



## A descriptive study: Determine stress levels and coping strategies among parents of children with Autism Spectrum Disorder at a selected autism therapy center, Odisha

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### Abstract

**Background:** Autism Spectrum Disorder (ASD) is a lifelong neuro developmental condition that affects communication, social interaction, and behavior, placing significant emotional, psychological, and social demands on parents who serve as primary caregivers. Parenting a child with ASD is often associated with elevated levels of stress, challenges in coping, and reduced quality of life. These challenges may be further influenced by cultural beliefs, social expectations, and the availability of support systems.

**Objective:** To assess the level of stress and coping strategies of parents, to find out the relationship between the level of stress and coping strategies among parents of Autism children, to find out the association between level of stress of parents with their selected demographic variables.

**Methods:** The research approach adopted was a survey which was descriptive in nature survey approach was selected for pursuer to assess the level of stress and coping strategies among parents, with a sample size of 50 parents, non- probability purposive sampling technique was used for the study. For content validation of tool seven experts were chosen from various field of nursing. Their advice was taken and according to their suggestion the data collection was done. Pilot study was conducted in future Bhubaneswar School, Odisha. There 8 parents were taken for the pilot study.

**Results:** The all participants 82% having moderately stress and 18% having severe stress. The same participants were interviewed to know their coping abilities, the results reveals that majority (96%) participants having good coping strategies (4%) participants having average coping strategies.

**Conclusion:** The outcome of the study can be concluded that the level of stress was the majority, of parents having moderate stress.

**Keywords:** Autism spectrum disorder, stress, coping strategies, autism therapy

### Introduction

Parents' psychological functioning and coping responses vary across cultures. While extensive research has examined the experiences of parents of children with ASD in Western countries, limited attention has been given to non-Western populations, particularly in the Arab world. Arab societies share distinct cultural values, family structures, and social norms that may shape parental perceptions, coping mechanisms, and experiences of stress differently from Western contexts. The lack of culturally specific research limits the understanding of how Arab parents adapt to and manage the demands of raising a child with ASD.

Understanding parenting stress, coping strategies, and quality of life among Arab parents of children with ASD is essential for developing culturally appropriate interventions. Investigating these psychosocial aspects can help identify specific needs and inform the design of effective support, educational, and therapeutic programs aimed at enhancing parental well-being and improving overall family functioning<sup>[1]</sup>.

Parents' psychological functioning varies across cultures when raising a child with a chronic disability such as Autism Spectrum Disorder (ASD). Although Arab societies share a distinct cultural background that differs from Western contexts, limited research has explored the experiences of Arab parents of children with ASD. This descriptive cross-sectional study examined parenting stress, coping strategies, and quality of life among 184 Arab parents of children with ASD using self-administered questionnaires. The findings showed high levels of parenting stress, with positive reappraisal being the most commonly used coping strategy and coping the least used. Parents reported poor quality of life across physical, psychological, social, and environmental domains, with mothers experiencing lower scores, particularly in environmental health. The study highlights the need for targeted support and educational programs to improve the psychosocial well-being and quality of life of these parents<sup>[2]</sup>.

This study assessed stress levels and coping strategies among parents of children with autism and Down syndrome in Jordan and compared them with parents of typically developing children. A total of 117 parents from special needs centers and mainstream schools in Amman, Zarqa, and Irbid completed the Parenting Stress Index–Short Form and the Brief COPE. Findings indicated that parents of children with autism experienced the highest stress levels, while parents of children with Down syndrome reported the lowest. No significant difference in stress was found between parents of children with Down syndrome and those of typically developing children. Religious coping was the most commonly used strategy across all groups, and no association was found between demographic variables and overall stress levels<sup>[3]</sup>.

This descriptive cross-sectional study examined caregiver burden and coping styles among 131 parents of children with Autism Spectrum Disorder attending a private education center in Istanbul. The findings showed that parents experienced high caregiving burden, particularly those with one child, parents of daughters, and mothers, who more often used submissive and social support-seeking coping strategies. Coping approaches such as self-confidence, helplessness, optimism, and seeking social support were significant predictors of caregiver burden<sup>[4]</sup>.

This systematic review explored coping strategies used by parents of children with Autism Spectrum Disorder (ASD) and their relationship with stress and quality of life. Following PRISMA guidelines, 11 studies were selected from 156 articles identified across Medline, PsycInfo, and ERIC databases. The findings showed that parents of children with ASD relied more on avoidance coping and less on social support compared to parents of typically developing children. Problem-focused coping was associated with reduced stress and better quality of life, whereas emotion-focused coping was linked to poorer outcomes. The review highlights the need for tailored psycho educational interventions to support parents of children with ASD<sup>[5]</sup>.

Research on parenting children with autism is limited in Africa. This qualitative study from the Kenyan coast found that parents face major challenges such as stigma, lack of treatment services, and financial and caregiving burdens. Parents used both problem-focused coping (diet management, respite care) and emotion-focused coping (prayer and spiritual beliefs), highlighting the need for community-based support services in rural areas<sup>[6]</sup>.

This study examined factors influencing family quality of life (FQoL) during the first six months after an ASD diagnosis. Fifty-three mothers completed standardized tools assessing FQoL, parenting stress, illness perceptions, and coping. Results showed that higher autism-related parental stress and being divorced were associated with poorer FQoL, while greater perceived treatment and personal control, as well as higher family income, and were linked to better FQoL. The findings highlight the need for early psychoeducational and supportive interventions for parents following an ASD diagnosis<sup>[7]</sup>.

This study examined coping strategies among parents of children with Autism Spectrum Disorder (ASD) and their relationship with parenting styles. Coping was assessed using the Sense of Coherence Scale and the Purpose in Life Test, while parental attitudes related to care, stress, worry, and guilt were measured with the Family Impact Questionnaire. The study included 66 parents of children with ASD and 66 matched parents of typically developing

children. Significant differences were found between the two groups, with parents in the control group demonstrating higher coping levels. Sense of coherence was associated with reduced stress in both groups, and purpose in life explained a substantial proportion of variance in sense of coherence, particularly among parents of children with ASD. Fathers in the ASD group showed a higher sense of coherence than mothers, suggesting greater burnout among mothers<sup>[8]</sup>.

This study examined anxiety, burnout, and coping strategies among 180 parents of children with Autism Spectrum Disorder. Results showed that burnout and anxiety were influenced by demographic factors, especially parents' psychiatric history, and were strongly positively related. Parents using problem-focused coping had lower anxiety and burnout, while those with higher distress relied more on dysfunctional coping strategies<sup>[9]</sup>.

The prevalence of autism in children has risen markedly over the past 15 years, creating significant challenges for families, educators, and healthcare professionals involved in their care. This descriptive survey study explored parents' perceptions of coping strategies and social support using the Social Support Index and the Family Crisis Oriented Personal Evaluation Scales. Nearly half of the families reported experiencing major stressors beyond autism. Seeking social support and cognitive reframing emerged as the most commonly used coping strategies. The findings highlight the important role of school nurses in identifying family needs and linking parents to support groups and community resources to strengthen coping and social support<sup>[10]</sup>.

## Methodology

### Study Design

This study adopted a non- experimental descriptive research.

### Study Setting

The study was conducted as Centre for Autism Therapy, Counseling and Help (CATCH) Bhubaneswar, Odisha.

The study estimates some criteria to select this specific center those are as follows:

- Availability of the study sample
- Administrative recommendation
- Feasibility for conducting the study
- Companionable
- Financially efficient and cost saving
- Accessibility of governance
- Ethical authorization

### Sampling Method

In this study non- probability purposive sampling technique is used.

### Sample size

A total of 50 parents of Autism Spectrum Disorder children were included in this study. The sample size was determined using Yamane's formula.

According to Yamane's formula

$$n = N / (1 + N e^2)$$

Here n= Sample size, N = Population size, e = Percentage of error i.e. 0.05

### Inclusion Criteria

Children between 7- 22 years of age including both boys and girls.

Parents of Autism children who are attending Center for Autism Therapy, Counseling and Help (CATCH).  
 Those are present at the time of data collection.  
 Parents who can speak and understand Odia.  
 Parents who are willing to participate.

**Exclusion Criteria**

Parents of children with other disability like mental illness and physical disability.  
 Parents with unstable, suspect, unbalanced mind.  
 Parents of other psychotic condition.

**Description of the tools**

Data were collected using three tools:

**Tool-1:** Self-structured socio-demographic questionnaire the variables. The socio-demographic tool consisted of six items related to personal history (age, gender, religion, educational status, marital status, occupational status of parents, family income, numbers of children, family history of psychiatric illness, age of the child in year).

**Tool-2:** Parental stress scale: It consists of 18 questions to assess the level of stress (mild, moderate, severe) among parents of Autism Spectrum children in which parents will evaluate by scoring method (strongly disagree, disagree, undecided, agree, strongly agree). Scoring interpretation: mild stress (18- 23), moderate (24-47), severe (48- 70).

**Tool-3:** F- COPE Scale: This tool includes 29 questions which will collaborate for gaining self- reported data as their coping strategies used by parents of autism spectrum disorder children in which parents will evaluate by scoring method ( Strongly disagree, moderately disagree, moderately agree, strongly agree). Scoring Interpretation: poor coping strategies- 29 to 47, average coping strategies- 48 to 95 marks, god coping strategies- 96- 145.

**Tool validation**

Content validity: Reviewed by 5 experts of department of psychiatric nursing (1 medical professionalism, 4 nursing professionalism). The tools demonstrated strong reliability, with Cronbach’s  $\alpha$  values of 0.7 for PSS (r- 0.7), F- Cope 0.8 (r 0.8). Pre-testing (tryout) done in hospital for clarity, ambiguity, and timing.

**Study variables**

Demographic variables: age, gender, religion, educational status, marital status, occupational status of parents, family income, numbers of children, family history of psychiatric illness, age of the child in year

Research variables: Level of stress, coping strategies

**Data collection procedure**

The written permission from head of the authority of organization, as well as written consent from subjects prior to data collection. Researchers introduced to the subject and given explanation of our study purpose and outcomes. The demographic Performa and others two tools (PSS AND F-Cope) measure stress level and coping strategies is used by interviewing method, researcher gathered information from participants of the study sample in a present study. Researcher had given instruction regarding tool in their suitable language for seeking co operation, each items of the tool was clarified for getting collaboration from participants and for better understanding that their actual feelings. Information was documented by the researcher at the time of assembling data. They were assured that their responses

would be kept confidential and used their reported information only for research purpose.

**Ethical considerations**

Ethical approval was obtained from the Sum Nursing College, Odisha, with approval dated 18.10.2017 (Ref. No.: SOADU/SNC/IRB/673/2017). Permissions were also secured from the medical superintendent, the head of the department, and relevant staff.

**Statistical Analysis**

SPSS version 21 was used for data analysis. Demographic information and baseline characteristics were summarized using descriptive statistics, including mean values, standard deviations, and frequency counts. The data will be collected and analyzed with descriptive and inferential statistical techniques. The demographic variables will be analyzed by using frequency and percentage. The frequency tables will be formulated for all significant information.

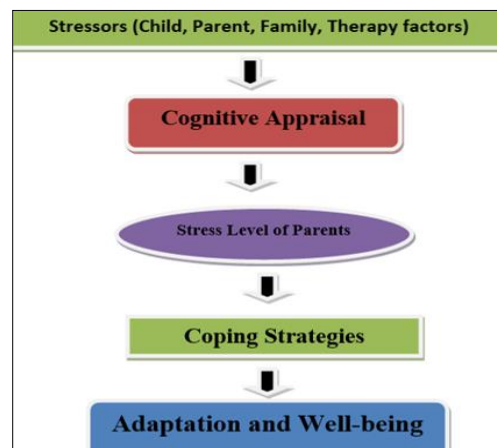
**Theoretical framework**

Lazarus and Folkman’s Transactional Model of Stress and Coping (1984): This model is most appropriate for your study because it explains how individuals perceive stress and use coping strategies in response to stressful situations, such as parenting a child with ASD.

Core Components of the Model-

1. **Stressors:** Parenting demands, Child’s behavioural problems, Financial burden, Social stigma, Therapy-related challenges
2. **Cognitive Appraisal:** Primary appraisal: Parents evaluate whether caring for a child with ASD is stressful or threatening. Secondary appraisal: Parents assess their ability and available resources to cop.
3. **Coping Strategies:** Problem-focused coping (seeking information, therapy involvement, planning), Emotion-focused coping (emotional support, acceptance, reframing, avoidance).
4. **Outcome:** Level of perceived stress, Adaptation and psychological well-being of parents

Lazarus and Folkman’s Transactional Model of Stress and Coping provides a strong theoretical basis for this descriptive study. The conceptual framework clearly explains how various stressors influence parental stress levels and coping strategies among parents of children with Autism Spectrum Disorder attending a selected autism therapy center.



**Conceptual framework- Lazarus and Folkman’s Transactional Model of Stress and Coping**

**Results**

**Table 1:** Distribution of subjects based on sociodemographic variables. (N =50)

Sl. No	Sociodemographic Variables	Frequency (f)	Percentage (%)
1	Age		
	a. Less than 25 years	13	12
	b. 26–35 years	30	20
	c. 36–45 years	7	60
	d. More than 45 years	-	20
2	Gender		
	a. Male	2	20
	b. Female	48	80
3	Religion		
	a. Hindu	47	94
	b. Muslim	2	4
	c. Christian	1	2
	d. Others	-	-
4	Educational Status		
	a. Primary education	-	-
	b. Secondary education	15	30
	c. Graduate	23	46
	d. Postgraduate	12	24
5	Marital Status		
	a. Married	50	100
	b. Unmarried	-	-
	c. Widow	-	-
	d. Divorce	-	-
6	Occupational Status		
	a. Private	11	32
	b. Government	3	20
	c. Self-employed	28	34
	d. Unemployed	8	14
7	Family Income		
	a. Less than 10,000	-	-
	b. 10,001–20,000	24	48
	c. 20,001–30,000	20	52
	d. More than 30,001	-	-
8	Number of Children		
	a. None	-	12
	b. 1	6	40
	c. 2	20	48
	d. >2	24	-
9	Family History of Psychiatric Illness		
	a. Yes	10	2
	b. No	40	98
10	Age of the Child (years)		
	a. 5 years	6	12
	b. 6–8 years	14	28
	c. 9–12 years	12	24
	d. >12 years	18	36

The above table-1 revealed that Frequency (F) and percentage (%) distribution of patients according to age, gender, religion, educational status, marital status, occupational status of parents, family income, number of children, family history of psychiatric illness, age of the child in years.

The data presented in table-2 revealed that the distribution of stress levels among the participants showed that the majority experienced moderate stress. Out of the total sample, 41 participants (82%) reported a moderate level of stress, while 9 participants (18%) experienced severe stress.

Notably, none of the participants reported mild stress. This finding indicates that most respondents were experiencing considerable stress, with a significant proportion facing severe stress levels.

**Table 2:** Distribution of subject according to level of stress using frequency and percentage. (n =50)

Level of Stress	Frequency (f)	Percentage (%)
Mild	-	-
Moderate	41	82
Severe	9	18

**Table 3:** Distribution of subject according to coping strategies using frequency and percentage. (N =50)

Coping Strategies	Frequency (f)	Percentage (%)
Mild	-	-
Moderate	2	4
Severe	48	96

The table reveals that the assessment of coping strategies among the participants revealed that the majority exhibited a severe level of coping strategies. Out of the total sample, 48 participants (96%) demonstrated severe coping strategies, whereas 2 participants (4%) had a moderate level of coping strategies. None of the participants fell under the mild category. This indicates that most respondents were actively employing coping mechanisms at a high level to manage their stress.

**Table 4:** Correlation analysis to find out the relationship between level of stress and coping strategies. (N= 50)

Item	Correlation(r)	P value	Significance
Stress	0.19	0.18	Not statistically significant
Coping Strategy			

The table showed that relationship between stress and coping strategies was statistically tested using correlation. The value is 0.197 that is not statistically significant.

**Table 5:** Association of level of stress and sociodemographic variables in the subjects. (N=50)

Sl No	Demographic data	Chi-Square	Df	P Value	Level of Significance
1	Age	0.063	2	0.970	Non-significant
2	Gender	1.758	1	0.386	Non-significant
3	Religion	5.89	2	0.05	significant
4	Educational status	0.625	2	0.733	Non-significant
5	Marital status	6.34	2	0.04	significant
6	Occupational status of parents	0.268	3	0.967	Non-significant
7	Family income	2.090	2	0.956	Non-significant
8	Number of children	0.055	1	0.082	Significant
9	Family history of psychiatric illness	7.21	1	0.007	significant
10	Age of child in year	5.639	3	0.131	Non-significant

Table-4 presents that the chi-square test was used to determine the association between selected demographic variables and the study variable among the participants. The analysis showed that religion ( $\chi^2 = 5.89$ ,  $df = 2$ ,  $p = 0.05$ ), marital status ( $\chi^2 = 6.34$ ,  $df = 2$ ,  $p = 0.04$ ), number of children ( $\chi^2 = 0.055$ ,  $df = 1$ ,  $p = 0.082$ ), and family history

of psychiatric illness ( $\chi^2 = 7.21$ ,  $df = 1$ ,  $p = 0.007$ ) had a statistically significant association with the study variable. However, no statistically significant association was found between the study variable and age ( $\chi^2 = 0.063$ ,  $df = 2$ ,  $p = 0.970$ ), gender ( $\chi^2 = 1.758$ ,  $df = 1$ ,  $p = 0.386$ ), educational status ( $\chi^2 = 0.625$ ,  $df = 2$ ,  $p = 0.733$ ), occupational status of parents ( $\chi^2 = 0.268$ ,  $df = 3$ ,  $p = 0.967$ ), family income ( $\chi^2 = 2.090$ ,  $df = 2$ ,  $p = 0.956$ ), and age of the child in years ( $\chi^2 = 5.639$ ,  $df = 3$ ,  $p = 0.131$ ).

Thus, it can be concluded that certain demographic factors, particularly religion, marital status, number of children, and family history of psychiatric illness, significantly influenced the study variable, while the remaining variables did not show a significant association at the selected level of significance.

### Discussion

The similar study that supported to the present study finding was conducted N. Tripathi (2015) the study focuses on the type of parenting style used by the parents who were undergoing different level of stress when dealing with children with Autism Spectrum Disorder and resulted that parents reported high level of stress when dealing with preadolescence children<sup>[11]</sup>.

The contra indicatory study that against the present study findings was conducted by G.E.Gray (2006) study on coping over time, the parents of children with Autism and resulted that parents cited for fewer coping strategies than they had previously. It depends upon the children had improved to the point when they were significantly easier to live with even if they retained many autistic symptoms<sup>[12]</sup>.

The supported study to the present study findings was conducted by L. Ali Dardas (2014) the study on stress, coping strategies, and quality of life among Jordanian parents of children with Autistic Disorder and revealed that parents of children with Autistic Disorder experience significant high levels of parenting stress<sup>[13]</sup>.

### Implications of the study

The study helps to explore the concept of stress and their coping strategies use by parents of Autism Spectrum Disorder children in selected Autism Therapy Center.

### Limitation

The study is limited on selecting samples from selected autism therapy center, the parents who are not able to speak and understand Odia,

### Conclusion

The outcome of the study can be concluded that the level of stress was that the majority, of parents having moderate stress. It was perceived that parents were having severe stress at the time of diagnostic and they coped with by time. As child grow and the disorder progress is very slow than other disorder the parents became agonize about their child's future at the time the parents has grown more stress parents had given one's attention to think and accept the child's strength more than of thinking and rejecting, concern about incapacitated of child's.

### Funding

Self

### Conflicts of interest

There are no conflicts of interest for the writers.

### Acknowledgements

The authors sincerely appreciate all the participants who willingly dedicated their time and thoughtfully provided sincere and well- considered responses.

### Ethics Approval

Ethical approval was obtained from the Sum Nursing College, Odisha, with approval dated 18.10.2017 (Ref. No.: SOADU/SNC/IRB/673/2017). Permissions were also secured from the medical superintendent, the head of the department, and relevant staff.

### Data Availability

The data is available and can be accessed with a reasonable request.

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