

Original Research Article

Comparative Analysis of Stress, Anxiety and Depression between the Parents of Children with Autism and ADHD

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ABSTRACT

Developmental disorders are present from early life and as child grows older, these cause impairments that continue through adult life. The central aim of the study is to compare stress, anxiety and depression between the parents of children with autism and ADHD. To conduct this study the researcher contacted with at least higher secondary, male and female from Bengali families in Kolkata city, having children with autism and ADHD whose age were not more than 10 and their parent's age ranged from 35 to 45 years and their monthly family income were about 10,000-50,000 per month. The total numbers of respondents were about 100 people (50 males and 50 females) and it was ensured that these respondents did not suffer from chronic physical and mental disturbances as well as for those candidates who were either separated or not staying with each other as well as with their children were not considered for the present study. Data were analyzed with average, Standard Deviation and t-test of Independent sample. Results indicated that there were significant differences in stress, anxiety and depression between the parents of the children with ADHD and autism.

Key Words: Autism, ADHD, Stress, Anxiety, Depression.

INTRODUCTION

A group of psychiatric conditions beginning in childhood which involve major impairment in different areas is known as Developmental disorders. These disorders encompass language disorders, learning disorders, motor disorders and autism spectrum disorders. Broadly defining this concept as neurodevelopment disorders within which ADHD is included. [1] Yet antisocial behavior and schizophrenia which develops in childhood and continues through life have been included by other experts as well. [1] Though, like other developmental disorders, these two latter conditions are not so strong, and also differ in terms of the evidence of a shared genetic liability. [1]

Though developmental disorders are present from early life and usually get

improve as the child grows older, but inevitably impairs different functioning which continues through adult life. Rutter et al., (2008) reported that there is a stable genetic component and sufferings are more for males than females. [1]

Autism

“Autism is a neuro developmental disorder characterized by impaired social interaction, verbal and non-verbal communication, and restricted and repetitive behavior. Parents usually notice signs in the first two years of their child's life”. [2] Though gradual development of these signs is noticed but in some cases in spite of reaching their developmental milestones at a normal pace some children with autism regress thereafter. [3] “The diagnostic criteria require that symptoms become apparent in early childhood, typically before age three”.

[4] Focusing on the causes of autism, researchers have impression those both environmental and genetic factors as causes.

[5] In rare cases, birth defects had been detected as a cause which is strongly associated with autism. [5]

As measured till 2013 autism affects 21.7 million people (Global Burden of Disease Study 2013 Collaborators, 2015). Occurrence of this disease is often found to be four to five times more in boys than girls and up to 2014 around 1.5% of children in the United States (one in 68) are diagnosed with ASD. [6] The rate is slightly different which is found to be 1.1% for adults aged 18 years and more in the United Kingdom. [7]

“Autism is a highly variable neuro developmental disorder [8] that first appears during infancy or childhood, and generally follows a steady course without remission. People with autism may be severely impaired in some respects but normal, or even superior, in others.” [9] As studied by Rapin and Tuchman (2008) overt symptoms of autism continue to begin after the age of six months and get stable by the age of two or three years, and often in a muted form features continue through adulthood. A group of symptoms differentiate this disorder such as impairments in social interaction, impairments in communication and restricted interests and repetitive behavior. [10]

Attention deficit hyperactivity disorder (ADHD)

“Attention deficit hyperactivity disorder (ADHD) is a psychiatric disorder of the neuro developmental type”. [11] The distinguishing features are disturbances in paying attention, excessive activity, or difficulty controlling behavior that is not expected for a person's particular age level. [12] These symptoms begin to develop by six to twelve years of age and continue for more than six months, and originate disturbances in at least two area such as school, home, or recreational activities. For children,

disturbances in paying attention may result in poor performances in school. [12]

Development of stress, anxiety and depression among the parents of children with autism and ADHD

In the phase of child rearing practices parents of autistic children may develop some psychological disturbances. Bitsika and Sharpley (2004) conducted a study on stress, anxiety and depression among the parents of children with autistic spectrum disorder. Results indicated that more than 90% of parents stated that in many occasion they found themselves unable to deal successfully with their child's behaviour. Almost half of the participants reported to be severely anxious and nearly two thirds reported to be clinically depressed. Results further indicated that parents with accessibility to positive family support deal effectively with the behavioural difficulties of a child with ASD. [13] Merkaj, Kika and Simaku (2013) conducted a study which compared between parents of autistic children and parents of typically developing children in terms of the symptoms of stress, depression and anxiety. Results showed that parents of autistic children reported more symptoms of stress, depression and anxiety than parents of clinically healthy children. ADHD, another developmental disorder managing is as difficult as autism and eventually parents sometimes, during the phase of child rearing practices may develop some psychological disturbances. [14]

Anastopoulos, Guevremont, Shelton and DuPaul (1992) in their study on parenting stress among families of children with attention deficit hyperactivity disorder, showed that particular characteristics among parents responsible for a considerable part of the variance in overall parenting stress. [15]

The present study has been conducted focusing in whether parents of the children with autism and ADHD differ in terms of sufferings through psychological disturbances such as stress, anxiety and depression.

MATERIALS AND METHODS

Hypotheses

Hypothesis1: There would be significant difference in stress between the parents of children with autism and ADHD.

Hypothesis2: There would be significant difference in anxiety between the parents of children with autism and ADHD.

Hypothesis3: There would be significant difference in depression between the parents of children with autism and ADHD.

The sampling technique

The purposive sampling technique will be used for the present study.

Sample

For selection of sample the researcher contacted male and female with

at least higher secondary as their educational qualification from Bengali families in Kolkata city, having children with autism and ADHD whose age were not more than 10 and their parent's age ranged from 35 to 45 years with their monthly family income ranged in between rupees 10,000 to 50,000 per month. The total number of respondents were about 100 people (50 parents of autistics children & 50 parents of ADHD children) and it was ensured that these respondents did not suffer from chronic physical and mental disturbances as well as for those candidates who were either separated or did not stay with each other as well as with their children were not considered for the present study.

The Sampling Criteria:

Inclusion Criteria	Exclusion Criteria
<ul style="list-style-type: none"> • Age of the subject : 35-45 Years • Age of the children : up to 10 Years • Education : At least higher secondary • Income: Rs (10000-50000)/month • Condition: Willing to cooperate with the Author. • Mother tongue: Bengali speaking • Occupation: Service, business or both but at least one of parents is employed. • Residence: Residing in and around Kolkata 	<ul style="list-style-type: none"> • Suffering from severe physical disability • Suffering from any chronic disease • History of addiction or referral to psychiatrist or psychotherapist for psychological problems • Child apart from ADHD or autism, suffering from other developmental disorder • Uncooperative with the Author • Candidates who are either separated or not staying with each other as well as with their children

Tools

An information schedule

An information schedule was prepared consisting of name, age, sex, educational qualification, marital status, occupation, number of family members, monthly family income, relationship with their spouse and child, present and past history of alcohol and drug addiction, mental and physical health and history of separation, problems their children are suffering from, whether their children have ever been treated etc.

DASS-21: [16]

DASS-21 is a 21 item self report questionnaire which was developed to assess the severity of a range of symptoms for depression as well as anxiety. To

complete the DASS, it is necessary for the person to indicate the presence of a symptom over the prior week. In scoring, each item is scored from 0 (did not apply to me at all over the last week) to 3 (applied to me very much or most of the time over the past week). The test shows stable reliability and validity either of full version (42 items) or short version (21 items) for the samples of healthy general population, [16,17-19] non-medical undergraduate students, [20] workers, [21] non psychiatry patient, [22] psychiatry outpatients [23] and psychiatry inpatients. [24] The correlation between the DASS and other psychological tools like the Beck Depression Inventory, Beck Anxiety Inventory, Positive and Negative Affect Scale, State-Trait Anxiety Inventory, Hospital Anxiety and Depression Scale

(HADS) showed satisfactory level of concurrent, convergent and discriminate validity. [25] This test takes about less than 10 minutes to administer.

In scoring, the items of the test are marked by the letters D, A and S to indicate for depression, anxiety and stress respectively. For each scale the total score is obtained separately for D, A & S by summing up the scores for identified items. To obtain score in long version of DASS (the Long Form has 42 items) the final score in each group of items such as for Depression, Anxiety and Stress; needs to be multiplied by two (x2). The range of severity ratings for normal is 0-9 in depression, 0-7 in anxiety and 0-14 in stress. Again for mild the depression is 0-13, anxiety is 8-9 and stress is 15-18 and in moderate the depression is 14-20, anxiety is 10-14 and stress is 19-25. Finally depression is 21-27 and 28 or more, anxiety is 15-19 and 20 or more and stress is 26-33 and 34 or more for the cases severe and extremely severe.

Statistical Analysis

The various statistical techniques which have been used in this study to analyze the data were descriptive (frequency, mean and standard deviation) and inferential statistics (t-test).

RESULTS

The analysis of result section is presented with Descriptive Statistics and Inferential statistics for hypotheses testing.

Results from Descriptive and Inferential Statistics: Hypotheses testing

To understand the difference in stress, anxiety and depression between the parents of the children with ADHD and autism, all the three hypotheses have been tested.

Hypothesis1: There would be significant difference in stress between the parents of children with ADHD and autism.

Hypothesis2: There would be significant difference in anxiety between the parents of children with ADHD and autism.

Hypothesis3: There would be significant difference in depression between the parents of children with ADHD and autism.

To test these hypotheses, t-test was conducted. Results are presented in Table - 1

Table - 1: Mean and SDs and t Values of stress, anxiety and depression for the parents of children with ADHD and autism

Variables	Group	Mean	SD	t
Stress	ADHD (N-30)	15.07	4.22	5.91**
	Autism (N-30)	8.90	3.84	
Anxiety	ADHD (N-30)	13.97	5.29	6.36**
	Autism (N-30)	6.07	4.28	
Depression	ADHD (N-30)	15.57	4.87	7.21**
	Autism (N-30)	7.13	4.16	

df=58, *P<.05, **P<.01

Results revealed that the differences in stress, anxiety and depression between the parents of the children with ADHD and autism were significant. Thus hypothesis 1, 2 and 3 were accepted.

DISCUSSION

The substantial findings which have revealed from this study are discussed in the light of the previous literatures and important theoretical backdrops. In general the findings showed that parents of ADHD and autistic children significantly differed in terms of stress, anxiety and depression and in all these three dimensions mean values of parents with ADHD were importantly to be higher. Such findings are analyzed and discussed under the following heading-

On the three major psychological dimensions such as stress, anxiety and depression, parents of children with ADHD and autism significantly differed

Researchers have showed that managing children with psychological disturbances are burdensome particularly for their first degree relatives such as parents. Such problems may manifest in the form of different psychological and somatic disturbances. [26] Farsi, Farsi, Sharbati and Al-Adawi (2016) conducted a case-control study on stress, anxiety, and depression among parents of children with autism spectrum disorder in Oman. Results indicated that in all the three dimensions

such as stress, depression, and anxiety scores were higher for the caregivers of children with autism spectrum disorder in comparison to the caregivers of the control group. Their study findings support this present study as in this case stress, anxiety and depression scores are significantly high for the parents of children with ADHD and autism.^[27] A more or less similar study was conducted by Cheesman (2011) to investigate experiences of the parents of children with ADHD in terms of stress and also to compare these children with control group where the control group encompasses with the parents of children with Autism. The results of this study indicated that these families undergone the immense stress in dealing with the children suffering from ADHD in comparison to the control group.^[28] Therefore, comparing such findings, it can be stated that this previous study corroborates with this present study as such childhood disturbances affect mental health related issues for the caregivers. Their study further revealed that mothers of children with ADHD-CT scored significantly higher than mothers of children with autism. Such findings support the other part of the present study findings that in all the three dimensions (stress, anxiety and depression) mean values were importantly to be higher for parents of ADHD children.

Weaknesses of the study

There were limitations in the present study:

- I. The relatively small sample size reduces the generalizability of the study.
- II. Sample was biased because majority of the candidates were selected from just few clinics of Kolkata.
- III. The tools used for the study were self report inventory which probably included self reporting biases.
- IV. Only those parents within the age group of 35 to 45 and having at least educational qualification of higher secondary were selected for this study which restricted age wise as well as education wise variations.

- V. Socioeconomic statuses of the candidates were not varied to have a concise picture of how such psychological pain and sufferings vary with the variation in social class.
- VI. Only those children having age of 10 or less were selected for this present study.

Recommendations for future study

In this study most noteworthy fact which has been revealed that dealing and treating children with psychological vulnerability is always burdensome and require developing knowledge about the special mechanisms which definitely enrich their parents to combat these issues effectively. Following recommendations or suggestions for the future studies are stated below-

1. For the present study sample size was small, future study may be conducted with larger sample, so that the study can be properly generalized.
2. In future study well planned controlled mechanisms may be adopted where the sample will be collected by covering all the zones of Kolkata city.
3. In future such comparative study may be conducted with large number of psychological variables.
4. A correlational study may be conducted among different demographic variables and parental psychological vulnerability in dealing with such kind of children.
5. Future study may be conducted with the children of different developmental phases from both rural and urban population, so that variations could be assessed in larger scale and other significant factors may rise for further analysis.

CONCLUSIONS

From the present study it can be concluded that the parents of the children with ADHD and autism differed significantly in terms of stress, anxiety and depression. The statement that needs to be drawn from this study findings that dealing

with children having behavioral disturbances is always burdensome and different diseases require knowledge about different mechanisms which must be learned in managing and treating such kind of children.

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How to cite this article: Malakar P, Ghosh S. Comparative analysis of stress, anxiety and depression between the parents of children with autism and ADHD. *Int J Health Sci Res.* 2018; 8(6):242-248.
