

Maternal Stressors and Coping Strategies toward their Children with Developmental Language Disorder

Sara Ahmed Abd-El Azeem⁽¹⁾, Amal Mohamed EL-Dakhakhny⁽²⁾ & Bataa Mahmoud Mohamed⁽³⁾

(1) Demonstrator at pediatric nursing department, Zagazig university

(2) Prof. of pediatric nursing, Zagazig University

(3) Lecturer of pediatric nursing, Zagazig University

Abstract

Background: Developmental language disorder is one of the most common types of special educational needs and is a risk factor for children's later development associated with enhanced behavioral, emotional, social difficulties and in particular peers problems, literacy difficulties and reduced levels of academic achievement. **Aim of the study:** was to assess maternal stressors and coping strategies toward their children with developmental language disorder. **Subjects& Method:** **Research design:** A descriptive exploratory design was used. **Setting:** The study was conducted at Speech outpatient clinic at Zagazig University Hospitals and Speech outpatient clinic at AL Ahrar Hospital. **Subjects:** The study sample was composed of 80 mothers of children with developmental language disorder. **Tools of data collection:** Three tools were used to collect the necessary data. **The first** was structured interview questionnaire sheet. **The second** was Parent's stressors scale and **the third** was Parental Coping Strategy Inventory. **Results:** **The study results** revealed that more than half of mothers had moderate stressors in relation to total mothers stressors as well as the majority of mothers had high coping. **Conclusion:** The study concluded the mothers facing many stressors including stressors related to their children's behaviors, psychological stressors, stressors related to restrictions of their roles, stressors related to relationship with spouse, social stressors and physical stressors and many of these mothers were coping with the situation as well as the stress score was negatively correlated with the coping score and the total stress score was related to the coping strategy of informational support. **Recommendations:** The study recommended that design mother's education program for the mothers of preschool children with language delay to reduce child's behavior problems, overcome maternal stressors and increase positive mother's coping.

Key words: Maternal Stressors, Coping, Developmental Language Disorder.

Introduction:

Speech and language delay are risk factors for delayed development, poor school performance, personal and social difficulties extending into adulthood (Mohair et al., 2014) as well as language is an important skill that allows a person to communicate. A child begins to develop language even before he/she can use words, a delay in language skills can cause frustration for a child as well as miscommunication about what he may be trying to convey (Megbrannagan, 2015). In addition to delayed language development is the most common developmental problem affecting 5 to 10 % of preschool children (National Institute on Deafness and Other Communication Disorders, 2017).

Parents of children with speech and language delay are exposed to different types of stressors. These stressors take the form of some feelings such as shyness, depression and

fear from the future as well as these stressors can affect on their children (American Psychology Association, 2017).

Stress is condition that is characterized by symptoms of physical or emotional tension. It is reaction to situation where a person feels threatened or anxious (Centers for Disease Control and Prevention, 2018).

The mothers play critical role in helping children to develop healthy appropriate communication attitude and positive self-image through complete acceptance of the child speaking abilities. If the parents convey the idea that disorders are bad the child will develop negative attitudes about his speaking abilities (Stuttering Center of Western Pennsylvania, 2014).

Coping strategies are the specific efforts both behavioral and psychological that people employ to tolerate or minimize stressful events. There are no standards for coping strategies

that may vary depending on socio-cultural factors (Redhwan et al., 2009). More over coping strategies have been shown to vary by region, community and social group as well as are influenced by individuals' previous experiences. Coping strategy is defined as someone's preferred way of dealing with stressful situations (Vigano et al., 2016).

The mothers can enhance the development of language skills with a child by interacting regularly, singing songs and reading simple stories. As a child grows he can talk about his day or explain his likes and dislikes. Mothers can play games with a child such as naming objects or practicing concepts of direction for example in, out, over and through. Moreover, mothers can Visit a library, encourage reading stories and teach a child simple stories and rhymes to encourage repetition and language (Megbrannagan, 2015).

The nurse can help the mothers to cope with their stressors associated with their children with language delay by raising parent's awareness about early diagnosis of language disorders. As well as their responsibilities to help mothers to take decision about bringing their children to speech language therapist (Aslan et al., 2015).

Significance of the Study:

Speech and language are the tools of the child to express about his own needs. In Egypt, developmental language disorder is the most common childhood disabilities and affect about 5-8% of preschool children. Speech and language disorders are overwhelming problem for the parents that may cause feeling of guilt and shame. There is scarcity of researches about this problem in this population. Therefore; this study will be conducted to assess maternal stressors and coping strategies toward their children with developmental language disorder.

Aim of the study:

The present study aimed to assess maternal stressors and coping strategies toward their children with speech and language disorders.

Research Questions:

- 1-What are the stressors faced by mothers of children with developmental language disorder?
- 2-What are the coping strategies used by mothers to adjust with these problem?
- 3- Is there relation between maternal stressors and their coping strategies?

Subjects and methods:

Research design:

A descriptive exploratory design was used.

Study setting:

The study was conducted at two setting

- Speech outpatient clinic at Zagazig University Hospitals.
- Speech outpatient clinic at AL Ahrar Hospital.

Study subjects:

The subjects of this study were composed of 80 mothers of children with developmental language disorder whom their children fulfilled the following criteria:

- Sex: both sexes.
- Age: 3-6 years
- Children free from any other neurodevelopmental disorders

Exclusion criteria:

The mothers having psychological disorders were excluded.

Sampling Technique:

- Convenient sample

Tools of data collection:

Three tools were used to collect the necessary data:

Tool I: Structured interview questionnaire

Structured interview questionnaire developed by researcher and it consisted of three parts:

- **Part A:** Characteristics of the studied

mothers including their age, level of education and occupation.....etc.

- **Part B:** Characteristics of the studied children such as age, gender, birth order and IQ.
- **Part C:** Medical history of the studied children.

Tool II: Parent's stressors scale

Parent's stressors scale developed by Elbeblawy,1998 and modified by Aslan et al., 2015 was adopted in this study to assess maternal stressors toward their children with speech and language disorders. The scale consisted of six items and 54 statements. Statements were on a 3-point Likert scale "never" "sometimes", and "always." These are scored from 0 to 2 respectively. The scores of each domain are summed-up and the total divided by the number of the items giving mean score for the part .These scores were converted into percent score then categorized into "mild stressors:<33%", "moderate stressors: 33-66%" and "sever stressors: >66%".

Tool III: Parental Coping Strategy Inventory

Parental Coping Strategy Inventory (PCSI) developed by (Yeh ,2001) to evaluate the coping strategies of parents having children with developmental disorders. The Arabic version of this scale was developed by (Mahmoud, 2007) and was utilized in this study. The scale consists of 66 item grouped into 12 subscales. These are namely: learning (9 items), struggling (4items), interaction with patient (6 items), interaction with spouse (6 items), interaction with healthy sibling (5 items)emotion support (4 items), information support (5 items),maintaining stability(8 items), maintaining an optimistic state of mind (6 items), searching for spiritual meaning (4 items) and increasing religious activities (4 items).

The items are rated on 4- point likert scale with response options: strongly disagree, disagree, agree and strongly agree. Higher score means greater use of particular coping strategy.

Scoring: The coping items were scored 4, 3, 2 and 1 for the responses strongly agree, agree, disagree and strongly disagree respectively. The scoring was reversed for negative items so that a higher score indicates better coping. The scores of items were summed up and the total divided by the number of the items giving mean score for the part .These scores were converted into percent score. The mother was considered to be high coping if the percent score was 60% or more and low coping if less than 60%.

Content Validity and reliability:

- **For validity assurance purposes**, tools were developed after a thorough review of the related literature and then submitted to a jury of five experts (one professor of pediatric nursing at faculty of nursing, one professor of medical surgical nursing at faculty of nursing, one professor of psychiatry at faculty of medicine and one professor of psychiatric & mental health at faculty of education, one professor of psychology at faculty of Arts). The recommended modification was done and the final form was ready for use.
- **Reliability** of tool was done by using cronbach's Alpha test reliability coefficient to measure the internal consistency for the final scales.
- The reliability of stress scale was 0.907.
- The reliability of coping scale was 0.887.

Field work:

Data was collected within six months starting in the period from the beginning of August 2017 to end of January 2018. The data was collected at three days per week (Saturday, Sunday and Monday) from 9:00 am to 1:00 pm. Each mother was interviewed individually , the researcher started with introducing herself and explaining the aim of the study for the selected mothers and obtaining their verbal consent assured that data collected will be confidential and would be used only to achieve the purpose of the study . The questionnaires were read, explained and the choices were recorded by the researcher. The time consumed for finishing the tools ranged from 20–30 minutes.

Pilot study:

It was carried on 10% of the total sample (6 mothers) after the tools were developed and before starting the data collection to test the applicability, consistency, clarity and the feasibility of the study tools as well as to determine the required time to fulfill the tools. No modification was done to the tools; accordingly mothers who shared in the pilot study were included in the study sample.

Administrative and ethical considerations:

All ethical issues were taken into consideration during all phases of the study:

- The research approval was obtained from ethical committee before starting study.
- The researcher maintained an anonymity and confidentiality of the subjects.
- The inclusion of subjects in the study was totally voluntary.
- The aim the study was explained to every mother before participation and oral consent was obtained.
- Mothers were notified that they can withdraw at any stage of the research; also they were assured that the information obtained during the study will be confidential and used for the research purpose only.

An official permission was obtained by submission of formal letters issued from the dean of faculty of nursing, Zagazig University to the responsible authorities of speech outpatient clinics at Zagazig university hospitals and Alahrar Educational hospital to obtain their permission for data collection.

Statistical analysis:

Data entry and statistical analysis were done using SPSS 20.0 statistical software package. Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables, and means and standard deviations and medians for quantitative variables. Cronbach alpha coefficient was calculated to assess the reliability of the scales through their internal consistency. Qualitative categorical variables were compared using chi-square test.

Whenever the expected values in one or more of the cells in a 2x2 tables was less than 5, Fisher exact test was used instead. In larger than 2x2 cross-tables, no test could be applied whenever the expected value in 10% or more of the cells was less than 5. Spearman rank correlation was used for assessment of the inter-relationships among quantitative variables and ranked ones. In order to identify the independent predictors of stress and coping scores, multiple linear regression analysis was used and analysis of variance for the full regression models done. Statistical significance was considered at p-value <0.05 and highly statistical significance was considered at p-value <0.01.

Results:

Table (1) represents Characteristics of families of studied children. It was found that 63.8% of studied mothers were in the age group of 30+ years old with mean of 32.3 ± 5.9 years. Regarding to marital status, it was found that 95% of studied mothers were married. Concerning to both mother's and father's education, it was clarified that 61.3% and 66.3% had basic and secondary education respectively. Also 81.3% of mothers were housewives whereas 88.8% of fathers were employees. As well as 68.8% of studied children lived in nuclear family.

Table (2) shows characteristics of studied children. It was illustrated that the mean age was 4.3 ± 0.9 years and 73.8% of studied children were males. As regard to the birth order, it was found that 73.8% was ranked as second or more. Additionally 45% of studied children had IQ ≥ 90 .

Table (3) portrays medical history of pregnancy and labor of studied children. It was displayed that 95% of studied children were full term and 20% of studied mothers had pregnancy problems. It was found that 43.8% had hypertension in addition to 53.8% of mothers exposed to passive smoking during pregnancy. Also 52.5% of studied mothers delivered by cesarean section and 10% had labor problem and 87.5% of them had hypoxia as labor problem.

Table (4) demonstrates history of the problem/ disease among studied children. The

results showed that 60% of mothers noticed the problem in their children before the age of 2 years. It was found that 82.5% of mothers had no consanguinity relationship with her husband. Additionally 62.5% of studied children exposed to parental violence and 52.5% didn't go to nursery.

Table (5) clarifies Stressors among studied mothers. Concerning stressors related to child behavior the most three moderate stressors were acceptability, distractibility and demandingness as they were represented (60%, 50% and 48.8%) respectively. Moreover for severe stressors related to child behavior were demandingness (37.5%) and acceptability (20.0%). The same table revealed that 46.3% of studied mothers had severe psychological stressors and 55% had severe stressors related to restrictions of their roles while 48.8% and 72.5% had mild stressors related to relationship with spouse and physical stressors respectively. Concerning social

stressors, it was found that 56.3% of mothers had moderate stressors. As regard to total stress score 65% of mothers had moderate stressors.

Table (6) represents coping strategies among studied mothers. The results revealed that the most coping strategies used by mothers were searching for spiritual meaning (100%) and maintaining optimistic state of mind (100%) followed by increasing religious activities (98%) and maintaining stability (92.5%). At the other extreme coping strategy through actual support was the least used. It was found that 73.8% of mothers had high coping compared to 26.3% had low coping regarding their children's problem.

Table (7) reveals Relations between stress among studied mothers and their coping strategies. It was represented that there was statistically significant relation between informational support coping strategy and maternal stress ($P=0.04$).

Table 1: Characteristics of families of studied children (n=80)

Characteristics	Frequency	Percent
Mother age:		
• <30	29	36.3
• 30+	51	63.8
Range	21.0-47.0	
Mean±SD	32.3±5.9	
Median	31.0	
Marital status:		
• Married	76	95.0
• Divorced/widow	4	5.0
Mother education:		
• Illiterate/ Read/write	12	15.0
• Basic/secondary	49	61.3
• Higher	19	23.8
Mother occupation:		
• Housewife	65	81.3
• Working	15	18.8
Father education:		
• Illiterate/ Read/write	13	16.3
• Basic/secondary	53	66.3
• Higher	14	17.5
Father occupation:		
• Unemployed	9	11.3
• Working	71	88.8
Family type:		
• Nuclear	55	68.8
• Extended	25	31.3
Crowding index:		
• <2	35	43.8
• 2+	45	56.3

Table 2: Characteristics and Intelligence Quotient (IQ) of studied children (n=80)

Characteristics	Frequency	Percent
Child age:		
• <5	54	67.5
• 5+	26	32.5
Range	3.0-6.0	
Mean±SD	4.3±0.9	
Median	4.0	
Gender:		
• Male	59	73.8
• Female	21	26.3
Birth order:		
• 1	21	26.3
• 2+	59	73.8
Range	1-6	
Mean±SD	2.4±1.2	
Median	2.0	
IQ:		
• <90	44	55.0
• 90+	36	45.0
Range	79-111	
Mean±SD	89.2±5.5	
Median	89.0	

Table 3: Medical history of pregnancy and labor of studied children (n=80)

Medical history	Frequency	Percent
Pregnancy:		
• Full-term	76	95.0
• Preterm	4	5.0
Had pregnancy problems	16	20.0
Problems:@		
• Diabetes	2	12.5
• Hypertension	7	43.8
• Ante partum hemorrhage	0	0.0
• Malnutrition	5	31.3
• Anemia	6	37.5
Exposed to smoking (passive)	43	53.8
Took non-prescribed medications	6	7.5
Had X-ray	2	2.5
Labor:		
• Normal vaginal	38	47.5
• Cesarean	42	52.5
Had labor problems	8	10.0
Problems (n=8)		
• Head trauma	1	12.5
• Hypoxia	7	87.5
Child needed incubator:		
• No	59	73.8
• Yes	21	26.3
Indication:@		
• Jaundice	15	71.4
• Infection	1	4.8
• Respiratory distress syndrome	6	28.6

@ Not mutually exclusive

Table 4: History of the problem/ disease among studied children (n=80)

History	Frequency	Percent
Age at problem start:		
• <2	48	60.0
• 2+	32	40.0
Range	<1.0-4.0	
Mean±SD	1.7±0.8	
Median	2.0	
Time since diagnosis (months):		
• <12	59	73.8
• 12+	21	26.3
Range	<1.0-30.0	
Mean±SD	5.4±5.9	
Median	3.0	
Consanguinity:		
• No	66	82.5
• Yes	14	17.5
Positive family history:		
• No	58	72.5
• Yes	22	27.5
Child exposed to parental violence:		
• No	30	37.5
• Yes	50	62.5
Child goes to nursery:		
• No	42	52.5
• Yes	38	47.5

Table 5: Total Stressors among studied mothers (n=80)

Stressors	Mild		Moderate		Sever	
	No	%	No	%	No	%
Stressors related to child behavior:						
• Distractibility	26	32.5	40	50.0	14	17.5
• Reinforcing parents	68	85.0	11	13.8	1	1.3
• Acceptability	16	20.0	48	60.0	16	20.0
• Mood	41	51.3	37	46.3	2	2.5
• Demandingness	11	13.8	39	48.8	30	37.5
• Adaptability	43	53.8	30	37.5	7	8.8
Total stressors related to child behavior	32	40.0	46	57.5	2	2.5
Total Psychological stressors	14	17.5	29	36.6	37	46.3
Total Stressors related to restrictions of parent role	8	10.0	28	35.0	44	55.0
Total Stressors related to relationship with spouse	39	48.8	32	40.0	9	11.3
Total Social stressors	26	32.5	45	56.3	9	11.3
Total physical Stressors	58	72.5	18	22.5	4	5.0
Total stress	24	30.0	52	65.0	4	5.0

Table 6: Coping strategies among studied mothers (n=80)

Coping Strategies (high: 60%+)	High		Low	
	No	%	No	%
• Learning	48	60.0	32	40
• Struggling	46	57.5	34	42.5
• Interaction with affected child	49	61.3	31	38.7
• Interaction with spouse@	55	70.5	23	29.5
• Interaction with healthy siblings@	19	25.3	56	74.7
• Emotional support	46	57.5	34	42.5
• Cognitive support	36	45.0	44	55
• Actual support	11	13.8	69	86.2
• Maintaining stability	74	92.5	6	7.5
• Optimistic state of mind	80	100.0	0	0.0
• Searching for spiritual meaning	80	100.0	0	0.0
• Increasing religious activities	79	98.8	1	1.2
Total Coping	59	73.8	21	26.3

@ Excluding the not applicable

Table 7: Relations between stress among studied mothers and their coping strategies

Coping strategies	Stress				X ² test	p-value
	Mild		Moderate/severe			
	No.	%	No.	%		
Learning:						
• High	17	35.4	31	64.6		
• Low	7	21.9	25	78.1	1.68	0.20
Struggling:						
• High	16	34.8	30	65.2		
• Low	8	23.5	26	76.5	1.18	0.28
Interaction with affected child:						
• High	16	32.7	33	67.3		
• Low	8	25.8	23	74.2	0.42	0.52
Interaction with spouse: @						
• High	19	34.5	36	65.5		
• Low	5	21.7	18	78.3	1.25	0.26
Interaction with healthy siblings: @						
• High	9	47.4	10	52.6		
• Low	15	26.8	41	73.2	2.76	0.10
Emotional support:						
• High	16	34.8	30	65.2		
• Low	8	23.5	26	76.5	1.18	0.28
informational support:						
• High	15	41.7	21	58.3		
• Low	9	20.5	35	79.5	4.24	0.04*
Actual support:						
• High	1	9.1	10	90.9		
• Low	23	33.3	46	66.7	Fisher	0.16
Maintaining stability:						
• High	23	31.1	51	68.9		
• Low	1	16.7	5	83.3	Fisher	0.66
Optimistic state of mind:						
• High	24	30.0	56	70.0		
• Low	0	0.0	0	0.0	0.00	1.00
Searching for spiritual meaning:						
• High	24	30.0	56	70.0		
• Low	0	0.0	0	0.0	0.00	1.00
Increasing religious activities:						
• High	24	30.4	55	69.6		
• Low	0	0.0	1	100.0	Fisher	1.00
Total coping:						
• High	20	33.9	39	66.1		
• Low	4	19.0	17	81.0	1.63	0.20

(*) Statistically significant at $p < 0.05$

@ Excluding the not applicable

Discussion:

The present study illustrated that more than half of studied mothers were at the age of 30⁺ with mean age 32.3 ± 5.9 years. This finding was contradicted with **Diepeveen et al., 2017** who conducted study about Specific language impairment is associated with maternal and family factors and found that children with specific language impairment had younger mothers than children in the control group with mean age 30 ± 0.9 versus mean 31 ± 0.9 . Also a

relationship was found between specific language impairment and maternal age.

Concerning to mothers and fathers education, the current study clarified that more than half of mothers and fathers had basic and secondary education. This might be justified that low educated mothers can't use rich vocabulary and can't speak in longer utterances when interacting with their children. These findings were consistent with **Wallace et al., 2015** who carried out study about Screening for speech and language delay in children 5

years old and younger and stated that low parental education was risk factor associated with speech and language delay.

Regarding to the family type, the results of the current study showed that more than two third of studied children were lived in nuclear families. This might be due to child's communication skills chance decrease in small families. These findings were consistent with **Gad-Alla et al., 2012** who conducted study about identification of communication disorders among Egyptian Arabic speaking nursery school's children and found that the majority (96.9%) of children with developmental language disorder were lived with their parent only.

The present study revealed that more than half of studied children were males and more than one third of children with developmental language disorder had IQ level ≥ 90 with mean 89.2 ± 5.5 . These results might be due to males are likely to develop developmental language disorders than females. This finding agrees with **craig et al., 2016** who conducted study about Parenting stress among parents of children with Neurodevelopmental Disorders and found that two third of children with language disorders were males and about half of them had IQ level ≥ 85 .

Hawa & Spanoudis, 2014 carried out study about Toddlers with Delayed Expressive Language: An Overview of the Characteristics, Risk Factors and Language Outcomes and mentioned that first born children experience an early social and language environment which is different from that experienced by later born children with greater possibilities for communicative interaction with an adult. This finding agrees with the result of the current study that showed that more than half of studied children were ranked as second or more regarding birth order.

The current study clarified that more than three quarter of studied children were full term. This finding was in consistent with **Laplante et al., 2004** who carried out study about Stress during Pregnancy affects General Intellectual and Language Functioning in Human Toddlers and reported that the gestational age at birth were not significantly related to the intellectual and language development in the toddlers.

On the other hand, this finding disagrees with **Zerbeto et al., 2015** who carried out study about association between gestational age and birth weight on language development of Brazilian children and found that preterm infants showed more expressive language delay and concluded that prematurity is a risk for developmental language delay especially during early years. Also this is in congruent with **Lean et al., 2018** who conducted study about Social Adversity and Cognitive, Language and Motor Development of Very Preterm Children from 2 to 5 Years of Age and mentioned that preterm children demonstrated poorer cognitive and language development.

Concerning pregnancy problems, results of the current study revealed that less than quarter of studied mothers were complaining from pregnancy problems and nearly half of them had hypertension. This finding goes in line with **Aslan et al., 2015** who conducted study about Parents Role and Stressors toward their children with speech and language problems at Ain shams university and found that less than quarter of mothers were complaining from chronic diseases during pregnancy and more than two thirds of them had hypertension. This might be justified that the gestational hypertension is one of the adverse early risk factors that may predispose to impaired cognitive development in childhood (**Heikura et al., 2013**).

Moreover, **Polanska et al., 2017** conducted study about environmental tobacco smoke exposure during pregnancy and child neurodevelopment and found that there was statistically significant negative association between environmental tobacco smoke exposure in 1st and 2nd trimester of pregnancy and language development at the age of two years. In addition, passive smoking in the 1st trimester of pregnancy was associated with reduced cognitive development among two year old children. This agrees with the results of the current study that illustrated that more than half of studied mothers were exposed to passive smoking during pregnancy. This might be referred to smoking is common and popular habit among partners.

Concerning history of problem, the results of the current study revealed that more than half of studied mothers reported child exposure to parental violence. This might be attributed to

parental lack of knowledge and attitudes toward discipline. This finding was congruent with **Gilbert et al., 2013** who conducted study about Child exposure to parental violence and psychological Distress Associated with delayed milestones and found significant association between child exposure to parental violence and language delay. Similarly with **lum et al., 2015** who carried out meta- analysis of cross sectional studies investigating language in maltreated children showed that maltreated children demonstrated consistently poor language skills.

Concerning stressors among studied mothers, the current study revealed that more than half of mothers had moderate stressors, more than one quarter had mild stressors and had sever stressors. These results might be due to the emotional burden of unhealthy child with his mother. These findings were supported by **Baea et al., 2015** who reported that parenting children with developmental disorders may be significant source of stress while the level of parenting stress is greater in parents of children with developmental problems compared to parents of normally developing children, furthermore children with special health care needs generally use more health care and related services than typically developing children which increases financial burden placed on parents.

Blumenfeld et al., 2018 carried out study about Language development delay in 24-month-old children at a health care center of the City of Buenos Aires and found that developmental language delay was significantly associated with behavior problems and parental stress related to children's behaviors. This finding goes in line with the current study that clarified that more than half of studied mothers had moderate stressors related to child behaviors. This might be justified that problem behavior is disruptive to family's quality of life and restricts the child from participating in regular school and community activities as well as disruptive behavior is strong maintaining factor to parent stress (**Walsh et al., 2013**).

As regard to psychological stressors among studied mothers, the current study found that more than one third complained from psychological stressors due to their children's problem. This might be justified that parents experience stress due to challenging external

realities of raising child with special needs .Also the financial pressures may develop when the parents are unable to care for their child or need to pay for services that are not covered by insurance or other agencies (**American Psychological Association, 2018**).This result agrees with **Vidyasagar & Koshy, 2010** who mentioned that some parents who have children with developmental delay experience helplessness, feeling of adequacy, anger, guilt, deep sadness and depression.

Mohammed, 2012 conducted study about psychological stressors of parents' care giving children with Down syndrome at Ain shams University and mentioned that the time spent in helping the child with developmental disability was the most frequently reported stress, therefore parents had no time for rest, their recreational activities were reduced and their marital relation was affected. This finding was in agreement with the result of the present study where more than half of studied mothers had sever stressors related to restrictions of their roles and the majority had mild stressors related to marital relation. This might be justified that the children with developmental language disorder need more care and interest from their mothers consequently increases mother's responsibilities and the marital relation should be affected.

More over the current study clarified that almost three quarters of studied mothers had mild physical stressors. This might be justified that parenting child with developmental delay is an exhausting task especially for mothers as they are more involved with care giving. This finding was in accordance with **Pietrangelo & Watson, 2017** who stated that physical stress can play apart in problems and is manifested as headache, high blood pressure, heart problems, anorexia, asthma, sleep disturbance, feeling sick and weight loss.

Regarding social stressors of the studied mothers, the current study showed that more than half of studied mothers mentioned that their children problem could be source of moderate social stressors. This might be attributed to they have barriers to make social activities. This result is supported by **corrice & glidden,2009** who reported that the majority of mothers of children with Down syndrome feel stigmatized by the condition of their children and are not willing to give them the opportunity to socialize.

As regard to coping strategies among studied mothers, the current study clarified that the most coping strategies used by mothers were searching for spiritual meaning, maintaining optimistic state of mind followed by increasing religious activities and maintaining stability. At the other extreme coping through actual support was the least used. This might be attributed to mother's educational level culture and religious rituals. On the same line **Morse, 2011** conducted study about Smith-Magenis Syndrome: Maladaptive Behaviors and Effects on Parent Stress, Coping, and Family Adjustment and demonstrated an increasing trend of the use of spiritual support among parents of autistic children.

Regarding the relation between stress among studied mothers and their coping strategies. The current study illustrated that there was statistically significant relation between informational support strategy and maternal stress. This might be justified that mother's awareness with their child disorder and involving them in the management process allow them to understand and facilitate the desired therapeutic changes reducing stress.

This result was consistent with **Plexico & Burrus, 2012** who carried out study about Coping with Child who Stutters: A phenomenological analysis and concluded that to relieve many forms of stress experienced by parents of children with developmental disorders, the clinicians need to provide information that will help parents to cope with their situation more effectively. This includes providing information on the nature of disorder, the cause of disorder and the therapeutic process.

Conclusion:

Based upon the findings of the present study, it can be concluded that almost half of studied mothers have high levels of stress and the mother facing many stressors including stressors related to their children's behaviors, psychological stressors, stressors related to restrictions of their roles, stressors related to relationship with spouse, social stressors and physical stressors. Meanwhile many of these mothers are coping with the situation. The mostly used coping strategies are those of searching for spiritual meaning, optimistic state of mind, increasing religious activities and

maintaining stability, while the use of actual support is the least used. The stress score is negatively correlated with the coping score and the total stress score is related to the coping strategy of informational support.

Recommendations:

In the light of the findings of the current study, the following recommendations are suggested:

- Encourage the mothers about the importance of accepting the child as he/she is
- Orientation of the mothers of children with language delay about community resources, care setting and necessary information to overcome and alleviate their stressors.
- Simple guidelines for the mothers about normal developmental milestone should be available in each setting providing care for those children.
- Design mother's education program for the mothers of preschool children with language delay to reduce child's behavior problems, overcome maternal stressors and increase positive mother's coping.
- The programs of mothers of children with developmental language disorder such as stress management, coping skills and communication with child should be part of formal special education programs.
- To increase cognitive and language abilities of children, the mothers will be suggested to use simple words when talking to children and to use demonstration to help children understand new learning tasks as well as picture cards are introduced to help children express their emotions.

References:

- 1- American psychological Association (2018): Mental health in early intervention: Achieving unity in principles and practice. Paul H Brookes Publishing. Available at: <http://psycnet.apa.org/record/2006-04189-000> . Accessed on [29 November, 2018 at 5:00A.m].
- 2- American Psychology Association: Managing Stress in his Family. Available at <https://www.apa.org/helpcenter/managing->

- [stress.aspx](#). (2014). Accessed on 5 March 2017.
- 3- Aslan EI, Adly RM and Elsyed ZF: Parents Role and Stressors toward their children with speech and language problems. Unpublished Master Thesis. Faculty of Nursing. Ain Shams University. (2015): P.3.
 - 4- Baea S, Jacksona B, Baninia S, Loa K, Sua F, Lykens K & Singha K (2015): Financial stress and income disparities in parents of children with special health care needs. Available at: <http://mssanz.org.au/modsim>. Accessed on [29 November, 2018 at 4:00A.m].
 - 5- Blumenfeld A, Carrizo ollala J , D Angelo SI, Gonzalez NS, Sadras Y, Graiser S, Macario A& Salamanco G: Language development delay in 24-month-old children at a health care center of the City of Buenos Aires. Arch Argent Pediatr, (2018); 116(4) 242-247.
 - 6- Centers for Disease Control and Prevention : Coping with Stress.Available at: https://www.cdc.gov/violenceprevention/pub/coping_with_stress_tips.html (2018). Accessed on [23 January 2019 at 3:00p.m].
 - 7- Corrice A.M and Glidden L.M: The Down syndrome Advantage: Fact or Fiction, American Journal on intellectual and Developmental Disabilities, (2009); 114(4) 254-268.
 - 8- Craig F, Operto F F, De Giacomo A, Margari L, Frolli A, Conson M & Margari F: Parenting stress among parents of children with neurodevelopmental disorders. Psychiatry research. (2016) ; 242 121-129.
 - 9- Diepeveen FB, van Dommelen P, Oudesluys-Murphy AM & Verkerk PH: Specific Language Impairment is Associated with Maternal and Family Factors. Child: care, health and development. (2017); 43(3) 401-405.
 - 10- Elbeblawy V (1998): Parent Stressors Scale. Anglo Library, Cairo, Egypt.
 - 11- Gad-Allah, H., Abd-Elraouf, S., Abou-Elsaad, T., & Abd-Elwahed, M: Identification of communication disorders among Egyptian Arabic-speaking nursery schools' children. Egyptian Journal of Ear, Nose, Throat and Allied Sciences. (2012); 13(2) 83-90.
 - 12- Gilbert A. L, Bauer N. S, Carroll A. E & Downs S. M: Child Exposure to parental violence and psychological Distress Associated with Delayed Milestones. Pediatrics, peds . (2013); 132(6) 1577-1583.
 - 13- Hawa V.V & Spanoudis G : Toddlers with Delayed Expressive Language: An Overview of the Characteristics, Risk Factors and Language Outcomes. Research in Developmental Disabilities. (2014); 35(2) 400-407.
 - 14- Heikura, U, Hartikainen, A L, Nordström, T, Pouta A, Taanila A & Järvelin M R: Maternal hypertensive disorders during pregnancy and mild cognitive limitations in the offspring. Paediatric and perinatal epidemiology, (2013); 27(2) 188-198.
 - 15- Laplante D. P, Barr R. G, Brunet A, Du Fort G. G, Meaney M. L, Saucier J. F& King S: Stress during pregnancy affects general intellectual and language functioning in human toddlers. Pediatric research. (2004); 56(3) 400- 410.
 - 16- Lean R.E, Paul R.A, Smyser T.A, Smyser C.D & Rogers C. E: Social Adversity and Cognitive, Language and Motor Development of Very Preterm Children from 2 to 5 Years of Age. The Journal of pediatrics, (2018); 203 177-184.
 - 17- Lum J.A, Powell M, Timms L & Snow P : A meta-analysis of cross sectional studies investigating language in maltreated children. Journal of Speech, Language, and Hearing Research, (2015); 58(3) 961-976.
 - 18- Mahmoud S F: Psychiologiical Problems and Adjustment among Parents of Children with Attention Deficit Hyper activity Disorder. Unpublished Master Thesis. Faculty of Nursing. Zagazig University. (2007).
 - 19- Megbrannagan: Why language is important to a child. Available at: <http://www.livestrong.com/article/225526-how-to-teach-english-to-small-kids>. (2015). Accessed on 8 Feb 2017.
 - 20- Mohair M, Barnett N, Tara's J, Cole M, Jones E and Levin L: Speech and language support. How physician can Identify and treat speech and language delays in the office setting. Journal of Pediatric Child Health .(2014),19(1) 13-18.
 - 21- Mohamed I: Psychological Stressors of Parents Caregiving Children with Down Syndrome. Master Thesis; Faculty of

- Nursing, Ain Shams University.(2012): PP 93,104,121.
- 22-Morse R.S : Smith-Magenis Syndrome: Maladaptive Behaviors and Effects on Parent Stress, Coping, and Family Adjustment. Published Doctoral Thesis. Faculty of George. Mason University. (2011). p.20.
 - 23-National Institute on Deafness and Other Communication Disorders Speech and Language Delay and Disorder. Available at: <https://www.nidcd.nih.gov/health/voice/stutter.asp>. (2017). Accessed at 11 Feb 2017
 - 24-Pietrangelo A & Watson S (2017): The Effects of Stress on Your Body. Available at: <https://www.healthline.com/health/stress/effects-on-body#1>. Accessed on [30 November, 2018 at 6:30A.m].
 - 25-Plexico L. W & Burrus E : Coping with a child who stutters: A phenomenological analysis. *Journal of Fluency Disorders*, (2012); 37(4) 275-288.
 - 26-Polanska K, Krol A, Merecz-Kot D, Ligocka D, Mikolajewska K, Mirabella F, & Hanke W: Environmental tobacco smoke exposure during pregnancy and child neurodevelopment. *International journal of environmental research and public health*, (2017);14(7):1-12.
 - 27-Redhwan A, Sami A, Karim A, Chan R & Zaleha M: Stress and coping strategies among management and science university students: A qualitative study. *International Medical Journal*.(2009)) ; 8(2):11-15.
 - 28-Stuttering Center of Western Pennsylvania: Helping Children Who Stutter Develop Healthy Communication Attitudes. Available at:<http://www.marshall.edu/mu-speech-and-hearing-center/files/Developing-Healthy-Attitudes.pdf>. (2014). Accessed on 12 Feb 2017.
 - 29-Vidyasagar N & Koshy S: Stress and Coping in Mothers of Autistic Children. *Journal of the Indian Academy of Applied Psychology*, (2010); 36(2) 245-248.
 - 30-Vigano C, Calzolari R, Marinaccio P and Bezzio C : Unrevealed Depression Involves Dysfunctional Coping Strategies in Crohn's Disease Patients in Clinical Remission. *Journal of Gastrology Research and Practice*. (2016); 2016(1) 1-7.
 - 31-Wallace I. F, Berkman N. D, Watson L. R, Coyne-Beasley T, Wood C. T, Cullen K & Lohr K. N: Screening for speech and language delay in children 5 years old and younger: asystematic review. *Pediatrics*. (2015); 136(2) 448-462.
 - 32-Walsh, C. E., Mulder, E., & Tudor, M. E: Predictors of parent stress in a sample of children with ASD: Pain, problem behavior, and parental coping. *Research in Autism Spectrum Disorders*, (2013); 7(2) 256-26.
 - 33-Yeh C.H: Development and testing of the parental coping strategy inventory (PCSI) with children with cancer in Taiwan. *Journal of advanced nursing*. (2001) ; 36(1) 78-88.
 - 34-Zerbeto A.B, Cortelo F.M & Élio Filho B.C : Association between gestational age and birth weight on the language development of Brazilian children: a systematic review. *Jornal de Pediatria (Versão em Português)*. (2015); 91(4) 326-332.