

Original article

Sociodemographic profile of families with mentally retarded children and its relation to stress

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Abstract:

Background: Families dealing with mentally retarded children undergo stress. Sociodemographic factors play a role in stress and coping mechanisms. This paper highlighting on stress and its relation with demographic variables of families with mentally retarded children is a part of a broader study on stress and coping in families with mentally retarded children. **Objectives:** 1. Study the sociodemographic profile of families with mentally retarded children. 2. Study the association of stress with sociodemographic variables. **Material and methods:** A cross sectional study was done on hundred families of mentally retarded children enrolled in special schools at Indore. Sampling procedure was convenience sampling. The study tool was a validated, pretested instrument called as the Family interview for stress and coping in mental retardation, (FISC-MR). **Results:** Families were found to be suffering from stress. The stress ranged from mild to severe, however it was not significantly associated with the sociodemographic variables except with maternal education level. **Conclusion:** Families of mentally retarded children undergo stress. Socio-demographic factors play a role in the development of stress in families with mentally retarded children.

Keywords: mental retardation; families; stress; sociodemographic

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Introduction:

Mental retardation is a condition of arrested or incomplete development of the mind, which is characterized by impairment of skills manifested during the developmental period, which contribute to the overall level of intelligence, i.e. cognitive, language, motor, and social abilities¹. By national sample survey data, India may have 6 to 9 million children with mental retardation². Keeping conservative figures of 4-5 family members for each child, a large number of people has to deal with the presence of mentally retarded child. Studies have revealed that caregivers of people with special needs undergo stress^{3,4}. A higher percentage of parents with mentally retarded children show significant stress when compared to parents of normal children³. There is sufficient evidence that caregiver strain and parenting stress are associated with the patient's symptoms^{5,6}. Other factors may also affect the stress. These could include the demographic

characteristics, social factors and cultural factors. However, there is a lack of research in this field. Present study attempts to analyze the sociodemographic factors like educational level of parents, family income, and family type that may be related to the stress experienced by such families. The cultural milieu in India puts the parents or immediate family as caregivers in majority of the people with mental retardation, hence the terms caregivers, families and parents are used interchangeably in this study.

Material and Methods

Study design: Cross-sectional study

Sampling procedure: Considering the nature of the study, a convenience sampling procedure was followed. The list of students was obtained from the special schools in Indore city. Parents were contacted on phone and were explained about the study. Parents who agreed to participate were contacted at their convenient time and place to conduct the interview. All interviews were conducted by a trained

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medical doctor (researcher herself). A total of 100 families were included in the study which comprised of 98 both- parent families and 2 with only mother.

Inclusion criteria:

- Age less than 18 yrs
- Pre-diagnosed mental retardation
- Enrolled in a special school

Exclusion criteria:

- Age more than 18

Study tool: Interview questionnaire consisted of two parts. Part one contained the basic demographic and socio-economic data. Part two contained the family assessment schedule developed for the Family interview for stress and coping in mental retardation, (FISC-MR), a semi structured interview, developed at national institute of mental health and neurological sciences (NIMHANS), Bangalore. This is a pre-tested, validated instrument that has been widely used in India. It has 2 sections, Section I for assessment of stress and section II for assessment of coping mechanisms. Present part of the study utilizes the section I.

Reliability and validity of this tool- Cronbach's Alpha, a measure of internal consistency for section I and II was 0.9 and 0.67 respectively. Inter rater reliability was 0.81 for any one rater and average for all 3 raters was 0.93. Test-retest reliability was 0.71 and 0.36 for section I and II respectively. Concurrent validity was 0.63. Construct validity was 0.51⁷. A likert scale was used to

grade the stress levels into mild (score 0-11), moderate (score 12-22), severe (score 23-33) and very severe stress (score 34-44).

Statistical analysis: included frequency distribution for sociodemographic variables and chi square test to study relationship of sociodemographic variables with stress.

Ethical issues: The respondents were clearly explained about the reason of the study and its implications. Anonymity and confidentiality was assured and maintained. Informed consent was obtained from the respondents prior to administration of the

interview questionnaire and they were free to leave the study anytime they desired.

Result:

A total of 100 families comprising of 102 children with mental retardation were studied.

Mild stress was found in 32% families, moderate stress in 61% families and severe stress in 7% families. None of the families showed very severe stress.

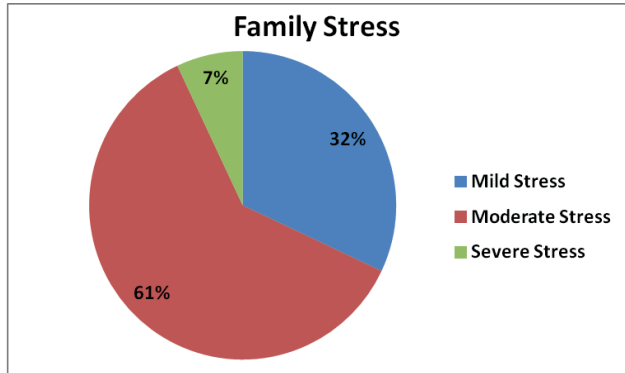


Fig 1

Table1: Demographic variables of mentally retarded children and family stress score

Variables	Stress scores	Mild		Moderate		Severe		Total	
		n	%	n	%	n	%	N	%
Age									
0-6yrs		3	15.0	14	70.0	3	15.0	20	100.0
6.1-12 yrs	16		32.65	30	61.23	3	6.12	49	100.0
12.1-18 yrs	13		39.39	19	57.58	1	3.03	33	100.0
Sex									
Male	20		31.75	39	61.90	4	6.35	63	100.0
Female	12		30.77	24	61.54	3	7.69	39	100.0
Severity of Retardation									
Mild	13		36.11	20	55.56	3	8.33	36	100.0
Moderate	12		26.08	30	65.21	4	8.69	46	100.0
Severe	7		35.0	13	65.0	-	-	20	100.0

Table 1 describes the age, sex and severity distribution of the affected children. Out of 102 children, 63 were males and 39 females. The largest age group was formed by 6-12 yrs with 49 children. The severity of retardation was mild in 36 children, moderate in 46 children while 20 had severe retardation. No statistical significance was found between family stress and any of the variables.

Table 2 describes the demographic variables of fathers and the family stress scores. Out of the 98 fathers, there were none in age group less than 20 yrs

Table 2: Demographic profile of fathers and family stress scores.

Variables	Stress scores						Total n %	
	Mild		Moderate		Severe			
	n	%	n	%	n	%	n	%
Age								
20-30yrs	-	-	5	100.0	-	-	5	100.0
30.1-40yrs	11	23.40	30	63.83	6	12.77	47	100.0
40.1-50yrs	21	45.65	24	52.17	1	2.18	46	100.0
Education								
Up to Primary	1	33.33	1	33.33	1	33.33	3	100.0
Up to Secondary	5	16.67	22	73.33	3	10.0	30	100.0
Degree and above	26	40.0	36	55.38	3	4.62	65	100.0
Occupation								
Service	11	31.43	22	62.85	2	5.72	35	100.0
Self employed	21	33.87	36	58.06	5	8.07	62	100.0
Unemployed	-	-	1	100.0	-	-	1	100.0

or more than 50 yrs. Most of them were between 30-50 yrs of age. The educational distribution of fathers shows that 65 were university graduates and all fathers except one were employed. The relation between family stress scores and father variables is not found to be significant.

Table 3: Demographic profile of Mothers and family stress scores

Variables	Stress scores						Total n %	
	Mild		Moderate		Severe			
	n	%	n	%	n	%	n	%
Age								
20-30yrs	1	14.28	6	85.72	-	-	7	100.0
30.1-40yrs	22	32.35	40	58.83	6	8.82	68	100.0
40.1-50yrs	9	36.0	15	60.0	1	4.0	25	100.0
Education*								
Illiterate	-	-	3	100.0	-	-	3	100.0
Up to Primary	1	20.0	2	40.0	2	40.0	5	100.0
Up to Secondary	12	41.38	14	48.28	3	10.34	29	100.0
Degree and above	19	30.16	42	66.67	2	3.17	63	100.0
Occupation								
Service	3	23.08	10	76.92	-	-	13	100.0
Self employed	2	28.57	3	42.86	2	28.57	7	100.0
Housewife	27	33.75	48	60.0	5	6.25	80	100.0

* p < 0.05

Table 3 describes the demographic variables of mothers and family stress scores. Most of the mothers were between 30-50 yrs of age. Majority of them (63) were university graduates. Eighty were housewives. Maternal age and occupation had no signifi-

cant association with family stress scores, but it showed significant association with the maternal education (p < 0.05).

Table 4 describes the family variables and stress scores. Out of 100 families, 58 were nuclear and 42 were non-nuclear families. On basis of Prasad's classification of socio-economic status⁸, most of the families belong to social class I(52) & II(32). In 68 families, there was presence of at least one sibling of the mentally retarded child. Stress scores were not found to be significantly associated with any of the family variables.

Discussion:

The study focused on measuring the levels of stress in families who are having mentally retarded children and the relation between various sociodemographic variables and stress. It revealed that mild to severe stress is perceived by the families of retarded children. However, none of the studied families reported very severe stress. An important finding of the study is the absence of any significant relation between the child's variables (age, sex, severity of the condition) and stress. This may be due to increasing information resources and change in social outlook. A study in Karnataka, also reported no relation between stress and the child's gender⁹. Though other studies have indicated significantly greater impact on parents due to having a girl retard-

Table 4: Socio-demographic profile of the family and stress scores

Variables	Stress scores							
	Mild		Moderate		Severe		Total	
	n	%	n	%	n	%	n	%
Type of family								
Nuclear	15	25.86	39	67.24	4	6.90	58	100.0
Non Nuclear	17	40.48	22	52.38	3	7.14	42	100.0
*SES of Family								
Social Class I	18	34.62	33	63.46	1	1.92	52	100.0
Social Class II	9	28.13	20	62.50	3	9.37	32	100.0
Social Class III	4	33.33	5	41.67	3	25.0	12	100.0
Social Class IV	1	33.33	2	66.67	-	-	3	100.0
Social Class V	-	-	1	100.0	-	-	1	100.0
Presence of Sibling								
Present	18	26.47	44	64.71	6	8.82	68	100.0
Not Present	14	43.75	17	53.13	1	3.12	32	100.0

* SES = Socioeconomic status.

ed child¹⁰. As regards the age of the child, there have been varied results in past. Some studies have shown lower age of the retarded child to have significant relation with stress⁹, while other studies have also shown significantly more psychosomatic problems as the age of their child increases¹⁰. In the present study, severity of retardation does not show a relation with stress in the families. Upadhyaya, G.R. and Havalappanavar, N.B (2004) have reported similar findings⁹ However, some studies have found different results. Studies by Gosch (2001) and Pisula & Gorska (2002) noticed that parents of severe and profoundly retarded children have higher stress^{11, 12}.

This study found that stress is not significantly related to father's age, education or occupation. The study found no significant relation of stress with mother's age and occupation. A significant association of stress with maternal education was however found. This may be because educated mothers can better understand the clinical aspect of their child's condition. This is consistent with findings of similar studies in India^{10,13}, where it was found that higher educated parents face greater stress. A study in

India also showed higher stress levels in housewives¹⁴

In the present study, stress was not significantly related with the family variables. These variables included family type, socioeconomic status, and presence of siblings. Studies have shown an association between family type and stress, and that grandparental support decreases stress¹⁵ In Indian context, extended family members have traditionally had a major role in most aspects of life but with

the changing cultural scenario and growing number of nuclear families this role is fast diminishing.

Studies outside India have also shown an absence of relationship of stress with socioeconomic status¹⁶, however other studies in India^{10, 17}, have shown a significant relation of stress with low socio-economic status of the family.

In this study, no significant difference was found in families with or without presence of siblings. Other studies in India have reported similar results⁹. In studies outside India, lower stress is reported when higher number of siblings is present¹⁸

Conclusion:

The study demonstrates that families having mentally retarded children invariably experience stress. The stress experienced by families varies in its level depending on various sociodemographic variables. Level of stress is related to age of child, sex of child, level of retardation, parent's education, occupation and their age, family types, socioeconomic status, and presence of siblings. Study findings emphasize the need for increased training opportunities for parents to cope with stress.

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