was: to help each parent will be able to gain knowledge about socialization skills.

**Session (8): Practical Session (Time: 90)**
The main objective of this session was: to help each parent will be able to develop burden alleviation.

**Session (9): Practical Session (Time: 90)**
The main objective of this session was: to help each parent will be able to acquire skills to improve effective coping strategies.

**Session (10): Practical Session (Time: 60)**
The main objective of this session was: to help each parent will be able to design personal plan for managing negative thoughts and emotions.

**Session (11): Practical Session (Time: 60)**
The main objective of this session was to help each parent will be able to demonstrate the steps of deep breathing technique.

**Session (12): Practical Session (Time: 60)**
The main objective of this session was: to help each parent will be able to implement of progressive muscles relaxation technique.

**Ending session: Evaluation session (Time: 60 min)**
Global summarization of the session and termination of the intervention sessions for parents.

### 4.6. Data analysis

The collected data were organized, analyzed using appropriate statistical significant tests. The data were collected and coded using the Computer Statistical Package for Social Science (SPSS), version 20, and was also used to do the statistical analysis of data. Data were presented using descriptive statistics in the form of frequencies and percentages. Chi-square tests were used to compare frequencies and correlation between study variables.

#### 5. Results

Table 1 shows that nearly two thirds (65%) of participants were female. More than one third (37.1%) of them had the mean age. Nearly half (45%) of them had secondary level of education. Three fifths (60%) of them were working. Three quarters (75%) of them were married, and more than three quarters (77.5%) of them were living in urban.

Table 2 shows that there highly statistically significant relation between stress subscales and total scale among parents having children with autism in pre and post intervention phase. While; there no statistically significant relation between stress subscales and total scale among parents having children with autism in post and follow up intervention phase.

Table 3 shows that there highly statistically significant relation between coping strategies subscales among parents having children with autism in pre and post intervention phase. While; there no statistically significant relation between coping strategies subscales among parents having children with autism in post and follow up intervention phase.

Table 4 shows that there highly statistically significant relation between of mean stress scores and their gender. Also, there a statistically significant relation between of total stresses scores and their ages, education level, and residence. While; there no statistically significant between of mean stress scores and their work, and social status.

Table 5 shows that, all correlations are highly statistically significant relation, Self-distraction, Active coping, Use of emotional support, Venting, Positive reframing, Planning, and Religion are all negative correlation of strategy with total stress. It means more use of these strategies decrease the stress level.

### Table (1): Frequency distribution of the socio demographic characteristics of the studied subjects (n= 40)

<table>
<thead>
<tr>
<th>Personal characteristics</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

www.turkjphysiotherrehabil.org
- Female 26 65.00
- Male 14 35.00

**Age**
- 20:<30 years 13 32.5
- 30:50 years 22 55
- >50 years 5 12.5

| Mean ± SD | 37.10 ± 5.08 |

**Education**
- Illiterate 5 12.50
- Read & write 7 17.50
- Primary 7 17.50
- Secondary 18 45.00
- Higher education 3 7.50

**Working status**
- Working 24 60.00
- Not Working 16 40.00

**Social status**
- Married 30 75.00
- Divorce 7 17.50
- Widow 3 7.50

**Residence**
- Urban 31 77.50
- Rural 9 22.50

### Table (2): Stress subscales and total scale among parents having children with autism (n= 40)

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
<th>Follow up</th>
<th>t Test Post &amp; Pre</th>
<th>t Test Follow up &amp; Post</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>(A) Somatic Symptoms</td>
<td>84.67</td>
<td>11.84</td>
<td>33.83</td>
<td>25.58</td>
<td>41.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(B) Psychological symptoms</td>
<td>88.23</td>
<td>12.02</td>
<td>43.96</td>
<td>20.65</td>
<td>49.38</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(C) Psychological stressors resulting from child communication problems</td>
<td>93.38</td>
<td>11.92</td>
<td>55.13</td>
<td>18.41</td>
<td>60.38</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(D) Psychological stressors resulting from child behavior disorder</td>
<td>91.54</td>
<td>13.03</td>
<td>54.85</td>
<td>18.80</td>
<td>60.15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(E) Psychological stressors resulting from child socialization deficit</td>
<td>92.84</td>
<td>7.06</td>
<td>62.12</td>
<td>15.34</td>
<td>66.54</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**www.turkjphysiotherrehabil.org**
Table (3): Coping strategies subscales among parents having children with autism (n= 40)

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Pre</th>
<th>Post</th>
<th>Follow up</th>
<th>t Test Post &amp; Pre</th>
<th>t Test Follow up &amp; Post</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>1-Self-distraction</td>
<td>31.88</td>
<td>14.97</td>
<td>88.75</td>
<td>27.12</td>
<td>81.25</td>
</tr>
<tr>
<td>2-Active coping</td>
<td>18.75</td>
<td>23.17</td>
<td>85.00</td>
<td>36.16</td>
<td>75.00</td>
</tr>
<tr>
<td>3-Denial</td>
<td>81.88</td>
<td>25.31</td>
<td>55.00</td>
<td>15.19</td>
<td>60.00</td>
</tr>
<tr>
<td>4-Substance abuse</td>
<td>51.25</td>
<td>21.15</td>
<td>30.00</td>
<td>12.91</td>
<td>32.50</td>
</tr>
<tr>
<td>5-Use of emotional support</td>
<td>48.13</td>
<td>22.92</td>
<td>70.00</td>
<td>12.91</td>
<td>67.50</td>
</tr>
<tr>
<td>6-Use of instrumental support</td>
<td>33.13</td>
<td>17.35</td>
<td>88.75</td>
<td>27.12</td>
<td>81.25</td>
</tr>
<tr>
<td>7-Behavioral disengagement</td>
<td>69.38</td>
<td>21.55</td>
<td>8.75</td>
<td>21.60</td>
<td>13.75</td>
</tr>
<tr>
<td>8-Venting</td>
<td>56.25</td>
<td>27.59</td>
<td>88.75</td>
<td>27.12</td>
<td>81.25</td>
</tr>
<tr>
<td>9-Positive reframing</td>
<td>19.38</td>
<td>22.99</td>
<td>85.00</td>
<td>36.16</td>
<td>75.00</td>
</tr>
<tr>
<td>10-Planning</td>
<td>62.50</td>
<td>27.74</td>
<td>92.50</td>
<td>18.08</td>
<td>87.50</td>
</tr>
<tr>
<td>11-Humor</td>
<td>35.63</td>
<td>20.32</td>
<td>53.75</td>
<td>16.55</td>
<td>58.75</td>
</tr>
<tr>
<td>12-Acceptance</td>
<td>69.38</td>
<td>21.55</td>
<td>8.75</td>
<td>21.60</td>
<td>13.75</td>
</tr>
<tr>
<td>13-Religion</td>
<td>45.00</td>
<td>26.67</td>
<td>91.25</td>
<td>21.60</td>
<td>86.25</td>
</tr>
<tr>
<td>14-Self-blame</td>
<td>85.00</td>
<td>16.79</td>
<td>35.00</td>
<td>24.55</td>
<td>42.50</td>
</tr>
</tbody>
</table>

Table (4): Relation of mean stress scores and demographic characteristics of the participants (n= 40)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t/t Test</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Age</td>
<td>40</td>
<td>37.10</td>
<td>5.08</td>
<td>0.318</td>
<td>0.045*</td>
</tr>
<tr>
<td>2- Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table (5): Correlation of total stress scores and coping strategies subscales among parents having children with autism (n= 40)

<table>
<thead>
<tr>
<th>Coping Strategies Subscales</th>
<th>Total Stress Scores</th>
<th>R</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Self-distraction</td>
<td></td>
<td>-0.999</td>
<td>0.000</td>
</tr>
<tr>
<td>2-Active coping</td>
<td></td>
<td>-0.999</td>
<td>0.000</td>
</tr>
<tr>
<td>3-Denial</td>
<td></td>
<td>0.823</td>
<td>0.000</td>
</tr>
<tr>
<td>4-Substance abuse</td>
<td></td>
<td>0.915</td>
<td>0.000</td>
</tr>
<tr>
<td>5-Use of emotional support</td>
<td></td>
<td>-0.915</td>
<td>0.000</td>
</tr>
<tr>
<td>6-Use of instrumental support</td>
<td></td>
<td>-0.999</td>
<td>0.000</td>
</tr>
<tr>
<td>7-Behavioral disengagement</td>
<td></td>
<td>0.965</td>
<td>0.000</td>
</tr>
<tr>
<td>8-Venting</td>
<td></td>
<td>-0.999</td>
<td>0.000</td>
</tr>
<tr>
<td>9-Positive reframing</td>
<td></td>
<td>-0.999</td>
<td>0.000</td>
</tr>
<tr>
<td>10-Planning</td>
<td></td>
<td>-0.999</td>
<td>0.000</td>
</tr>
<tr>
<td>11-Humor</td>
<td></td>
<td>0.588</td>
<td>0.000</td>
</tr>
<tr>
<td>12-Acceptance</td>
<td></td>
<td>0.823</td>
<td>0.000</td>
</tr>
<tr>
<td>13-Religion</td>
<td></td>
<td>-0.965</td>
<td>0.000</td>
</tr>
<tr>
<td>14-Self-blame</td>
<td></td>
<td>0.990</td>
<td>0.000</td>
</tr>
</tbody>
</table>

6. Discussion

Autism Spectrum Disorder (ASD); Neurodevelopmental disorders (NDD) is an umbrella term for conditions arising from disruptions or extreme variations of the maturation, architecture, and functioning of the developing brain. NDD affect cognition and behavior, persistently reduce functional adaptive skills and quality of life, and are associated with increased mortality. Autism spectrum disorder (ASD) is a diagnosis under the NDD umbrella. ASD has a phenotypically heterogeneous presentation, defined by impairments in social communication and interaction alongside repetitive, stereotypic activities and interests, as well sensory processing alterations (Liu, et al., 2021). So, the current study aimed to investigate the effect of nursing intervention program for parents of children with autism.

Regarding demographic characteristics, the current study showed that nearly two thirds of participants were female. Nearly half of them had secondary level of education. Three fifths of them were working. Three quarters of them were married, and more than three quarters of them were living in urban.

This result is in agreement with Zhou, et al., (2019) who conducted a study entitled "The effect of family-focused psycho-educational therapy for autism spectrum disorder children's parents on parenting self-efficacy and emotion" and
found that more than half of participants were female, married, and had secondary level of education. Conversely, this result is in disagreement with Fernandez, et al., (2020) who conducted a study entitled “Dance intervention for Mexican family caregivers of children with developmental disability” and found that more than half of participants weren’t worked and lived in rural area.

Regarding stress subscales and total scale among parents having children with autism, the current study showed that there highly statistically significant between stress subscales and total scale among parents having children with autism in pre and post intervention phase. While; there no statistically significant between stress subscales and total scale among parents having children with autism in post and follow up intervention phase.

This result is supported with Ilias, et al., (2018) who conducted a study entitled "Parenting stress and resilience in parents of children with autism spectrum disorder (ASD) in Southeast Asia" and found that there highly statistically significant between stress subscales and total scale among parents having children with autism in pre and post intervention phase. Conversely, this result is in disagreement with Whippey, et al., (2019) who conducted a study entitled "Enhanced perioperative management of children with autism" and found that there a statistically significant between stress subscales and total scale among parents having children with autism in post and follow up intervention phase.

Regarding Coping strategies subscales among parents having children with autism, the current study showed that there highly statistically significant between coping strategies subscales among parents having children with autism in pre and post intervention phase. While; there no statistically significant between coping strategies subscales among parents having children with autism in post and follow up intervention phase.

This result is accordance with Cheung, et al., (2018) who conducted a study entitled "A social-cognitive intervention program for children with autism " and found that there highly statistically significant between coping strategies subscales among parents having children with autism in pre and post intervention phase. Also, in the same line with Cheung, et al., (2018) who conducted a study entitled" A social-cognitive intervention program for children with autism” and found that there no statistically significant between coping strategies subscales among parents having children with autism in post and follow up intervention phase.

Regarding Correlation of mean stress scores and demographic characteristics of the participants, the current study showed that there highly statistically significant between of mean stress scores and their gender. Also, there a statistically significant between of mean stress scores and their work, and social status

This result is accordance with Zhou, et al., (2019) who conducted a study entitled "The effect of family-focused psych educational therapy for autism spectrum disorder children's parents on parenting self-efficacy and emotion" and found that there highly statistically significant between stress scores and their demographic characteristics. Also, this result is accordance with Burton, et al., (2018) who conducted a study entitled " An intervention for parents of children with autism" and found that there highly statistically significant between stress scores and their demographic characteristics

Regarding Correlation of total stress scores and coping strategies subscales among parents having children with autism, the current study showed that, all correlations are highly statistically significant, Self-distraction, Active coping. Use of emotional support, Venting, Positive reframing, Planning, and Religion are all negative correlation of strategy with total stress. It means more use of these strategies decrease the stress level

This result is accordance with Haglund, et al., (2020) who conducted a study entitled "Improvement of autism symptoms after comprehensive intensive early interventions in community settings" and found that there is appositive correlation between total stress scores and coping strategies subscales among parents having children with autism. Conversely, this result is in disagreement with Petcharat, & Liehr, (2017), who conducted a study entitled " Mindfulness training for parents of children with autism" and found that there is negative correlation between total stress scores and coping strategies subscales among parents having children with autism

7. Conclusion

The current study concluded that there highly statistically significant between stress subscales and total scale among parents having children with autism in pre and post intervention phase. While; there no statistically significant between stress subscales and total scale among parents having children with autism in post and follow up intervention phase.
There highly statistically significant relation between coping strategies subscales among parents having children with autism in pre and post intervention phase. While; there no statistically significant relation between coping strategies subscales among parents having children with autism in post and follow up intervention phase. All correlations are highly statistically significant relation, Self-distraction, Active coping, Use of emotional support, Venting, Positive reframing, Planning, and Religion are all negative correlation of strategy with total stress. It means more use of these strategies decrease the stress level

8. Recommendations

Based on the study finding, it was recommended that help parents of children with autism to continue their children's life normally. Establish special courses for all caregivers of children with autism in under the supervision of psychiatric hospitals about the psychological consequences of care of children with autism and the scientific base of managing it. A hotline must be available to solve immediate problems of caregivers of children with autism

9. References


