- The results of the present study are presented in the following parts:-
- **Part I:** socio demographic characteristic of the studied sample, (Table 1, 2) (Figures 1, 2, 3&4)
- **Part II**: medical history and physical assessment of the studied sample from medical record, (Table 3&4)
- **Part III:** health history of children with speech impairment of the studied sample, (Tables 5-7)
- **Part IV:** the main health problems, which affected children in studied sample, psychological, social& learning, (Tables 8-10)
- **Part V**: health need of children with speech impairment of the studied sample from parents' point of view, (Tables 11-13)
- **Part VI**: parent adjustment patterns of the studied sample, (Tables 14-16)
- **Part VII**: relations between parent adjustment and health problems of studied children with speech impairment, (Table 17)
- **Part VIII**: relations between socio demographic characteristic of the parents & their adjustment ,(Tables 18-22)

Part I: Socio-demographic characteristics of the studied sample

Table (1): Distribution of the studied sample according to their socio demographic characteristics (n=200).

Socio demographic characteristics	N	%						
Sex								
Female	72	36						
Male	128	64						
Age								
5-	122	61						
7-	52	26						
9-10.	26	13						
Range	5-	10.						
Mean±SD	6.43±	1.522						
The arrangement between siblings								
The only child	20	10						
1st-2nd	40	20						
3rd-4th	120	60						
Fifth and more	20	10						
Class level								
Nursery	90	45						
1st-2nd Class level	78	39						
3rd-4th Class level	32	16						
Family Income								
Enough	138	69						
Enough & save	16	8						
Not Enough	46	23						
Family Size	-							
3	34	17						
4	70	35						
5 and more	96	48						

Table (1): Shows that (64 %) of children in the studied sample were males, and (36 %) were females. (61%) of children ages from 5to7years old. The mean age was 6.43 ± 1.522 . As regard the arrangement between siblings (60%) were between 3rd-4th siblings. As regard level of children education (45 %) were in nursery. And (69 %) of them had enough income. In relation to family size it showed that (48 %) had 5 and more person.

Table (2): Distribution of studied sample according to sociodemographic characteristic of their parents (n=200)

Socio demographic characteristic	N	%
Marital status		
Married	174	87
Single (divorce & widow)	26	13
Father age		
Less than 20	2	1
20-	56	28
30-	82	41
40 years and over	60	30
Father Level of Education		
Primary	22	11
Intermediate	62	31
High	116	58
Occupation		
Private	50	25
Employees	112	56
Other(farmars&workers)	38	19
Mother age		
Less than 20	20	10
20-	104	52
30-	44	22
40 years and over	32	16
Mother Level of Educational		
Primary	30	15
Intermediate	60	30
High	110	55
Occupation		
private	40	20
House Wife	82	41
Employees	78	39
Consanguinity		
1st degree	48	24
2nd degree	36	18
Not relative	116	58

Table (2): reveals that marital status (87 %) were married. As regard (41 %) of sample fathers aged from 30-40 years old while (52 %) of mothers aged from 20-30 years. According to level of education (58 %) of fathers, (55 %) of mothers were high education. As regard of occupation it shows that (56 %) of fathers were employees and (41%) of mothers were housewives, (39%) of mothers were employees. According to the consanguinity for parents it shows that (58 %) were not relative.

Part II: Medical history and physical assessment of studied sample from medical records.

Table (3): Distribution of the studied sample in relation to medical history from medical records (n=200).

Items	N	%	Chi-so	quare	
Tens	11	/0	X^2	P-value	
Diagnosis					
Delayed language development (DLD) without associated disease	44	22	62.720	0.000	
Delayed language development (DLD) with associated disease	156	78	02.720	0.000	
Stuttering	30	19			
Nasality	20	12.5			
Auditory impairment	36	23	50.462	0.000	
Mental retardation	50	32	30.402	0.000	
Lisp	16	10.5			
Autism	4	3			
IQ					
Moderate retardation (35- 49)	50	25		0.000	
Mild retardation(50-69)	16	8	49.120		
Dull ness(70-90)	86	43	49.120	0.000	
Normal and average intelligence(91-110)	48	24			
Hearing test					
Normal(0-20) dB	164	82			
Mild disability(20-40) dB	16	8	213.280	0.000	
Moderate disability(40-70) dB	20	10			
Treatment*					
- Speaking department.	200	100			
- Psychotherapy section.	64	32	152.515	0.000	
- Therapy for auditory Impairment.	36	18	132.313	0.000	
- Drugs for health problems	104	52			

^{*}The answer are not mutually exclusive

Table (3): Shows that as regards the diagnosis (22 %) in studied sample of the children had delayed language development (D.L.D) without associated diseases. And (78 %) had (D.L.D) with associated diseases, (32%) of them were mental retardate, (23%) were auditory impairment. As regard IQ investigations shows that (43 %) recorded as dullness. According to hearing test, (82%) were normal. As regard treatment the all sample (100 %) were treated in speaking department.

Table (4): Distribution of the studied sample in relation to physical assessment of children with speech impairment. (n=200).

Items	N	%
*Presence of any deformities or anoma	alies	
- Nose.	36	18.00
- Throat.	18	9.00
- Cleft palate.	10	5.00
- Cleft lip.	16	8.00
- No control of lip movements	166	83.00
Dental deformity	20	10.00

^{*}The answer are not mutually exclusive

Table (4): Shows that studied children had deformities or anomalies as no control of lip movements, Nose, teeth deformities, throat, cleft lip& cleft palate (83%, 18%, 10%, 9%, 8%&5%) respectively.

Part III: Health history of children with speech impairment on studied sample.

Table (5): Distribution of the studied sample in relation to prenatal history of children with speech impairment (n=200)

Prenatal history	N	%
Gestational period		
32 week	32	16
37 week	128	84
Antenatal Diseases		
Heart diseases	14	7
Gestational diabetes	24	12
Hypertension	18	9
Toxemia	42	21
Viral infection of certain diseases such as meals	2	1
Exposure to syphilis.	4	2
Anemia	70	35
Other	26	13
Mother of psychological exposure during pregnancy		
Phobias	44	22
Serious concern	32	16
Sense of frustration and despair.	64	32
Other	60	30
Infected mother with neurological diseases during pregnancy		
Epilepsy	88	44
Affect nervous system during pregnancy with some diseases such as cerebral palsy	28	14
Stroke	12	6
Others	72	36
The premature rupture of membrane		
Infection	100	50
the mother had accident	44	22
Others	56	28

Table (5): Shows that (84 %) of children in studied sample were gestational age 37 weeks. As regard antenatal diseases, (35 %) had anemia and (21 %) of them had toxemia. According to mother of psychological exposure during pregnancy (32 %) had sense of frustration & despair, and (22 %) of them had phobias. According to infected mother with neurological diseases during pregnancy, (44%) had epilepsy. According to the premature rupture of membrane, (50 %) of mothers had infection.

Table (6): Distribution of the studied sample in relation to natal history of children with speech impairment (n=200)

Natal history	N	%
Children's Injuries at birth		
Bleeding of the brain.	2	1
Asphyxia of the child	96	48
Infection transmitted mother to fetus	6	3
Anoxia at birth.	72	36
Shortage of sugar in the blood	20	10
Others	4	2
Admission of child to the premature unite in the hospital		
Asphyxia during birth.	66	33
Oxygen deficiency	66	33
Premature baby (born before 36 weeks)	22	11
Congenital anomalies.	4	2
Jaundiced	22	11
other	20	10

Table (6): Shows that children's injuries at birth, (48%) of them had asphyxia, and (36%) had anoxia. According to admission of child to the premature unite in the hospital, equal percent (33%) had asphyxia during birth and Oxygen deficiency.

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Table (7): Distribution of the studied sample in relation postnatal history of children with speech impairment (n=200)

Post natal history	N	%
Feeding difficult		
Presence of cleft lips.	96	48
Cleft palate	44	22
Hard palate	28	14
Other	32	16
Presence of injuries or accident to the child head		
Traffic accident	64	32
A fall	72	36
Burns	6	3
Exposure to radiation	52	26
Others	2	1
Diseases affected Child after birth		
Recurrent otitis media	100	50
Measles	32	16
Mumps	30	15
Meningitis	20	10
Others	18	9

Table (7): Shows that feeding difficulties (48 %) of them had presence of cleft lips. According to presence of injuries or accident to the child head (36 %) were fall. According Diseases affected child after birth, (50 %) were had recurrent otitis media.

Part IV: The main health problems in studied sample, psychological, social& learning. (Tables 8 -10)

According to research question No (1) what are the health problems among children with speech impairment?

Table (8): Distribution of studied sample according to their psychological health problems (n =200).

D	Rarely		Son	ne time	Usually		
Psychological health problems	N	%	N	%	N	%	
Nervousness.	34	17.00	78	39.00	88	44.00	
Shame	96	48.00	70	35.00	34	17.00	
Thumb sucking.	124	62.00	50	25.00	26	13.00	
Stress & anxiety.	56	28.00	108	54.00	36	18.00	
Hyperactivity.	40	20.00	66	33.00	94	47.00	
Nail biting	134	67.00	40	20.00	26	13.00	

Table (8): Shows that (67 %) of the studied sample were rarely related to nails biting, and (62%) of them had rarely thumb sucking. While (54 %) were some time related to stress and anxiety (47 %) of them were usually hyperactivity, and (44%) had nervousness.

Table (9): Distribution of studied sample according to their social problems (n = 200)

G 'ID II		Rarely		ne time	Usually	
Social Problems	N	%	N	%	N	%
Lying	134	67.00	40	20.00	26	13.00
Aggression.	44	22.00	102	51.00	54	27.00
Stupor ness.	72	36.00	66	33.00	62	31.00
Selfishness.	80	40.00	74	37.00	46	23.00
Disobedience.	94	47.00	68	34.00	38	19.00
Lone lines.	98	49.00	70	35.00	32	16.00
Fear of other.	50	25.00	116	58.00	34	17.00
Unable to Cooperative	52	26.00	86	43.00	62	31.00

Table (9): Shows that (67 %) of the studied sample were rarely related to lying, and (49%) of them rarely loneliness. While (58%) were sometime related to fear of other, and (51%) of them were aggression and equal percent (31%) were usually stupor ness and unable to cooperation.

Table (10): Distribution of studied sample according to their learning problems from the parents report (n=200).

Learning Problems	No	%
Attitude towards school	•	
Wanted to go to school every day.	70	35
Regular going to school?	130	65
Ability to Read		
Read the simple words only clearly	46	23
Read from 3 to 5 simple words.	56	28
Read difficulty	98	49
Ability to write	•	
Write from 8: 10 words clearly.	42	21
Write from 3 to 5 words clearly.	72	36
Write difficulty	86	43
Ability to Draw		
Draw complete picture.	30	15
Draw in complete picture.	74	37
Draw un clear picture	96	48

Table (10): Shows that according to attitude towards school (65%) had regular going to school. According to ability to read (49%) had read difficulty. According to ability to write (43%) had write difficulty, and (36%) had write from 3 to 5 words clearly. As regard ability to draw (48%) of them had drawn unclear picture.

Part V: Health needs of children with speech impairment on studied sample from parent's point of view. (Tables 11-13)

According to research question No (2) what are the health needs of children with speech impairment from the parents' points of view?

Table (11): Distribution of studied sample in relation to physical needs of children with speech impairment (n=200).

Items	Independent		Semi dependent		Dependent	
Ttems	N	%	N	%	N	%
Personal hygiene						
Wash hands with soap and water before eating	64	32	86	43	50	25
Wash hands with soap & water after eating	36	18	50	25	114	57
Wash hands with soap & water after using the toilet	28	14	48	24	124	62
Full bath	26	13	38	19	136	68
Partial bath	28	14	46	23	126	63
Brushing teeth	52	26	82	41	66	33
Rinse the mouth	34	17	50	25	116	58
Nutrition						
Eating breakfast meal	22	11	52	26	126	63
Eating lunch meal	20	10	56	28	124	62
Eating dinner meal	20	10	56	28	124	62
Eating sandwiches	18	9	26	13	156	78
The Sleep and rest						
The child needs to the mother to be with him during sleep	40	20	26	13	134	67
The child needs to hear story before rest	102	51	42	21	56	28

Table (11): Shows that as regard personal hygiene (68 %) of the studied sample dependent on mother in full bath ,and (63 %) of them in partial bath, and (62%) wash hands with soap and water after using the toilet. on the other hand, semi dependent in personal hygiene were observed from (43%)of them in wash hands with soap and water before eating and (41%) of them brushing teeth .While independent of personal hygiene observed from (32%)were wash hands with soap and water after eating. According to nutrition (78 %) were dependent related to eating

sandwiches. While equal percent (28 %) were semi dependent related to eating lunch meal and eating dinner meal, and (11 %) were independent related to eating breakfast meal. According to the sleep & rest (67 %) were dependent related to the child needs to the mother next to be with him during sleep. While (21 %) of them were semi dependent related to the child needs to hear story before rest and (51 %) of them were independent related to the child needs to hear story before rest.

Table (12): Distribution of studied sample according to their social needs (n = 200)

Items	R	Rarely		netimes	Usually	
Items	N	%	N	%	N	%
The social relations of the child						
Dealing with parents.	138	69	54	27	8	4
Dealing with brothers	128	64	56	28	16	8
Having friends	74	37	76	38	50	25
Visiting relative.	58	29	112	56	30	15
Playing with group.	78	39	74	37	48	24
tending to be isolated	22	11	58	29	120	60

Table (12) Shows that (69 %) of studied sample were rarely about dealing with parents, (64%) of them related to dealing with brothers. While (56 %) of them were some times related to visiting relative, and (60 %) were usually related to tending to be isolated.

Table (13) Distribution of studied sample according to their psychological needs (n = 200)

Items	Rarely		Son	metimes	Usually	
The psychological needs of the child	N	%	N	%	N	%
Satisfy with love and compassion.	0	0	32	16	168	84
Modify unhealthy behavior.	78	39	104	52	18	9
Reward for good things that he done.	102	51	80	40	18	9
Needs of child in the state of fear						
Understand his concerns of the child.	106	53	52	26	42	21
Deal with familiar objects.	42	21	100	50	58	29
Try to increase the confidence of the child.	134	67	54	27	12	6
Express charges, coloring, games and dolls that represent.	28	14	44	22	128	64
Praise any success achieved by to overcome his fear.	136	68	46	23.00	18	9
Needs of child in case of aggression against others						
Find out what types of events and circumstances that make	96	48	62	31	42	21
him behave rudely.	90	48	02	31	42	21
Take care about his behaviors.	42	21	86	43	72	36
Needs of child who suffers Jealousy						
Get the love and care from parents.	154	77	30	15	16	8
Teach to cope with situation.	80	40	76	38	44	22
The equal care of fathers for sons.	134	67	48	24	18	9
Need of child who suffers from thumb sucking						
Satisfy the needs, the attention and sponsorship.	158	79	40	20	2	1
Involve with his colleagues in the play.	76	38	84	42	40	20
Direct the energy and his activates	58	29	54	27	88	44
The most effective way to modify the behavior of						
the child in correct						
Clarify the mistakes	6	3	30	15	164	82
Isolate the child in a place alone for a certain time.	62	31	78	39	60	30
Deprived of his favorite things	60	30	82	41	58	29
Harm the child.	64	32	88	44	48	24
Show positive behavior	22	11	52	26	126	63

Table (13) Shows that according to the psychological needs of studied sample (51 %)of them were rarely reward for good things he done, While (52 %) were sometime related to modify unhealthy behavior, and (84%) were usually satisfy with love and compassion. As regard needs of the child in the state of fear it shows that (68 %) of them were rarely praise any success achieved to overcome his fear. While (50 %) were sometime deal with familiar objects and (64 %) were usually express charges coloring, games and dolls that represent. According to

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needs of child in case of aggression against others, it shows that (48 %) were rarely find out what types of events and circumstances that make him behave rudely. While (43 %) were sometimes take care about his behaviors. As regard needs of child who suffers Jealousy it shows that (77%) were rarely get the love and care from parents. While (38 %) were sometime teach to cope with situation. As regard need of child who suffers from thumb sucking it shows that (79 %) were rarely satisfy the needs, the attention and sponsorship. While (42 %) were sometime involve with his colleagues in the play and (44 %) were usually direct the energy and his activates. As regard the most effective way to modify the behavior of the child in correct, it shows that (32%) were rarely harm the child. While (41%) were sometime deprive of his favorite things and (82 %) were usually clarify the mistakes.

Part VI: parent adjustment patterns of the of parents (Table 14-16)

According to research question No (3) what are the parents' adjustments regards health problem of their children with speech impairment?

Table (14): Distribution of the studied sample in relation to nature of parent's relation ship with their children with speech impairment (n=200).

	Strong Agree		A	gree	Disagree	
Items	N	%	N	%	N	%
Parents' do their best to keep their children with speech Impairment, in good condition.	164	82	8	4	28	14
The child with speech Impairment gets more care than other siblings.	138	69	40	20	22	11
Parents' dealing differently with speech impairment child.	156	78	30	15	14	7
Parents' refuse to take their child with speech Impairment outside the home in public place.	54	27	48	24	98	49
Parents' refuse to let their child with speech impairment to sit with visitors.	16	8	20	10	164	82
Parents' let their child with speech Impairment to eat alone apart from the other siblings	34	17	34	17	132	66

Table (14): shows that (82 %) of parents were strong agree related to do their best to keep their children with speech impairment in good condition, and (78%) of them had parents' dealing differently with speech impairment child .While (24%) were agree that parents' refuse to take their child with speech impairment outside the home in public place, and (82%) were disagree parents' refuse to let their child with speech impairment to sit visitors, and(66%) of them let to eat alone apart from other sibling.

Table (15): Distribution of parents in relation to their social development with children with speech impairment (n=200)

Items		Strong gree	Agree		Disagree	
Items	N	%	N	%	N	%
Parents' encourage their child with speech Impairment gain self-confidence.	188	94	10	5	2	1
Parents' punish child if made a mistake.	116	58	48	24	36	18
Family members are helping to meet his requests and care to the child with speech Impairment	126	63	40	20	34	17
Parents are worried about their child with speech Impairment to play with other children even if it is nearby.	92	46	32	16	76	38
Don't care if child refuse to eat.	6	3	20	10	174	87
Parents clean child that, he does not know the meaning of cleanliness	6	3	24	12	170	85

Table (15): Shows that (94 %) were strong agree related to parents' encourage their child with speech impairment gain self-confidence and. While (24 %) were agree related to parents' punishes child if made a mistake and (87 %) were disagree don't care if child refuse to eat while (85%) of parents disagree that child does not know their meaning of cleanliness.

Table (16): Distribution of parents in relation to their pattern of social adjustment of Children with speech impairment (n=200)

	Strong Agree		Agree		Disagree	
Items	N	%	N	%	N	%
What happened to the child with speech Impairment is a normal as many children	164	82.00	10	5.00	26	13.00
Left everything to (God) that nothing could be done	86	43.00	38	19.00	76	38.00
Interest with child's future.	156	78.00	38	19.00	6	3.00
Worry about child's future.	126	63.00	46	23.00	28	14.00
Stay alone with the child	0	0.00	0	0.00	200	100.00

Table (16): Shows that (82 %&78%) of parents were strong agree that what happened the child with speech impairment is a normal as many children, and they had interest with child's futures, respectively. While (23 %) were agree to worry about child's future, and all of them (100 %) disagree to stay alone with the child.

Part VII: Correlation between parents' adjustment and health problems of their children with speech impairment According to research question No (3)

What are the parents' adjustment regard health problems of their children with speech need?

Table (17): Correlation between parents' adjustment and health problems of their children with speech impairment

Parent' s adjustment		Psychological problems	Social problems	Learning problems
Notone of moneyay	r	0.061	0.124	0.043
Nature of parents' relation ship	P- value	0.390	0.081	0.543
	r	0.004	0.068	0.086
Social development	P- value	0.953	0.339	0.223
Patterns of social adjustment	r	0.032	-0.015	-0.077
	P- value	0.656	0.838	0.279

Table (17): Shows that significant positive correlation between social problems and nature of parents' relation ship.

Part VIII: Relations between socio-demographic characteristics of the parents and their adjustment

According to research question No (4): Is their relationship between socio-demographic characteristics of the parents and their adjustment? **Table (18):** Statistical relation between parents' adjustment and father educational level (n=200).

Parent' s		Fat	ANOVA			
adjustment		Primary	Intermediate	High	F	P- value
Nature of parents	Mean	11.000	11.500	11.561	0.905	0.406
relation ship	SD	1.633	1.835	1.708		0.400
Social	Mean	13.727	13.938	14.073	0.263	0.769
development	SD	2.995	1.962	1.917	0.203	0.709
Patterns of social	Mean	8.273	8.813	8.073	3.698	0.027*
adjustment	SD	1.856	1.932	1.713	3.090	0.027*

Table (18) Shows that there was a statistically significant relation between patterns of social adjustment and father educational level (p<0.05).

Parent' s adjustment		Mo	AN	OVA		
		Primary	Intermediate	High	F	P- value
Nature of parents	Mean	10.600	11.622	11.625	4.452	0.013*
relation ship	SD	1.102	1.752	1.892	4.432	0.013
Social development	Mean	14.067	13.867	14.050	0.203	0.817
	SD	2.449	2.029	1.987	0.203	0.817
Patterns of social adjustment	Mean	8.400	8.511	8.400	0.087	0.916
	SD	2.127	1.704	1.946	0.087	0.910

Table (19) Shows that there was statistically significant relation between nature of parents relation ship of studied sample and their mothers education level (p<0.5).

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Table (20): Statistical relation between parents' adjustment and mother's occupation (n=200).

Parent' s adjustment		M	other's occu	ANOVA		
		private	Employs	House Wife	F	P-value
Nature of parents relation	Mean	11.550	11.805	11.077	3.552	0.031*
ship	SD	1.518	1.822	1.756	3.332	0.031
Social development	Mean	14.300	14.073	13.692	1.314	0.271
Social development	SD	2.127	1.727	2.348		0.271
Patterns of social adjustment	Mean	8.700	8.439	8.333	0.513	0.600
	SD	1.698	1.847	1.965	0.313	0.000

Table (20): Shows that there was statistically significant relation between mothers occupation and nature of parents relation ship (p<0.05).

Table (21) Statistical relation between parents' adjustment and father's occupations (n=200).

Parent' s adjustment		F	ather's occu	ANOVA		
		Private	Employs	Other	F	P-value
Nature of parents relation ship	Mean	11.720	11.482	11.105	1.324	0.268
	SD	1.552	1.889	1.607	1.324	0.200
Social development	Mean	14.080	14.107	13.421	1.661	0.193
Social development	SD	1.455	1.997	2.815	1.001	0.193
Patterns of social adjustment	Mean	8.240	8.571	8.368	0.591	0.555
	SD	1.546	2.043	1.683	0.591	0.000

Table (21) Shows that there was no statistically significant relation between nature of parents relation ship, social development, and patterns of social adjustment and fathers occupation (p>0.05).

Table (22) Statistical relation between parents' adjustment and family income (n=200).

Income										
Parent' s		Enough		Not	ANC	OVA				
adjustment		Enough	&save	Enough	f	P- value				
Nature of parents	Mean	11.41	12.13	11.43	1.209	0.301				
relation ship	SD	1.85	1.41	1.57	1.209	0.301				
Social	Mean	13.96	14.88	13.70	1.052	0.145				
development	SD	1.87	1.67	2.66	1.952	0.145				
Patterns of social	Mean	8.39	8.00	8.78	1.274	0.282				
adjustment	SD	1.74	1.71	2.23	1.2/4	0.282				

Table (22) Shows that there was no statistically significant relation between natures of parent relation ship, social development and patterns of social adjustment and family income (p>0.05).