

Impact of Disability of Mentally Retarded Persons on their Parents

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ABSTRACT

Mental retardation is a permanent condition unlike many other diseases. It is a highly prevalent and highly disabling condition. In this study an attempt has been made to study both positive and negative impact on parents so as to help manage this problem in the best possible way. The study was conducted at the outpatient department of P.G.I. Behavioral and Medical Sciences, Raipur, and two special schools of mentally challenged children and it was done by purposive sampling method. Using specially designed semi-structured sociodemographic and clinical data sheet, information was gathered about mentally challenged children and their parents. Vineland Social Maturity Scale (VSMS) and Developmental Screening Test (DST) were used to assess their intelligence. Parents fulfilling inclusion and exclusion criteria consenting for the study were selected. National Institute for the Mentally Handicapped Disability Impact Scale (2003) was then administered on them. The results are reported and discussed.

Key Words: *Disability, mental retardation*

INTRODUCTION

Mental retardation is a highly prevalent and highly disabling condition. Depending on the severity of their disability, mentally retarded (MR) are more and more dependent on their caregivers. Previous studies have focused either on positive or negative^[1,2] impact on the parents. In this study an attempt has been made to assess both positive and negative impact on the parents of such persons so that they could be helped to manage these problems in the best possible way.

Definition of disability and mental retardation

Disability may be defined as disturbances in performance of social roles that would normally be expected of an individual in the habitual milieu, arising in association with diagnosable mental disorder.^[3] The terms disability, impairment, and handicap are often used in a confusing and interchangeable fashion. Recently, the World Health Organization^[4] has given the following definitions: "An impairment is an anatomical defect, or absence or loss of a specific psychological or physiological function that can arise from a disease or from an intrinsic pathological state."

- A 'disability' is a restriction in the ability to perform a task or activity within the range normally expected of someone of the same age or level of maturity.
- A 'handicap' is a social disadvantage preventing the fulfillment of a normal social role.

According to persons with disabilities (equal opportunities, protection of rights, and full participation) act, 1995

'Disability' means

- (1) Blindness;
- (2) Low vision;
- (3) Leprosy-cured;
- (4) Hearing impairment;
- (5) Loco motor disability;
- (6) Mental retardation; and
- (7) Mental illness.

'Person with disability' means a person suffering from not less than 40% of any disability as certified by a medical authority.

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Mental retardation is a highly prevalent and highly disabling condition. It is generally considered that 2% of the Indian population constitutes persons with mental retardation. In India prevalence of mental retardation varies from 0.22–32.7^[5,6] per thousand populations.

According to American association of Mental deficiency,^[7] “Mental retardation can be defined as a significantly subaverage general intellectual functioning, resulting or associated with concurrent impairment in adaptive behavior and is manifested during the developmental period”.

Need for study

Mental retardation makes a person incapable of living an independent life. In India, family bears the main burden of caring for such persons unlike in the developed world. Family members, particularly parents, are more affected by the condition. Normally the people in the society and the professional workers do not feel the actual stress and the burden to the extent it is experienced by the family members of the MR child. There is need to find out how disability due to mental retardation is affecting parents of such persons in order to help those who are having negative impact and to find out how they are positively affected so that others can be helped in the same manner. Aim of this study was to know the type of impact of having a MR child on the parents.

Classification of mental retardation

The two major classificatory systems ICD-10 and DSM-IV have classified mental retardation into four degrees of severity [Table 1].

Aims

- (1) To assess the level of disability in mentally retarded children.
- (2) To see the impact of disability of mentally challenged children on their parents.

METHODS AND MATERIALS

Null hypothesis

There will be no impact of disability on parents.

Alternative hypothesis

There will be positive and negative impact on parents.

Sample

The study sample consisted of parents of 65 mentally challenged children. The study was conducted at the outpatient department of Post Graduate Institute of Behavioral and Medical Sciences (PGIBMS) and two special schools of such children in Raipur. The samples were selected by purposive method.

Inclusion criteria

- (1) Parents of persons with IQ below 70.
- (2) Those who gave their consent for study.

Exclusion criteria

- (1) Persons having chronic physical illness.
- (2) Persons having mental illness.
- (3) Mentally challenged parents.

Tools used

Developmental screening test

DST^[9] was used to assess intelligence of children. Developmental schedule are inventories for the purpose of assessing the level of development reached by the children. DST is also a development schedule like that of other developmental schedules such as Vineland Social Maturity Scale, Gessel's Developmental Schedule,^[10] etc. DST was developed by Dr. J. Bharatraj in 1977 and revised in 1983.^[9]

Vineland Social Maturity scale^[10]

The VSMS was originally devised by E. A. Doll in 1935. And, since then this test is being used in many parts of the world. The first Indian adaptation was done by Rev. Fr. Dr. A. J. Malin^[11] while working at the Nagpur child guidance center. This scale is being used at many clinics, university departments, and institutions for mentally retarded persons. It has high correlation with Binet scale (0.85–0.96). VSMS gives a profile on development in areas viz, self-help general, self-help eating, self-help dressing, self direction, socialization, occupation, communications, and locomotions. The social age and social quotients can be computed from the person's scores.

National Institute for the Mentally Handicapped disability impact scale^[12]

This scale was used to assess the impact of disability on caregivers of the mentally challenged children. NIMH disability impact scale has been developed as part of the

Table 1: ICD-10 and DSM-IV classification of mental retardation

Level of retardation	IQ level		Mental age (years)	Proportion of MR group (%)
	DSM-IV	ICD-10		
Mild mental retardation	50–55 to approximately 70	50–70	9–12	85
Moderate mental retardation	35–40 to 50–55	35–49	6–9	10
Severe mental retardation	20–25 to 35–40	20–34	3–6	3–4
Profound mental retardation	below 20 or 25	<20	<3	Approximately 1–2

Volkmar and Dykens, 2002^[8]

research project on “Family intervention and support programs for persons with mental retardation” funded by the US–India rupee fund (1998–2003). Parents and the family are known to get impacted because of having a child with mental retardation.

This is a culture specific tool which could be used to identify and assess the following:

- (a) The nature and degree of impact on the parents (both positive and negative) because of having a child with mental retardation.
- (b) The nature and degree of impact on the family members and the relationship within the family.
- (c) The nature and degree of impact with regard to relationships outside the family.
- (d) To identify trust area for family intervention programs.
- (e) To objectively evaluate family intervention programs.

The 11 areas of impact included in the scale are as follows:

- (1) Physical care
- (2) Health
- (3) Career
- (4) Support
- (5) Financial
- (6) Social
- (7) Embarrassment/Ridicule
- (8) Relationships
- (9) Sibling effects
- (10) Specific thoughts
- (11) Positive effects

METHODOLOGY

Sixty five MR children, fulfilling the ICD-10 criteria of mental retardation, were selected from special school and OPD of PGIBMS, Raipur. Information was gathered about these children and their parents on specially designed semi-structure sociodemographic and clinical data sheet. MR children were administered DST and VSMS to assess their intelligence. Parents of such children fulfilling inclusion and exclusion criteria and consenting for the study were selected for the study. Disability impact scale was then administered on the parents to assess the impact of disability of the mentally challenged person on them.

RESULTS

There were a total of 65 parents, their age range was 21–63 with the mean of 37.43, and standard deviation 8.78. With regard to sex, there were 49.2% of male

parents and 50.8% of female parents. Most of the parents (41.6%) were educated up to graduation or more, 30.8% were educated up to preuniversity, 12.3% up to primary level, while 15.4% were uneducated. Most of the parents (95.4%) were living as couples, only 4.6% had single status. In occupation, majority of, that is, 43.1% were house wives, 23.1% were employed, 13.8% were business persons, and 20% were laborers and farmers. Most of them belonged to urban background (63.1%), while 36.9% hailed from rural background. Income wise, a majority of parents (43.1%) were earning less than INR 5000. Thirty point eight percent parents were in the income range of INR 5001–10,000 per month, while 26.2% parents were earning more than INR 10,000. Most families (63.1%) were living in nuclear family setting while 36.9% families were living in joint family setting [Table 2].

Table 3 shows the clinical variables of parents. The maximum percentage of fathers (78.5%) was in the age range of 21–35 years at the times of birth of their children, 3.1% fathers were under 20 years of age, and 18.5% of fathers were above 35 years at that time. The majority (72.3%) of mothers was in the age range of 21–35 years, 23.1% were below 20 years, and only 4.6% were above 35 years of age at the times of birth of their children. Ninety five point four percent mothers did not have any infection during first three months of pregnancy and 4.6% had infection during first trimester of pregnancy. Most of children didn't have any history of maternal disease (93.8%) and only 6.2% of children had history of maternal disease. Maximum number of mothers (87.7%) did not attempt to induce abortion

Table 2: Sociodemographic details of parents

Variable	N	Range	Mean	SD
Age	65	21-63	37.43	8.78
Variable	n	Percent		
Sex				
	Male	32	49.20	
	Female	33	50.80	
Education				
	Up to primary	8	12.30	
	Up to preuniversity	20	30.80	
	Up to graduation	27	41.60	
	Illiterate	10	15.40	
Parents living status (single or together)				
	Single/widow/ widower/divorcee	3	4.60	
	Living together	62	95.40	
Occupation				
	Unskilled worker	13	20	
	Business	9	13.80	
	Service	15	23.10	
	Housewife	28	43.10	
Domicile				
	Rural	24	36.90	
	Urban	41	63.10	
Income (INR)				
	900–5000	28	43.10	
	5001–10,000	20	30.80	
	10,000 and above	17	26.20	
Type of family				
	Nuclear	41	63.10	
	Joint	24	36.90	
Informant's relation with the child				
	Mother	31	47.7	
	Father	34	52.3	

and 12.3% of mothers attempted to induce abortion and 10.80% had history of repetitive abortions. Most children were full-term (84.6%), 6.2% were premature, and 9.2% were postmature babies.

Table 4 shows the sociodemographic variables of MR children. It shows that there were 65 children in the age range of 5–28 years. The mean age was 11.38 and standard deviation 5.76. There were 66.2% and 33.8% male and female children, respectively. Maximum number of MR children was first borns (43.1%), followed by 21.5% of last borns, and 35.4% born in between. With regards to education, maximum numbers of MR children were not going to school (44.6%), 18.5% were educated up to primary level, 32.30% up to preprimary level, and 4.61% were educated up to prevocational level.

Table 5 shows that 86.2% of the MR children did not have any history of mental retardation in the family, while 13.8% had a family history of mental retardation. Fifty nine point two percent of MR children didn't have any history of mental illness in the family and only 10.8% of them were having the family history of mental illness. Seventy five point four percent of the children were born of normal delivery, 16.4% caesarian sections, and the rest of 7.7% forceps delivery. With regards to complication occurring during birth, 30.76% of MR children were having the history of complications, whereas 90.80% children included in this study did not have any complication during birth. Postnatal complications were present in 15.38% children while 84.61% children did not have any such problem. Maximum (60%) children had moderate level of mental retardation, 13.50% had mild level, and 26.20% had severe level of mental retardation.

Table 6 shows the percentage of positive and negative

Table 3: Clinical variables of parents

Variable	N	Range	X	SD
Age	65	21-63	37.43	8.78
Variable	n	Percent		
Father's age at the time of child's birth (years)	<20	2	3.10	
	21–35	51	78.50	
	>35	12	18.50	
Mother's age at the time of child's birth (years)	<20	15	23.10	
	21–35	47	72.30	
	>35	3	4.60	
Any infection during first three months of pregnancy	No	62	95.40	
	Yes	3	4.60	
Any history of maternal disease	Absent	61	93.80	
	Present	4	6.20	
Any attempt to induce abortion	Yes	8	12.30	
	No	57	87.70	
Any history of Repetitive abortion	Yes	7	10.80	
	No	58	89.20	
Duration of Pregnancy	Full term	55	84.60	
	Premature	4	6.20	
	Postmature	6	9.20	

impact on parents. The maximum negative impact on caregivers was on finance (39.33%) and physical care (35.45%), the minimum negative impact on parents was on career (12.96%) and specific thoughts (14.40%), percentage of negative impact on health, support, social, embarrassment, and relationships was 20.48, 25.38, 23.21, 21.65, 25.13, and 25.08, respectively.

The items measuring positive impact were in the areas of patience, tolerance, empathy, sensitivity, support, and

Table 4: Sociodemographic variables of mentally retarded children

Variable	N	Range	Mean	SD
Age	65	5-28	11.38	5.76
Variable	n	Percent		
Sex	Male	43	66.20	
	Female	22	33.80	
Birth order	First	28	43.10	
	Between	23	35.40	
	Last	14	21.50	
Education	Not going to school	29	44.60	
	Pre primary/K.G./Nursery	21	32.30	
	Primary	12	18.50	
	Pre Vocational/V, VI	3	4.61	

Table 5: Clinical details of mentally retarded children

Variables	Status	n	Percent
Family history of mental retardation	Present	9	13.80
	Absent	56	86.20
Family history of mental illness	Present	7	10.80
	Absent	58	89.20
Nature of delivery	Normal	49	75.40
	Caesarean	11	16.90
	Forceps	5	7.70
Complications occurring during birth	Present	20	30.76
	Absent	45	69.23
Postnatal complication	Present	10	15.38
	Absent	55	84.61
Any comorbidity	Present	59	90.80
	Absent	6	9.20
Behavioral problems	Present	16	24.80
	Absent	49	75.20
Delivery place	Hospital	40	61.50
	House	25	35.50
IQ level	Mild	9	13.50
	Moderate	39	60
	Severe	17	26.20

Table 6: Impact of mental retardation on the caregivers

Areas	Maximum scores	Obtained scores	Percentage (%)
Physical care	1430	507	35.45
Health	1040	213	20.48
Career	910	115	12.96
Support	1170	297	25.38
Financial	1040	409	39.33
Social	780	181	23.21
Embarrassment/Ridicule	910	197	21.65
Relationships	1170	294	25.13
Sibling affect	1300	326	25.08
Specific thoughts	910	131	14.40
Total negative impact	10660	2693	25.26
Positive impact	1170	645	55.38

better relationships. The overall percentage of positive impact was 55.38, while overall negative impact was 25.26%.

DISCUSSION

This study aimed to enumerate the impact of having an intellectually disabled child. Results of this study show that parents reported more positive impact (55.38%). They had developed more patience, more tolerance, more empathy, more sensitivity, and better relationships among the couple because of having such a child in their family. Reporting of more positive and less negative impact may be due to better coping mechanisms, more awareness and training about the behavioral intervention techniques, various benefits provided by the Government and support by various NGO's, etc. Similar findings are reported in literature.

Abbot and Meredith^[13] contributed a study on parental strength of the parents of the MR children. The authors noticed that the parents with retarded children were less critical of family members, and they had fewer persistent family problems than second group. Authors have suggested that those parents with retarded children have been using 'spousal support', 'participation in similar kind of parents groups', and 'religious beliefs' as the important resources used to cope with the challenges of rearing a disabled child. Similarly, Stainton and Besser^[14] tried to explore the positive impact of MR children in family. They identified nine core themes, in them viz, (i) source of joy and happiness; (ii) increased sense of purpose and priorities; (iii) expanded personal and social networks; (iv) community involvement; (v) increased spirituality; (vi) source of family unity and closeness; (vii) increased tolerance and understanding; (viii) personal growth and strength, and (ix) positive impacts on others/community. Positive impact has also been reported by various other authors. Gray and Holden^[15] examined psychosocial well-being of parents of 'autism' affected children. Parents who had better social support had lesser level of emotional symptoms like 'depression', 'anxiety', 'anger' and parents of older autistic children had lower level of 'depression', 'anxiety', 'anger' may be because with passing of time they learn to live with the problem.

Likewise, Kazak and Marvin^[16] pointed that higher levels of stress are found in the families with handicapped children and that despite the presence of high levels of stress, the families were found to have successful coping strategies. Friedrich *et al.*,^[17] commented that coping resources like 'utilitarian resources', 'energy/moral', 'general and specific beliefs', and above all 'social support from the near and dear ones' were the important sources to overcome the continuous stress

to those parents with severely MR children. Beavers *et al.*,^[18] found that family support and cohesiveness were the positive elements to overcome the stress. Canam^[19] talked about the common adaptive tasks and styles of the parents of the children with chronic conditions including mental retardation. Parents of chronically ill or disabled children face a number of common tasks in adapting to their child's condition. Those parents have similarity in managing tasks and coping strategies to overcome the day-to-day stressful situations. The author noticed that effective coping strategies can reduce the menace to them as well as increase the family adaptability.

In the present study negative impact (25.26%) included difficulties in meeting extra demands with physical care of the child, experiencing health-related problems, making career adjustments, experiencing loss of support from the spouses, etc. Previous studies on similar topics showed that there can be a chance of having negative emotions like 'despair', 'blaming each other', 'comparing child with normal children', 'marked disruption in parental job activities', 'interpersonal relationships', etc. In the present study it was found that parents' were having maximum negative impact on the domains like 'physical care and financial areas'. Whereas least negative impact has been noticed in the areas of parents' 'career activities and specific thoughts'. It means that the parents' are having problems in the allocation of funds in the care and training of their retarded children as well as in other necessary domestic requirements. Less negative impact in the area of career may be due to the fact that many respondents were housewives and in India many females remain housewives and are not career oriented. Negative impact on the parents' of the intellectually disabled children in the form of financial crisis was also noted by Datta.^[20] Parents might develop an antagonistic attitude toward their retarded children due to failure in reaching balance in meeting the financial needs of the family in general and specific needs of their retarded children. The present study found that in the families of MR children problems come in the shape of 'negative impact on health of caregivers', 'social embarrassment of the family members', 'relationship problems among the siblings', etc. Those problems can magnify the existing problem of having a MR child.

In the present study parents have reported both positive and negative impact. The enumerated percentage of 'positive impact of having a MR child outnumbered the level of negative impact of it'. (Positive impact = 55.38% vs. Negative impact = 26.26%). Kearney and Griffin^[21] also noted the similar phenomenon among the parents of retarded children. They found that the parents had both positive and negative emotions toward

their children, such as 'sorrow and joy', 'pessimism and optimism'. Their daily activities evolved around 'positive impact to negative impact'. These may be due to the fact that parents tend to develop a sense of resilience to meet up the daunting task, that is, 'fulfilling the needs of their retarded children'.

Ramey and Keltner^[22] accomplished a study to explore the family adaptation and meeting with the challenges of the families with MR persons. This study made it evident that both the informal and formal support systems have significant and pervasive effects on parental well-being. Similarly, culture and ethnicity exert influences on families through belief systems and culturally endorsed practices. Studies support that families where parents prior to having a MR child had good marital relationship tend to come even closer to each other to face the situation of having a MR child. Indian parents report that the major things found most useful in coping up with the situation include getting physical help for looking after the child, financial help, early and timely advice by professionals, their empathic attitude, and overall faith in God.

Golbert and Mukherjee^[23] contributed that professionally oriented training program to the parents of the disabled children can reduce their feeling of hopelessness, resentment, and increase the ability to cope with this chronic stress. Those authors formulated a specially designed training program for the parents of 'spastic children' in a center namely, "Spastic Society of Eastern India" (now Indian Institute of Cerebral Palsy, IICP). They commented that favorable results can be expected if proper guidance program is initiated for those parents.

According to Akkok^[24] parent training and education about the nature of disabilities of their children can enhance the development of the children with intellectual disabilities, because parents are the significant contributors to the development of their children. They are the primary caretakers, managers, behavior models, disciplinarians, and agents of socialization and change for their children. If parents are adequately trained and taught they can be better teachers or trainers to their disabled children than other formal professionals.

Karayanni^[25] tells that if the parents of severe MR children like 'Down's syndrome' are adequately counseled about their child's condition and future requirements then they can best be helped to increase their coping mechanism to deal with this chronic stress. The author chooses two Arab families with 'Down's syndrome' children. He explores the cultural considerations which are to be remembered by the

treating team. Aim of this study was to present implications and suggestions to professionals to help parents of children with Down's syndrome to function better and to extend maximum help to their children.

McGaw *et al.*^[26] conducted a study aimed to see the positive results of 'group intervention' to reduce emotional problems of parents of MR children. Group intervention was provided to 12 parents with borderline or mild intellectual disabilities over 14 weeks. 'Judson Rating Scale and Behaviour Problem Index' was applied on parents to examine the results after 27 week's follow-ups. The immediate and long-term benefits of group interactive process have beneficial effect to reduce parental stress.

SUMMARY AND CONCLUSIONS

This study has been carried out to enumerate the level of 'disability associated with mental retardation' on the parents with the retarded children. Having a disabled child in the family is a continuous source of 'stress' to the family members. Not only the retarded child but the whole family fabric gets affected to this. But this study shows that it is not necessary that every family of retarded children will have negative impact but in some families this problem can create a positive impact, like 'acceptance of the situation realistically', 'standing right behind the retarded child and provide support'. In this study parents of 65 mentally challenged children were selected. The study was carried out at the outpatient department of PGIBMS, Raipur, and two special schools in the city for such children. The samples were selected by purposive method. Tools used for data collection were: A) a specially designed sociodemographic and clinical data sheet; B) Developmental screening test (DST); C) Vineland social maturity scale (VSMS); D) National Institute for the Mentally Handicapped (NIMH) Disability Impact Scale. Results showed that mean age of the parents was 37.43 ± 8.78 . Among the parents males were slightly lesser in number. As per the level of education of the parents are concerned most of them had the education of either preuniversity or graduation. Other sociodemographic characteristics noticed were that most of the parents were from urban background, having nuclear family structure; majority of them belonged to lower middle to middle socioeconomic status. Clinical data showed that most of the retarded children's mothers did not have the history of 'infectious diseases' during first three months of pregnancy as well as most mothers did not have any history of severe physical illness. Coming to the clinical profile of the children it was found that most of the children were born normally and very few of them were born by caesarian process.

Due to the problem of subnormal intellect to their children

most of the parents of the selected sample, that is, retarded children had problems like 'problem in interpersonal relationship' and 'communication'. But this study gives the heartening finding that most of the parents of the selected retarded children viewed that they have more 'positive impact' than 'negative impact'. This study shows that the overall percentage of positive impact was 55.38 while overall negative impact was 25.26. To these parents having a mentally challenged child in the family is not a 'burden like thing' but they are willing to see the situation more positively and overcome the situation more gracefully.

In conclusion it can be said that having an intellectually subnormal child is not altogether a sign of so-called 'bad fate or misfortune' to everyone, but it can also be a challenge which strengthens the parents of those children. But at the same time it is equally true that having a MR child is a source of chronic stress to the family members and it can affect them negatively in many ways and more attempts should be made for primary prevention of mental retardation.

Limitations and future directions

1. Large populations having equal representation of all categories of mental retardation should be included.
2. Technique used for better coping should be assessed so that other parents can also be benefited.

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