

# Investigating Mental Health Status Among Parents of Special Needs Children in South Region in Bangladesh

Md. Sariful Islam<sup>1, a</sup>, Tania Najnin<sup>1, a</sup>, Rowshan Ara Afrin<sup>2, b</sup>, Sadia akter Shormela<sup>2, a</sup>, Md. Mosaraf Hossain<sup>3, a</sup>, Md. Tanzir Hossen<sup>4,a</sup>, Md. Mejbah Uddin Mithu<sup>5,c\*</sup>

<sup>a</sup>Department of Public Health and Informatics, Jahangirnagar University, savar, Dhaka.

<sup>b</sup>Department of Public Health, German University Bangladesh, Gazipur, Bangladesh, <sup>c</sup>Department of Public Health, Daffodil International University, Savar, Bangladesh

Email address: mejbah.ph@diu.edu.bd

Abstract—Background: Parental mental health problem is a common condition of special needs children. Having a special needs child means facing long-term problems as a parent, regardless of the type and complexity of the special needs child's disability. **Objective**: The present study aimed to investigate the association among sociodemographics factors, financial difficulties and mental health status of those parents. Methods: A cross-sectional study was conducted on 206 respondents and semi-structured questionnaire including questions concerning socio-demographics and financial difficulties along with a psychometric scale (i.e., DASS-21) was used to collect data from parents of special needs. Data was analyzed by using SPSS version-24 software to determine the factors associated with mental health consequences. Results: The present study found that the proportion of mothers and fathers was 31% and 69% respectively. It was found that only 36.41% respondent have reached at the government facilities for special needs child and 63.59% do not have any government facilities. From this study it was known that among the respondents 17.96%, 16.02% had severe and extremely severe levels of depression respectively where 15.53%, 33.98% had severe and extremely severe levels of anxiety was found. Mothers were suffering more anxiety (78.32%), depression (84.85%) and stress (49.69%) compared to men mental health status. Among the respondents 24.76% special needs children received institutional treatment where 75.24% had no access to this treatment facilities. Conclusion: Most of the respondents were found with a mental health concern as moderate to severe and also extremely severe. These findings highlight the contributing factors of poor mental health which warrant the further investigation and interventions that will address and improve the mental health conditions of the suffered parents. It is necessary to pay attention to the parent's mental health, provide more social and family support, and reduce parenting pressures.

Keywords— Depression, Anxiety, Stress, Disability, Mental health.

#### I. INTRODUCTION

Children with "special needs" are those who need resources and particular care that others do not need. The probability that a kid may require special education can be influenced by variables including parental age, race, and financial level. For example, compared to women between the ages of 20 and 29, women over 40 had a 50% higher chance of having a kid with autism [11] Children with cerebral palsy, epilepsy, autism spectrum disorder, spina bifida, traumatic brain injuries, visual impairments, hearing loss, Down syndrome, emotional disturbances, learning disabilities, intellectual disabilities, speech and language impairments, and severe or multiple disabilities can all be classified as special needs children.

These problems usually begin in early childhood and endure for the duration of a person's life. Parents' health and well-being, as well as the quality of their parenting, are affected by the stress connected with these roles [2,19]. According to relevance theory, these children should have particular difficulties communicating via language. Although there are some behaviors that are similar, they also have very unique characteristics in many ways [12,24]. Compared to parents of developmentally ordinary children, parents of children with exceptional needs, such as those with autism and Down syndrome, report greater levels of parental stress and dysphoria. There is a strong correlation between stress and dysphoria, and mothers of autistic children exhibit higher depressed symptoms. Social support has a particularly potent mitigating impact on mothers' depression and lessens the detrimental consequences of parental stress on fathers as well [36]. A study on 32 autistic parents found that disruptive symptoms, physical typeability, and lack of knowledge contribute to stigma, with moms more likely to feel this, often affecting younger or more severe children [10]. The study found that while non-executive performance of autistic parents was comparable to reference groups, executive function was significantly compromised, and executive function issues were strongly correlated with social abnormality classification [17]. A study found autistic parents face higher stress and adjustment problems compared to Down syndrome or normal children, but often demonstrate perseverance in adjusting to their circumstances [31]. Recent studies said that the prevalence of special needs children in Bangladesh. Around 10% of Bangladesh's population is challenged; of those, 1 percent is estimated to be autistic, amounting to approximately 1.5 lakh people [6,15,23]. According to the World Health Organization (WHO), it is estimated that throughout the world 1 in 150 children is specially needed children. And according to the Centre for Disease Control and Prevention (CDC), approximately 1 in 68 children aged 8 years are identified that he/she is special child [16,34]. Before 1980, the average



prevalence of it in Asia was 1.9/10000, but it has risen to 14.8/10000 since then [2,19]. Parents of special needs children face a great deal of stress and have their mental well-being harmed. Parents of these children reported to have greater parenting stress levels [3,5]. Having a special needs child means facing long-term problems as a parent, regardless of the type and complexity of the special needs child's disability [3,5]. It has been found that social support and coping skills might lessen the harmful consequences of stress, with certain coping processes being associated with worse results [8]. On the other hand, self-efficacy did not moderate mothers' worry; instead, it helped lessen dads' concerns [14].

According to partial correlation studies, moms' stress was linked to dads' mental health issues and problems with children's behavior. However, there was no connection between mothers' mental health or issues with children's behavior and dads' stress [13]. A study found that over half of mothers experience psychological distress due to low family support and raising challenging children. Factors like lone parenting, subpar housing, or having special need children were associated with higher distress levels [4]. A study found that 94.4% of parents experience mental health stress, with over half having poor psychological health. Gender and psychological health differ significantly among parents of special need children, but no significant correlation exists [22]. A current study research on positive coping as opposed to problem-focused coping, these findings show that psychological acceptance may be a significant coping strategy for parents of special need children for difficulties that are persistent and challenging to resolve [35]. A study found that mothers of children with autism spectrum disorders face higher stress levels and poor mental health compared to normal mothers. This stress can lead to depression if not controlled. Coping mechanisms, such as strong coping abilities, emotional support from family and friends, and social support from the community can help reduce these risks [38].

A report from Protibondhi Foundation, Dhaka, found that only 24% of mothers have knowledge about special need children, and 28% require physical, occupational, speech, and psychotherapy treatments. Age, education, and general knowledge about special need children were significant factors [27]. Research shows that primary school instructors in Tanzania lack understanding of special need children, highlighting the need for regular training and workshops to improve inclusive education and overcome obstacles [9]. A study in urban Bangladesh revealed a higher autism prevalence compared to other developing nations. Parents often face late diagnosis and lack knowledge about raising their children and special needs education in schools [29]. Parent education programs benefit children and families by generalizing skills, improving individual knowledge, integrating therapy, enhancing social conduct, communication, and behavior management, reducing parental tension, self-assurance, improving increasing and parents' psychological health [28]. The study reveals that parents of autistic children experience higher parenting stress due to factors like cognitive impairment, behavioral issues,

hyperactivity, and social difficulties [20]. The research on parent education and training for autism spectrum disorders found that 86.4% of studies reported positive results, indicating a need for methodological improvement, despite the need for parents' education programs outside the US [7]. A study at Suez Canal University Hospital found that 97.2% of caregivers had high coping scores, 77.8% had high strain scores, and 44.4% had insufficient knowledge about special need children. The study emphasizes the need for educational programs [1]. A systematic review of articles on the mental health of parents of children with autism spectrum disorder during the COVID-19 pandemic revealed increased stress and anxiety levels, increased need for support, and difficulties in coping strategies, highlighting the need for improved support and coping strategies [37]. A study in Malaysia found that 37.9% of parents and special educators believe their children's diets are well-balanced, highlighting the need for increased awareness and prevention of malnutrition [32].

There are still many families in Bangladesh who do not fully comprehend or recognize special needs children. As a result, the special child born into those families is kept apart from all social rituals, and everyone in the society is kept in the dark year after year [18]. If parents are aware of the early signs of special needs children, they can save them from this problem mostly. Even children with special needs can be benefited from education and training if they are given the proper care. These children, like other children, can improve if they can recognize problems quickly and take appropriate action. If parents or caregivers are aware, they can take advantage of a variety of skill-building opportunities, such as communication and social-behavioral training. There is a need to investigate the epidemiology of special needs children in Bangladesh in order to obtain precise statistics that will aid in the development of an appropriate program and intervention plan for those with special needs children. If parents have adequate knowledge of special needs children, early family care can greatly reduce the severity of the problem. In this regard, the parents bear the greatest responsibility. Regular parental care in special needs children can help improve the child's behavioral, cognitive, and social development because parents are always spending most of the time with their children. In this study we are going to assess the mental health status of parents of special needs children in Bangladesh.

## II. METHODOLOGY

# 2.1 Study design

A cross-sectional descriptive research was carried out in Barishal District, Bangladesh, to measure the mental health of parents of special needs children. The research was conducted in chosen parts of the district during a seven-month period. The research participants were parents of special needs children living in Barishal District. These parents were chosen to offer information about the mental health problems that caregivers of children with special needs encounter in this region.

2.2 Sample size



For the unknown population size, the sample size can be calculated by *Cochran formula*, *which is* 

$$\begin{array}{l} n_0 = Z^{2*} pq/d^2 \\ = (1.96)^{2*} (.5) \ ^* (1-.5)/ \ \ (0.05)^2 \end{array}$$

 $n_0 = 384$ 

Here,  $n_0$ = calculated sample size,

Z= standard normal deviation, set at 96% CI (1.96)

p= population having special child,

q= 1-p

# 2.3 Inclusion & Exclusion Criteria

Parents of special needs children were interviewed and the caregivers of special needs children who were interested to participate in this study. Those who had language or speech difficulties was excluded. Caregivers of special needs children who have recently been diagnosed with any illness, such as physical or severe psychological illness, that has hampered the participants' ability to communicate at the time of data collection was excluded.

#### 2.4 Measures

#### 2.4.1 Demographic Information

Demographic information including age, sex, educational level, occupation, family monthly income, total family members and children information about gender, age and type of disability were also collected.

#### 2.4.2 Data collection instruments and procedure

A pre-tested questionnaire and check list was used. The questionnaire was designed to consist of 3 parts. Part 1 was the demographic information of the parents or caregivers, part 2 for investigating the condition of the special needs children and part 3 was the ways of the evaluation of the mental health status of the parents. Each question has been explained to all respondents before they filled in the questionnaire. Data Collection Procedure was face to face interview.

# 2.4.3 Data collection

A self-reported semi-structured questionnaire including questions concerning socio-demographics and financial difficulties along with a psychometric scale (i.e., DASS-21—see below) was used to collect data from participants. In a total of 384 samples were selected purposively, but due to COVID-19 situation & target population was infrequent it was finally 206 parents of special need children were participated in the study. Some of the special need children whom I knew previously, it helped me to find other similar children. I collected the home addresses of special need children from their schools in Barishal District and went to them. It was difficult to collect information from the children of most upper-class families because they avoided this issue. There was no problem in collecting data in lower- and middle-class families.

or non-mainstream school. However, among the workforce associated with special need children in Bangladesh, the most commonly used is the term "Special School." *2.4.4 Data analysis* 

Data were processed using SPSS software when the descriptive instrument fieldwork was completed (version 24). 2.4.5 Depression Anxiety Stress Scale (DASS-21)

Depression, anxiety, and stress were measured through the DASS-21, which contains 21 items across three dimensions (seven items for each dimension). For example, statements like "I could not seem to experience any positive feeling at all" assess depression, "I was worried about situations in which I might panic" evaluate anxiety, and "I found it difficult to relax" gauge stress. Participants rated these items on a fourpoint Likert scale ranging from 0 (Did not apply to me at all) to 3 (Applied to me very much, or most of the time). Higher scores on each dimension indicate increased levels of depression, anxiety, and stress. Scoring of the sub-scales was conducted as follows-depression: normal 0-9, mild 10-13, moderate 14-20, severe 21-27, and extremely severe +28; anxiety: normal 0-7, mild 8-9, moderate 10-14, severe 15-19, and extremely severe +20, and stress: normal 0-14, mild 15-18, moderate 19-25, severe 26-33, and extremely severe +34).

# 2.5 Ethics and Incentive

Each participant was informed of the study's goals and its voluntary nature prior to the interview. Participants were made aware that they could quit the interview at any time or refuse to answer any questions before giving their consent. The interview data were anonymized and not tied to any specific individuals. Participants got no monetary or other rewards for their participation. Anytime they desire, individuals are welcome to ask any questions they have concerning the study. They have informed them that their identities would be kept confidential and have described how the interview data will be utilized in the study. Other than the researcher's supervisor, who was aiding with the study, their information was kept private.

#### III. RESULTS

Table 1 shows that different character of both parents and special need children about socio-demographic status, behavior towards children, behavior towards parents and the facilities of government and institutions. A total 206 respondents were participating in the study where 63 (31%) were male and 143 (69%) were female. Among the respondents 16.02 % participants were found who did not have a formal education, 18.93%, 29.6%1 and 17.48% had studied upto 1 to 5 class, 6 to 10 class and 11 to 12 class respectively and also 17.96% had graduation or above educational level. The study reported that most of the respondents were housewife (61.17%) and among three rest they were employee (16.99%) and day laborers (12.62%).

TABLE	1:	Socio	-dem	ogra	phic	status	of	Speci	al l	Need	ls	Childre	n l	Patents	
a .						• •				~					

Socio-demographic status of Special Needs Children Patents						
Variables	Variables					
	Male	63 (31%)				
Gender	Female	Female 143 (69%)				
	No formal Education	33 (16%)				
	Primary	40 (19%)				
Education	Secondary	62 (30%)				
	Higher Secondary	35 (17%)				
	Graduation or above	36 (17%)				

	Housewife	134 (65%)		
Occupation	Employee	45 (22%)		
-	Day laborer	27 (13%)		
About special	need children			
Child conden	Male	83 (40%)		
Child gender	Female	123 (60%)		
Treat of family members	Looks normal	144 (705)		
Treat of family members	Annoying	62 (30%)		
Dehaviors of paichbors with special	Affectionate	61 (30%)		
Behaviors of neighbors with special need child	Annoying	35 (17%)		
need cinid	Both	110 (53%)		
About special need	children's parents			
	Yes	36 (17%)		
Conflicts of marriage life	No	94 (46%)		
	Sometimes	76 (37%)		
	Yes	140 (68%)		
Participation in social events	No	24 (12%)		
_	Sometimes	42 (20%)		
About Govt. and in	stitutional Facilities			
	Yes	74 (36%)		
Government facilities	No	132 (64%)		
Institutional training	Yes	86 (42%)		
Institutional training	No	120 (58%)		
Institutional treatments	Yes	151 (75%)		
institutional treatments	No	51 (25%)		

Through the study most of the special need children were found female (59.71%) and the remainder were male (40.29%). Usually, the family should be the comfortable zone for every person and it was really pathetic that 29.61% special need children faced annoying behavior from their family members and 70.39% experienced normal behavior. The study indicated the pattern of behavior of neighbors with special need children and the respondents reported they had faced

т

16.5%, 30.58% and 52.91% annoying, affectionate and both (annoying, affectionate) behavior respectively. It was surprising that a number of the respondents (16.99%) uttered that they had a conflict in their married life for the taking care of their special need children, where 46.6% respondents had no conflict with their spouse about the taking care of their special need children and 36.41% faced conflict for sometimes Among the participants, 67.48% expressed a positive response that they take their special need children to any social events where, 3.5% participate reported that they did it for sometimes and 11.17% did not take their special need children at any social events. Among the respondents only 36.41% respondent had received the available government facilities for special need children and 63.59% did not have any government facilities which they actually needed. It was also found that among the special need children only 42.23% had attained institutional training and 57.77% did not have any institutional training or special work. Although proper treatment can improve the condition of a special need children but only 24.76% respondents narrated that they received institutional treatment for their special need children where 75.24% did not have any institutional treatment facilities for the betterment of the condition.

# 3.1 Depression:

Figure demonstrate the level of depression among the respondents. It was found that 24.76% respondents had no depression, 13.59% had mild and 27.67% had moderate level of depression where 17.96%, 16.02% had severe and extremely severe depression respectively.

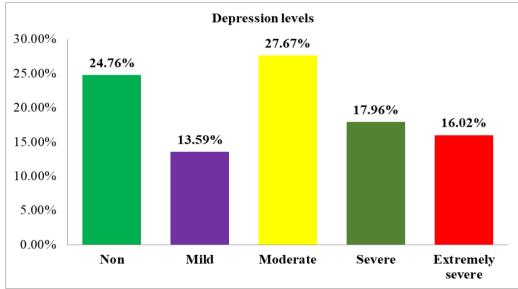


Figure-1: Level of depression among study population

ABLE 2. Distribution	of depression	and its associations	with all studied variables	
ADEL 2. DISTIDUTION	of depression	and its associations	with an studied variables	

			Depr	ession		$\gamma^2$ test / t-test	
Variables	Categories	Categories Absent		Present		<i>p</i> -value	χ test / t-test
	_	Frequency / Mean	% / SD	Frequency / Mean	% / SD	_	
Age	—	42.99	(11.82)	42.39	(11.97)	0.110	.12
Gender	Male	47	(32.87)	96	(67.13)	0.015	5.94
Gender	Female	5	(15.15)	28	(84.85)	0.015	
Educational Qualification	No formal education	13	(33.33)	26	(66.67)	0.018	11.9



	Primary	25	(40.98)	36	(59.02)			
	Secondary	17	(47.22)	19	(52.78)			
	Higher secondary	19	(51.35)	18	(48.65)			
	Graduation or above	38	(30.16)	88	(69.84)			
	Housewife	24	(68.57)	11	(31.43)			
Occupation	Employee	10	(38.46)	16	(61.54)	0.001 13	17.1	
Occupation	Day laborer	7	(36.84)	12	(63.16)	0.001	17.1	
Number of family members	Others							
Number of family members	_	4.87	(1.29)	5.25	(1.39)	0.480	3.8	
Monthly income	_	37455.70	(37556.38)	22401.57	(20829.72)	0.110	13.7	
Age of special child	—	13.44	(7.07)	14.96	(8.60)	0.133	1.7	
Child's conden	Female	46	(37.40)	77	(62.60)	0.733	.117	
Child's gender	Male	33	(39.76)	50	(60.24)	0.755	.117	
Order of child	—	1.82	(.94)	1.84	(1.06)	0.200	.018	
Govt. facilities for your special child	No	37	(49.33)	38	(50.67)	0.014	6.01	
	Yes	42	(32.06)	89	(67.94)		0.01	
Institutional training or special work	No	29	(33.33)	58	(66.67)	0.206	1.6	
	Yes	50	(42.02)	69	(57.98)			
Institutional treatment	No	20	(39.22)	31	(60.78)	0.883	.022	
institutional treatment	Yes	59	(38.06)	96	(61.94)		.022	
Treat of family members	Looks normal	67	(46.21)	78	(53.79)	< 0.001	12.8	
freat of family members	Annoying	12	(19.67)	49	(80.33)		12.0	
	No	53	(55.21)	43	(44.79)	< 0.001		
Conflicts in married life	Yes	10	(28.57)	25	(71.43)		22.1	
	Sometimes	16	(21.33)	59	(78.67)		22.1	
	No	2	(8.70)	21	(91.30)	0.008		
Participation in social events	Yes	59	(42.45)	80	(57.55)		9.7	
	Sometimes	18	(40.91)	26	(59.09)			
Playing games with neighbors	No	29	(36.25)	51	(63.75)	0.621	.244	
Taying games with heighbors	Yes	50	(39.68)	76	(60.32)		.244	
	Affectionate	29	(46.03)	34	(53.97)	0.322		
Behavior of neighbors with child	Annoying	12	(35.29)	22	(64.71)		2.3	
	Both	38	(34.86)	71	(65.14)			

This study also assessed the distribution of depression and its association with other study variables (Table 2). According to the results, presence of depression was significantly higher in male respondents than female respondents (*p-value=0.015*). This study also represents that depression was significantly higher among respondents with educational qualification is graduation or above (p- value=0.018). The study also found that, occupation has significant association with depression, as it was found that depression was comparatively higher among day laborers (*p*-value = 0.001) than another occupational group. Depression was also significantly higher among who had not got government facilities (50.67% vs. 67.94%, pvalue = 0.014). The present study expressed that, behavior of family members and presence of depression was significantly associated at 0.05 level of significance level. The depression was significantly higher among the respondents who replied that behavior of family members was annoying (80.33%) than who replied that it was looks normal (53.79%) to the special need children, where p-value is <0.001. This present study expressed that, presence of depression and conflicts in married was significantly associated at 95% of confidence level. The depression was higher among who have sometimes conflict in married life (78.67%), where p-value is <0.001. This study showed that depression was significantly higher among the participants who did not participate in social events with special need child (91.30% vs. 59.09 %, p-value=0.008).

3.2 Anxiety:

Figure illustrates the respondents' level of anxiety. It was discovered that 20.87% of respondents reported having no anxiety, 8.25% mild anxiety, 21.36% moderate anxiety, and 15.53%, 33.98% severe anxiety, respectively.

This study also assessed the distribution of anxiety and its association with other study variables (Table 3). The findings showed that male respondents had considerably greater rates of anxiety than female respondents (*p*-value<0.001). Moreover, this study showed that respondents without a formal education had considerably higher rates of anxiety (*p*-value=0.017). In light of the findings, it could be said that the housewife mothers were more likely to have an anxiety because of her special need children (*p*-value=0.004).

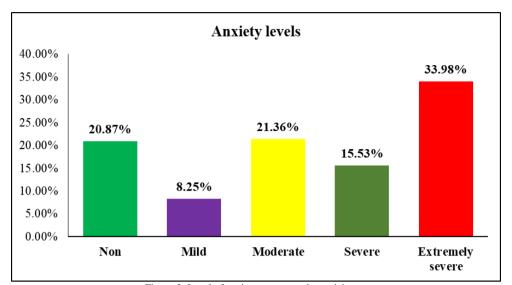
The study also discovered a strong link between occupation and anxiety, with day laborers having a much greater rate of anxiety than any other occupational group (p-value = 0.002). Additionally, those who had not received government services have significantly greater rates of anxiety (p-value < 0.001). According to the results of the current study, there was a strong association between marital conflict and anxiety at a 95% confidence level. When there was no conflict in a marriage, but anxiety was more prevalent (76.67%), and the p-value is 0.001.

## 3.3 Stress:

The respondents' level of stress was seen in Figure-3. It was discovered that 42.23% of respondents had no stress, 15.05% had light stress, 18.93% had moderate stress, and



ISSN (Online): 2581-6187



23.79% and 23.79%, respectively, experienced severe and extremely severe stress.

Figure-2: Level of anxiety among study participants

TABLE 3: Distribution of anxie	y and its associations	with all studied variables

	Anxiety						$\gamma^2$ test / t-test	
Variables	Categories Absen			Present	5	<i>p</i> -value	χ-test / t-test	
	Categories	Frequency / Mean	% / SD	Frequency / Mean	% / SD	-		
Age	—	41.93	(10.96)	42.90	(12.27)	0.482	.282	
Conden	Male	29	(46.03)	34	(53.97)	<0.001	12.6	
Gender	Female	31	(21.68)	112	(78.32)			
	No formal education	5	(15.15)	28	(84.85)	0.017		
	Class 1 to 5	9	(23.08)	30	(76.92)		12.1	
Educational Qualification	Class 6 to 10	15	(24.59)	46	(75.41)	p-value   D	12.1	
	Class 11 to 12	13	(36.11)	23	(63.89)			
	Graduation or above	18	(48.65)	19	(51.35)			
	Housewife	27	(21.43)	99	(78.57)	0.004		
	Employee	18	(51.43)	17	(48.57)		12.2	
Occupation	Day laborer	10	(38.46)	16	(61.54)		13.2	
	Others	5	(26.32)	14	(73.68)	p-value   % / SD   (12.27) 0.482   (53.97) <0.001		
Number of family members	_	5.20	(1.42)	5.07	(1.34)	0.391	.394	
Monthly income	_	44533.33	(40752.44)	21452.05	(19490.79)	0.002	30.19	
Age of special child	_	13.02	(9.06)	14.94	(7.58)	0.528	2.43	
	Female	34	(27.64)	89	(72.36)	0.568	.326	
Child's gender	Male	26	(31.33)	57	(68.67)			
Order of child	_	1.80	(.84)	1.85	(1.08)	0.586	.099	
Govt. facilities for your special child	No	37	(49.33)	38	(50.67)	<0.001	22.2	
	Yes	23	(17.56)	108	(82.44)		23.3	
	No	31	(35.63)	56	(64.37)	0.079	2.1	
Institutional training or special work	Yes	29	(24.37)	90	(75.63)		3.1	
T dia di Tarra a	No	17	(33.33)	34	(66.67)	0.446	501	
Institutional treatment	Yes	43	(27.74)	112	(72.26)		.581	
	Looks normal	46	(31.72)	99	(68.28)	0.206	1.6	
Treat of family members	Annoying	14	(22.95)	47	(77.05)		1.6	
	No	39	(40.63)	57	(59.38)	0.003		
Conflicts in married life	Yes	8	(22.86)	27			11.9	
	Sometimes	13	(17.33)	62	(82.67)	0.446		
	No	3	(13.04)	20	(86.96)	0.135		
Participation in social events	Yes	41	(29.50)	98	(70.50)		4.01	
r alterpation in social events	Sometimes	16	(36.36)	28	(63.64)		1	
	No	27	(33.75)	53	\ /	0.244	1.4	
Playing games with neighbors	Yes	33	(26.19)	93				
	Affectionate	22	(34.92)	41	· /	0.478		
Behavior of neighbors with child	Annoying	9	(26.47)	25			1.5	
	Both	29	(26.61)	80	· · · · · · · · · · · · · · · · · · ·		1.0	



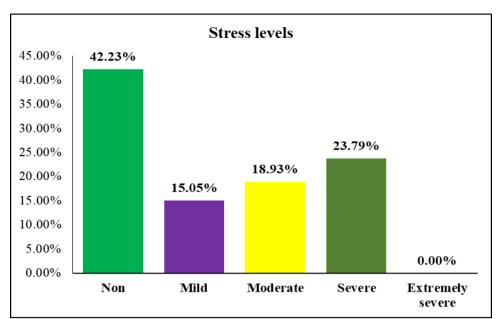


Figure-3: Level of stress among study participants

TABLE 4: Distribut	ion of stress and	its associations	with all studied	variables

		Stress					24	
Variables	Categories	Absent Present				<i>p</i> -value	χ²test / t-test	
	Ũ	Frequency / Mean	% / SD	Frequency / Mean	% / SD	1		
Age	_	42.74	(11.64)	42.47	(12.27)	0.093	.026	
	Male	46	(73.02)	17	(26.98)	0.002	9.2	
Gender	Female	72	(50.35)	71	(49.65)		9.2	
	No formal education	13	(39.39)	20	(60.61)	0.165		
	Class 1 to 5	21	(53.85)	18	(46.15)			
Educational Qualification	Class 6 to 10	39	(63.93)	22	(36.07)		6.5	
Laucatona Quantonion	Class 11 to 12	21	(58.33)	15	(41.67)			
	Graduation or above	24	(64.86)	13	(35.14)			
	Housewife	65	(51.59)	61	(48.41)	0.053		
Orientian	Employee	27	(77.14)	8	(22.86)		7.7	
Occupation   Number of family members   Monthly income	Day laborer	16	(61.54)	10	(38.46)		1.1	
	Others	10	(52.63)	9	(47.37)			
Number of family members	_	5.03	(1.31)	5.22	(1.43)	0.338	.982	
Monthly income	_	35127.12	(34698.59)	18852.27	(15722.11)	0.096	16.8	
Age of special child	_	14.07	(8.24)	14.79	(7.85)	0.280	.393	
Child's gender	Female	71	(57.72)	52	(42.28)	0.876	.024	
	Male	47	(56.63)	36	(43.37)			
Order of child	_	1.88	(0.94)	1.77	(1.12)	0.053	.573	
Govt. facilities for your special child	No	51	(68.00)	24	(32.00)	0.019		
	Yes	67	(51.15)	64	(48.85)		5.5	
	No	49	(56.32)	38	(43.68)	0.812	057	
Institutional training or special work	Yes	69	(57.98)	50	(42.02)		.057	
T dia di ta a a	No	26	(50.98)	25	(49.02)	0.294	1.1	
Institutional treatment	Yes	92	(59.35)	63	(40.65)			
Treat of family members	Looks normal	94	(64.83)	51	(35.17)	0.001	11.4	
Treat of family members	Annoying	24	(39.34)	37	(60.66)		11.4	
	No	69	(71.88)	27	(28.13)	<0.001		
Conflicts in married life	Yes	13	(37.14)	22	(62.86)		16.8	
	Sometimes	36	(48.00)	39	(52.00)			
	No	9	(39.13)	14	(60.87)	0.160		
Participation in social events	Yes	84	(60.43)	55	(39.57)		3.7	
-	Sometimes	25	(56.82)	19	(43.18)			
	No	49	(61.25)	31	(38.75)	0.359	942	
Playing games with neighbors	Yes	69	(54.76)	57	(45.24)		.842	
	Affectionate	35	(55.56)	28	(44.44)	0.631		
Behavior of neighbors with child	Annoying	22	(64.71)	12	(35.29)		.92	
-	Both	61	(55.96)	48	(44.04)			



The distribution of stress and its relationship to other research factors were also evaluated (Table 4). Results revealed that male respondents experienced significantly higher levels of stress than female respondents (p-value 0.002). Furthermore, those who had not received government assistance experienced much higher levels of stress (p-value 0.019). The stress rate was substantially greater among those who said that their family members' behavior was irksome (35.17%) than among those who said that the behavior of special needs children appeared normal (53.79%), with a p-value of 0.001. At a 95% confidence level, the findings of the present study showed a significant association between marital conflict and stress. In marriages where there was no conflict, stress was more common (71.88%), and the p-value was 0.001.

# IV. DISCUSSIONS

The current study shows that mental health disruptions were common among the parents of special needs children and that financial hardships were strongly related with mental health problems. A special needs children have a significant impact on the family. A special needs children may threaten all family members well-being and mental health. In this study majority of the respondents were female and among them 16.02 % had no formal education, 18.93%, 29.61 and 17.48% have studied class 1 to5, class 6 to 10 and class 11 to 12 respectively, and also 17.96% had graduation or above education level. Among the special needs children most of were female children and their average age was around 14 years. In the study it was indicated that most of the participates (specially mother) were housewife and it was found that lower income class families with a special need child had more likely to enhance the mental instability. Socialization is very important for growing up children and in this study, it was found that almost half of the respondents reported that their special need children often play with their neighbors and peer groups where another half said that their children usually did not play with them and keep them aloof. In a study it was reported that when special need children seem interested in associating with others but are unable to express their want to play, while some special need children youngsters appear to be aloof, purposefully avoid interaction, and are insensitive to social cues supplied by peers [21].

Now-a-days government have provided many facilities for special needs children but this study revealed that majority of the respondents did not have those facilities for their special needs children and less than half of the participants reported that they received institutional training where most of them slipped the opportunities. Although majority of the respondents said that they behaved normally with their special needs children but there are still some families where the special needs children faced annoying behavior form their family members. Within all the respondent's majority gave a positive response that they took their special needs children to any social events where some took them for sometimes and the rest never took their special needs children in any social events which is very discriminative. In a study they compared the rates of social activity involvement among special need children and young people who received special education services for intellectual impairment, emotional/behavioral disability, or a learning disability to those among young adults who received assistance for being special need children. Living with a parent, having fewer functional skills, and being special needs children were all indicators of lower levels of social participation [25].

Most of the participants narrated that they often had a conflict in their conjugal life for taking care of their special needs children which had a negative effect on their mental health as well as entire life style. This study indicated the pattern of behavior of neighbors with special need children and it found that a volume of neighbor was annoying, where some were affectionate and some were both behavior (annoying, affectionate) with the special needs children. In a recent study of Malaysia, construct a finding about 90.4 percentage of the 52 parents with autistic children (34 females and 18 males) exhibited severe parental stress, anxiety and 53.8 percent of the parents had clinical disturbances in psychological wellbeing and profoundly affecting the wellbeing of the entire family. They also found that there was no statistically significant correlation between the severity of autistic symptoms and parental stress but socio-demographic parameters and psychological well-being were associated as well to the parental stress of special needs children [5].

Most of the participating mothers were experiencing mental health problems (i.e., anxiety (78.32%), depression (84.85%) and stress (49.69%)). Where the male respondents were going through the less severe situation depression (11.97%), anxiety (12.27%) and stress (26.98%) compared to mothers. This finding was similar with a study, in where they narrated that, in terms of stress and depression, moms and fathers did not differ from one another, however women reported higher levels of anxiety than fathers [4]. Another study also showed that parental attitude and mental health differed by gender. Mothers were said to interact with their children more socially than fathers. Mothers also reported having more depression than fathers did. They also narrate that according to the findings of a multiple regression study, depression, the harmony of parents many responsibilities in their lives, and dysfunctional interactions between parents and children are all related to parenting hardship [26]. According to a recent study, 27% of parents of children with special needs reported having mental health issues. The severity of these issues varied based on the children's specific disabilities. According to earlier studies, parents of special needs children and a were more likely to experience mental health issues than parents of other children [5].

#### VI. LIMITATIONS OF THE STUDY

The results of this study should be interpreted with several limitations in mind. Because the sample form did not include information on the status of all parents in Bangladesh, we were unable to draw any general conclusions. The majority of the participants in this research are from Bangladesh's lower middle-class neighborhoods, who receive fewer benefits and have partial or full access to services, even though we tried to recruit individuals from different socioeconomic backgrounds.



Therefore, the study accidentally concentrates on urban environments. All of the results were self-reported; because it is convenient, self-reported scales are frequently used to assess mental health. Future studies might employ a variety of assessment modalities for each variable to improve the internal validity of the findings. Future research can examine the impact of discrimination over time by using random sample techniques with multiple data gathering methods.

## VII. CONCLUSIONS

The present study was conducted to determine the association among depression, anxiety and stress with sociodemographic characteristics and others variables. Mother of special needs children experienced more mental health problems compared to father and the severity of these issues varied based on the children's specific disabilities. Adequate facilities and training can reduce the burden and can improve the conditions. Socio-demographic factors have much involvement with the mental health instability of a special needs children's parents. Marital conflict had a strong involvement in mental health issues that means the parents who had a conflict between them suffered more depression, anxiety and stress.

#### VIII. RECOMMENDATIONS

Numerous social services, organizations, and other resources can be helpful to people with special needs children. The deficiency of evidence from the vast majority of people in the globe shows that low and middle-income countries have an urgent need for additional research and capacity building. Adoption of the following recommendations may improve parents' mental well-being and their kid's quality of life while also develop their cooperation with child care services.

- 1. Depends on the nature of specialty, it is important to set up a special unit and offer other treatments in a hospital or clinic by a qualified doctor.
- 2. There are requirements for classrooms, teachers, training programs, unique instructional materials, and equipment's.
- 3. Low-cost or free treatment and advice should be provided to those with special need children.
- 4. Special need children should receive the tools they need to participate fully in society.

Organizational structures are being created. A training program for parents in early intervention and sensory integration should be part of Bangladesh's action plan for special need children. This would help the special need children learn more effectively and perform better in the school.

Conflict of interest: The authors declare no conflict of interest.

#### REFERENCES

- Abu El-Soud, S. G., Ouda, W. E.-S., Abdou, A., El Sayed, S., & Mohamed, M. F. (2020). Assessment of Knowledge, Strains and Coping of the Family Care Givers Having Autistic Children. *Port Said Scientific Journal of Nursing*, 7(2), 202-219.
- [2]. Akhter, S., Hussain, A. E., Shefa, J., Kundu, G. K., Rahman, F., & Biswas, A. (2018). Prevalence of Autism Spectrum Disorder (ASD) among the children aged 18-36 months in a rural community of Bangladesh: A cross sectional study. *F1000Research*, 7.

- [3]. Alhuzimi, T. (2021). Stress and emotional wellbeing of parents due to change in routine for children with Autism Spectrum Disorder (ASD) at home during COVID-19 pandemic in Saudi Arabia. *Res Dev Disabil*, 108, 103822. https://doi.org/10.1016/j.ridd.2020.103822
- [4]. Bromley, J., Hare, D. J., Davison, K., & Emerson, E. (2004). Mothers supporting children with autistic spectrum disorders: Social support, mental health status and satisfaction with services. *Autism*, 8(4), 409-423.
- [5]. Chen, S. Q., Chen, S. D., Li, X. K., & Ren, J. (2020). Mental Health of Parents of Special Needs Children in China during the COVID-19 Pandemic. Int J Environ Res Public Health, 17(24). https://doi.org/10.3390/ijerph17249519
- [6]. Chowdhury, M. S. H., Islam, M. Z., Bhuiyan, M. R., Rafi, A., & Al Kawsar, A. (2019). Parenting Stress and Coping Capacity Linked with Quality of Life among Parents of Children with Autism Spectrum Disorder. *Journal of Armed Forces Medical College, Bangladesh*, 15(1), 48-54.
- [7]. Dawson-Squibb, J.-J., Davids, E. L., Harrison, A. J., Molony, M. A., & de Vries, P. J. (2020). Parent education and training for autism spectrum disorders: Scoping the evidence. *Autism*, 24(1), 7-25.
- [8]. Dunn, M. E., Burbine, T., Bowers, C. A., & Tantleff-Dunn, S. (2001). Moderators of stress in parents of children with autism. *Community mental health journal*, 37(1), 39-52.
- [9]. Edward, G. (2015). Teachers' knowledge and perceived challenges of teaching children with autism in Tanzanian regular primary schools. *International Journal of Academic Research and Reflection*, 3(5), 36-47.
- [10]. Gray, D. E. (1993). Perceptions of stigma: The parents of autistic children. Sociology of Health & Illness, 15(1), 102-120.
- [11]. Grether, J. K., Anderson, M. C., Croen, L. A., Smith, D., & Windham, G. C. (2009). Risk of autism and increasing maternal and paternal age in a large north American population. *American Journal of Epidemiology*, 170(9), 1118-1126.
- [12]. Happé, F. G. (1993). Communicative competence and theory of mind in autism: A test of relevance theory. *Cognition*, 48(2), 101-119.
- [13]. Hastings, R. P. (2003). Child behaviour problems and partner mental health as correlates of stress in mothers and fathers of children with autism. *Journal of intellectual disability research*, 47(4-5), 231-237.
- [14]. Hastings, R. P., & Brown, T. (2002). Behavior problems of children with autism, parental self-efficacy, and mental health. *American journal* on mental retardation, 107(3), 222-232.
- [15]. Hossain, M. D., Ahmed, H. U., Chowdhury, W. A., Niessen, L. W., & Alam, D. S. (2014). Mental disorders in Bangladesh: a systematic review. *BMC Psychiatry*, 14, 216. https://doi.org/10.1186/s12888-014-0216-9
- [16]. Hossain, M. S., Persicke, M., ElSayed, A. I., Kalinowski, J., & Dietz, K.-J. (2017). Metabolite profiling at the cellular and subcellular level reveals metabolites associated with salinity tolerance in sugar beet. *Journal of Experimental Botany*, 68(21-22), 5961-5976.
- [17]. Hughes, C., Leboyer, M., & Bouvard, M. (1997). Executive function in parents of children with autism. *Psychological medicine*, 27(1), 209-220.
- [18]. Hyman, S. L., Levy, S. E., Myers, S. M., Kuo, D. Z., Apkon, S., Davidson, L. F., Ellerbeck, K. A., Foster, J. E., Noritz, G. H., & Leppert, M. O. C. (2020). Identification, evaluation, and management of children with autism spectrum disorder. *Pediatrics*, 145(1).
- [19]. Lai, M.-C., Baron-Cohen, S., & Buxbaum, J. D. (2015). Understanding autism in the light of sex/gender. In (Vol. 6, pp. 1-5): Springer.
- [20]. Lodder, A., Papadopoulos, C., & Randhawa, G. (2020). SOLACE: a psychosocial stigma protection intervention to improve the mental health of parents of Autistic Children—a feasibility randomised controlled trial. *Journal of autism and developmental disorders*, 50(12), 4477-4491.
- [21]. Nelson, C. B. (2004). *Keys to play: A strategy to increase the social interactions of young children with autism and their typically developing peers.* The University of Utah.
- [22]. Nikmat, A. W., Ahmad, M., Oon, N. L., & Razali, S. (2008). Stress and psychological wellbeing among parents of children with autism spectrum disorder. ASEAN Journal of Psychiatry, 9(2), 65-72.
- [23]. Nuri, N. N., Sarker, M., Ahmed, H. U., Hossain, M. D., Beiersmann, C., & Jahn, A. (2018). Pathways to care of patients with mental health problems in Bangladesh. *Int J Ment Health Syst*, 12, 39. https://doi.org/10.1186/s13033-018-0218-y
- [24]. O'Brien, G., & Pearson, J. (2004). Autism and learning disability. *Autism*, 8(2), 125-140.



- [25]. Orsmond, G. I., Shattuck, P. T., Cooper, B. P., Sterzing, P. R., & Anderson, K. A. (2013). Social participation among young adults with an autism spectrum disorder. *Journal of autism and developmental disorders*, 43(11), 2710-2719.
- [26]. Ozturk, Y., Riccadonna, S., & Venuti, P. (2014). Parenting dimensions in mothers and fathers of children with Autism Spectrum Disorders. *Research in Autism Spectrum Disorders*, 8(10), 1295-1306.
- [27]. Parvin, N., Haque, M. M., Bhuiyan, M. R., Haqe, M., Saha, P. K., & Islam, A. M. (2015). Knowledge on care of autistic child among the mother s attending Protibondhi Foundation, Dhaka. *Bangladesh Journal* of Medical Science, 14(2), 179-182.
- [28]. Prata, J., Lawson, W., & Coelho, R. (2018). Parent training for parents of children on the autism spectrum: A review. *Int J Clin Neurosci Ment Health*, 5, 3.
- [29]. Preity, S., Delwer, M., Hawlader, H., Akhter, S., Abdullah, A., & Biswas, A. (2017). Views of the parents of autistic children about autism and schools for autistic children: A qualitative study in urban Bangladesh. *Int J Public Heal Res*, 5(5), 56-61.
- [30]. Ravens-Sieberer, U., Kaman, A., Erhart, M., Devine, J., Schlack, R., & Otto, C. (2021). Impact of the COVID-19 pandemic on quality of life and mental health in children and adolescents in Germany. *European child & adolescent psychiatry*, 1-11.
- [31]. Sanders, J. L., & Morgan, S. B. (1997). Family stress and adjustment as perceived by parents of children with autism or Down syndrome: Implications for intervention. *Child & Family Behavior Therapy*, 19(4), 15-32.
- [32]. Shammi, M., Bodrud-Doza, M., Islam, A. R. M. T., & Rahman, M. M. (2020). COVID-19 pandemic, socioeconomic crisis and human stress in

resource-limited settings: A case from Bangladesh. Heliyon, 6(5), e04063.

- [33]. Shohaimi, D. A., Sahidan, S. F. I., Zulkifly, M. A., & Hasibuan, N. T. (2021). Knowledge of Special Nutrition for Children with Autism Spectrum Disorder Among Parents and Special Educators in Malaysia. *Jurnal Sains Kesihatan Malaysia*, 19(1), 127-135.
- [34]. Thomas, S., Hovinga, M. E., Rai, D., & Lee, B. K. (2017). Brief report: prevalence of co-occurring epilepsy and autism spectrum disorder: the US National Survey of Children's Health 2011–2012. *Journal of autism* and developmental disorders, 47(1), 224-229.
- [35]. Weiss, J. A., Cappadocia, M. C., MacMullin, J. A., Viecili, M., & Lunsky, Y. (2012). The impact of child problem behaviors of children with ASD on parent mental health: The mediating role of acceptance and empowerment. *Autism*, 16(3), 261-274.
- [36]. Wolf, L. C., Noh, S., Fisman, S. N., & Speechley, M. (1989). Brief report: Psychological effects of parenting stress on parents of autistic children. *Journal of autism and developmental disorders*.
- [37]. Yılmaz, B., Azak, M., & Şahin, N. (2021). Mental health of parents of children with autism spectrum disorder during COVID-19 pandemic: A systematic review. *World Journal of Psychiatry*, 11(7), 388.
- [38]. Zablotsky, B., Bradshaw, C. P., & Stuart, E. A. (2013). The association between mental health, stress, and coping supports in mothers of children with autism spectrum disorders. *Journal of autism and developmental disorders*, 43(6), 1380-1393.