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Impact of behavioral problems of autistic children upon psychological stress of their family at autistic care centers in Holy Kerbala

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Abstract---Stress experienced by parents of children with developmental impairments is very high, and the tension is best explained by the increase in child behavior concerns seen in children with developmental disabilities rather than intellectual or

developmental functioning (davis, 2015).The study aimed to know the impact of the problem of autistic behavior in children on the psychological pressures of the caregiver and to know the differences in the psychological pressure of caregivers regarding the demographic characteristics of them and their children. To assess the psychological stress of family caregiver of autistic child. An analytical descriptive study was conducted to determine the effect of behavioral problems for children with autism on the psychological stress of family caregivers in autism care centers in the holy Kerbala and started from September_ 2019 to May 2020. A convenance sample consist of 75 An autistic child, and the psychological stress questionnaire was responded to by family caregivers. The results of the study showed that the level of family stress related to the problems of the behavior of children with autism is moderate, and there is a statistically significant relationship between behavioral problems of children with autism and family stress, and the absence of statistically significant differences in the level of behavioral problems and family stress regarding the demographic variables of the child and family caregiver (age, gender, educational level and family income).

Keywords---autism, psychological stress, behavioral problems.

Introduction

The parents of children with developmental disabilities have very high levels of parental stress, and the stress faced by these parents seems to be best accounted for by the increase in child behavior issues seen in children with developmental disabilities rather than intellectual or developmental functioning (1). Specifically, we were interested in understanding the influence on caregiver stress of the degree of functioning and behavior problems (2). In addition, we hypothesized that this relationship would hold regardless of the child's level of functioning or the type of rater (parent or caregiver). The interest in autism is due to its growing prevalence in Arab and international communities. One in 68 US children and autism in 2014, both the latest figures from the Center for Prevention and Control (3). Among children with developmental delays children with autism have been found to have the highest levels of behavior problems and, in turn, parents of these children typically show the highest levels of stress. The link between stress and behavior problems appears to be reciprocal, with increased child behavior difficulties leading to increased parental stress, which exacerbates the child's behavior problems even more (4). Within the literature review on families of children suffering from developmental disabilities, two ways to date of parental self-efficacy has been explored: (a) as an outcome variable itself and (b) as a predictor of parental outcomes. In research addressing the former, many of studies have established that closely or self-efficacy related constructs are prediction of parental stress (5, 6). Naturally, the responsibility to raise and care for a child will add pressure on parents to live as a family (7,8).

Methodology

Design: An analytical descriptive study was conducted to determine the effect of behavioral problems for children with autism on the psychological stress of family caregivers in autism care centers in the holy Kerbala and started from September_ 2019 to May 2020.

Setting: The study was conducted at the Imam Hussein and the Noor Al-Mustafa Institutes for Autism in Kerbala.

Sample: The questionnaire was distributed to health care providers for autistic children (n = 175), but caregivers who completed the questionnaire (n = 75)

Data collection: Data was collected from the Hussein and Noor Al-Mustafa institutes in Kerbala. Inclusion criteria for sample selection autistic child from two years old and above and Family caregiver, parents, or others.

Data analysis: The data is coded, tabulated, and presented in a descriptive form. The data was analyzed by using the statistical package for the SPSS- 20, There is a certain set of probability levels to determine the importance of the probability value test as follows (Non-significant $p > 0.05$, Significant $p \leq 0.05$, and Highly significant $p \leq 0.01$, also the following statistical procedures were used for the purpose of the current study (frequency, percentages, means and standard deviations, T. test , and ANOVA.

Administrative arrangement: An official permission has been granted from Ethical Committee for the College of Nursing / University of Kerbala. And the General Secretariat of the Husseini Holy Shrine / Educational Coordination and Rehabilitation Section / Secretary General's Office.

Study Instrument: Structured questionnaires consisting of closed questions in order to assess the impact of behavioral problems of autistic children on the psychological stress of autistic care providers in Kerbala. The study tool consists of 3 parts (Social and demographic characteristics, Information related to the child's behavior, and social and behavioral reactions of the family caregiver. The scale there are 3 Likert scale levels (always, sometimes, never) and registration according to these levels.

Results

Table 1 : The socio-demographic characteristics of the autistic children

No	Child characteristics	No	(%)
1	Age (years)	2-<4	4
		4-<6	20
		6-<8	26
		8-<10	16
		10-15	9
2	Gender	Male	60
		Female	15
3	Address	With the father and mother	73
		with father	1
		with mother	1
4	Read & write	Cannot read or write	66
		read or write	9

Table (1) shows that the highest percentage (34.7%) were within age group (6-<8) years old; the majority (80%) were males; 97.3% are living with two parents; and 88% cannot read and write.

Table 2: The socio-demographic characteristics of the family caregivers of autistic children

No	Caregivers' characteristics		N.75	%
1	Parent age	20-29	11	14.7
		30-39	41	54.7
		40-49	19	25.3
		50-59	4	5.3
2	Gender	Male	21	28.0
		Female	54	72.0
3	Kinship	One of the parents	64	85.3
		One of the brothers and sisters	2	2.7
		Other	9	12.0
4	Parents' education	Cannot read or write	3	4.0
		Read and write	20	26.7
		Secondary School	18	24.0
		Institute level	11	14.7
		BA	22	29.3
		Master or PhD	1	1.3
5	Income	Sufficient	32	42.7
		Barely enough	34	45.3
		Not enough	9	12.0
6	Time of unusual behavior be observed	3 years	69	92.0
		6 years	5	6.7
		More	1	1.3

Table (2) shows that the reveal that more than half family caregivers (54.7%) were within (30-39) age group, the majority (72%) were females, and (85.3%) were parents, and the highest percentage 29.3%) have bachelor's degree, (45.3%) with barely sufficient income and the majority (92%) were observed unusual behavior on their children from (3) years ago.

Table 3: The level of behavioral problems of autistic child

No	Items	Mean	Std. Deviation
1	The difficulty of the child interacting socially with us or with others	1.96	.531
2	Trying to make friends	2.12	.657
3	The difficulty of the child speaking or communicating with us or verbally with others	1.65	.797
4	Excess child attaches to a specific topic or things	1.67	.622
5	The child has frequent and unusual stereotypical behaviors or body movements	1.72	.727
6	The difficulty of the child carrying out daily life tasks in	2.05	.787

	terms of food, drink and clothing		
7	Child performs hostile behavior, such as anger, self-harm, and assault on others	2.39	.695
8	Doing strange behavior while eating	2.53	.622
9	Repeats the words without understanding their meaning	1.95	.751
10	It is preferable to sit alone for long hours	2.43	.661
Average mean		20.467 2.0467	3.17649 0.31765

Table (3) shows that indicate that the child behavioral problems is moderate (mean = 2.0467)

Table 4 : The level of family stress among family caregivers of autistic children

No	Items	Mean	Std. Deviation
A	Behavioral reactions of the caregiver		
1	I suffer from rapid forgetfulness	1.87	.723
2	I suffer from confusion in thinking	1.76	.714
3	It is difficult for me to make any decision, even a simple one	2.15	.692
4	Rush in my actions and my rulings	2.09	.738
5	I have a lot of problems and injuries	2.39	.733
6	I use sedatives and analgesics	2.77	.481
7	Go to smoking	2.93	.342
8	I find myself in conflict situations	2.28	.669
9	I feel under pressure	2.13	.811
10	Feel the burden of responsibility	1.59	.680
B	Caregiver reactions from social aspects		
1.	I suffer from family problems because of the child	2.21	.759
2.	I feel numb and embarrassed because of his behavior	1.96	.706
3.	I neglect my other sons because of my interest in the autistic child	2.25	.773
4.	My external social relationships became limited due to the child	1.92	.834
5.	Autistic child is the source of the family's problems	2.35	.830
6.	The requirements for caring for an autistic child are stressful	1.73	.723
7.	It hurts me not to have social support from family, relatives, friends and neighbors	1.81	.833
8.	Child care entails requirements beyond material means	1.80	.735
9.	Be shy when the child is socially embarrassing behavior	1.89	.709
10.	I do not take the child with me on many occasions	1.79	.776
11.	I feel ridiculed because of the autistic child	2.56	.721
Average means		44.2400 2.11	7.74569

Table (4) shows that the level of family stress related to autistic child behavioral problems is moderate (mean= 2.11).

Table 5: The relationship between autistic child behavioral problem and family stress

Variables		Behavioral problems	Family stress
Behavioral problems	Pearson Correlation	1	.322**
	Sig. (2-tailed)		.005
Family stress	Pearson Correlation	.322**	1
	Sig. (2-tailed)	.005	

Table (5) shows that the reveal that there is a significant relationship ($r = 0.322^{**}$) between behavioral problems of autistic children and family stress at $p \leq 0.005$.

Table 6: ANOVA for the difference in the autistic behavioral problems and family stress regarding children's age

Items		Sum of Squares	Df	Mean Square	F	Sig.
Behavioral problems	Between Groups	32.226	4	8.057	.789	.536
	Within Groups	714.440	70	10.206		
	Total	746.667	74			
Family stress	Between Groups	359.995	4	89.999	1.544	.199
	Within Groups	4079.685	70	58.281		
	Total	4439.680	74			

Table (6) shows that reveal that there is non-significant difference in the level of behavioral problems and family stress regarding children's age at $p \leq 0.05$.

Table 7: T. test for the difference in the autistic behavioral problems and family stress regarding children's gender

Items		T	Df.	Sig.
Behavioral problems	Equal variances assumed	.634	73	.528
	Equal variances not assumed	.592	19.964	.561
Family stress	Equal variances assumed	-.721-	73	.473
	Equal variances not assumed	-.625-	18.595	.540

Table (7) shows that the reveal that there is non-significant difference in the level of behavioral problems and family stress with regard to children gender at $p \leq 0.05$.

Table 8: ANOVA for the difference in the autistic behavioral problems and family stress with regard to family caregivers' age

Items		Sum of Squares	df	Mean Square	F	Sig.
Behavioral problems	Between Groups	18.169	3	6.056	.590	.623
	Within Groups	728.497	71	10.261		
	Total	746.667	74			
Family stress	Between Groups	69.034	3	23.011	.374	.772
	Within Groups	4370.646	71	61.558		
	Total	4439.680	74			

Table (8) shows that the reveal that there is non-significant difference in the level of behavioral problems and family stress with regard to family caregivers' age at $p \leq 0.05$.

Table 9: T. test for the difference in the autistic behavioral problems and family stress with regard to family care givers' gender

Items		t	df	Sig.
Behavioral problems	Equal variances assumed	.710	73	.480
	Equal variances not assumed	.633	29.660	.532
Family stress	Equal variances assumed	.527	73	.600
	Equal variances not assumed	.563	42.081	.576

Table (9) shows that the reveal that there is non- significant difference in the level of behavioral problems and family stress with regard to family caregivers gender at $p \leq 0.05$.

Table 10 : ANOVA for the difference in the autistic behavioral problems and family stress with regard to family caregivers' kinship

Items		Sum of Squares	df	Mean Square	F	Sig.
Behavioral problems	Between Groups	7.377	2	3.688	.359	.699
	Within Groups	739.290	72	10.268		
	Total	746.667	74			
Family stress	Between Groups	352.742	2	176.371	3.107	.051

	Within Groups	4086.938	72	56.763		
	Total	4439.680	74			

Table (10) shows that the reveal that there is non-significant difference in the level of behavioral problems and family stress with regard to kinship at $p \leq 0.05$.

Table 11: ANOVA for the difference in the autistic behavioral problems and family stress with regard to family caregivers' educational level

Items		Sum of Squares	df	Mean Square	F	Sig.
Behavioral problems	Between Groups	20.298	5	4.060	.386	.857
	Within Groups	726.368	69	10.527		
	Total	746.667	74			
Family stress	Between Groups	142.796	5	28.559	.459	.806
	Within Groups	4296.884	69	62.274		
	Total	4439.680	74			

Table (11) shows that the reveal that there is non-significant difference in the level of behavioral problems and family stress with regard to family caregivers' educational level at $p \leq 0.05$.

Table 12: ANOVA for the difference in the autistic behavioral problems and family stress with regard to family income

Items		Sum of Squares	df	Mean Square	F	Sig.
Behavioral problems	Between Groups	6.868	2	3.434	.334	.717
	Within Groups	739.799	72	10.275		
	Total	746.667	74			
Family stress	Between Groups	254.899	2	127.449	2.193	.119
	Within Groups	4184.781	72	58.122		
	Total	4439.680	74			

Table (12) shows that the reveal that there is non-significant difference in the level of behavioral problems and family stress with regard to family income at $p \leq 0.05$.

Table 13: ANOVA for the difference in the autistic behavioral problems and family stress with regard to child age of changing behavior

Items		Sum of Squares	df	Mean Square	F	Sig.
Behavioral problems	Between Groups	31.565	1	31.565	3.222	.077
	Within Groups	715.101	73	9.796		
	Total	746.667	74			
Family stress	Between Groups	298.028	1	298.028	5.253	.025
	Within Groups	4141.652	73	56.735		
	Total	4439.680	74			

Table (13) shows that the reveal that there is non- significant difference in the level of behavioral problems with regard to child age of changing behavior whereas a significant difference was found in the level of family stress at $p \leq 0.05$.

Discussion of the Result

This chapter deals with the systematic interpretation of the results of the current study and its discussion of such findings related to the effect of behavioral problems of children with autism on psychological stress of family caregivers. This is the first known study to be conducted in Kerbala to comprehensively describe the effect of an autistic child's behavior on caregivers' stress. The present result will be the first step in providing basic quantitative data on the impact of behavioral problems on psychological stress of the caregiver of children with autism in autism centers in the holy Kerbala.

Socio-demographic characteristics

The results of the socio-demographic characteristics of the 75 autistic patients (Table 1) showed that (34.7%) of the sample were in the age group (6–8 years), and this result agrees with the study by Sandeer et al. (2013). Most of the children were boys, and the ages ranged from 7 to 11 years, which agreed with the study (American Psychiatric Association (2013). The results showed that the majority of patients were 80% male, and the study (Ana et al., 2019) agreed with the current results that males were (92.3%). Regarding housing, with a percentage of 97.3% with parents, the result is consistent with the study (Nika et al., 2019). The results indicated that 88% could not read and write. The study (Nika et al., 2019) agrees with the current results, as the percentage (18.9%) does not read or write.

The results showed that more than half of the caregivers in the household (54.7%) (Table 2) were in the age group (30-39), and this result is consistent with a study (Sally, 2013), which showed that (38.5%) of caregivers between the ages of 31 and 40 years old. The results indicated that most of them were female (72%). The study (Nika et al., 2019) agrees with the current results, which indicate that the

percentage of females is 74.9%. With regard to kinship (85.3%) of the sample of parents, this result is consistent with a study (Nika et al., 2019) which reported 55.9% of parents. The highest percentage of educational level (29.3%) of the sample holds a bachelor's degree. This finding is supported by a finding (Yu_Chi et al., 2017) which stated that those with a Bachelor's degree were (74.2%). As for income, the majority of the samples had a sufficient income of about 45.3%. This finding is consistent with the findings of a previous study (Abdulaziz and Al-Deeb, 2016), which found that 33.9 percent of participants live on an annual family income and that the majority (92.2 percent) noticed unusual behaviors in their children three years ago. This result is supported by a study (Al-Kiki, 2011) that stated that it is a type of behavioral disorder that is observed during the first three years of a child's life.

The level of behavioral problems of autistic child

The results indicate that the child's behavioral problems are moderate (mean = 2.04667), where the arithmetic mean of expression (8) reached 2.53, expressing a high level of behavioral problems for an autistic child. This result is consistent with the study of Abdullaziz and AlDib (2016), where the average arithmetic (m = 3.34) indicates an intermediate level. The results of the studies (Barroso et al., 2018; Yorke et al., 2018) agree with supporting the important link between parenting stress and children with ASD. Autism parenting stress presented a positive association with behavioral problems, exceeding the value for the relationship between ASD symptoms and behavioral problems.

The level of family stress among family care givers of autistic children

The results showed that the level of family stress associated with behavioral problems in children with autism is average (average $r = 2.11$). (Abdullaziz and AlDib, 2016) indicated the level of family pressure associated with behavioral problems in children with autism was average ($r = 2.68$). It agrees with the current study that It was also found that (Samadi and McConkey, 2014), which reported that social support aids coping methods and can have a favorable impact on carers' perceptions of burden. In this regard, Mazak, Speranza, Fernandes, Cid, and Gasparini (2020) contribute to the diagnosis of autism and their families' stress, as well as the extent to which the support and guidance of health and education professionals, the collective, and the community can be essential for reducing stress and facing challenges.

The relationship between autistic child behavioral problem and family stress

With regard to the relationship between behavioral problems of children with autism and family stress, the results of the current study indicated that there is a significant relationship ($r = 0.322$) at $p \leq 0.005$. Chen et al. (2017), which agrees with the current study regarding behavioral problems for children with autism and family stress ($r = 0.25-0.53$, $p < 0.001$). It was also found that (Samadi et al., 2014). Other factors, such as parents' emotional health, children's behavioral difficulties, the presence of other dependents at home, and the number and quality of informal support, all contribute to increased family stress levels. Athari et al. (2013) and Gona et al. (2016), they reported that there were a lack of

adequate services and high financial costs; peer rejection; family and community stress; lack of adequate information and qualified professionals; and parents' difficulty engaging in other professional activities or family responsibilities that do not involve the care of children with autism-behavioral problems.

Analysis of Variance in the autistic behavioral problems and family stress with regard to children's age

With regard to the age of the children, the highest age (6–8), there were no statistically significant differences in the level of behavioral problems and family pressures regarding their age at $p \leq 0.05$. The results agree with the study represented by Khalil and Hajj (2011), which mentioned that there were no statistically significant differences in the level of behavioral problems according to the age variable. Barker et al., 2011; Fitzgerald et al., 2002; Tehee et al., 2009 mentioned that there was no association between age and parenting stress.

Analysis of Variance in the autistic behavioral problems and family stress with regard to children's gender

Regarding sex, no statistically significant differences were found in the levels of behavioral problems and family pressures regarding gender for children at $p \leq 0.05$. (Khalil and Hajj, 2011) agree with the current findings that there are no statistically significant differences in the level of behavioral problems according to the child's gender at $p = 0.05$. The results of this study agree with Al-Rahman (2006), who mentioned that there are no statistically significant differences in the level of family stress depending on the gender of the child.

Analysis of Variance in the autistic behavioral problems and family stress with regard to family caregivers' age and gender

Regarding the age of family caregivers (31/39), the results showed that there was no significant difference in the level of behavioral problems and family stress regarding their age at $p \leq 0.05$. The results of Bouchaaria and Al-Dayikh (2017) indicated that there are no statistically significant differences in the level of psychological stress according to the age variable. Regarding the gender of family caregivers, the current results show that there is no significant difference in the level of behavioral problems and family tension regarding the gender of family caregivers at $p \leq 0.05$. A study (Hastigs and Johnson, 2001) indicated that parental pressures were linked to psychological factors rather than demographic factors. Consistent with research, parent gender was found to impact predictors of family adaptation (Allen et al., 2013; Baker-Ericzen et al., 2005; Davis and Carter, 2008; Pozo et al., 2013). For mothers, children's externalizing behavior and difficulty seeing stressors as a challenge were the strongest predictors of stress.

Analysis of Variance in the autistic behavioral problems and family stress with regard to family caregivers' kinship

The results showed that there was a non-significant difference in the level of behavioral problems and family pressures with regard to kinship at $p \leq 0.05$. The

study of Lecavalier (2006) agrees with the present finding, which reveals that there are non-significant differences.

Analysis of Variance in the autistic behavioral problems and family stress with regard to family caregivers' educational level

The current results show that there was a nonsignificant difference in the level of behavioral problems and family stress regarding the educational level of caregivers at the level of $p \leq 0.05$. This result is supported by Bouchaaria and Al Dayikh (2017), who reported no statistically significant differences in the level of psychological stress with regard to the educational level of caregivers.

Analysis of Variance in the autistic behavioral problems and family stress with regard to family income

The results show that there was a non-significant difference in the level of behavioral problems and family stress with respect to family income at $p \leq 0.05$. (Davis, 2015) agrees with the current findings that there are no statistically significant differences in the levels of behavioral problems and family stress with regard to family income. (Pegah et al., 2013). The results indicated a negative significant correlation was achieved between family income and the severity of autism among children. (Keenan et al., 2007) indicated low socioeconomic status and low income as the first stressors in poor families. (Oregon Health and Science University family physician, 2011) also indicated that low family income has side effects on families and children with autism.

Analysis of Variance in the autistic behavioral problems and family stress with regard to child age of changing behavior

The results showed that there was no significant difference in the level of behavioral problems with regard to the child's age in changing the behavior, while a significant difference was found in the level of family stress at $p \leq 0.05$ (Chien et al., 2013). The results reported in his study are consistent with current findings regarding autistic child behavior and its correlation significantly with the degree of family stress at ($p < 0.05$).

Conclusion and Recommendations

Family stress among parents and behavioral problems in autistic children are at a moderate level. Family stress is associated with the behavior problems of children. Also, the age and gender of children and the age and type of family caregivers, kinship, educational level, and family income have no effect on the level of behavioral problems and family stress. Also, the negative effect of behavioral problems has no effect on the level of behavioral problems and family stress. The study recommended the importance of training an autistic child according to specialized programs. preparing a family therapy program with the aim of reducing some symptoms of behavioral disorders in children, such as aggression, withdrawal behavior, and vandalism. Avoiding punishment as a global behavioral observation so as not to lead to the emergence of behavioral disorders, conflicts, and psychological pressure on the child Create a channel, TV, and

social media programs that contribute to spreading awareness of the disease and how to deal with it. Create a club to train autistic people until after their teens. The existence of a comprehensive and organized body that meets the needs of families of children with autism, from early diagnosis on a sound basis, and provides medical and cognitive support and training to the families of children with autism. Also, providing counseling programs for family caregivers based on the results of these studies, taking into account in their design the needs of autistic caregivers, is effective in reducing the psychological stress of autistic caregivers. expanding the provision of educational training programs that help parents communicate and interact with their children, and train them to be independent in performing daily life skills. and expanding the establishment of centers specialized in providing psychological support and relieving stress among autistic childcare providers.

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