

Spirituality as the Most Influential Factor in the Resilience of Siblings of Children with Disabilities: Cross-sectional Study

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Abstract

Background: Siblings, who have the longest relationship with individuals with disabilities, are frequently negatively impacted by their sibling's disabilities. However, previous studies demonstrated that there are positive impacts of this condition. The concept of resilience can explain differences in the responses. Therefore, it is critical to analyze factors influencing the resilience of siblings of individuals with disabilities.

Objective: This study aims to analyze factors influencing the resilience of siblings of children with disabilities.

Methods: This study was a cross-sectional study involving a total of 118 respondents consisting of parents and siblings of children with disabilities from 7 special schools in Padang, West Sumatera, Indonesia, selected using a random sampling method. Five questionnaires were collected from May to June 2023. The siblings completed 3 questionnaires (Child & Youth Resilience Measure-Revised (CYRM-R), Multidimensional Measurement of Religiousness / Spirituality (MRS) and Multidimensional Scale of Perceived Social Support (MSPSS)), while the parents completed the other 2 questionnaires (Demographics, Parenting Style and Dimensions Questionnaire (PSDQ)). Descriptive statistics, Chi-square, Mann-Whitney analysis, Pearson analysis, and logistic regression analysis were used to analyze the data.

Results: There is a significant relationship between parenting style ($P=.002$), children's perceived social support ($P=.005$), and children's spirituality ($P=.001$). This study confirms that spirituality is the most influential factor influencing the resilience of siblings of children with disabilities. ($OR=.394$).

Conclusions: Spirituality was such a key factor influencing the resilience of siblings of children with disabilities. Nurses could provide spiritual care to the patients' siblings, allowing them to grow into physically and emotionally healthy siblings. Clinical Trial: -

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Original Manuscript

Short Paper

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Keywords: disability children; sibling; spirituality

Introduction

The sibling relationship is one of the most intense lifelong interpersonal relationships, and it has a direct impact on the children's future well-being [1] and each other's lives [2]. The majority of healthy siblings of children with chronic illnesses are physically and psychologically impacted. The siblings of children with disabilities are at risk for a variety of emotional disorders and harmful behaviors [3]. In fact, growing up with siblings with disabilities affects personal and social development [1].

Previous studies have conflicting results on the influence of chronic illnesses on the patients' siblings [4]. Several studies have found that the siblings of children with chronic illnesses are more likely to have anxiety, depression, [1], low self-esteem [5], and poor psycho-social functioning [6]. The siblings of children with chronic illnesses, on the other hand, exhibit enhanced empathy [7], altruism [7], independence and responsibility [8].

The concept of resilience explain various differences in expression in traumatized children [9]. The resilience is defined as the ability to function and develop in a healthy manner in the face of misfortune and stress [10]. It is a concept or individual characteristic that has been identified as potentially important in protecting mental health in people with chronic illnesses [11].

The resilience theory can be utilized to assist the children coping with stressful experiences and to make changes to create a healthier and more productive environment for them [12]. However, no research on the resilience of siblings of children with disabilities has been conducted.

Methods

Research Design

This study was cross-sectional research. The samples included the siblings and parents of children with disabilities who attended special schools (Sekolah Luar Biasa (SLB)) in Padang, West Sumatra, Indonesia.

Sample/Participant

A simple random sampling method was employed to select the participants. Initially, all special schools in Padang city were identified. Then, the siblings and parents who met the criteria were randomly selected by means of a balance. The inclusion criteria for the siblings included: Parents have more than one biological child and one of the children has a disability; the siblings of children with disabilities are 7-17 years old; and both the parents and siblings are willing to participate. Meanwhile, the exclusion criteria were: The siblings of children with disabilities also have disabilities or other chronic conditions; and the parents or siblings may have cognitive problems that make interpreting the questionnaire difficult. If the child with disabilities had more than one sibling, the researchers chose a sibling at random to be the participants of this study.

Instruments

This study used five instruments. Two questionnaires were completed by the parents, including the demographics and Parenting Style and Dimensions Questionnaire (PSDQ). The questionnaires completed by the siblings were the Child & Youth Resilience Measure-Revised (CYRM-R) questionnaire modified by the researchers, the Multidimensional Measurement of Religiousness / Spirituality (MRS) and the Multidimensional Scale of Perceived Social Support (MSPSS).

Data Collection

The researchers and one research assistant collected the data between May and June 2023. The first researcher collaborated with the special schools' principals and teachers to identify students who had siblings who fit the research criteria. Then, the researcher contacted the parents to obtain an informed consent document. After the parents and siblings consented to participate, the researcher arranged on a time and location for the questionnaire to be completed. The researcher assisted the siblings or parents who were having problems reading the questionnaire. The research assistant assisted in the data collection by distributing and collecting the completed questionnaires from the parents and children.

Data Analysis

The data was then evaluated after it had been validated for completeness and accuracy. To assess the participant profile descriptively, a univariate analysis was performed. Prior to performing the data analysis, the Kolmogorov-Smirnov test was employed to determine the normality of one variable of the numerical data type. Considering that the variable failed the normality test, the Mann-Whitney

test was utilized. The Chi-square or Fisher test was performed for categorical data. The logistic regression using backward approach was performed to examine the correlational model.

Ethical Considerations

The ethics committee of the Faculty of Nursing, University of Indonesia, accepted this study with the number KET-101/UN2.F12.D1.2.1/PPM.00.02/2023. The researchers explained to the participants about the purpose, methods, and time required to complete the questionnaires. The participants were allowed to refuse to participate, or even withdraw from the study at any time. The participants then signed a consent form. To guarantee the privacy, the parent and sibling questionnaires were completed in separate locations. In addition, to maintain anonymity and confidentiality, the questionnaires were coded.

Results

Participant Profile

At the end of this study, the total participants were 118 parents and 118 siblings (Table 1).

Table 1. Participant profile (N=118).

	Characteristics	%
Gender of Sibling		
	Male	56.8%
	Female	43.2%
Parenting Style		
	Democratic	92.4%
	Authoritarian	5.1%
	Permissive	2.5%
Social Support		
	High	76.3%
	Intermediate	23.7%
Age Gap^a		
	Age gap	4 (0-12) years
Age Category of Sibling		
	School Age	22%
	Adolescence	78%
Knowledge		
	Understand	97.5%
	Do Not Understand	2.5%
Birth Order of Sibling		
	Firstborn Child	39.8%
	Middle Child	28.8%
	Youngest Child	31.4%

^a Median (min-max)

Resilience

Table 2 reveals that the majority of siblings of children with disabilities had a high level of resilience (58.7%).

Table 2. Resilience of siblings (N=118).

Resilience	N	%
High	71	60.2%
Low	47	39.8%

The Relationship of Dependent and Independent Variables

Table 3 shows that there is a significant relationship between parenting style ($P=.009$), social support ($P=.005$), and spirituality ($P=.001$) has significant relationship with the resilience of siblings of children with disabilities.

Table 3. Relationship between Independent variable and resilience (N=118).

	Independent Variable		Resilience				P	OR	95% CI	
			High		Low				Min.	Max.
			N	%	N	%				
1	Gender ^a	Male	42	62.7	2	37.3	.652	1.27	.61	2.68
		Female	29	56.9	5					
					2	43.1				
2	Age Group ^a	School Age	14	53.8	1	46.2	.604	.72	.30	1.72
					2					
		Adolescence	57	62.0	3	38.0				
3	Parenting Style ^b	Democratic	70	64.2	3	35.8	.009*		-	
		Authoritarian	1	16.7	5	83.3				
		Permissive	0	0	3	100				
4	Order of Birth ^a	Firstborn Child	31	66	1	34	.223		-	
					6					
		Middle Child	22	64.7	1	35.3				
					2					
		Youngest Child	18	48.6	1	51.4				
					9					
6	Social Support ^a	High	61	67.8	2	32.2	.005*	.26	.11	.64
					9					
		Intermediate	10	35.7	1	64.3				
					8		.562	3.11	.27	35.32
7	Knowledge ^b	Understand	70	60.9	4	39.1				

	Independent Variable		Resilience				P	OR	95% CI	
			High		Low				Min.	Max.
			N	%	N	%				
					5					
		Do Not Understand	1	33.3	2	66.7				
8	Socio-Economic Condition ^a	High Income	32	64	18	36	.590	.76	.36	1.60
		Low Income	39	57.4	29	42.6				
9	Type of Disability ^b	Physical Disability	1	50	1	50	.973	-		
		Intellectual Disability	42	59.2	29	40.8				
		Mental Disability	10	55.6	8	44.4				
		Sensory Disability	18	66.7	9	33.3				
10	Spirituality ^a	High	52	73.2	19	26.8	.001*	.25	.11	.54
		Low	19	40.4	28	59.6				
11	Age Gap ^c	-	-	-	-	-	.989	-		

^a Chi-square analysis

^b Fisher analysis

^c Mann-Whitney analysis;

* P<.05

** P<.01

Factors Influencing the Resilience

According to Table 4, the final modeling of the multivariate analysis with the logistic regression includes four variables (sibling relationship, social support, spirituality, and parenting style). This demonstrated that, compared to other variables in this study, these four variables had the most significant relationship with the resilience of siblings of children with disabilities, where the spirituality being the most influential one (OR=.394).

Table 4. Logistic regression of factors influencing the resilience (N=118).

		Coefficien	S. E.	Wald	d	P	OR	95% CI
		t			f			

Step 1	Order of Birth			2.725	2	0.256			
	Order of Birth (1)	.787	.522	2.277	1	.131	2.19 7	.790	6.10 6
	Order of Birth (2)	.735	.548	1.803	1	.179	2.08 6	.713	6.10 2
	Parenting Style (1)	-2.506	1.15 8	4.683	1	.030	.082	.008	.790
	Spirituality (1)	-1.028	.455	5.100	1	.024	.358	.147	.873
	Social Support (1)	-1.086	.508	4.573	1	.032	.337	.125	.913
	Constanta	.865	.416	4.329	1	.037	2.37 6		
Step 2	Parenting Style (1)	-2.407	1.13 4	4.511	1	.034	.090	.010	.830
	Spirituality (1)	-0.932	.443	4.438	1	.035	.394	.165	.937
	Social Support (1)	-1.164	.500	5.412	1	.020	.312	0,11 7	.832
	Constanta	1.360	.305	19.86 5	1	< .00 1	3.89 6		

Discussion

The purpose of this study is to understand factors influencing the resilience of siblings of children with disabilities, and this study confirms that spirituality is the most influential factor.

Based on the findings of the study, parenting style has significant relationship with resilience. The democratic parenting style dominated the parents' parenting style in this study was a loving and nurturing parenting style that allowed the children to thrive while still maintaining sufficient control over their behavior. A previous study found that the parenting style had significant relation resilience in the adolescents from poor families [13]. Parenting style and resilience also had a significant relationship with post-traumatic symptoms in adolescents [14].

This study shows that there is a significant relationship between social support and the resilience of siblings of children with disabilities. The children with high social support have higher adaptability and have fewer behavioral problems [15]. The social support that has the greatest value in this study comes from support obtained from the family. Positive family support is a protective factor that can increase resilience, reduce stress, and can help children to form positive coping strategies to overcome physical and psychosocial problems in adolescents with type 1 diabetes [16].

This study finds that the sibling relationship was one of the most influential factors on the resilience of siblings with disabilities. The behavior of mentally impaired children and their siblings was two-

way and reciprocally related to their sibling relationship [17]. The quality of sibling relationships was one of the elements that could influence the resilience of adolescents [18].

This study confirms that spirituality is the most influential factor in the resilience of siblings of children with disabilities. The spirituality was something that began in childhood and grew as the children grew and developed [19]. It was defined as a belief, experience, and awareness, as well as distinct behaviors that constructed meanings in a child's life, including significant events such as illnesses experienced by the children or loved ones [20]. The children could comprehend the significance of events in their lives as well as the socio-cultural background [19]. The siblings reported a high level of spirituality, which was highly related to their resilience. There was a strong association between the spirituality and emotional resilience also found in elementary school children in Bekasi [21].

Nursing Implications

Based on this research, nursing interventions concentrating on spirituality, building a social support system, and assisting the parents in developing a democratic parenting style can be developed to promote sibling resilience.

Limitations

This study was limited to the special schools in Padang city. Future research is suggested to employ larger samples and analyze them from different cultural backgrounds to better understand the factors influencing the resilience of siblings of children with disabilities.

Conclusions

Parenting style, social support, and spirituality are factors that played a role in the resilience of siblings of children with disabilities. In this study, revealed that the spirituality was the most influential factor in the resilience of siblings of children with disabilities. The findings of this study can be used to develop nursing care to boost the spirituality-based resilience in the siblings of children with disabilities.

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Conflicts of Interest

None declared

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