

Life Style Profile of School Age Children Suffering From Pathological Stuttering

Mervat Ali Abdo Said Ahmed

B. S. C. Nursing, Faculty of Nursing Tanta University

Rahma Soliman Bahgat

Professor of Pediatric Nursing, Faculty of Nursing, Tanta University

Dr. Mohammed El-Sayed Darwish

Lecturer of Phonetics E.N.T Department, Faculty of Medicine, Head of Speech Therapy Center

Abstract

Stuttering as a speech event that contains intraphonemic disruption, part-word repetitions, monosyllabic whole word repetitions, prolongation and silent fixations (blocks). The present study aimed to investigate the lifestyle profile of children suffering from pathological stuttering and to identify the factors that worsen or improve the child with pathological stuttering. This study followed a descriptive design. The study was conducted on 60 children who were attending the speech therapy in Tanta University. Data were collected by using two tools: questionnaire sheet, observation checklist. The results revealed, a mean age of stuttering children, it was found that 63.3% of children with stuttering had a mean age of 8.17 ± 1.66 years. Significant difference was found between the mean age of stuttering children and his socialization. Significant difference was found between the mean age of stuttering children and response to treatment. From the present study it can be concluded that the pathological stuttering as disease is easy to diagnose, difficult to treat has many negative impact on physical, psychological, social and spiritual aspect of children life. This study recommends that searching for the causation of stuttering. Health education and counseling of stuttering children and their mothers includes follow up to speech therapy, family

Introduction

School-age period characterized by cognitive and language development progresses rapidly. Vocabulary expands, and Sentence structure becomes more complex.⁽¹⁾ The assessment of the progress in language development includes examination of three interactive components of language itself: phonics, or speech sound; syntax or grammar and semantics or meaning in language forms such as word and sentence. Usually, speech is fluent, fluent speech is free of any interruption, blockage but disfluency is defined as a breakdown or blockage in the forward flow of speech. The occurrence of disfluency is not the same of stuttering though stuttering is characterized by an excessive amount of disfluency.^(2,3) One of the most common speech disorders is stuttering. This disorder is state mixed of these of item as; word break, protracted telling, repeating the first sound and lock or stopping but none of these items are lonely defined stuttering. It can also be defined as speech have difficulty speaking because of repetition, protraction, or involuntary lock.^(4,5) Stutter is a complex,

multi-dimensional. Stuttering can range in frequency and intensity from mild to severe. Stress can sometimes make it worse. The struggle to speak may be accompanied by physical gestures or movements⁽⁶⁾

Prevalence of stuttering how many people stutter at a given point in time appear to be somewhat lower than 1 % (according to Craig; 2002⁽⁷⁾ the actual incidence is approximately 5% with onsets. Occurring mainly at the age Pre School (Andrews Harris, 1964; Manson, 2002) is about 2, 5% that is, about 1 in 20 children now stutter incidence is about 5% or 1 in 20 children at same point in childhood⁽⁸⁾. Males stutter than females. People who stutter make up about 1% in the West Indies, 3-4% of population stutters. African countries seen to have the highest prevalence of the stuttering with about 8-9% of population stuttering⁽⁹⁾ Causes of stuttering in children are not surely known, but most researchers believe that the stuttering occurs as the result of a variety of factors. They may include one or more of the following First; Genetic plays role sixty percent of all people who stutter have close family member who also stutters

(Zerbrowski, 2003). Scand; Developmental stuttering beginning at the age of 18 months to 2 years, as they hone their speech and language skills. Third; neurological factors researchers has found in some cases, there seems to be a problem in the way language is transmitted through the brain. Scientists don't know exactly why this occurs^(10, 11) Language and communication skills an essential of school life is the use of a system of symbols for communication and thought. Early in school life judgments are made intuitive on superficial appearance with increasing experience and language at his disposal. The child can image complex situation think out the most appropriate solution and anticipate the outcome. The child has developed logical thinking from assimilating experience into schemes^(2, 3) Life style is a way of living including behaviors that promote or impair good health and longevity, the young child with stuttering must learn how to adapt their self care and minimize any disruption of their lifestyle⁽¹²⁾ so, the contents of life style profile program of the stuttering child should focus on the needs and capabilities of

the learners to ensure the three main categories including survival skills, health maintenance skills and health promoting skills^(13, 14, 15) Stuttering education can be divided into three main categories survival skills, health maintenance skills and health promotion skills Health maintenance preserves the present state of health and health promotions skills maximize the optimal level of functioning and health hazard are reduced. The care program of those children must invade also every aspect of patient's life including home & school. These skills comprise the necessity for scheduled speech therapy, regular physical activities, normal communication with others.⁽¹⁶⁾ Stuttering impact in their academic performance at school and relationship with teacher and classmates; according to the study of Klompas and Rass(2004) on life experience of individually with stuttering⁽¹⁷⁾ The nurse play an important role for the care of stuttering children which help in improving the quality of life and facilitating the children and family's adaptation to this problem. She encourages the child to adjust himself to live a

satisfactory life and to be a productive number in the society it is very important for nurse to study the life style of stuttering children to be able to achieve her role efficiency⁽¹⁸⁾

Aim of the study:

1-To investigate life style profile of school age children suffering from pathological stuttering.

2- Identify the factor that worsen or improves the child with pathological stuttering.

Materials and Method

Research design

A descriptive design was used in this study

Setting: The study was conducted at the Speech Therapy Center of Tanta University Hospital

Subjects:

Composed of 60 school age children suffering from pathological stuttering and their mothers or caregivers who attended the previous setting were included. The children had the following criteria: -

Both sex, Age ranged from 6-15years. Free from any other speech problem. Started speech therapy.

Tools of data collection:

Two Tools Were Used In Data Collection:

Tool (I): Structured Questionnaire sheet

It was developed by the researcher after reviewing of literature to obtain the following information:

a) Biosocial data of both pathological stuttering children Such as:

Age, sex, birth order, educational level

Development history such as first defines of family, sitting, walking, talking, control of bladder, delay of language.

b) Biosocial data of mothers Such as:

Age, educational level, occupation, family size, number of siblings, Family history of stuttering, presence of parental consanguinity.

c) The three main categories of health promoting life style Profile:

Survival skills.

Health maintenance skills.

Health promotion skills.

1) Survival skills

Entailed The Following Items:

Items related to the need for speech therapy

Relation between speech therapy and speech

Production

Items related to children communication with others.

Information about speech therapy per week and its effect.

Schedule for speech therapy.

Psychological assessment was done to assess psychological state of school age children during speech session such as (anxiety, anger, and avoidance)

(2) Health maintenance skills

They entailed The Following Items:

- Physical exercise such as different types of sports.

-Social relations of the stuttering child as making friendly relationship with classmates, neighbors and participation in activities with others, playing in groups, school or in the club.

3) Health promoting skills

They entailed the following items: Ask mothers about some information, if not they should be given in counseling:

Counseling of the school age children suffering from pathological stuttering and their mothers

-Counseling is a kind of experience that will

help them to change their attitude, which includes: -Help the child in every possible way to feel that he is normal

Be ready to make reasonable change in the environment to facilitate verbal communication

Reduce communication stress

Be good listener

Allow time for the child to speak

-Don't ask the child to talk when he is very emotional stressed especially when crying
Don't allow others to tease, ridicule, interrupt or joke about the child's speech

Follow up visits for speech therapy and its recording in a certain file of the outpatient clinic

Tool (II): Observation checklist

It was developed by the researcher after reviewing the literature to observe school age children suffering from pathological stuttering and their mothers during speech therapy.

Method

1-AdministrativeProcess

An official permission was obtained from the head of speech therapy department for carrying out this study.

- Children and their mothers were selected by using simple random method.
- Based on reviewed literature, the tool of study was developed.
- - Data for this study covered a period of five months from August 2012 to December 2012.
- Both nurses and other working in the clinic were informed about the role of the researcher to gain their cooperation and secure proper communication.
- Children and their mothers' consents were obtained to participate in this study.

2- Development of the Study Tools:

Two tools were designed and used in this study: a questionnaire sheet and observation checklist was developed after reviewing recent literatures.

3- Ethical consideration:

Privacy and confidentiality of data and results were considered. Also the study samples were informed that they can withdraw from the study at any time.

4- Pilot Study:

A pilot study was carried out on a sample of 10 children and their mothers/caregivers to verify the applicability, feasibility and test the clarity of the questions and estimate the time required for each interview. The necessary modification was carried out. The data obtained from the pilot study was analyzed then some questions were restated and some items were added.

5- The Actual Study

- Children and their mothers'/caregivers were interviewed using a questionnaire sheet in the outpatient speech therapy to assess their knowledge. Every child and his or her mother /caregivers was interviewed for 20-30 minutes.
- The researcher observed children and their mothers /caregivers while taking speech therapy regarding the following:-

a) Speech production of school age children such as:

- Frequency of occurrence of stuttering.

- Duration and consistency of stuttering.
- The child uses a speech rate that is either too fast or too slow.
- The child repeats the beginning sound of words.
- The child repeats whole words.
- The child repeats whole phrases.
- The child uses interjections.
- The child engages in additional behavior when speaking.
- Presence of any other speech disorder and symptoms appear during therapy.
- Observe mothers when demonstrating instruction provided by the doctors.

b) Communication Skills

To assess the following information:
Verbal and non verbal abilities

1) Vocalization such as:

-The child has difficulty to remember and use content area terms

The child uses immature vocabulary

- The child has difficulty making word association or comparisons

2) Social pragmatics such as:

- The child is cooperative and attentive.
- The child uses poor eye contact.
- The child is easily distracted or has short attention.
- The child is easily frustrated or impulsive.
- The child has difficulty using language for the purposes.
- The child prefers structure routine and prefers to spend more time alone rather than in-group.

Statistical design:

The collected data were organized, tabulated and statistically analyzed using SPSS statistical package version 19. Numerical variables were presented as mean and standard deviation. for comparison of mean values, student's t test was used for categorical variables , the number and percent distribution was calculated and difference were tested using Monte Carlo

exact test. Chi square was not used because of small sample size and presence of small observations in some categories which is one of the limitations of the use of chi square. Spearman's correlation was used to test association between stuttering and total socialization score. The level of significance was adopted at $p < 0.05$.

Results

Table (1) shows the percentage distribution of mothers/caregivers according to their biosocial characteristics. It is observed that the highest percentages of mothers (40%) were aged 30 years, with a mean age of (34.92 ± 5.56) years. Illiteracy, reading and writing prevailed in (13.4%) and university grades in (35%) while primary and secondary grades had more percentage than others (51.7%). More than half of the samples (63.3%) were housewives but (36.7%) are employees. Also this table shows that more than half of the sample (55%) have 3-4 members in the family with a mean of (3.60 ± 1.62) . Regarding the family residence, it is clear that about more than half 58.3% of the samples live in urban area

and about (41.7%) of the samples live in rural area.

Table (2) shows the percentage distribution of children characteristics according to family history. The positive family history of stuttering constituted (25%) of the sample distributed as follows: uncles (40%) ante (33.3%) and (26.7%) cousins. It is noticed that the start of stuttering at three years occurred in (35%) also gradual illness in (63.4%) This table shows also positive parents consanguinity in (25%) while positive sibling history of stuttering in (16.7%). A reason for stuttering was found in 28.3%

Table (3) shows the percentage distribution of children according to response to treatment. It is noticed that more than half of the sample (61.7%) had disturbance of normal speech. It is clear that (93.3%) had impact of irregular speech therapy. Children with stuttering taking therapy constituted (53.3%), maintenance follow up at home (11.7%) compared to those taking oral treatment is (1.7%).

According to psychological state of children during session, it is clear that about half of the sample (50%) had anxiety state, less slightly than one third of the sample (31.7%) had anger and avoidance was found in (18.3%).

Table (4) shows the correlation between children response to treatment and their age in years. A significant difference is observed between children age in years and having response to speech therapy ($P= 0.017$). No significant differences were observed between disturbances of a normal speech, impact of irregular speech therapy, type of impact, stage of treatment, function of speech session, needs for speech per week, content of speech session, psychological state during speech session ($P = 0.811, 0.567, 1.000, 0.083, 1.000, 0.833, 0.317, 0.983$ respectively).these findings are illustrated in figure (4-10).

Table (5): shows the correlation between children response to treatment and mothers' educational level. A significant difference was observed between mothers educational level and having need for speech therapy

session and response to speech therapy treatment ($P= 0.05, 0.033$). The table illustrates that no significant differences were observed between mothers educational level and disturbance of a normal speech , impact of irregular speech therapy, type of impact, stage of treatment, function of therapy, content of speech session, psychological state during session($P = 0.683, 0.817, 0.550, 0.500, 0.767, 0.450, 0.567$ respectively).

Table (6): illustrates the comparison of total socialization score in relation to language delayed. No significant difference between socialization and delayed language development was found ($p= 0.691$) and (t test = 0.399).

Table (1): percentage Distribution of stuttering children according to mothers' characteristics

Characteristics of mothers of stuttering children	(n=60)	%
	No	
Age in years:		
25-	11	18.3
30-	24	40.0
35-	13	21.7
40-	9	15.0
45+	3	5.0
Mean±SD	34.92±5.56	
Educational level:		
Illiterate or read and write	8	13.4
Primary and preparatory	16	26.7
Secondary or technical institute	15	25
University	21	35.0
Occupation:		
Housewife	38	63.3
Employee	22	36.7
Family size:		
1-2	14	23.3
3-4	33	55.0
5-6	9	15.0
7+	4	6.7
Mean±SD	3.60±1.62	
Accommodation type:		
Shared house	6	10.0
Private house	40	66.7
Rented house	14	23.3
Residence:		
Urban	35	58.3
Rural	25	41.7

Table (2): percentage Distribution of stuttering children according to family history

Family history	(n=60)	%
	No	
Positive family history for stuttering		
Yes	15	25.0
No	45	75.0
Relationship to family history:	(n=15)	25.0%
Positive Uncle	6	40.0
Positive Ante	5	33.3
Positive cousins	4	26.7
Negative	45	75
Start of stuttering:		
<2 years	17	28.3
2- years	12	20.0
3- years	21	35.0
4+ years	10	16.7
Start of illness:		
Gradual	38	63.4
Sudden	22	36.7
History of Parents consanguinity		
Yes	15	25.0
No	45	75.0
Sibling history of stuttering		
Positive	10	16.7
Negative	50	83.3
Causes of stuttering		
Yes	17	28.3
No	43	71.7

Table (٢): percentage Distribution of stuttering children according to response to treatment

Response to treatment:	(n=60)	%
	No	
Disturbance of normal speech	37	61.7
Impact of irregular speech therapy	56	93.3
Relationship with teacher	7	12.1
Relationship with other student	9	15.5
School action	10	17.2
Family relationship	32	55.2
Stage of treatment :		
Follow up at home	7	11.7
Taking therapy	32	53.3
Taking oral treatment	1	1.7
Maintenance therapy and follow up at home	20	33.3
Function of speech therapy :		
Ability to cooperate with others	47	78.3
Don't know	13	21.7
Child need for speech therapy session per week		
Follow up(every 3 months)	14	23.3
Once per week	13	21.7
Twice per week	28	46.7
Thrice per week	5	8.3
Response to speech therapy treatment:	52	86.7
Ability to interaction with society	10	17.2
Psychological status improved	13	22.4
Interaction with family and School	6	10.3
Improved action in school	5	8.6
Improved interaction with other children during session	24	41.4

Percentage Distribution of children according to response to treatment (continued)

Response to treatment:	(n=60)	%
	No	
Content of the speech session:		
Educate child same exercise	7	11.7
Educate caregivers same exercise	6	10
Encourage child to communicate with others	12	20
Educate child, caregivers same exercise	35	58.3
Psychological state of children during speech session:		
Anxiety	30	50
Anger	19	31.7
Avoidance	11	18.3

Table (4): Correlation between children response to treatment and children's age

Response to treatment	Children's age in years (n=60)				p
	6-<8 (n=38)		8-12 (n=22)		
	No	%	No	%	
Disturbance of normal speech	23	60.5	14	63.6	0.811
Impact of irregular speech therapy:					1.000
Relationship with teacher	4	10.8	3	14.3	
Relationship with other student	6	16.2	3	14.3	
School action	6	16.2	4	19	
Relationship with family	21	56.8	11	52.4	
Stage of treatment for children with stuttering					0.083
Follow up at home	7	18.4	0	0	
Taking therapy	19	50	13	59.1	
Taking oral treatment	0	0	1	4.5	
Maintenance therapy and follow up at home	12	31.6	8	36.4	
Function of speech therapy session :					1.000
Ability to cooperate with others	30	78.9	17	77.3	
Don't know	8	21.1	5	22.7	

Need for speech therapy session per week					0.833
Follow up (every 3 months)	10	26.3	4	18.2	
Once per week	7	18.4	6	27.3	
Twice per week	18	47.4	10	45.5	
More than thrice per week	3	7.9	2	9.1	

Correlation between children response to treatment and children age (continued)

Response to treatment	Children's age in years (N=60)				p
	6-<8 (n=38)		8-12 (n=22)		
	No	%	No	%	
Response to speech therapy treatment:	36	94.7	16	72.7	0.017
Types of response:					0.300
Ability to interact with society	5	13.5	5	23.8	
Psychological status improved	11	29.7	2	9.5	
Interaction with family and school	3	8.1	3	14.3	
Improved in school	2	5.4	3	14.3	
Improved interaction with other children during session	16	43.2	8	38.1	
Content of the speech session:					0.317
Educate child same exercise	4	10.5	3	13.6	
Educate caregivers same exercise	4	10.5	2	9.1	
Encourage child to communicate	5	13.2	7	31.8	
Educate child, caregiver same exercise	25	65.8	10	45.5	
Psychological state of children during speech session:					0.983
Anxiety	18	47.4	12	54.5	
Anger	13	34.2	6	27.3	
Avoidance	7	18.4	4	18.2	

**Significant at level 0.05

Table (♠): Correlation between children response to treatment and mothers' education

Response to treatment:	Mothers' educations (n=60)						P
	Primary (n=24)		Secondary (n=15)		University (n=21)		
	No	%	No	%	No	%	
Disturbance of a normal speech	13	54.2	10	66.7	14	66.7	0.683
Impact of irregular speech therapy	23	95.8	15	93.3	20	90.5	0.817
Types of impact :							0.550
Relationship with teachers	4	17.4	0	0	3	15	
Relationship with other students	2	8.7	2	13.3	5	25	
School action	4	17.4	3	20	3	15	
Relationship with family	13	56.5	10	66.7	9	45	
Stage of treatment for child with stuttering							0.500
Follow up at home	2	8.3	3	20	2	9.5	
Taking therapy	15	62.5	5	33.3	12	57.1	
Taking oral treatment	1	4.2	0	0	0	0	
Maintenance therapy and follow up at home	6	25	7	46.7	7	33.3	
Function of speech therapy session							0.767
Ability to cooperate with others	18	75	13	86.7	16	76.2	
Don't know	6	25	2	13.3	5	23.8	
Child need for speech therapy session per week							0.050*
Follow up (ever3months)	10	41.7	1	6.7	3	14.3	
Once per week	7	29.2	2	13.3	4	19	
Twice per week	7	29.2	10	66.7	11	52.4	
More than three time per week	0	0	2	13.3	3	14.3	

Correlation between children response to treatment and mothers' education (continued)

Response to treatment :	Mothers' education (n=60)						p
	Primary (n=24)		Secondary (n=15)		University (n=21)		
	No	%	No	%	No	%	
Response to speech therapy treatment:	21	75	13	86.7	21	100	0.117
Types response:							0.033**
Ability to interact with the society	8	36.4	1	6.7	1	4.8	
Psychological status improved	4	18.2	3	20	6	28.6	
Interaction with family and school	4	18.2	0	0	2	9.5	
Improved interaction with other children during session	5	22.7	9	60	10	47.6	
Content of the speech session:							0.450
Educate child some exercise	5	20.8	1	6.7	1	4.8	
Educate caregivers some exercise	3	12.5	1	6.7	2	9.5	
Encourage child to communicate	6	25	3	20	3	14.3	
Educate child, caregivers same exercise	10	41.7	10	66.7	15	71.4	
Psychological state of child during speech session:							0.567
Anxiety	13	54.2	7	46.7	10	47.6	
Anger	9	37.5	5	33.3	5	23.8	
Avoidance	2	8.3	3	20	6	28.6	

Table (6): Comparison of total score of socialization in relation to delayed language development

Total socialization Score	Delayed Language development	
	Yes	No
Range	12-20	13-21
Mean	15.15	15.37
SD	2.21	1.98

T test = 0.399, p = 0.691

Discussion

Stuttering as a problem is full of controversies. It has several definitions and several theories of a etiology. The line of treatment of stuttering also differs greatly and produces variable degrees of improvement. The aim of the treatment of stuttering is not only to reduce dysfluency, but also to replace stuttering with natural speech production having normal rate. ⁽¹⁹⁾Lifestyle means the manner or way of acting. Style is a particular from of behavior directly associated with an individual. The first 18 years are the period during which the most profound change occurs in physical,

cognitive and social development. The contents of the lifestyle care program of the affected children should focus on the need and capabilities of the stuttering children to ensure the three main categories: Survival skills, Health maintenance skills and Health promotion skills. ^(13,14,15) The sample used for this study met the incidence and prevalence of stuttering. The male to female incidence in this study was 65%: 35%. This result is in agreement with Mansson (2000) who found that the boy to girl ratio is 1.65: 1 %. Also this result disagrees with Yaruss (2006), Bloodstein (2002) and Stackhouse (2001). They found ratio of 3 males to one

female 3:1. Boys generally have more speech disorders because girls are speak earlier than boy's and they are better speech and language and specially at using speech and language for social purposes. ^(21, 16,22, 23)

As regards the biosocial characteristics of mothers according to mothers' age, the present study revealed that the mean age was 34.92 years. Less than half of the sample mothers had high education, so they are more aware to be involved in child care and dealing with their problem, in addition they seek earlier consultation and engage their children in speech therapy. Regarding family size, the present study revealed that the mean family size was 3.60 children. In the present study, high a percentage of stuttering children live in urban areas (Table 1), while a low percentage (41.7%) live in rural ones. This is in disagreement with the study of Yaruss (2001), who revealed that rural inhabitation was found in 55% and urban in 29% respectively when investigating 1818 people at two villages in Upper Egypt. This result is due to the fact families of children living in urban area did not allow them to play outside the house

which prevents early communication with peers. ⁽²⁴⁾

As regards the family history of stuttering children, the present study revealed parent consanguinity was found in 25% of children while 16.7% of them had positive sibling history (Table 2). Consanguinity is a social phenomenon. These results explain the importance of counseling for the prevention and early detection of stuttering among children especially in positive family history. This finding is in agreement with a study of Andrews and Harries (2008) who found that 25-60% of stutterers had relatives who stuttered. ⁽²⁵⁾ Stuttering is a problem interfering with the normal life of the children. There are three main categories of health promoting life style profile: Survival skills, health promoting skills, and health maintenance skills. Survival skills entail the items related to the need for speech therapy and speech production and communication with others. Information about speech therapy and psychological assessment (anxiety, anger and fear) is so accurate, and adequate knowledge is necessary to help these children understand the nature of their

problems, therapy administration, treatment of stuttering, child's daily activity, . These may help them to reduce dysfluency, replace stuttering with natural speech production having normal rate and to improve communication, social adjustment and self fulfillment as much as possible Bloodstein (2002) ²⁰⁾ The results showed that the therapy led to improvement in all parameters. (Table 3) The improvement of all perceptual prolongation, repetition, blocks, went parallel with increased speech rate, which indicates stability of the results. Although this improvement was associated with improvement of psychological assessment, improvement did not reach significant level after therapy. This was expected because this study was conducted for a short term evaluation and the psychological changes need is in a long period of therapy and follow up to show improvement. This result is in agreement with Cooper and Bloom (2002) who found that speech therapy greatly improves prognosis and extends the life span. ⁽²⁶⁾ The present study revealed that the majority of the sample (Table 3) suffered from the

impact of irregular speech therapy sessions; this means that the child who maintains regular speech therapy improves but the one who has irregular speech therapy sessions does not progress. Irregular speech sessions have a major relationship with family but a less impact on school action and relation with others students (both of them less than quarter of the sample). These results are in agreement with Andrews, Craig (2002) and Lincoln (2006) who found that the stuttering frequency decreased to very low level post treatment and also improvement in stuttering frequency at least in 85% to 90% across all assessment contexts for 9-14 year olds stutterers. So the earlier treatment of stutter gives the better prognosis. ^(27,28) According to psychological status, the results showed that there was a positive linear association between presence of anxiety and stuttering (Table 3). Although all children therapy in this study improved, this improvement did not reach the significant level. This result is in agreement with Bloodstein(2002) who found that the stutter scores were higher in social anxiety than in a normal speaking. However, negative findings were obtained

by Denial, Brutton who reported that there was a similarity between some stuttering characteristics as shame, avoidance, denial and addiction. The stutterers needed as the addicts need support and structured recovery, from others with the same problems. So the rule of helping group was very important. ⁽²¹⁾ There was a significant difference between child age and child response to treatment (Table 4). Young children respond better to speech therapy because they are still unaware about their problem. As regards mothers' education it had a significant positive impact on response to speech therapy session among stuttering children (Table 5) Those who were illiterate and primary educated school mothers were less competent than other groups (secondary, university). The present study showed that the severity of stuttering had a significant negative effect on total socialization. This result is in agreement with Miller and Watson who reported that the young stutterers had significant negative attitudes toward speech communication and the negative attitudes increased with age. The present study showed that child

socialization had a positive effect on the child with delayed language development (Table 6). Moreover, Riley (2004) reported that 30% of young stutterers have simultaneously language difficulty.

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