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ORIGINAL ARTICLE

STRESS & COPING STRATEGIES IN FAMILIES OF MENTALLY RETARDED CHILDREN

Mukesh Morya[1], Atul Agrawal[2], Suneet Kumar Upadhyaya[3], D. K. Sharma[4]

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ABSTRACT: BACKGROUND: Families with mentally retarded children experience a great physical and psychosocial stress which demands various psychosocial strategies for effective coping. **METHODOLOGY:** This study was conducted in the department of Psychiatry, Government Medical College, Kota (Raj.) in 2006-07 with the objectives of finding out the stress & coping strategies and the factors influencing these strategies in the families with mentally retarded children. Fifty mentally retarded children were divided into two groups- Group A comprising children with IQ more or equal to 50 (n=28) and Group B comprising children having IQ less than 50 (n=22). Parents of selected mentally retarded children were interviewed by using semi structured Performa containing– personnel identification data, Family Interview for Stress and Coping in Mental Retardation (FISC-MR), NIMH–Family Efficacy Scale (NIMH-FES), Problem Behavior Check List. Obtained data was analyzed by using unpaired t test, Pearson`s correlation coefficient & z-score. **RESULTS:** In various dimensions of perceived stress, families with mentally retarded children with IQ <50 (Group B) experienced significantly higher daily care stress, emotional stress, social stress and total perceived stress than the families with mentally retarded children with IQ≥50 (Group A). Families in both groups used similar coping strategies (i.e., awareness about mental retardation, attitude and expectation, rearing practices and social support) except global support strategy which was used significantly higher by the families of children with IQ<5o. Having a female mentally retarded child and nuclear family were the factors associated with higher stress in families.

KEYWORDS: Stress, Coping strategies, Mentally retarded children.

INTRODUCTION: Mental retardation is a unique disorder, both as a symptom as well as syndrome, which fall under the broad rubric of neurodevelopmental disabilities.[1] According to ICD-10, Mental Retardation is a condition of "arrested or incomplete development of the mind" and characterized by impaired developmental skills that contribute to the overall level of intelligence.[2] The presence of a mentally handicapped child shakes the family to its foundations. Family experiences a kind of initial shock to stress and reacts with grief, hopelessness, and shame and guilt feelings. They need an understanding & supportive physician who can provide reassurance, consolation, support and guidance regarding children which cannot be completed without parental counseling.[3] The burden associated with rearing such mentally handicapped children is multifold. Problems like disturbance of routine, family leisure and family health make steady drain on time, physical and emotional energy as well as financial resources of the parents.[4] In one study Venkatesan & Das (1994) reported that the type of burden reported by family members may range from difficulties in transportation of the child to the place of service delivery, management of behaviour problems, disruption of their daily routine, economic, physical and social burden.[5] Various factors attributing to stress in such parents have been studied and it has been found that parents of children with disabilities undergo more than

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the average amount of stress. Having a child with mental retardation in the family demands a lot of adjustments and coping on the part of parents.

The ability of the individual to cope with this situation depends on his internal resources such as faith in the God, energy, self-determination and perception of the situation, and the external resources such as support from family members, relatives, friends, neighbors, professionals, community and Governmental policies and programmes.

There is hardly any study on the issue of family stress and coping strategies and factors affecting these parameters especially in this part of country therefore the present study has been planned.

AIMS & OBJECTIVES: (1) To find out the stress in the families with mentally retarded children. (2) To study the coping strategies of the families with children with mental retardation. (3) To find out the factors influencing the stress & coping in family members having a mentally retarded child.

MATERIALS & METHOD: Fifty already diagnosed children below 16 years of age suffering from mental retardation according to the report of clinical psychologist attending Psychiatry O.P.D. of M. B. S. Hospital, Kota & children attending Shivika Special School, Kota constituted the sample of study. IQ assessment was done on Developmental screening test (Bharat Raj 1983), Coloured progressive matrices test & Wechsler intelligence scale for children test. Children with physical disabilities were excluded from the study. The parents of selected mentally retarded children were interviewed by using a specially designed Performa which included:

A. Personal identification data.
B. Family Interview for Stress and Coping in Mental Retardation (FISC-MR) - This tool was developed by Dr. Girimaji at NIMHANS Bangalore. This tool consists of 2 sections: 1. Measuring Stress (Daily care, emotional stress, social stress and financial stress) and 2. Measuring mediators of stress or coping strategies (awareness, attitudes & expectations, child rearing practices, social support and global adaptation).[6]
C. NIMH – Family Efficacy Scale (NIMH-FES) - This tool was developed by Peshawaria et al at NIMH, Secunderabad (A.P.) to measures the family uniqueness and degree of strength of each of the 15 themes.[7]
D. Problem Behavior Check List. – This scale was developed by Veeraraghavan and Dogra to identify the emotional and conduct problems of children.[8]

Among the selected children, 28 had I.Q. more than or equal to 50 (belong to group A) and rest of the children had I.Q. less than 50 (belong to group B). Score of various dimensions of stress & coping mechanisms were compared using unpaired T test. Correlation of social & other factors with various dimensions of perceived stress was determined by using Pearson's correlation coefficient & Z score.

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RESULTS:

Variables	Male	Female	Total
	N=32(%)	N=18(%)	N=50(%)
Age groups			
4-8 yrs	24(75%)	12(66.66%)	36(72%)
9-13 yrs	6(18.75%)	4(22.22%)	10(20%)
14-18 yrs	2(6.25%)	2(11.11%)	4(8%)
Mean age	9.6	9.2	9.5
School status			
Going to normal school	16(50%)	8(44.44%)	24(48%)
Not going to school	10(31.25%)	6(33.33%)	16(32%)
Going to special school	6(18.75%)	4(22.22%)	10(20%)
Family size			
< 5	13(40.62%)	7(38.88%)	20(40%)
5-10	12(37.5%)	6(33.33%)	18(36%)
> 10	7(21.87%)	5(27.77%)	12(24%)
Family type			
Nuclear	15(46.87%)	5(27.7%)	20(40%)
Joint	17(53.12%)	13(72.22%)	30(60%)
Birth order	**Q`**		`
Only child	4(12.5%)	2(11.11%)	6(12%)
First	6(18.75%)	2(11.11%)	8(16%)
Last	4(12.5%)	4(22.22%)	8(16%)
Any other	18(56.25%)	10(55.55%)	28(56%)

Table 1: Socio-Demographic Data of M. R. Children

Groups	I. Q. N=50	Percentage (%)
Group A (I.Q.> 50)	28	56%
Group B (I.Q.< 50)	22	44%

Table 2: Distribution of M. R. Children According To I. Q.

Family Income/year Income of parents of MR children	
< 50, 000 Rs./Yr.	24 (48%)
50, 000-1 Lac Rs./Yr.	10 (20%)
1- 1.5 Lacs Rs./Yr.	7 (14%)
1.5-2 Lacs Rs./Yr.	5 (10%)
> 2 Lacs Rs./Yr.	4 (8%)

Table 3: Distribution of M.R. Children According to Family Income

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Family Efficacy Support	N=50	%
Low (15 - 30)	36	72%
High (30 - 45)	14	28%

Table 4: Distribution of M.R. Children According to Level of Family Efficacy Support

Problem Behavior	I.Q. > 50 n=28	I.Q. < 50 n-22
(Irritability)	4(14.28%)	6(27.27%)
(Fear)	6(21.42%)	4(18.18%)
(Bizarre behavior)	2(7.14%)	6(27.27%)
(Hyperactivity)	6(21.42%)	1(4.5%)
(Violent& destructive behavior)	4(14.28%)	0
(Misbehave with other)	2(7.14%)	0
(Self-injurious behavior)	0	2(9.09%)
(Rebelling behavior)	2(7.14%)	0
(Antisocial behavior)	0	1(4.5%)
No problem behavior	2(7.14%)	2(9.09%)

Table 5: Distribution of M.R. Children According to Problem Behavior

Dimensions of Perceived Stress	Group A(I.Q.> 50) [N=28]	Group B(I.Q. < 50) [N=22]	P value (on applying Unpaired t-test, significant at P<.05)
	Mean stress scores μ(S.D.)		
Daily care stress	7.93(3.2)	11.0(4.6)	P < 0.005
Emotional stress	6.12(2.9)	7.75(3.7)	P < 0.05
Social stress	4.3(2.1)	5.5(2.6)	P < 0.05
Financial stress	2.22(1.02)	2.33(1.14)	P > 0.05
Total Perceived Stress	20.57(9.8)	26.58(12.1)	P < 0.05

Table 6: Comparison of Various Dimensions of Perceived Stress by Families with I. Q Level of M. R. Children

Dimensions of Coping Mechanisms	Group A (I.Q.> 50) [N=28]	Group B (I.Q. < 50) [N=22]	P value (on applying Unpaired t- test, significant at P<.05)
	Mean coping scores μ(S.D.)		
Awareness	5.4(2.5)	6.0(2.9)	P > 0.05
Attitude & Expectations	8.64(4.3)	8.5(4.1)	P > 0.05
Rearing practices	5.56(2.7)	4.75(2.2)	P > 0.05
Social support	6.0(2.8)	5.36(2.4)	P > 0.05
Global support	5.1(2.3)	6.20(2.9)	P < 0.05

Table 7: Comparison of Various Dimensions of Coping Mechanism by Families with IQ Level of M. R. Children

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Variables	Daily care stress*	Emotional stress*	Social stress*	Financial stress*	Total perceived stress*
Age of child	0.36	0.43	0.62	0.58	0.48
I.Q. of child	-0.78	-0.71	-0.82	-0.52	-0.74
Age of Father	0.34	0.23	0.62	0.38	0.32
Age of Mother	0.32	0.68	0.54	0.31	0.48
Education of Father	-0.26	0.24	0.34	-0.11	-0.18
Education of Mother	-0.39	0.22	0.43	-0.16	-0.24
Family size	-0.35	-0.21	-0.11	0.36	-0.22
Family Income	0.12	-0.20	0.28	-0.67	-0.34
Family efficacy support	-0.52	-0.58	-0.48	-0.45	-0.54

Table 8: Correlation of Social & Other Factors with Various Dimensions of Perceived Stress

*(+ve values indicate positive correlation and -ve values indicate negative correlation. Degree of freedom = (N-2) = 48, Correlation coefficient > 0.28 is significant at P < 0.05.)

Life aspects of M. R. Children	Dimension of Perceived Stress				
	Daily care stress	Emotional stress	Social stress	Financial stress	Total perceived stress
1.Sex of Child					
Male mean stress score μ (SD)	6.48(3.1)	5.21(2.5)	4.01(1.8)	2.28(1.1)	18.98(8.6)
Female mean stress score μ (SD)	12.11(5.2)	8.34(3.9)	5.91(2.7)	2.11(0.9)	28.47(12.1)
P* VALUE	P<0.001	P<0.001	P<0.01	P>0.05	P<0.001
SIGNIFICANCE	Highly significant	Highly significant	Highly significant	Non-significant	Highly significant
2. Occupation of Parents					
one parent working mean stress score μ (SD)	8.10(3.8)	5.89(2.7)	4.62(2.1)	3.12(1.4)	21.73(8.6)
Both parents working mean stress score μ (SD)	11.91(5.1)	9.01(5.1)	5.21(2.4)	2.04(0.8)	28.17(12.1)

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P* Value	P<0.05	P<0.01	P>0.05	P<0.05	P<0.05
Significance	Significant	Highly significant	Non-significant	Significant	Significant
3.Type of Family					
Nuclear family mean stress score μ (SD)	11.41(5.3)	7.34(3.3)	6.13(2.8)	3.02(1.8)	27.90(12.1)
Joint family mean stress score μ (SD)	7.78(3.4)	6.02(2.8)	4.02(1.9)	2.31(1.1)	20.13(8.6)
P* Value	P<0.005	P>0.05	P<0.005	P<0.05	P<0.01
Significance	Highly significant	Non-significant	Highly Significant	significant	Highly significant
4. Problem Behavior					
Present mean stress score μ (SD)	10.82(5.1)	7.65(3.5)	6.34(3.1)	2.56(2.6)	27.37(12.3)
Absent mean stress score μ (SD)	8.31(3.9)	5.56(2.6)	4.94(2.3)	2.35(1.1)	21.16(9.6)
P* Value	P<0.05	P<0.05	P>0.05	P>0.05	P<0.05
Significance	Significant	Significant	Non-significant	Non-significant	Significant

Table: 9 Comparison of Various Dimensions of Perceived Stress with different Aspects of M.R. Children

*P value on applying z- test

DISCUSSION: Results of the study have been depicted in tables 1-9. It is evident that Majority of the children (72%) were in the age group of 4-8 year, followed by 20% of 9 -13 years and 4% of 14 -18 years of age group.

About half (48%) families of M.R. children had family income <50, 000 Rs. /year, while 20% children were from families with an income of 50, 000-1, 00, 000 Rs. /year. Floyd FJ et al (1992) supported the role of socioeconomic status (SES) as a major determinant of parenting attitude and behaviors in families with M.R. children.[9]

On categorization of M.R. children on the basis of I.Q. we found that 56% of children belonged to group A (IQ >50), whereas 44% belonged to group B (I.Q. <50).

72% families had low family efficacy support scores (15-30) where as 28% of families had high scores (30-45) on family efficacy support scale which means that the families with mentally retarded children get less family support in general. According to Jones and Passey (2004) , family resources are associated with parental stress; parents who value social support have lower stress relating to finances, and both support services and family support are associated with lower stress related to lack of parental reward.[10] These findings are supported by various studies reporting social

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support to be highly important in the reduction of parental stress (Bristol, 1987[11]; Barakat & Linney, 1992[12]; Trivette & Dunst, 1992[13]; Park & Turnbull, 2002.[14])

The most common problem behavior was irritability & fear each present in 20% of children followed by bizarre behavior in 16%, hyper activity in 14%, violent & destructive behavior in 8% misbehaving with others, self-Injurious behavior & rebellious behavior was present each in 4% of the mentally retarded children. Behavior problems in M.R. children was found to be the most common inhibiting factor affecting coping in parents in the study done by Peshawaria et al (1998).[15] Venkatesan (2003) reported that disciplining and management of problem behaviours in M.R. children appear to be the major source of stress in their parents.[16] Eymen and Call (1977) & Jacobson (1982) found that self-injurious behaviour, physical aggression, irritability and property destruction had a linear relationship with I.Q. whereas other behaviour that require verbal ability or higher level of cognitive skills were more prominent among those with mild retardation.[17,18]

Regarding the perceived stress by families of mentally retarded children, it was observed that except Financial stress where there was no significant difference between the two groups, all other dimensions of perceived stress i. e. daily care stress, emotional stress, social stress and total perceived stress scores were significantly higher in group B i.e. mentally retarded children with IQ<50. Our findings are supported by Gathwala et al (2004) who concluded that perceived stress by families of mentally retarded children increased in various dimensions.[4] For the Financial stress there was no significant difference found between the two groups.

With respect to the coping mechanism employed by families, both the groups (group A & B) did not differ significantly on different dimensions of coping mechanism (like awareness about mental retardation, attitude and expectation, rearing practices and social support). The only exception in different dimension of coping mechanism was global support where the families of mentally retarded children with low IQ level scored significantly high.

As regards to correlation among various dimensions of perceived stress and various socio-demographic factors (quantitative in nature) affecting coping mechanism it was observed that few factors, like age of child & age of parents, showed significant positive correlation with the total perceived stress whereas factors like IQ of child, family income and efficacy support had negative correlation with the perceived stress. Our finding are in accordance with Emerson et al (2004) and Lavee et al (1996) who concluded that the rate of psychological distress is increased by socioeconomic deprivation.[19,20]

There is strong negative correlation between perceived stress and family efficacy support. This finding is supported by Hassall R et al (2005) who found strong negative correlation between family supports and parenting stress which was mediated by parental locus of control.[21]

Few factors like education of parents and family size did not have any significant correlation with stress.

Considering some more socio-demographic factors (qualitative in nature) like sex of mentally retarded children, occupation of parents, type of family and problem behavior, it was seen that having a female mentally retarded child was significantly more stressful for families in comparison to having a male mentally retarded child. This finding is supported by the study done by Tangri and Verma (1992) who reported higher stress in parents of female retarded children.[22] As regards to type of family, nuclear families faced significantly more stress in comparison to joint families in managing the mentally retarded children.

Similarly presence of problem behavior in mentally retarded children was significantly more stressful for families in comparison to families with no problem behavior in mentally retarded children. Working by both the parents was significantly more stressful for families in comparison to families where single parent was working.

CONCLUSION: This study shows various dimensions of perceived stress and coping strategies by the families of mentally retarded children which needs to be considered before planning effective policies and programmes.

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AUTHORS:

1. Mukesh Morya
2. Atul Agrawal
3. Suneet Kumar Upadhyaya
4. D. K. Sharma

PARTICULARS OF CONTRIBUTORS:

1. Medical Officer, Department of Psychiatry, Government Medical College, Kota, Rajasthan.
2. Assistant Professor, Department of Psychiatry, Gajra Raja Medical College, Gwalior, Madhya Pradesh.
3. Associate Professor, Department of Psychiatry, GMERS Medical College, Patan, Gujarat.
4. Professor & HOD, Department of Psychiatry, Government Medical College, Kota, Rajasthan.

NAME ADDRESS EMAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Atul Agrawal,
Singhal Bhavan,
Jatar Gali, Laxmiganj,
Lashkar, Gwalior-474001.
E-mail: aagwl123@gmail.com

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