ORIGINAL ARTICLE

FAMILY STRESS AND DYADIC ADJUSTMENT AMONG PARENTS OF CHILDREN WITH INTELLECTUAL DISABILITY AND FUNCTIONAL PSYCHOSIS : A COMPARATIVE STUDY

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ABSTRACT

Children with intellectual disabilities and fuctional psychosis may require additional time and expense to provide independent living and rehabilitative services. The stress of having a child with intellectual disability and functional psychosis can take a toll on parents and cause relationship stress. This study aimed to assess and compare the family stress and dyadic relationship among parents of children with intellectual disability and functional psychosis. This study was a cross-sectional hospital based study. The study samples were selected purposively. The sample size was 40 parents among which 20 parents were of children and adolescents with intellectual disability and 20 parents were of children and adolescents with functional psychosis taken from the Central Institute of Psychiatry, Ranchi. Depression, anxiety and stress scale and dyadic adjustment scale were used for the data collection. Data was analyzed by Statistical Package for Social Sciences (SPSS - 21 windows version). Findings indicated no significant difference between the parents of intellectually disabled children and children with psychosis in stress perception and dyadic relationship.

Key words : Family Stress, Dyadic Adjustment, Psychosis, Intellectual Disability

INTRODUCTION

Intellectual Disability, formerly known as "Mental Retardation," is a disorder with onset during the developmental period. It includes intellectual deficits and difficulty functioning in daily life in areas such as communication, self-care, home living, social/interpersonal skills, self-direction, academics, work, leisure, health, and safety. According to the American Association of Mental Retardation (AAMR)[now American Association on Intellectual and Developmental Disabilities—AAIDD], "Intellectual disability is characterized

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by significant limitations both in intellectual functioning and in adaptive behavior as expressed in conceptual, social, and practical adaptive skills. This disability originates before age 18"[1]. Earlier, in 1959, the erstwhile American Association on Mental Deficiency (AAMD) defined mental retardation (now intellectual disability) as sub-average general intellectual functioning that originates during the developmental period and is associated with impairments in maturation, learning, and social adjustment[2]. In 1961 AAMD subsumed 'maturation', 'learning', and 'social adjustment' into a single term, adaptive behaviour[3]. According to ICD-10, Mental retardation or intellectual disability is a condition of arrested or incomplete development of mind, which is especially characterized by impairment of skills manifested during the developmental period, which contributes to the overall level of intelligence, i.e. cognitive, language, motor, and social abilities[4]. However, providing a standard definition of psychosis is a difficult task. Perspicuously, psychosis is understood as disruptions to a person's thoughts and perceptions that make it difficult for them to distinguish between reality and unreality. They experience these disruptions as seeing, hearing and believing things that aren't real or having strange, persistent thoughts, behaviours and emotions[5-6]. Psychological and behavioural anomalies in children is a potential source of stress to parents, because of the difficulties, frustrations, and challenges these parents face in everyday basis. The coming of a child with developmental disabilities brings unexpected demands and challenges to parents, for which they are often not prepared. Having a child with developmental disabilities brings life changing implications and long-lasting effects in the life of the whole family[7-9]. Parents and family members are required to cope with ongoing challenges and crises which affect various aspects of daily life : economic, personal, couple relationship, familial and social[10]. Most parents expect that their children will be attractive, smart, graceful, athletic, and loving. Parents of an intellectually disabled child not only mourn the loss of unfulfilled expectations but often face enormous strain on their psychological and economic resources. Parents and key caregivers of children with disabilities tend to experience greater stress because of their children's incapacity in various social and cognitive areas as well as anticipating social stigma[10-20]. Parents of children with psychosis also experience stress and adjustment related problems. In those families, problems like 'marked disruption and disorganization in the family unit', 'marital conflict and strained communication between parents'often crop up[21]. This study is an endeavor to explore and compare the family stress and dyadic adjustment among the parents of children and adolescents with intellectual disability and functional psychosis in Indian setting.

METHOD AND MATERIALS

This study was conducted at the Central Institute of Psychiatry, Ranchi. Subjects of the study were parents of children with intellectual disability and functional psychosis. The subjects were selected purposively. The sample size was 40 parents among whom 20 parents of children and adolescents diagnosed with intellectual disability and 20 parents of children and adolescents diagnosed with functional psychosis. In this study, children and adolescents with intellectual disability were screened on Developmental Screening Test (DST) 22 and Vineland Social Maturity Scale (VSMS) 23 and children and adolescents with functional psychosis were screened on Brief Psychiatric Rating Scale for Children (BPRS-C). Selected children's and adolescents' parents were assigned to two study groups[24].

STUDY TOOLS

1. **Socio-Demographic & Clinical Data Sheet :** This data sheet was used to obtain information about various socio-demographic and clinical variables of the selected children and their parents like age, gender of children, education of children and parents, religion, ethnicity, domicile, psychopathology and behavioral problems, family history, etc.

2. **Development Screening Test[22] :** It consists of 88 items, which represent the behavioral characteristics of respective age levels. At each age level, items are drawn from behavioral areas, like motor development,speech, language, and personal-social development. Appraisal of a child can be done in semi-structured interview with a parent or a person well acquainted with the child. Scores obtained on these items with IQ calculator are used to assess the level of development in the child.

3. **Vineland Social Maturity Scale[23]** : This scale consist 89 items. This scale is not only providing social age and social quotient measures but also indicate the social deficits and social assets in a growing child. It is for age level from 0 to 15 years. It is good to locate mentally retarded.

4. **The Psychiatric Rating Scale for Children[24]** : The Brief Psychiatric Rating Scale for Children (BPRS-C) is a 21 - item clinician-based rating scale for use for evaluating psychiatric problems of children and adolescents. It was developed to provide a descriptive profile of symptoms applicable to a broad range of child and adolescent psychiatric disorders and is increasingly used as an outcome measure in research, managed care, and public sector child / adolescent clinical settings. Ratings are based on a 7 point Likert scale, from "Not Present" (scores 0) to "Extremely Severe" (scores 6 points).

5. **The Depression and Anxiety Scale (DASS)[25]** : This is a 42-item self-report instrument designed to measure the three related negative emotional states of depression, anxiety and tension/ stress. The DASS is a self-report Questionnaire designed to measure the severity of a range of symptoms common to both Depression and Anxiety. The essential function of the DASS is to assess the severity of the core symptoms of Depression, Anxiety and Stress.

6. **Dyadic Adjustment Scale[26]** : The Dyadic Adjustment Scale is a measure for assessing the quality of marriage and other similar dyads. The 32 - item scale is designed for use with either married or unmarried cohabiting couples. This scale has high degree of reliability and validity. This scale measures the dyadic adjustment of couples on four subscales [dyadic satisfaction, dyadic cohesion, dyadic consensus and affection expression].

PROCEDURE

Parents of the children and adolescents with diagnosis of Intellectual Disability and Functional Psychosis as per ICD-10 (DCR) criteria included in accordance with the inclusion and exclusion criteria of the study. The Socio-Demographic and Clinical Data Sheet was used for collecting the relevant socio-demographic and clinical data. The Development Screening Test (DST)[22] andVineland Social Maturity Scale (VSMS)[23] were applied on the children with intellectual disability for measuring the degree of disability, whilst, the Brief Psychiatric Rating Scale for Children (BPRS-C)[24] was applied on children with Functional Psychosis. Subsequently, Depression and Anxiety Scale (DASS)[25] and Dyadic Adjustment Scale[26] were administered on parents of the children of either group. Descriptive statistics was used to describe various sample characteristics. Chi square test was used for describing and comparing categorical data. The Mann Whitney U Test was used for describing and comparing continuous data. Spearman's correlation and point bi serial correlation coefficient were computed to study the relationship for continuous and categorical variables, respectively.

RESULTS

Table-1 : Comparison of Socio-demographic Background of the Participants

Variables		Groups (N=40)		X^2/ Fisher's Exact Test#	df	p
		Intellectual Disability n=20, n(%)	Functional Psychosis n=20, n (%)			
Sex of the patients	Male	11(55.0)	13(65.0)	0.417	1	0.519
	Female	9(45.0)	7(35.0)			
Religion	Hindu	17(85.0)	18(90.0)	0.230#	-	1.000
	Other	3(15.0)	2(10.0)			
Father's Occupation	Farmer	5 (25.0)	9 (45.0)	8.744#	-	0.090
	Labourer	6 (30.0)	2 (10.0)			
	Business	2 (10.0)	5 (25.0)			
	Private Job	5 (25.0)	1 (5.0)			
	Gov. Job	0 (0.0)	2 (10.0)			
	Unemployed	2 (10.0)	1 (5.0)			
Mother's Occupation	Employed	0 (0.0)	1 (5.0)	1.412#	-	1.000
	Unemployed	20 (100.0)	19 (95.0)			
Parental Status	Both parents	18 (90.0)	19 (95.0)	1.204#	-	1.000
	Single parent	1 (5.0)	1(5.0)			
	Separated	1 (5.0)	0 (0.0)			
Family Type	Nuclear	12 (60.0)	15 (75.0)	2.553#	-	0.301
	Joint	8 (40.0)	4 (20.0)			
	Extended	0 (0.0)	1 (5.0)			
Socio-economic Status	Lower	15 (75.0)	13 (65.0)	0.476	1	0.490
	Middle	5 (25.0)	7 (35.0)			

Most of the patients were male and Hindu by religion in both groups. It was found that majority of the fathers were farmers by profession in functional psychosis group. Results also showed that most of the mothers were unemployed (51.3% & 48.7%) in both groups.In either group, preponderance of people belonging to lower socio-economic status was noted. No significant difference was noted in any socio-demographic variable between these two groups.

Table-2 : Comparison of Depression, Anxiety and Stress between the Parents of children and adolescents with Intellectual Disability and Functional Psychosis

Variables (Scores Obtained in Depression &Anxiety Scale's Domain)	Groups (N=40)		Mann Whitney U Test	P
	Intellectual disability (Mean Rank) n=20	Functional Psychosis (Mean Rank) n=20		
Depression	21.95	19.05	171.000	.432
Anxiety	20.62	20.38	197.500	.946
Stress	23.85	17.15	133.000	.069

Table 2 shows the comparison of the scores obtained by the parents of the children of Intellectual disability and Functional Psychosis in the three domains of Depression, Anxiety and Stress Scale. The Mann Whitney U Test was used to compare the levels of depression, anxiety and stress of the children of either group. No significant difference was seen in all three domains of the scale.

Table-3 : Dyadic Adjustment Scalein Parents of Parents of children and adolescent with Intellectual Disability and Functional Psychosis

Variables (Domains of the Dyadic Adjustment Scale)	Groups (N=40)		Mann Whitney U Test	P
	Intellectual disability (Mean Rank) n=20	Functional Psychosis (Mean Rank) n=20		
Consensus	22.85	18.15	153.000	.203
Affectional relationship	22.52	18.48	159.500	.247
Satisfaction	21.42	19.58	181.500	.615
Cohesion	22.82	18.18	153.500	.203

Table 3 shows the comparison of the scores obtained by the parents of either group of children in the domains of Dyadic Adjustment Scale. The Dyadic Adjustment Scale was applied to assess the quality of relationship between parents. No significant difference was seen in all four domains ofthe Dyadic Adjustment Scale, i.e., consensus, affectional relationship, satisfaction and cohesion between the parents of either type of children and adolescents.

Table-4 : Correlation between Dyadic Adjustment and Depression, Anxiety and Stress in Parents of children and adolescent with Intellectual Disability

Variables (Domains of the Depression, Anxiety & Stress Scale)	Domains of the Dyadic Adjustment Scale			
	Consensus	Affectional relationship	Satisfaction	Cohesion
Depression	.151	.449*	.498*	.241
Anxiety	.118	.508	.266	.229
Stress	-.086	.405	.394	.386

P<0.05

Table 4 showed the correlation between the domains of Depression, Anxiety and Stress Scale and Dyadic Adjustment Scale in parents of children and adolescents with intellectual disability. Score of depression (Depression Anxiety & Stress Scale) showed significant positive correlation with affectional relationship (r=.449, p<0.05) and satisfaction (r=.498, p<0.05) of Dyadic Adjustment Scale.

Table-5 : Correlation between Dyadic Adjustment and Depression, Anxiety and Stress in Parents of children and adolescent with Functional Psychosis

Variables (Domains of the Depression Anxiety & Stress Scale)	Domains of the Dyadic Adjustment Scale			
	Consensus	Affectional Relationship	Satisfaction	Cohesion
Depression	.345	.171	-.189	-.072
Anxiety	.220	.191	.029	.165
Stress	.202	.144	-.119	-.086

Table 5 showed the correlation between the domains of Depression, Anxiety and Stress Scale and Dyadic Adjustment Scale in parents ofchildren and adolescents with functional psychosis. No significant correlation was seen among domains of the Depression, Anxiety and Stress Scale and Dyadic Adjustment Scale in parents of children and adolescents with functional disability.

DISCUSSION

The present study was a hospital based cross sectional single contact study and it was conducted at the Central Institute of Psychiatry, Ranchi. The purpose of this study was to assess and compare the family stress and dyadic relationship among parents of children with intellectual disability and functional psychosis. Previous research has established that parents of children and adolescents with intellectual disabilities and functional psychosis often experience considerable stress resulting from worries and demands related to their child[11-14]. Parents of the children with intellectual disabilities very often have the feeling of loss and despair because of their children's marked incapacity in scholastic and social areas[12-14]. Baker et al[12] found that parenting stress was higher for parents of preschoolers with delays than for parents of preschoolers without delays. The diagnosis of developmental disability in a child can evoke a plethora of emotional responses in parents and the entire family systems. For some parents, it is virtually end of life and a major crisis for parents. In some parents and family members, the birth of a disabled child is recognized as an unfortunate event, yet this event may evoke some positive responses in

the forms of positive coping and problem-solving skills in them or taking this event as a challenge to deal it effectively or making the family system more positively functioning. Birth of an intellectually disabled child in the family evokes wide range of behavioural and emotional responses, from entirely positive to entirely negative among the family members including the parents[16-18, 27-29].

The results of the present study supported previous findings indicating that parents of children with delays report experiencing significantly more stress than parents of children without delays. It is well acknowledged in literature that marital satisfaction is one of the protective factors for a positive adaptation to stressful situations, such as the management of a disabled child. Higher levels in marital satisfaction are related to lower levels of depression, lower parenting stress, and improved efficiency in the parents' role[19,20,28-30]. Contrary to the previous findings the present study indicated that the sub domains of depression, anxiety and stress scale were positively correlated with domains of affectional relationship(r=.449, p<.05) and satisfaction (r=.498, p, .05). It might be because they received psychoeducation about the illness and increased their knowledge over their children's problems after coming for treatment in this institute and being aware that this is a condition not an illness. Knowing about their children's disability can't be cured is a matter of stress for any parent and this leads to depression in them but as they were described about aetiology and outcome after intervention, they may have a hope that if their children can't be cured completely still there is a hope for them and they can improve their condition. It might be they adopted positive coping strategies which affected their dyadic relationship.

It was a hospital-based study with small sample size, which was the main limitation of this study. As a hospital-based study, which dealt with referred patients, which might not have been truly representative of the general population. Nevertheless, it has given us numerous insights into the problems of the patients who reach us but due to less sample size generalization of results could not be possible. Future research with larger, less selective samples and longitudinal designs may provide a clearer picture of the multiple factors associated with family stress and dyadic adjustment.

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