Assessment of Behavioral Problems among Children with Speech Difficulties

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ABSTRACT
Abstract: Behavioral problems can present differently for many children with speech difficulties, some common ones outbursts or tantrums, unwillingness to follow directions, being angry or irritable, purposefully annoying others and physical aggression toward others, such as hitting, kicking, or scratching, some children may show one of these behaviors, while other children may have many. Objectives: to assess sociodemographic characteristics, behavioral problems and speech difficulties among children with speech difficulties. Methodology: A descriptive cross-sectional study design was carried out in Baghdad Teaching Hospital. A non- probability (purposive) study sample of (300) child, who attended Hearing and Speech Center. The data were analyzed using descriptive and inferential statistical procedure for data analysis. Results: The study results reveal that (41.7%) of children with age group 6-less than 8 years (73%) of them were males and remaining (27%) were females, second born among (41%) of them while (28.7%) of them were not registered and (36.7%) of children having stuttering; speech sound disorders were prevalent among (39.7%); childhood apraxia of speech prevalent among (19.7%). Conclusion: The children experience mild behavioral problems regarding somatic complaints, thought problems, and rule-breaking behaviors, and experience moderate behavioral problems regarding anxious/depressed problems, withdrawal, social problems, and aggressive behavior, while experiencing severe behavioral problems regarding attention and hyperactivity. Recommendations: the child with speech difficulties to be seen by a speech language pathologist (SLP) to assess the child to obtain a clear idea of the child's strengths and weaknesses in speech and language.

1. Introduction

Children are born ready to learn a language, but they need to learn the language or languages that their family and environment use. Learning a language takes time, and children vary in how quickly they master milestones in language and speech development, language plays an important role in the cognitive, social, emotional, and behavioral development of children. Typically developing children may have trouble with some sounds, words, and sentences while they are learning; most children can use language easily around 5 years of age, therefore impairment in language development may have a serious impact on cognitive and psychosocial development (1). Speech disorders refer to difficulties producing speech and language problems with voice quality, they might be characterized by an interruption in the flow or rhythm of speech, such as stuttering, also problems with the way sounds are formed, called articulation or phonological disorders, or they may be difficulties with the pitch, volume or quality of the voice (2). Behavior and communication are always connected because behavior is communication. There are many children who have behavioral problems including many with social, emotional, and mental health needs; they often have speech, language, and communication difficulties. It is vital to diagnose these difficulties at an early stage so the children can get help as soon as possible to identify their needs and to deliver tailor made individual programs to assist them (3).

2. Methodology

A descriptive cross-sectional study design was carried out in Baghdad Teaching Hospital. A non-probability (purposive) study sample of (300) child, who attended Hearing and Speech Center. Data collection: Was done through by interview the questionnaire underlying the present study, Questionnaire format about the behavioral problems was designed and developed by the researcher after reviewing related literatures, previous studies and according to the Child Behavior Checklist CBCL/6-18 (used with children 6 to 18), is made up of eight syndrome scales anxious/depressed,

withdrawn, somatic complaints, social problems, thought problems, attention problems, rule-breaking behavior and aggressive behavior, the questionnaire which is composed of fourth parts. Validity of the instrument was established through a panel of (16) experts, and reliability by calculating the Cronbach`s alpha. The data were analyzed approach by using (SPSS 26) using descriptive and inferential statistical test for data analysis.

Ethical consideration

The researcher was explained the purpose of the study for every parent before participation, oral consent was obtained from every parent prior to data collection. Parents were assured that the study maneuver will cause no actual or potential harm to study sample.

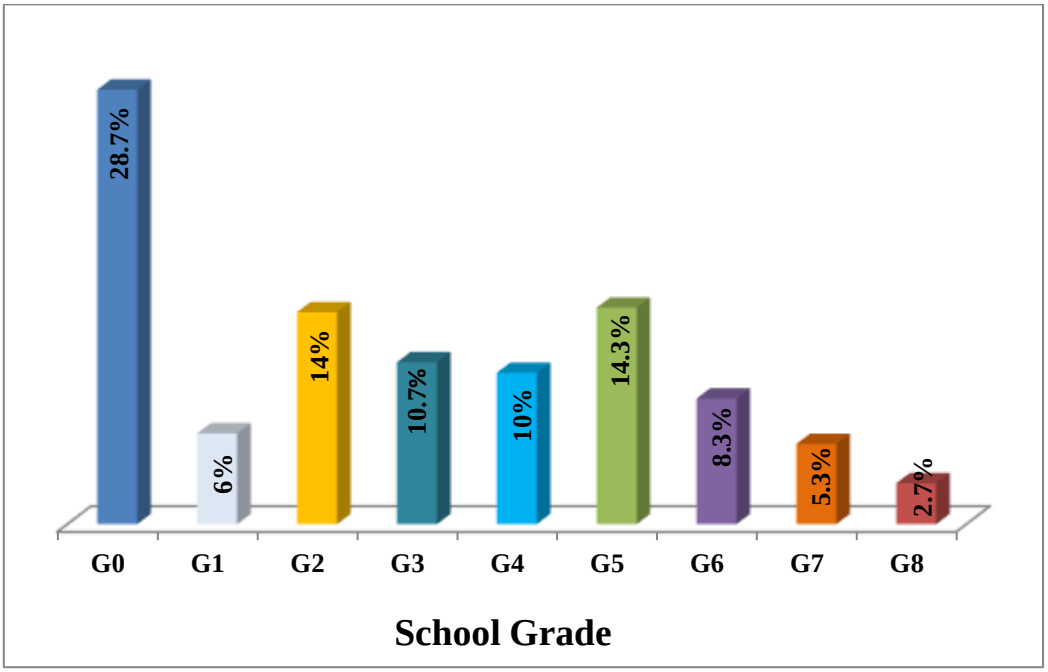
3. Results and Discussion

Table (1): Socio-demographic Characteristics of Children's

No	Characteristics		f	%
1	**Age (years) M±SD= 8.7±2.4**	6 – less than 8	125	41.7
		8 – less than 10	65	21.7
		10 – less than 12	50	16.8
		12 – less than 14	60	20
		Total	***300***	***100***
2	**Gender**	Male	219	73
		Female	81	27
		Total	***300***	***100***
3	**Birth order**	First	79	26.4
		Second	123	41
		Third	76	25.3
		Fourth	13	4.3
		Fifth or more	9	3
		Total	***300***	***100***
4	**School grade**	Not registered	86	28.7
		First	18	6
		Second	42	14
		Third	32	10.7
		Fourth	30	10
		Fifth	43	14.3
		Sixth	25	8.3
		Seventh	16	5.3
		Eighth	8	2.7
		Total	***300***	***100***

No: Number, f: Frequency, %: Percentage, M: Mean, SD: Standard deviation

The finding in table (1) shows that children were with M±SD= 8.7±2.4 in which (41.7%) of them seen with age group of 6-less than 8 years. Regarding gender, (73%) of children were males and remaining (27%) were females. The birth order of children refers to second born among (41%) of them followed by first born among (26.4%). Concerning to school grade, (28.7%) of them were not registered; (14.3%) of them were from fifth grade, (14%) from second grade, and (10.7%) were from third grade.



G: Grade, %: Percentage

Figure (1): The Distribution of Children according to School Grade

This figure reveals that the higher percentage (28.7%) of children were not registered while (14.3%) in fifth grade, (14%) second grade, (10.7%) in third grade, (10%) in fourth grade, (8.3%) in sixth grade, (6%) in first grade, (5.3%) in seventh grade and (2.7%) in eighth grade.

Table (2): Types of Speech Disorders among Children

No	Speech disorders		f	%
1	**Stuttering**	No	190	63.3
		Yes	110	36.7
		Total	***300***	***100***
2	**Speech sound disorders**	No	181	60.3
		Yes	119	39.7
		Total	***300***	***100***
3	**Childhood apraxia of speech**	No	241	80.3
		Yes	59	19.7
		Total	***300***	***100***
4	**Orofacial myofunctional**	No	300	100
		Yes	0	0

	disorders	***Total***	***300***	***100***
5	**Dysarthria**	No	300	100
		Yes	0	0
		Total	***300***	***100***

No: Number, f: Frequency, %: Percentage

The table (2) indicates that (36.7%) of children having stuttering; speech sound disorders were prevalent among (39.7%); childhood apraxia of speech prevalent among (19.7%); orofacial myofunctional and dysarthria were not reported among children.

Table (3): Assessment of Behavioral Problems Sub-domains among Children (N=300)

Behavioral problems sub-domains	**Range score**	**M± SD**	**Assessment**
Anxious/Depressed	*Mild= 0 – 5.33* *Moderate= 5.34 – 10.67* *Severe= 10.68 - 16*	**8.37 ± 2.936**	**Moderate**
Withdrawal	*Mild= 0 – 4.66* *Moderate= 4.67 – 9.33* *Severe= 9.34 - 14*	**5.19 ± 3.079**	**Moderate**
Somatic complaints	*Mild= 0 – 6.66* *Moderate= 6.67 – 13.33* *Severe= 13.34 - 20*	**1.58 ± 2.806**	**Mild**
Social problems	*Mild= 0 – 4.66* *Moderate= 4.67 – 9.33* *Severe= 9.34 - 14*	**8.86 ± 2.333**	**Moderate**
Thought problems	*Mild= 0– 3.33* *Moderate= 3.34 – 6.67* *Severe= 6.68 - 10*	**1.97 ± 1.467**	**Mild**
Attention & hyperactivity	*Mild= 0 – 4* *Moderate= 4.1 – 8* *Severe= 8.1 - 12*	**9.31 ± 2.462**	**Severe**
Rule-breaking behavior	*Mild= 0 – 8* *Moderate= 8.1 – 16* *Severe= 16.1 - 24*	**7.82 ± 3.414**	**Mild**
Aggressive behavior	*Mild= 0 – 10* *Moderate= 10.1 – 20* *Severe= 20.1 - 30*	**18.79 ± 5.446**	**Moderate**

M: Mean, SD: Standard Deviation

The table (3) indicates that children experience mild behavioral problems regarding somatic complaints (M±SD= 1.58 ± 2.806), thought problems (M±SD= 1.97 ± 1.467), and rule-breaking behaviors (M±SD= 7.82 ± 3.414), and experience moderate behavioral problems regarding anxious/depressed problems (M±SD= 8.37 ± 2.936), withdrawal (M±SD= 5.19 ± 3.079), social problems (M±SD= 8.86 ± 2.333), and aggressive behavior (M±SD= 18.79 ± 5.446), while experiencing severe behavioral problems regarding attention and hyperactivity (M±SD= 9.31 ± 2.462).

The results in table (1) show that children are more than forty percent (41.7%) of them seen with age group of (6-less than 8) years with mean age and S.D (8.7±2.4). These results are consistent and supported by Veronica Maggio et al., (2013), Buenos Aires, Argentina (4). Who stated that children's age ranged from (2.1 to 7.9) years and S.D (4.7+ 0.1). Regarding gender, (73%) of children are males and remaining are females (27%). These results are consistent with the study conducted by Marina Leite et al., (2016) (5) who reported higher percentage (83.3%) were male, while (16.7%) of children

were female. The birth order (41%) of children refers to second born followed by first born among (26.4%) of them, while (25.3 %) of children were third born, (4.3%) were fourth born and (3%) were fifth or more. These results are consistent and supported by Mohadese G Arefi et al., (2022) in Mashhad City, Iran (6). The results were shown (51%) of children were first born, (31.3%) of them were second born, while (10.1%) third born and (4%) were fourth and more. Concerning to school grade the results show more than twenty (28.7%) of children are not registered; (14.3%) of them were fifth grade, (14%) second grade and (10.7%) were third grade. These results are consistent and supported by Mohadese G Arefi et al., (2022) in Mashhad City, Iran. The results were shown (17.4%) of children preschooler, (31.2%) second grade and (21.4%) were third grade.

The results in table (2) indicates that (36.7%) of children having stuttering; speech sound disorders are prevalent among (39.7%); childhood apraxia of speech prevalent among (19.7%). These results are consistent and supported by Ali H Obeid et al., (2014) in Al-Hilla city, Iraq (7). The results show the percentage of speech disorder by gender of children, stuttering in male (69.2%) and (30.8%) of female, while speech sound disorders in male was (62.8%) and (37.2%) of female. The other study conducted by Sedighah A Karbasi et al., (2011) in Yazd, Iran (8). The prevalence of total speech disorders was (14.8%) among whom (13.8%) had speech-sound disorder, (1.2%) stuttering and (0.47%) voice disorder. The prevalence of speech disorders was higher than in males (16.7%) as compared to females (12.7%).

The results in table (3) indicate that children experience mild behavioral problems regarding somatic complaints (M±SD= 1.58 ± 2.806), thought problems (M±SD= 1.97 ± 1.467), and rule-breaking behaviors (M±SD= 7.82 ± 3.414), and experience moderate behavioral problems regarding anxious/depressed problems (M±SD= 8.37 ± 2.936), withdrawal (M±SD= 5.19 ± 3.079), social problems (M±SD= 8.86 ± 2.333), and aggressive behavior (M±SD= 18.79 ± 5.446), while experiencing severe behavioral problems regarding attention and hyperactivity (M±SD= 9.31 ± 2.462). These results are consistent with the study conducted by John van Daal et al., (2007) in Netherlands (9). That indicate more than ten (18.46 %) of children experience withdrawal and somatic complaints, (13.85 %) of them experience thought problems, (12.31 %) aggressive behavior, (10.77 %) attention problems, (7.70 %) social problems, (6.15 %) anxious/depressed and (3.08 %) delinquent behavior. Means and standard deviations for CBCL ratings by mothers (M) and fathers (F), withdrawal M (M±SD = 57.78 ± 8.67) F (M±SD = 55.63 ± 6.99), somatic complaints M (M±SD = 56.00 ± 8.33) F (M±SD = 54.44 ± 6.59), anxious/depressed M (M±SD = 52.92 ± 5.53) F (M±SD = 51.32 ± 2.94), social problems M (M±SD = 57.27 ± 6.44) F (M±SD = 54.95 ± 5.38), thought problems M (M±SD = 57.28 ± 9.66) F (M±SD = 55.44 ± 7.13), attention problems M (M±SD = 56.31 ± 7.35) F (M±SD = 54.39 ± 5.46), delinquent behavior M (M±SD = 52.72 ± 4.61) F (M±SD = 52.00 ± 4.01), aggressive behavior M (M±SD = 56.11 ± 7.60) F (M±SD = 55.08 ± 6.51).

4. Conclusion

The study concluded that the children experience mild behavioral problems regarding somatic complaints, thought problems, and rule-breaking behaviors, and experience moderate behavioral problems regarding anxious/depressed problems, withdrawal, social problems, and aggressive behavior, while experiencing severe behavioral problems regarding attention and hyperactivity, that significant relationship have been reported among speech sound disorder with social problems, thought problems, attention & hyperactivity, and aggressive behavior, also indicates that there were significant relationships among childhood apraxia and anxious/depressed problems, thought problems, and attention/hyperactivity. While there were significant relationships among behavioral problems with children' birth order and grad school.

Recommendations

Parents and teachers have challenges for children with speech and language difficulties in school, and in meeting developmental and educational needs. These challenges were centered on the need for

specific expertise in the school setting, and access to additional classroom and professional services to support these students' engagement in the learning and social environments of school. The study recommended that the child with speech and language difficulties to be seen by a speech language pathologist (SLP). The SLP will assess the child to obtain a clear idea of the child's strengths and weaknesses in speech and language, also an intervention program to be planned accordingly and areas of deficit will be targeted in therapy. Liaison with parents and school teachers is indicated in order to achieve the child's maximum potential.

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