



The mental health of Children with Siblings with Physical and Mental Disabilities

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ABSTRACT

The presence of a disability in one of the family's children not only affects the parents but can also cause various problems for all family members. Family life, when one of the children has a disability, often revolves around the needs of that child. For this reason, parents have less time to spend with other children, and this makes those children think they are not as important to parents as children with disabilities, and this issue in turn leads to feelings of unhappiness and behavioral problems in them. Therefore, the current research was conducted with the purpose of the study of the mental health of children with siblings with physical and mental disabilities. The current research is retrospective descriptive research. The statistical population includes all normal students and students with a sibling who has physical and mental disabilities registered in schools and multi-disability rehabilitation centers. The number of 160 students (80 children with disabled siblings and 80 normal people) was selected as a statistical sample by cluster method. Self-esteem questionnaires (Cooper-Smith) and the new anxiety test (Reynolds and Richmond) were used independently to analyze T data to evaluate mental health. Statistical tests of analysis of variance were used. The results of the tests used showed that children and teenagers who had a disabled sibling had a high level of anxiety compared to normal peers, but the difference was not significant in terms of self-esteem.

Keywords: mental health, physical and mental disability, children with disabled siblings, well-sibling

1. Introduction

The birth of a baby with physical and mental disabilities has a deep and comprehensive effect on the family and its members. A child with a physical, mental, or behavioral disability provides unique and different challenges for the family. For example, due to severe conflicts between families, the whole family may experience a crisis, and family relations may be weakened by increasing unwanted physical, emotional, and financial pressures [1]. According to the studies, no factor changes the harmony of the family as much as the birth of a child, especially if the newborn has a physical-mental disability or both, this disruption is amplified. Parents and siblings may react to this issue with trauma, despair, anger, depression, guilt, and confusion. With the passage of time, the coping skills of many parents and siblings grow, and in this way, their sense of well-being and capacity to deal with the stressful pressures of children and adolescents with special disabilities increases [2]. Usually, the immediate and predictable reactions to the birth of a child with a disability are trauma, which is characterized by feelings of hopelessness, sadness or depression, loneliness, fear, anger, failure, disbelief, destruction,

bewilderment, doubt, and the feeling of being trapped. Both mothers and fathers have repeatedly reported having such cases or similar feelings throughout their child's life [3].

According to the results of various studies, the mental health of children with disabled siblings is strongly affected by the disability conditions of their disabled siblings. Siblings' reactions to their disabled brothers and sisters are different [4]. After being aware of the fact that their brother or sister is disabled, the siblings become extremely anxious and have serious concerns and continuously have many questions such as; Why did this happen? Does my brother have an infectious disease? Is it possible that I also get his disease? What should I tell my friends? I can't take care of a child like him! Do I have to take care of him all my life? Will I have disabled children? What responsibility do I have towards my disabled brother?

One of the common emotional reactions of children who have disabled siblings; depression, anxiety, and helplessness are accompanied by negative self-concept, which is mostly in the form of sadness or grief, and confusion. Some of these children have described these reactions as similar to emotions as if they lost a family member [5]. According to the studies, in most cases, there are negative feelings and negative self-evaluations among children and adolescents who have siblings with specific physical and mental disabilities. Feelings of loneliness, anxiety, guilt, and regret are common among them. The feeling of loneliness can be seen in children and adolescents who wanted to have a brother or sister, whom they can play with, or because of the feeling that if their parents cannot or are not alive, who will be their disabled sibling? Will take care of children and adolescents who believe that they are obliged to take care of their disabled sibling, thinking that failure to provide such care may make them look bad or immoral [6]. For this reason, they may sometimes show psychological reactions of anger, failure, disgust, and guilt towards the disabled sibling, and feel anxiety and self-deprecation in the environment outside the home [7]. Parents' attitudes and behaviors have an important effect on their children and adolescents towards siblings with disabilities. Children are mirrors that reflect the attitudes and values of their parents. If parents are optimistic and realistic in their view of a child with a physical-mental disability, then the siblings will probably share this attitude [8]. The results of some research have shown that some children and teenagers feel more positive about having a sibling with a special disability and believe that their experience with these disabled siblings will make them stronger people [9].

Siblings who have a loving interest in helping a child with a disability can be an important source of support [10]. In some cases, children and adolescents with disabled sibling feel emotionally neglected by their parents. Many children and teenagers may be annoyed by the fact that their parents spend more time and attention on their disabled siblings, and this annoyance causes separation anxiety and jealousy in them [11].

2. Review Literature

Marquis et al (2019) used population-level administrative data for health service utilization from the Ministry of Health, British Columbia, Canada to assess the mental health of siblings of children who have a developmental disability. Evidence of increased depression and mental health problems existed across all income levels, indicating that other stressors may have an



impact. These findings suggest that siblings of children who have a developmental disability are a vulnerable group in need of programs and services that support their mental health [12].

Qureshi et al (2022) examined the mental health of siblings of children with physical illness (PI), with or without co-occurring mental illness. Differences in mental health exist between children with PI or PM versus their healthy siblings. However, differences between siblings of children with PI versus siblings of children with PM can be explained by parental and family factors (e.g. marital status, education, and income). Findings reinforce family-centered care approaches to address the needs of children with PI or PM and their families [13].

Saad et al (2022) examined the mental health of siblings of children with physical illness (PI), with or without co-occurring mental illness. After adjusting for parent psychopathology and family functioning, no statistically significant differences between siblings of children with PM versus siblings of children with PI were found. Differences in mental health exist between children with PI or PM versus their healthy siblings. However, differences between siblings of children with PI versus siblings of children with PM can be explained by parental and family factors. Findings reinforce family-centered care approaches to address the needs of children with PI or PM and their families [14].

Krzeczowski et al (2022) proposed scoping review aims to address the following questions: i) how do mental disorders impact the mental health of their siblings ii) Can we identify resources designed to address the needs of siblings of children with mental disorders? This scoping review protocol was developed in keeping with gold standard scoping review methodological criteria. Finally, our inclusion of the consultation and stakeholder engagement exercise will ensure that this work is relevant and that results can be rapidly translated to knowledge users. Taken together, this proposed scoping review aims to provide evidence and guidance critical to investing in the health of siblings of children with mental disorders [15].

Siminghalam et al (2018) having a disabled child can have profound effects on the living conditions and the mental health of their family. Siblings of the children with disabilities have an important role in supporting them. Their physical, mental and emotional health may be at risk, therefore, their condition and living should be concerned and improved. The current study showed that the quality of life of siblings of children with developmental disabilities is decreased. These results suggest the necessity to provide supportive and therapeutic programs for maintaining and improving the quality of life of these siblings and the whole family [16].

3. Method

The current research is a retrospective descriptive research. The statistical population includes all normal students and students with physical and mental disabilities registered in schools and multi-disability rehabilitation centers. The number of 160 students (80 children with disabled siblings and 80 normal children) was selected as a statistical sample by cluster method. From self-esteem questionnaires (Cooper Smith) and the new anxiety test (Reynolds and Richmond 1). This questionnaire has four dimensions of physiological anxiety (11 questions), worry (10 questions), social anxiety (9 questions) and lie detection (7 questions) and independently for T analysis; there are a total of 37 questions in Likert scale. Statistical inference tests of analysis of variance and information were used.

4. Result



Table 1: The mean and standard deviation of the studied children and adolescents in the four dimensions of the Reynolds and Richmond anxiety test.

Students		Dimensions of anxiety				
		Statistical characteristic	Physiology	Worry	Social anxiety	Lying
	Well-sibling boys	Average	13.90	15.30	9.60	11.97
		Standard deviation	2.13	1.32	1.30	1.98
		Standard deviation error	0.390	0.24	0.238	0.360
	Normal boys	Average	15.10	17.20	11.17	9.47
		Standard deviation	1.20	2.3	1.07	1.6
		Standard deviation error	0.22	0.24	0.199	0.29
	Well-sibling girls	Average	17.83	19.67	12.37	15.907
		Standard deviation	1.937	1.887	1.712	2.123
		Standard deviation error	0.35	0.34	0.31	0.39
	Normal girls	Average	19.60	20.37	11.23	13.03
		Standard deviation	1.13	1.35	1.28	1.32
		Standard deviation error	0.21	0.25	0.23	0.24

Table 1 shows the mean scores, standard deviation, and standard deviation error of the four studied groups in the four dimensions of anxiety (physiology, worry, social anxiety, and lying).

Table 2: Statistical description of total anxiety in the studied sample

Anxiety		N	Average	Standard deviation	Mean standard error
	Normal children	60	58.58	20.43	3.20
	Well-sibling children	60	89.39	20.30	3.40

Table 2 shows the overall anxiety score of the studied sample (children with normal siblings and children with disabled siblings).

Table 3: T-test of independent groups for general anxiety

		Lone test			T-test for equality of means			
		F	Significant	t	Mean difference	Significance (two-sided)	df	Error difference
Anxiety	The assumption of the equality of variances	0.38	2.004	0.31	9.47	0.03	118	1.65
	Inequality of variances		2.004		9.47	0.03	77.80	1.65



In Table 3, the t-test of independent groups of normal children and children with disabled siblings in the anxiety variable is presented. It can be seen that there is a significant difference between the two groups at a significance level of 0.5 have seen.

Table 4: Descriptive data related to the total score of the self-esteem variable under study, that is, children and adolescents

Self-esteem		N	Average	Standard deviation	Mean standard error
	Normal children	60	1.86	0.56	0.042
	Well-sibling children	60	1.06	1.81	0.19

Table 4: Presents the statistical description of the anxiety variable in the studied sample. The average scores of these two groups are 1.86 (children with disabled siblings) and 1.06 (normal children).

Table 5: T-test of independent groups for self-esteem

			Lone test		T-test for equality of means			
		F	Significan t	t	Mean differenc e	Significanc e (two- sided)	df	Error differenc e
Anxiety	The assumptio n of the equality of variances	6.81	0.005	0.51	78	0.58	0.077	0.28
	Inequality of variances			0.51	40.30	0.58	0.077	0.28

Table 5 shows the t test of independent groups for the self-esteem variable. As can be seen, there is no significant difference between these two groups.

Table 6: One-way analysis of variance

		Sum of squares	df	Average of squares	F	Significant level
Physiological anxiety	Intergrup	41.933	3	137.313	49.786	000.1
	Intragrup	319.933	116	2.758		
	Total	731.867	119			
Worry	Intergrup	523.492	3	184.164	81.739	000.1
	Intragrup	257.100	116	2.216		
	Total	800.592	119			
Social anxiety	Intergrup	255.833	3	85.278	45.911	000.1
	Intragrup	215.467	116	1.857		
	Total	471.300	119			
Lying	Intergrup	425.892	3	141.964	44.496	000.1
	Intragrup	370.100	116	3.191		
	Total	795.922	119			

5. Discussion and Conclusion

The exceptionality of a child creates problems for both the parents and the child's siblings. Parents and siblings of a child with a special disability are anxious and confused about the child's disability and are worried about his current situation and his future life, and this worry is amplified by the fact that they do not know what will happen when the exceptional child grows up. Throughout history, there has always been a relatively malignant attitude towards disabled

people (physically and mentally), especially to people who were suffering from severe mental insufficiency, and despite positive developments and transformations regarding the personal and social sufficiency of disabled people, as well as awareness and general culturalization based on the fact that disabled children and adolescents are first of all human beings with all human characteristics, secondly, they are individuals with special physical and mental conditions that require special support in order to revive their abilities, more or fewer witnesses the attitudes and the encounters are similar to the past. And the family members (especially siblings) who have a close relationship with this type of people are reluctantly condemned to some limitations and psychological-social problems that the presence of a disabled person has imposed on them unwillingly [17].

Families and especially children and teenagers with a disabled sibling are more anxious than their peers with a normal sibling, and they also have different feelings in terms of self-esteem. In this research, according to the tests used, the total scores of both groups of children and adolescents with normal siblings and with disabled siblings, as well as between-group and intra-group scores in the four dimensions of anxiety were shown. The results showed that children and teenagers with a disabled sibling had significant anxiety compared to children and teenagers with a normal sibling, but in the self-esteem variable that was done using the Cooper-Smith self-esteem scale, although the difference was noticeable, this difference was not significant.

According to the results, it seems those officials, experts, trainers, parents, and all those who somehow contribute to the education, rehabilitation, and treatment of children with special (physical-mental) disabilities, are more concerned about education and rehabilitation issues than before. They should be diligent and plan more than in the past in order to inform and modify and transform the malignant attitudes that exist towards the abilities and capabilities of disabled people, and naturally, such actions can cause unpleasant feelings in families and children and adolescents whom it corrects and improves siblings with special disabilities. In addition, it is necessary to compile programs for such families to facilitate the process of reconciliation and acceptance for them and to take measures to curb, control and reduce the mental and emotional pressures caused by this situation.

Siblings of a mentally retarded child can affect the social competence of the affected child. On the other hand, there are evidence that show that siblings of mentally retarded children may be at risk of developing behavioral problems due to the inability of the family to accept and cope with the presence of a mentally retarded child in the family as their own size [18].

A retarded child can put stress on the siblings of a disabled child. But if the family accepts and supports their mentally retarded child with love and sincerity along with the reality, their normal children will not experience much psychological pressure in accepting their disabled sibling [19].

Studies show that if there is strong and continuous social support for a mentally retarded child, the siblings of the mentally retarded child will have a better understanding of this issue and will accept it easily. Also, it is likely that the family relationship will be stronger, especially if the parents are not under psychological pressure [20].

Dyson (1993), in a study, investigated the effect of a mentally retarded child on the development of his normal sibling. Dyson compared two groups. In the first group; a younger sibling is mentally retarded and in the second group; a younger sibling is healthy.



The results showed that the first and second groups did not differ much in terms of behavior and self-confidence. In fact, both groups had more behavioral problems and fewer self-confidence problems. In addition, the mental performance of these children has been reported to be stable over time, in such a way that social and behavioral competence has the most stability and self-perception has the least stability. Since then, psychological factors have had a mutual effect on these results. The positive relationship between the family and the emphasis on individual responsibility led to better social ability, and on the contrary, the negative experiences of the family related to self-perception became weaker, which decreased over time [21].

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