

## Stress, coping, and resilience among mothers of children with attention deficit hyperactivity disorder

Blessy B George<sup>1</sup>, Ashfaq Ahmad Dangroo<sup>2</sup>, Kamlesh Kumar Sahu<sup>3</sup>, Priti Arun<sup>4</sup>

<sup>1</sup>Research Scientist I, Drug De-Addiction & Treatment Centre, Department of Psychiatry, Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh, India

<sup>2</sup>Ph.D. Scholar, Department of Social Work, University of Delhi, New Delhi, India

<sup>3</sup>Associate Professor (PSW), <sup>4</sup>Professor & Head, Department of Psychiatry, Government Medical College and Hospital, Chandigarh, India

### ABSTRACT


**Background:** Families with children diagnosed with ADHD often experience elevated levels of stress compared to families with typically developing children. This stress manifests in various forms including family conflicts, disciplinary challenges, financial strain, parental depression, and difficulties in marital relationships. **Objectives:** The objective was to assess parenting stress, coping, and resilience among parents of children with ADHD, as well as the psychosocial problems of children with ADHD as reported by parents. **Method and Materials:** This descriptive cross-sectional study was conducted at the Child Guidance Clinic, Psychiatry Department, Government Medical College & Hospital, Chandigarh. It included 40 consecutive mothers of children diagnosed with ADHD according to DSM-5 criteria, aged 6 to 14 years, fluent in Hindi or English, and residing with their child. Exclusion criteria comprised major medical or psychiatric illnesses, specific learning disabilities (SLD), and comorbid disabilities in children, as well as significant psychiatric or medical illnesses, disabilities, or substance dependencies (excluding nicotine) in mothers, and multiple family members with major disabilities. Assessment tools used were the Socio-demographic and Clinical Data Sheet, Chandigarh Parent Related Stress Scale (CPRSS), Brief-COPE, The Connor-Davidson Resilience Scale (CD-RISC), Screening Tool for Assessment of Psychosocial Problems (STAPP), and Vanderbilt ADHD Diagnostic Parent Rating Scale (VADPRS). **Result:** The study revealed high levels of stress among mothers of children with ADHD, who employed a range of coping strategies including instrumental support, active coping, and planning, as well as emotional support, acceptance, positive reframing, and religious coping. Some also used maladaptive strategies like behavioural disengagement, venting, and self-blame. Participants showed a moderate level of resilience, with mild overall problems noted. Issues related to financial resources and high expressed emotion were most prevalent, followed by challenges with medication/treatment compliance and social support. **Conclusion:** This study underscores the need for increased focus on supporting parents in ADHD management, informing the development of comprehensive psychosocial intervention programs.

**Keywords:** Mother, stress, coping, resilience, ADHD

### INTRODUCTION

Attention deficit hyperactivity disorder (ADHD) is a neurodevelopmental disorder (NDD) defined by a persistent pattern of inattention and/or hyperactivity-impulsiveness that interferes with behaviour or development.<sup>[1]</sup> ADHD is one of the most

severe neuropsychological conditions with neurobiological and brain roots in school children and young adults.<sup>[2]</sup> This condition is characterized by a consistent pattern of attention deficiency or hyperactive and impulsive behaviour, more pronounced in younger children. Anatomical MRI studies

Access the Article Online	
<b>DOI:</b> 10.29120/IJPSW.2024.v15.i1.614	<b>Quick Response Code</b> 
<b>Website:</b> <a href="http://pswjjournal.org/index.php/ijpsw">http://pswjjournal.org/index.php/ijpsw</a>	



#### Address for Correspondence:

Dr. Kamlesh Kumar Sahu, Associate Professor  
Department of Psychiatry, Government Medical  
College and Hospital, Chandigarh - 160030, India  
Email: withkamlesh@gmail.com

#### How to Cite the Article

George BB, Dangroo AA, Sahu K, Arun P. Stress, coping, and resilience among mothers of children with attention deficit hyperactivity disorder. Indian J Psychiatr Soc Work. 2024;15(1):17-27.

have shown cortical (frontal) abnormalities in ADHD patients, along with abnormalities in the basal ganglia and subcortical brain regions, which play a significant role in ADHD aetiology.<sup>[3]</sup> ADHD typically leads to challenges in family settings, school, and peer relationships.<sup>[4]</sup> It is frequently diagnosed in infancy<sup>[5]</sup> and affects about 7% of children and adolescents.<sup>[6]</sup> ADHD is gender-moderated, with boys being at least twice as likely as girls to be diagnosed.<sup>[7]</sup> Symptoms vary between genders, with boys more likely to exhibit hyperactivity, impulsivity, and oppositional defiant disorder, while girls are more likely to display inattention and comorbid anxiety/depression.<sup>[8]</sup> Hyperactive children are typically restless and constantly in motion, often engaging in impulsive behaviour. Inattentive children struggle with sustained focus and may find it difficult to complete tasks or learn new information.

The global prevalence of ADHD worldwide is estimated at 2.2% in children and adolescents (age < 18 years).<sup>[7]</sup> In India, primary school students have shown a prevalence of ADHD of 11.32%, with a higher prevalence among males (66.7%) than females (33.3%). Prevalence also varies significantly between socioeconomic groups, with the highest rates observed among 9-10-year-olds [8]. The incidence rates according to DSM-5 criteria are estimated at 2.5% among adolescents and 5% among children.<sup>[9]</sup>

Studies indicate that families of children with ADHD experience more stress and family dysfunction compared to families of healthy children. They often face challenges such as marital disputes, financial burdens, and parental distress, along with increased incidents of aggressive or inappropriate parental behaviour triggered by the child's ADHD symptoms.<sup>[10-13]</sup> ADHD can significantly strain family dynamics and often results in inadequate support due to health services focusing primarily on symptomatic treatment without sufficient family engagement.<sup>[12,13]</sup>

Stress is defined by behavioural, emotional, cognitive, biological, and interpersonal responses to challenging experiences. Its impact varies among individuals, necessitating consideration of both stressors and individual responses.<sup>[14]</sup>

Children with ADHD pose significant

challenges for parents, leading to higher levels of family tension and impacting parental physical and mental health and parenting practices. Studies suggest that increased parental stress correlates with higher levels of ADHD symptoms and behavioural/emotional issues in children/adolescents. The relationship between ADHD and parental stress is partly mediated by behavioural problems and social functioning within the family.<sup>[15]</sup>

Coping refers to cognitive and behavioural efforts to manage, accept, or reduce internal and external demands and conflicts in stressful situations.<sup>[16]</sup> Parents of children with ADHD demonstrate both adaptive and maladaptive coping mechanisms in response to symptoms, affecting their mental health. Factors such as a child's age, symptom severity, and demographic variables (e.g., parental education, and economic status) influence parental coping strategies.<sup>[17]</sup>

Resilience involves the ability to adjust to and recover from adversity based on past experiences.<sup>[18]</sup> Effective resilience strategies, including social and family support, can significantly benefit parents of children with ADHD, enhancing their mental well-being.<sup>[19]</sup> Strengthening resilience in families can improve overall functioning and well-being by fostering stronger relationship bonds and adaptive processes.<sup>[20-23]</sup>

Raising children with developmental disorders like ADHD demands significant psychological, physical, and temporal efforts from parents. While these experiences can lead to stress or mental health challenges, many parents adapt well to this role, demonstrating resilience and effective coping strategies.<sup>[24]</sup>

Raising a child with attention deficit hyperactivity disorder (ADHD) can be very challenging. It demands a lot of attention from parents. The demands of parenting are usually associated with some stress and elevated levels of stress may affect the parent-child relationships, parenting practices and various aspect of life of the child, their parent and whole family. Many families come up with strategies to help themselves to cope with everyday situations, but many do not because of low resilience which must be address by interventions. There are various pharmacological and non-pharmacological managements that are tested and found

effective. In the Indian setting, the management for ADHD has always focused on pharmacological management and to a certain extent behaviour therapy. Focus on parents, the primary caregivers have been minimal. This study will attempt to bring to light the various facets affected with regard to parents' stress-coping and some familial factors, thus paving the way for a wholesome management program for attention deficit hyperactivity disorder.

### Objectives

The objective was to assess parenting stress, coping, and resilience among parents of children with ADHD, as well as the psychosocial problems of children with ADHD as reported by parents.

### MATERIALS AND METHODS

This cross-sectional descriptive study was conducted at the Child Guidance Clinic in the Outpatient Department (OPD) of the Department of Psychiatry, Government Medical College & Hospital, Chandigarh. The study included mothers of children diagnosed with attention deficit hyperactivity disorder (ADHD) according to DSM-5 criteria. Participants comprised 40 consecutive mothers of children with ADHD, attending the OPD, who provided written consent and met the study's inclusion criteria. Mothers of children aged 6 to 14 years of both genders were eligible. Further, inclusion criteria for mothers included fluency in Hindi or English and residency with the child. Exclusion criteria encompassed major medical or psychiatric illnesses, specific learning disabilities (SLD), co-morbid disabilities for children, and major psychiatric or medical illnesses, disabilities, or substance dependencies (excluding nicotine) for mothers, along with the presence of multiple family members with major disabilities.

*Tools Used:* The study employed the following tools: (1) *Socio-demographic and Clinical Data Sheet*, which included details such as registration number, name, age, sex, educational level, onset and duration of illness, treatment history, symptoms, and family information for children with ADHD and their parents. (2) *Chandigarh Parenting Related Stress Scale (CPRSS)*, a 48-item Likert-type scale assessing stress among parents of children with ADHD.<sup>[25]</sup> (3) *Brief COPE* is a 28-item self-administered scale measuring coping

strategies categorized into problem-focused coping, active emotional coping, and avoidant emotional coping.<sup>[26]</sup> (4) *Connor-Davidson Resilience Scale (CD-RISC)*, comprising 25 items rated on a 5-point scale to assess resilience in participants.<sup>[27]</sup> (5) *Screening Tool for Assessment of Psychosocial Problems (STAPP)*, a 12-question tool with a 4-point Likert scale to evaluate psychosocial issues requiring intervention.<sup>[28]</sup> (6) *Vanderbilt ADHD Diagnostic Parent Rating Scale (VADPRS)*, used to assess ADHD symptoms and related disorders including oppositional defiant disorder (odd), conduct disorder, anxiety, and depression in children aged 6-12 through specific scoring criteria for each subscale.<sup>[29]</sup>

*Procedure:* Parents of children with ADHD attending the Child Guidance Clinic in the OPD of the Department of Psychiatry, Government Medical College & Hospital, Chandigarh, diagnosed as per DSM-5 and who gave written consent, were included in the study. After obtaining informed consent, parents were screened using the Vanderbilt ADHD Diagnostic Parent Rating Scale (VADPRS). Those who scored high in the inattentive and hyperactivity sections were included. Socio-demographic and clinical data were collected, followed by administration of study tools. Each assessment took one to two hours. Data were coded and entered into a master chart for analysis.

*Statistical Analysis:* Data were analysed using Statistical Package for the Social Sciences version 16 (SPSS-16). The statistics used were mean and standard deviation for continuous variables and frequency and percentage for categorical variables. A two-tailed Pearson correlation test was conducted to explore the associations between socio-demographic variables, stress, coping, resilience, and psychosocial problems.

*Ethical Consideration:* Approval was obtained from the institutional ethical committee. Written consent was obtained from parents and assent from children above 7 years. Participants could withdraw at any time. Confidentiality was maintained. After data collection, participants were referred back to the treating consultant for any identified psychosocial problems/issues that were briefed to the treating team so that they could be referred for intervention.

## RESULTS

### Socio-demographic profile and clinical profile

Table 1 Socio-demographic profile of Mothers with ADHD ( $n = 40$ )

Characteristics	Mean (SD)/ Frequency (%)
Age (years) range 27-48)	33.98(4.40)
Education level	
Illiterate	1(2.5)
Primary	3(7.5)
Middle	7(17.5)
Matric	9(22.5)
Inter/Diploma	7(17.5)
Graduate	12(30.0)
Professional	1(2.5)
Occupation	
Professional	3(7.5)
Semi-professional	2(5.0)
Skill/Semi-skilled/ Unskilled/Worker	6(15.0)
Housewife	29(72.5)
Family Income	
0-10000	8(20.0)
10001-20000	9(22.5)
20001-30000	11(27.5)
30001 & above	12(30.0)
Religion	
Hindu	22(55.0)
Sikh	18(45.0)
Family Type	
Nuclear	24(60.0)
Joint	16(40.0)
Locality	
Urban	25(62.5)
Rural	15(37.5)

Table 1 shows the socio-demographic characteristics of the mothers of children with attention deficit hyperactivity disorder (ADHD). The mean age of the sample was  $33.98 \pm 4.41$  years. Most participants were Hindu (55%), followed by Sikh (45%). A majority (60%) belonged to nuclear families, while the rest (40%) were from joint families. In terms of locality, most lived in urban areas (62.5%), with the remainder in rural areas (37.5%).

Regarding education, 30% were graduates, 22.5% had completed matriculation (10th grade), 7.5% had primary education, 17.5% had middle or intermediate education or a diploma, and 2.5% were either illiterate or professionals.

In terms of occupation, 72.5% were housewives or engaged in household work, 15% were skilled or semi-skilled workers, 7.5% were professionals, and 5% were semi-professionals. Regarding family income, 30% of the study sample had a family income of Rs. 30,001 and above, 27.5% had an income between Rs. 20,000 and 30,000, 22.5% had an income between Rs. 10,001 and 20,000, and 20% had an income between Rs. 0 and 10,000.

Table 2 Socio-demographic and clinical profile of children with ADHD ( $n = 40$ )

Characteristics	Mean (SD)/ Frequency (%)
Age (years) (range 6-14)	8.73(2.55)
Gender	
Male	31(77.5)
Female	9(22.5)
Education level	
Primary	27(67.5)
Middle	12(30.0)
Matric	1(2.5)
Duration of Illness	
6-12 months	3(7.5)
1-2 years	14(35.0)
2-5 years	13(32.5)
5-10 years	2(5.0)
More than 10 years	1(2.5)
Duration of Treatment	
6-12 months	4(10)
1-2 years	18(45)
2-5 years	17(42.5)
5-10 years	1(2.5)
Type of ADHD	
Inattentive	1(2.5)
Hyperactivity	15(37.5)
Combined, Inattentive & Hyperactivity	24(60.0)

Table 2 shows the socio-demographic and clinical details of children with ADHD. The mean age was  $8.73 \pm 2.55$  (range 6-14) years. The majority of children with ADHD were male (77.5%). In terms of education, 67.5% were students of primary level followed by middle level (30%) and matriculation (2.5%). The mean duration of illness was  $4.95 \pm 1.52$  years. The duration of treatment taken was  $4.55 \pm 1.39$  years. It was found that most of the children were with combined, inattentive and hyperactivity (60%) followed by hyperactivity (37.5%) and inattentive (2.5%) type.

### Parenting Stress among mothers of children with ADHD

The scores of the Chandigarh Parent Related Stress Scale (CPRSS) for mothers of children with ADHD revealed a mean total score of 94.53 (SD = 23.20) among the 40 mothers, with scores ranging from a minimum of 60 to a maximum of 170.

### Coping Style of mothers with children of ADHD

Table 3 Coping Styles among Mothers of Children with ADHD ( $n = 40$ )

Coping Styles	Mean (SD)
Self-distraction	4.93(1.74)
Active coping	6.10(1.23)
Denial <sub>SEP</sub>	3.15(1.00)
Substance use <sub>SEP</sub>	2.00(0.00)
Use of emotional support	6.03(1.49)
Use of instrumental support	6.20(1.43)
Behavioural disengagement	4.58(1.31)
Venting	4.98(1.44)
Positive reframing	5.05(1.30)
Planning <sub>SEP</sub>	5.85(1.36)
Humour	2.70(1.45)
Acceptance	5.23(0.94)
Religion	5.70(1.71)
Self-blame	4.78(1.62)

Table 3 presents the mean scores on the Brief COPE, depicting the coping styles of mothers with children who have ADHD. The most frequently used coping styles were the use of instrumental support (mean = 6.20, SD = 1.43), emotional support (mean = 6.03, SD = 1.49), active coping (mean = 6.10, SD = 1.23), and religion (mean = 5.70, SD = 1.71). Planning (mean = 5.85, SD = 1.36), acceptance (mean = 5.23, SD = 0.94), venting (mean = 4.98, SD = 1.44), and self-distraction (mean = 4.93, SD = 1.74) were also commonly used. Positive reframing (mean = 5.05, SD = 1.30), behavioural disengagement (mean = 4.58, SD = 1.31), and self-blame (mean = 4.78, SD = 1.62) were less frequently used. Denial (mean = 3.15, SD = 1.00), humour (mean = 2.70, SD = 1.45), and substance use (mean = 2.00, SD = 0.00) were the least frequently used coping styles by these mothers.

### Resilience of mothers with children of ADHD

The mean score on the Connor-Davidson Resilience Scale (CD-RISC), depicting the resilience of mothers of children with ADHD, was 60.10 (SD = 10.10). According to the CD-RISC, a total score of less than 50 represents low resilience, a score between 50 and 75 represents moderate resilience, and a score above 75 represents high resilience. Therefore, the results indicate that the mothers in this study generally have moderate resilience.

### Psychosocial problems of children with ADHD

Table 4 Psychosocial Problems of Children with ADHD ( $n = 40$ )

Areas of Psychosocial Problems	Score*			
	0(%)	1(%)	2(%)	3(%)
Knowledge/Awareness	28(70.0)	12(30.0)	0	0
Medication/Treatment Compliance	19(47.5)	19(47.5)	2(5.0)	0
Availability of Financial Resources	25(62.5)	10(25.0)	5(12.5)	0
Social Support	13(32.5)	25(62.5)	2(5.0)	0
Expressed emotion	8(20.0)	27(67.5)	5(12.5)	0
Emotional/Physical/Sexual abuse	18(45.0)	22(55.0)	0	0
Legal Issues	39(97.5)	1(2.5)	0	0
Conflicts including property & marital	19(47.5)	21(52.5)	0	0
Employment	36(90.0)	4(10.0)	0	0
Accommodation	39(97.5)	1(2.5)	0	0
Stigma	28(70.0)	11(27.5)	1(2.5)	0
ADL **	34(85.0)	6(15.0)	0	0
Total Score	4.63(1.628) [Mean (SD)]			

0= No problem, 1= Mild, 2= Moderate, 3= Severe. \*\*ADL= Activities of daily living

Table 4 shows that on STAPP as reported by their mothers, indicates that all 40 mothers felt some level of psychosocial problem. The mean score was  $4.63 \pm 1.628$ , indicating that overall, psychosocial problems in the family are at a mild level. Considering domains of psychosocial problems, moderate-level problems related to the availability of financial resources and high expressed emotion were reported by 12.5% of mothers, while issues related to medication/treatment compliance and social support were reported by 5% of mothers. The higher positive response percentages for expressed emotion (32%), social support (27%), and awareness/ knowledge (30%) highlight more significant issues in these domains.

### Correlation between socio-demographic and study variables

A Pearson correlation two-tailed test was conducted to explore the associations between socio-demographic variables, stress, coping, resilience, and psychosocial problems among mothers of children with ADHD. The results, as summarized in Table 5, reveal several significant correlations. Stress showed significant negative correlations with occupation ( $r=-.37$ ), religion ( $r=-.36$ ), family type ( $r=-.33$ ), and locality ( $r=-.33$ ) at the .05 level. This suggests that mothers with different

occupations, religious affiliations, family structures, and localities experience varying levels of stress, with certain factors potentially mitigating stress.

The overall coping score exhibited a significant positive correlation with family type ( $r=.47$ ) at the .01 level, indicating that family structure plays a crucial role in the coping mechanisms of these mothers. Sub-domains of coping, as measured by the Brief COPE, also showed significant correlations with socio-demographic variables. Active coping (AC) had a negative correlation with the education of the patient ( $r=-.36$ ) at the .05 level, while the use of instrumental support (UOIS) had a positive correlation with the family type ( $r=.39$ ) at the .05 level. Behavioural disengagement showed a positive correlation with occupation ( $r=.46$ ) at the .01 level. Venting (VT) had positive correlations with both occupation and family type at the .01 level. Planning was positively correlated with family type ( $r=.38$ ) at the .05 level. Acceptance (APTE) showed significant negative correlations with the duration of illness (DOI) and the duration of treatment (DOT) at the .05 level. Self-blame had a significant negative correlation with the age of the caregiver ( $r=-.36$ ) at the .05 level and a positive correlation with occupation ( $r=.57$ ) at the .01 level.

Variables	AOC	EOC	OCUPN	FI	RLN	FT	LOTY	AOP	GOP	EOP	DOI	DOT	VADPRS
CPRSS	-0.01	0.17	-.37*	0.27	-.36*	-.33*	-.38*	0.09	-0.17	-0.08	-0.29	-0.18	-0.18
SD	0.1	-0.08	-0.18	-0.27	0.04	-0.05	0.09	0.16	0.09	0.19	-0.09	-0.26	-0.03
AC	-0.02	-0.01	-0.13	-0.05	-0.19	0.31	-0.06	-0.28	0.05	-.36*	-0.06	-0.12	-0.2
DL	-0.15	-0.28	0.14	-0.02	0.06	-0.07	-0.06	0.08	-0.02	0.14	0.04	-0.08	0.16
UOES	0.25	0.08	0.06	0.08	0.16	0.29	-0.22	0.09	-0.09	0.02	-0.29	-0.09	-0.14
UOIS	0.14	0.07	-0.09	0.01	0.12	.39*	-0.26	0.001	-0.20	-0.09	-0.25	-0.09	-0.18
BD	-0.08	-0.19	.46**	-0.11	0.06	0.37	0.06	0.09	0.22	0.14	0.06	-0.009	0.06
VT	-0.004	-0.18	.43**	-0.13	-0.16	.46**	0.05	0.17	0.22	0.16	0.14	0.12	0.26
PR	-0.01	0.18	-0.09	0.26	-0.07	0.28	-0.23	-0.10	0.07	-0.17	0.09	-0.001	-0.16
PL	-0.07	-0.16	0.09	-0.17	0.07	.38*	0.20	-0.20	0.19	-0.10	-0.004	-0.13	-0.12
HR	-0.28	-0.05	0.24	0.002	0.05	0.16	-0.16	-0.09	-0.05	-0.17	-0.04	0.07	.38*
APTE	-0.04	0.50	0.12	-0.07	-0.11	0.17	-0.07	-0.15	0.17	-0.26	-.37*	-.39*	-0.26
RLN	0.16	-0.11	-0.25	-0.16	.37*	-0.006	-0.06	0.004	-0.22	0.006	0.18	.39*	0.19
SB	-.36*	-0.27	.57**	-0.18	-0.06	0.24	0.10	-0.15	0.26	-0.06	0.09	0.03	0.26
BREFCT	-0.03	-0.05	0.21	-0.05	0.05	.47**	-0.18	-0.03	0.09	-0.05	-0.01	0.002	0.04
CDRISCT	0.09	0.06	-0.16	-0.008	-0.01	0.17	-0.01	0.07	0.01	0.08	0.02	-0.05	-0.06
KLAW	.36*	-0.09	-0.08	0.14	.36*	-0.09	-0.07	0.31	-0.22	0.29	-0.06	-0.02	-.39*
MTC	-0.15	0.23	0.09	0.21	-0.28	0.24	-0.14	-0.11	0.17	-0.06	0.17	0.07	0.14
AFR	0.01	-0.26	0.18	-.46**	0.21	-0.29	.59**	-0.05	0.04	0.08	-0.02	0.07	0.03
SS	-0.18	-.36*	0.28	-0.23	0.08	-0.07	0.26	0.07	0.27	0.28	0.17	-0.06	.53**
EE	0.07	-0.16	-0.07	0.001	-0.09	0.19	0.10	0.25	0.18	0.27	-0.12	-.32*	0.14
EPSA	0.06	-0.25	0.17	-0.16	0.01	0.02	0.26	0.18	0.17	0.22	0.08	-0.004	0.31
LGLISE	0.001	-0.05	0.08	0.08	-0.16	-0.13	-0.12	-0.11	-0.07	-0.15	0.005	-0.06	0.16
CIPAM	-0.10	-0.03	-0.31	-0.19	0.17	-0.04	.32*	-0.10	0.03	-0.19	-0.19	-0.20	0.06
EMLT	-0.29	-0.05	0.18	0.09	-0.13	-0.10	-0.29	-0.06	-0.18	-0.06	0.01	-0.01	0.19
ACMDTN	0.148	-0.051	0.08	-0.098	0.177	-0.131	0.207	0.16	0.28	0.19	0.11	0.05	-0.17
STMA	-0.14	0.18	-0.008	0.18	-0.08	-0.27	-.37*	-0.06	-0.18	-0.14	0.05	0.06	-0.13
ADL	-0.09	0.18	0.2	0.12	-0.09	-0.08	-0.18	-0.09	-0.06	-0.17	0.20	0.24	-0.09
STAPPT	-0.16	-0.29	0.18	-0.21	0.07	-0.18	.34*	0.13	0.2	0.24	0.05	-0.12	0.22

Table 5 Correlation between the Socio-demographic and Study Variables (n=40)

The overall psychosocial problem score, as measured by STAPP, had a significant positive correlation with locality ( $r=.34$ ) at the .05 level, suggesting that the locality influences the extent of psychosocial problems experienced. Within the various sub-domains of psychosocial problems, knowledge/awareness had a significant positive correlation with the age of the caregiver and religion ( $r=.36$ ) at the .05 level. The availability of financial resources (AFR) showed a negative correlation with family income ( $r=-.46$ ) at the .01 level and a positive correlation with locality ( $r=.59$ ) at the .01 level. Social support (SS) had a negative correlation with the education of the caregiver ( $r=-.26$ ) at the .05 level and a positive correlation with VADPRS ( $r=.53$ ) at the .01 level. Expressed emotion (EE) showed a significant negative correlation with the duration of treatment ( $r=-.32$ ) at the .05 level. Conflicts including property and marital issues (CIPAM) had a positive correlation with locality ( $r=.32$ ) at the .05 level. Finally, stigma (STMA) had a significant negative correlation with locality ( $r=-.37$ ) at the .05 level.

## DISCUSSION

There are various studies conducted on stress among parents of children with attention deficit hyperactivity disorder (ADHD).<sup>[17]</sup> Studies have also examined coping strategies adopted by parents of children with ADHD<sup>[35]</sup> and those with ADHD and co-morbid developmental disorders, but there is no study that addresses the stress, coping, and resilience of mothers of children with ADHD together. This is a strength and uniqueness of the present study.

### Socio-demographic and clinical profile

In the present study, the mean age of the sample (mothers of children with ADHD) was  $33.98 \pm 4.406$  years, which is comparable with another study<sup>[30]</sup> finding where the mean age of the mothers was  $29.5 \pm 5.9$  years. Hindus constituted 55% of the sample, followed by Sikhs at 45%. Most participants were educated up to graduate level. Around 72.5% were homemakers, and 27.5% were semi-skilled workers/professionals. Family income ranged from thirty thousand and above (30%) to ten thousand to twenty thousand (22.5%). The majority (60.6%) of the study sample was from urban nuclear families. These findings reflect the socio-cultural background of the study

sample and are somewhat comparable to previous studies.<sup>[30]</sup>

In the present study, the mean age of children with ADHD was 8.7 years, whereas another study found a mean age of 5.7 years at the Child Guidance Clinic of a pediatric tertiary care hospital in a South Indian city.<sup>[31]</sup> In the present study, the majority (77.5%) of the children with ADHD were boys, compared to 86.3% boys in a similar Indian study setting. [38] More children (60%) had the combined (inattentive and hyperactive) type of ADHD, followed by the hyperactive type (37%), which is inconsistent with the findings of another Indian study where the combined type was 40% and the hyperactive-impulsive type was 25%.<sup>[32]</sup>

### Stress of mothers with children with ADHD

The present study shows high stress levels among mothers. Impaired attention among children with ADHD has significant clinical and therapeutic implications and could contribute to reducing their mothers' effectiveness in managing everyday life, play, and schooling. It is likely that inattention, hyperactivity, and impulsivity among children with ADHD act as barriers to their mother's mental health and cause feelings of stress. Additionally, ADHD is a developmental disorder that could worsen as the child grows older. Long periods spent with children with ADHD also result in tension for their mothers. These findings are similar to previous studies conducted on the stress of mothers with ADHD children.<sup>[33-35]</sup>

### Coping style of mothers with children with ADHD

This study demonstrates that the mothers of children with ADHD used a variety of coping strategies. According to Folkman and Lazarus, there are three types of coping strategies: problem-focused coping, emotion-focused coping, and maladaptive emotion-focused coping.<sup>[16]</sup> In the present study, mothers were more inclined to use instrumental support, active coping, and planning (problem-focused coping) and some used emotional support, acceptance, positive reframing, and religion (emotion-focused coping). Findings also showed that some mothers used maladaptive emotion-focused coping strategies such as behavioural disengagement, venting, and self-blame. It has been explained that a bad coping



strategy reduces an individual's effort to deal with the stressor, even giving up the attempt to accomplish goals with which the stressor is interfering.<sup>[36]</sup> Mothers use maladaptive coping strategies when they feel helpless and expect poor coping outcomes, consistent with the present study's finding of less frequent substance use by mothers. Past studies have also found similar results.<sup>[37,38]</sup> Substance use was least frequently seen in the mothers, perhaps due to strong religious beliefs and cultural norms. When under stress, an individual might turn to religion for emotional support, positive reinterpretation and growth, or active coping with a stressor.

### **Resilience among mothers of children with ADHD**

Based on the results of the present study, the participants had a relatively moderate level of resilience. A similar study used the same questionnaire to examine the resilience levels of 110 mothers and found a mean resilience score of 65.7, indicating a moderate level of resilience.<sup>[19]</sup> The stress of having a child with ADHD can cause severe stress in mothers and result in psychological disorders.<sup>[39]</sup> While individuals experience difficult periods, especially prolonged stressful conditions such as caring for a child with ADHD, resilience helps them find a way to get through and overcome these stressful situations.<sup>[40]</sup> There are a limited number of studies concerning the resilience of mothers of children with ADHD.

### **Psychosocial problems of children with ADHD as reported by their mothers**

The present study reveals that all children with ADHD had some psychosocial problems, as reported by their mothers; none reported no problems. The overall findings suggest that mothers have only a mild level of problems, which is a positive aspect. A similar study conducted to find the perceived social support of Chinese parents with their child with ADHD used a tool almost identical to the present study, covering all domains. It showed that parents were receiving adequate instrumental and emotional support from relatives and friends.<sup>[41]</sup> Proper care and support may attenuate parents' distress.

### **Correlation between socio-demographic and study variables**

The results show that the stress of mothers of children with ADHD has a significantly weak

negative correlation with occupation, religion, family type, and locality. Mothers' stress was highest when they were professionals and lowest when they were housewives this particular finding is not consistent with a study finding which reported non-working parents had higher levels of parenting stress than the employed parents.<sup>[42]</sup> It is expected that when mothers have to take on multiple roles at work and home, they will have more stress. Hindu mothers experienced more stress compared to Sikh mothers, possibly due to differences in their support systems. Mothers from nuclear families were more stressed than those from joint families, likely because joint families have more members to help care for the children, reducing the mothers' stress. Similarly, urban mothers experienced more stress than rural mothers.

Active coping has a weak negative correlation with the education of children with ADHD, indicating that active coping was less used when children were studying in higher grades. The use of instrumental support has a significant positive correlation with family type, meaning mothers from joint families used more instrumental support than mothers from nuclear families, likely due to the additional support available in joint families. Behavioural disengagement has a positive correlation with occupation, meaning professional mothers used disengagement coping more than housewives, possibly due to the time constraints of their profession. Venting has a positive correlation with occupation and family type, suggesting that professional mothers from nuclear families used venting as a coping style more than housewives from joint families. Planning also has a positive correlation with family type, indicating that mothers from joint families used more planning coping than those from nuclear families. Acceptance has a significant negative correlation with the duration of illness and the duration of treatment, meaning that acceptance decreased with a prolonged period of caregiving, indicating a caregiving burden, though this was not separately studied. Self-blame has a significant negative correlation with the age of the caregiver and a positive correlation with occupation, meaning younger housewives had less self-blame as a coping style.

Healthcare professionals need to understand the coping styles of mothers to help them reduce



their stress and increase their resilience. Specifically, healthcare providers must improve current psychosocial interventions, including psychoeducation programs, to better educate parents and train them ineffective coping skills and stress management.

The overall psychosocial problem had a significant positive correlation with locality, indicating more psychosocial problems in urban areas. In various areas of psychosocial problems, knowledge/awareness had a significant positive correlation with the age of the caregiver and religion, indicating that older mothers and Sikh mothers reported more psychosocial problems. The availability of financial resources had a negative correlation with family income and a positive correlation with locality, suggesting that families with better financial resources and those in urban areas had fewer psychosocial problems. Social support had a negative correlation with the education of mothers, indicating that higher education levels were associated with poorer perceived social support. Expressed emotion had a significant negative correlation with the duration of treatment, indicating that expressed emotion decreased over the course of treatment. Conflict, including property and marital issues, had a positive correlation with locality, and stigma had a significant negative correlation with locality, indicating that urban areas reported more conflicts but less stigma compared to rural areas.

#### **Limitations of the Study**

The study's sample size was small, limiting the generalizability of findings and requiring further validation. It was conducted as a cross-sectional hospital-based assessment, which restricts its applicability to the broader community population. The study focused exclusively on mothers of children with ADHD and did not compare findings with the normal population or similar disorders.

#### **Future Directions**

Future studies should consider larger sample sizes from diverse settings (hospitals and communities) to enhance result generalizability. Longitudinal research designs could provide deeper insights into stressors, coping abilities, and resilience factors among mothers of children with ADHD. Adopting a mixed-method approach, combining

quantitative and qualitative methods like focus group discussions and in-depth interviews, could offer a comprehensive understanding of the study variables. Clinicians should be sensitized to the diverse stresses and psychosocial issues faced by mothers of children with ADHD, carefully assessing and intervening to promote and enhance their coping and resilience strategies.

#### **CONCLUSION**

This study explored stress, coping strategies, resilience, and psychosocial issues among mothers of children with ADHD. It found that mothers, predominantly in their mid-30s and educated to the graduate level, faced high levels of stress. They employed a variety of coping mechanisms, including instrumental support, active coping, and planning, alongside emotional support, acceptance, positive reframing, religious coping, and maladaptive strategies such as behavioural disengagement and self-blame. Resilience levels were moderate overall. Mothers reported moderate concerns related to financial resources and high expressed emotion, with notable issues regarding medication/treatment compliance and social support. The study underscores the need for comprehensive psychosocial support programs tailored to address the unique challenges faced by parents of children with ADHD, particularly in managing stress and enhancing resilience.

**Financial support and sponsorship:** Nil.

**Conflicts of interest:** None.

**Ethical considerations:** Taken

#### **REFERENCES**

1. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 5th ed. Washington, D.C: American Psychiatric Association; 2013.
2. Mahone EM, Crocetti D, Ranta ME, Gaddis A, Cataldo M, Slifer KJ, et al. A preliminary neuroimaging study of preschool children with ADHD. *Clin Neuropsychol.* 2011;25:1009-28. doi: 10.1080/13854046.2011.580784
3. Sadock BJ, Sadock VA, Ruiz P. Synopsis of psychiatry: behavioral sciences, clinical psychiatry. 7th ed. Philadelphia: Wolters Kluwer; 2015.

4. Muñoz-Silva A, Lago-Urbano R, Sanchez-Garcia M, Carmona-Márquez J. Child/adolescent's ADHD and parenting stress: The mediating role of family impact and conduct problems. *Front Psychol.* 2017;8:2252. doi: 10.3389/fpsyg.2017.02252
5. Barkley RA, Fischer M, Smallish L, Fletcher K. Young adult outcome of hyperactive children: adaptive functioning in major life activities. *J Am Acad Child Adolesc Psychiatry.* 2006;45:192-202.
6. Catalá-López F, Peiró S, Ridao M, Sanfélix-Gimeno G, Génova-Maleras R, Catalá MA. Prevalence of attention deficit hyperactivity disorder among children and adolescents in Spain: a systematic review and meta-analysis of epidemiological studies. *BMC psychiatry.* 2012;12:168.
7. Rucklidge JJ. Gender differences in attention-deficit/hyperactivity disorder. *Psychiatric Clinics.* 2010;33:357-73.
8. Rucklidge JJ. Gender differences in ADHD: implications for psychosocial treatments. *Expert Rev Neurother.* 2008;8:643-55.
9. Centres for Disease Control and Prevention (CDC). Mental health in the United States. Prevalence of diagnosis and medication treatment for attention-deficit/hyperactivity disorder-United States, 2003. *MMWR: Morbidity & Mortality Weekly Report.* 2005;54(34):842-47.
10. Powell DR, Son SH, File N, San Juan RR. Parent-school relationships and children's academic and social outcomes in public school pre-kindergarten. *J Sch Psychol.* 2010;48:269-92.
11. Savundranayagam MY, Montgomery RJ, Kosloski K, Little TD. Impact of a psychoeducational program on three types of caregiver burden among spouses. *Int J Geriatr Psychiatry.* 2011;26:388-96. doi: 10.1002/gps.2538
12. Pahlavanzadeh S, Mousavi S, Maghsoudi J. Exploring the needs of family caregivers of children with attention deficit hyperactivity disorder: a qualitative study. *Iran J Nurs Midwifery Res.* 2018;23:149-54.
13. Patel MJ, Patel PB, Bansal RK. Parental stress scale: translation and preliminary testing for a Gujarati sample. *Natl J Community Med.* 2016;7(4):551-4.
14. Walsh F. A family resilience framework: Innovative practice applications. *Family relations.* 2002;51:130-37.
15. Breaux RP, Harvey EA. A longitudinal study of the relation between family functioning and preschool ADHD symptoms. *Journal of Clinical Child & Adolescent Psychology.* 2019;48(5):749-64.
16. Folkman S. Personal control and stress and coping processes: a theoretical analysis. *J Pers Soc Psychol.* 1984;46:839-52.
17. Craig F, Savino R, Fanizza I, Lucarelli E, Russo L, Trabacca A. A systematic review of coping strategies in parents of children with attention deficit hyperactivity disorder (ADHD). *Res Dev Disabil.* 2020;98:103571. doi: 10.1016/j.ridd.2020.103571
18. American Psychological Association. *The road to resilience.* Washington, DC: American Psychological Association; 2014.
19. Karimirad MR, Seyedfatemi N, Hossein Oghli S, Noorian S, Amini E. Resilience of mothers of children with attention deficit hyperactivity disorder and its related underlying factors. *J Prev Epidemiol.* 2019;4:e11.
20. Luthar SS, Cicchetti D, Becker B. The construct of resilience: a critical evaluation and guidelines for future work. *Child Dev.* 2000;71:543-62.
21. Suzuki K, Kobayashi T, Moriyama K, Kaga M, Inagaki M. A framework for resilience research in parents of children with developmental disorders. *Asian J Hum Serv.* 2013;5:104-11.
22. Tajalli P, Hooman HA, Afrooz GA, Bonab BG. A comparison of coping strategies used by mothers of children with/without ADHD. *International Journal of Fundamental Psychology & Social Sciences.* 2011;1:1-11.
23. Arya A, Agarwal V, Yadav S, Gupta PK, Agarwal M. A study of pathway of care in children and adolescents with attention deficit hyperactivity disorder. *Asian J Psych.* 2015;17:10-5.
24. Finzi-Dottan R, Triwitz YS, Golubchik P. Predictors of stress-related growth in parents of children with ADHD. *Res Dev Disabil.* 2011;32:510-9.
25. Arun P, Gupta N, Sharma A, Kaur M, Ukey K, Sharma K. Construction of

- Chandigarh Parenting Related Stress Scale. Souvenir 35th Annual National Conference of Indian Society of Professional Social Work on Social Stress, Resilience and Mental Health. 2017 Feb 9-11; Chandigarh, India: Department of Psychiatry, Government Medical College and Hospital; 2017. p. 114.
26. Carver CS. You want to measure coping but your protocol 'is too long: Consider the brief cope. *Int J Behav Med.* 1997;4:92-100.
  27. Connor KM, Davidson JR. Development of a new resilience scale: The Connor-Davidson resilience scale (CD-RISC). *Depress Anxiety.* 2003;18:76-82.
  28. Sahu KK, Chavan BS, Bala C, Tyagi S. Reliability and validity of the Screening Tool for Assessment of Psychosocial Problems. *Open J Psychiatry Allied Sci.* 2019;10:163-8.
  29. Wolraich ML, Lambert W, Doffing MA, Bickman L, Simmons T, Worley K. Psychometric properties of the Vanderbilt ADHD diagnostic parent rating scale in a referred population. *J Pediatr Psychol.* 2003;559-67.
  30. Ellingsen R, Baker BL, Blacher J, Crnic K. Resilient parenting of children at developmental risk across middle childhood. *Res Dev Disabil.* 2014;35:1364-74.
  31. Catherine TG, Robert NG, Mala KK, Kanniammal C, Arullapan J. Assessment of prevalence of attention deficit hyperactivity disorder among schoolchildren in selected schools. *Indian J Psychiatry.* 2019;61:232-7.
  32. Venkatesh C, Ravikumar T, Andal A, Virudhagirinathan BS. Attention-deficit/hyperactivity disorder in children: Clinical profile and co-morbidity. *Indian J Psychol Med.* 2012;34(1):34-8.
  33. Yousefia S, Far AS, Abdolalian E. Parenting stress and parenting styles in mothers of ADHD with mothers of normal children. *Procedia Soc Behav Sci.* 2011;30:1666-71.
  34. Samiei M, Daneshmand R, Keramatfar R, Khooshabi K, Amiri N, Farhadi Y, et al. Attention Deficit Hyper Activity Disorder (ADHD) and stress: A mutual relationship between children and mothers. *Basic Clin Neurosci.* 2015;6:113-21.
  35. Bailey J, Barton B, Vignola A. Coping with children with ADHD: coping styles of mothers with children with ADHD or challenging behaviours. *Early Child Dev Care.* 1999;148:35-50.
  36. Carver CS, Scheier MF, Weintraub JK. Assessing coping strategies: a theoretically based approach. *J Pers Soc Psychol.* 1989;56:267.
  37. Daud MM, Noor SS, Yusoff MN, Abd Rahman N, Zakaria MN. Gender differences in coping skills of parents with hearing-impaired children. *B-ENT.* 2013;9:319-23.
  38. Isa SN, Ishak I, Ab Rahman A, Saat NZ, Din NC, Lubis SH, et al. Perceived stress and coping styles among Malay caregivers of children with learning disabilities in Kelantan. *Malays J Med Sci.* 2017;24:81-93.
  39. Babakhanian M, Sayar S, Babakhanian M, Mohammadi G. Iranian children with ADHD and mental health of their mothers: The role of stress. *Iran J Psychiatry Behav Sci.* 2016;10:e2026. doi: 10.17795/ijpbs-2026
  40. Herrman H, Stewart DE, Diaz-Granados N, Berger EL, Jackson B, Yuen T. What is resilience? *Can J Psychiatry.* 2011;56:258-65.
  41. Ma JL, Lai KY, Lo JW. Perceived social support in Chinese parents of children with attention deficit hyperactivity disorder in a Chinese context: Implications for social work practice. *Soc Work Ment Health* 2017;15:28-46.
  42. Si Y, Ma JL, Zhang J. Factors influencing parenting stress among Chinese families of children with attention-deficit/hyperactivity disorder. *Children and Youth Services Review.* 2020;116:105148. doi: 10.1016/j.childyouth.2020.105148

**Received on:** 24-06-2024

**Revised on:** 03-07-2024

**Accepted on:** 10-07-2024

**Published on:** 10-07-2024