



ESTIMATING THE MAGNITUDE OF ANXIETY AND DEPRESSION IN PARENTS OF CHILDREN WITH MENTAL RETARDATION

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ABSTRACT **Background:** This study assessed anxiety and depression levels among parents of children with Mental Retardation. There is little data in developing countries, such as India, concerning the impact of raising children with mental retardation upon the quality of parent functioning and risk for psychopathology. **Objective:** To estimate the magnitude of anxiety and depression in parents of children with mental retardation. **Methods:** This was a prospective study conducted at a tertiary care neuropsychiatry hospital in Delhi. Participants were 60 parents of 60 children with the diagnosis of MR. The parents were assessed for anxiety and depression using ICD-10 criteria. Informed consent was obtained. The study was approved by the Institutional Research Committee. **Results:** It was seen that 53.3% parents of MR children had depression as compared to control group (15%) based on HAM-D scores, out of which mainly mild depressive symptoms were more predominant (38.3%) and in control group 13.3% had mild depression, 13.3% had moderate depression in parents of cases as compared to control group (1.7%). Anxiety was seen in 43.3% parents of MR children as compared to control group (8.3%) based on HAM-A scores, out of which mainly mild anxiety symptoms were more predominant (35%). Statistically significant difference (p value < 0.001) between the HAM-A score of parents of cases and control. **Conclusion:** The prevalence of anxiety and depressive symptoms was significantly more in parents of children with MR than normal controls.

KEYWORDS : Anxiety, Depression, Mental Retardation, Parents

BACKGROUND

Family is the core social system for human entity. Helping the children to be healthy, efficient, productive and independent is one of the major responsibilities of parents. Having disability brings hardness and difficulty in social and personal life of not only for the child, but also for his or her parents. Mental retardation has impact on the family in many ways. Before the early 1980s, families of children with mental retardation were perceived to be families in crisis. Mother was examined for their mourning reactions, couples for divorce, and the mother, and unaffected siblings for the presence of any form of psychopathology. Several studies have found that parents of children with intellectual disability report higher level of stress than that the parents of normally developing children (Olsson MB and CP Hwang 2001)[1]. Parents of children with intellectual disability frequently reports symptoms of depression and anxiety.

Family is the main source of support for the child with mental retardation in any society. Functional impairment of the child with mental retardation, may be it physical, psychological or social, needs to be compensated by the parents. A mentally retarded child in a family is usually a serious stress factor for the parents. It often requires a reorientation and re-evaluation of family goals, responsibilities and relationships. This lead to unavoidable stress and psychological trauma among the parents. Chronic conditions of disability, both medical and emotional, make extra demands on parents, resulting in stress [2, 3, 4, 5]. In addition these parents report worries and concerns about their child's future care after they are no longer able to sustain a supportive role. They also may find themselves sandwiched between the need of two generations, as their parents or spouse may become frail and require care in addition to the care they provide to their child with disabilities. According to Sen (1988)[6] in India, disability is still viewed in terms of a "tragedy" with a "better dead than disabled" approach the idea being that it is not possible for disabled people to be happy or enjoy a good quality of life. Cultural beliefs about disability play an important role in determining the way in which the family perceives disability and the kind of measures it takes for prevention, treatment and rehabilitation. Therefore, it is not surprising in the case of mental retarded children, that most parents, even if they are well adjusted, are likely to experience major emotional problems. Parents with disabled child may have higher levels of stress and lower levels of well-being than with the normal children [7]. There can be no doubt that intellectual gifts have been distributed on a continuum for as long as mankind has walked on the earth. Yet, through the ages, understanding and treatment of persons with intellectually disabled has moved like a pendulum between extremes. At one extreme, persons with intellectually disabled have been exalted, considered "les

enfants du Bon Dieu" (children of the Good God). The word "cretin" (congenital hypothyroidism), was used previously, for intellectually disabled children, takes its origin from Christian or Christ-like, even as its modern definition includes descriptors such as stupid, vulgar, and insensitive.

Over the past two decades, family units have become smaller and the rate of marriage breakdown has increased. In the same period, with the technological advance in medicine, the survival of children with disabilities has risen. The shift of healthcare to ambulatory and community-based care settings may serve to increase demands on family members, necessitating that they be more active participants in the care of their child. This combination of factors leaves smaller family units shouldering the responsibility for increased caregiving demands, making the task of understanding and providing for the needs of the parents more important.

ANXIETY AND DEPRESSION IN PARENTS OF CHILDREN WITH MENTAL RETARDATION

Parents of children with Mental Retardation face many psychological problems in which anxiety and depression are common among them. Anxiety is a state of apprehension or unease arising out of anticipation of danger. Depression is an emotional disorder associated with variety of symptoms such as loss of energy, loss of interest in activities and in life, sadness, decreased or absence of adequate appetite and sleep, self-criticism, feeling of hopelessness, worthlessness and helplessness.

As per Bitsika approximately 50% of the parents were severely anxious and about two-thirds were clinically depressed [8]. However the prevalence of mental health difficulties among mothers is not well documented [9]. According to Grebler (1952) it is assumed that parental attitudes towards mentally retarded children are magnified in their expression by the frustrating experience of having given birth to and bringing up a mentally retarded child. Rangaswami (1995) found that the overall attitude of mother of mentally retarded children with behavior problems were found to have a significantly higher negative attitude towards their retarded children. Mary (1990) found that almost all mother reported strong feeling for their child immediately after receiving the news of the disabling condition. The most commonly expressed negative emotion was a feeling of grief or sorrow, and also reported negative feeling of shock and guilt which had lessened over time[10]. Existence of a disabled child cause problems for mental health of family members which can't be compensate and parents become depressed, stressful, disputative, ashamed or feared and may hope to die [11]. Parents of mental retarded children experience more psychological problems in aspects of

aggression, depression, obsession, anxiety, physical complaint and psychosis than parents of normal children[12]. Prevalence rates of 34% for depression and anxiety in Pakistan [13]. In rural area of Pakistan, 72% of women and 44% of men reported anxiety and depression[14]. Fathers have lower rates of anxiety and depression as compared to mothers, but higher rates than males in the general population[15]. Presence of high rates of behavioral issues and comorbid illnesses with Mental Retardation most likely have contributed to high rates of parental anxiety and depression [16]. Earlier studies have reported parental stress and health outcome being related to child characteristics such as the severity of the core disability, main diagnosis, the age of the child, and the extent of coexisting behavioral issues [17].

According to Gupta and Kaur in India, both mothers and fathers of children with Intellectual Disability reported high rates of mental stress as compared to physical stress, especially women [18]. More psychiatric symptomatology in the parents when the child showed a high level of dysfunction [19]. Children having Intellectual Disability, those parents required even greater need of help than those who have children with severe chronic illness/physical handicap [20].

As per the findings from the study of Bayat M. et al (2011) Independent t-test for two groups showed that parents with intellectual disabilities children experienced more psychological problems as compared to those who having normal children and their difference as regards hostility, anxiety, obsessive compulsive, interpersonal senility, psychotics, and depression were significant and as regards phobic and paranoid states, there were no significant differences between parents of the two groups. The findings of the dependent t-test for examining difference existed between mothers and fathers were intellectual disabilities children showed that mothers tolerated those problems more than fathers. That there existed a significant difference between fathers and mothers as regards hostility behavior, depression, summarization inter personality senility and anxiety and obsessive - compulsive and there was no significant difference between fathers and mothers of intellectual disabilities children as regards psychotics, phobic and paranoid states[21].

OBJECTIVE OF THE STUDY:

To estimate the magnitude of anxiety and depression in parents of children with mental retardation.

METHODOLOGY OF STUDY:-

The study was carried out over a period of 9 months. Detailed clinical assessment was done of the first and second patient registered in Mental Retardation Speciality Clinic at tertiary care neuropsychiatry center. Parents of those patients that have an IQ score of below 70 were approached. Then after applying inclusion and exclusion criteria and explaining the purpose of study, those parents who give consent was included. Similarly, children for the control group from the community without Mental Retardation and no psychiatric disorders with their parents were recruited by House to house survey using simple random sampling.

In case group a total of 80 children and their parents were approached for the study. Out of which 20 children were excluded, in which 7 children were excluded due to presence of psychiatric ,medical comorbidity and behavioural problems, 4 children had age more than 12 years, 6 parents of children had chronic medical illness and 3 parents does not give consent for the study.

In control group Children who were age and gender matched with children from case group were selected from nearby community of hospital. While recruiting 60 children, 2 were excluded due to chronic medical illness, 2 children's parents not living with children consistently from last 2 years. Hence, 4 extra children were recruited after age and gender matching. Finally, 60 children were included in the study.

After recruitment in the study assessment was done in following way:

- Assessment of socio-demographic variables using semi-structured proforma. IQ test was done for all children in case and control group. KSADS was used to screen the children for other comorbid psychiatric illness in case and control group. NIMH checklist was applied in all children of case group for excluding the behavioural problems. Parents were screened using GHQ-12

[22] and those found to have a score of 2 or greater on GHQ-12 were clinically assessed and further diagnosis of syndromal anxiety and depression were made according to the ICD-10. Parents were applied the relevant scales for anxiety and depression (HAM-A and HAM-D rating scale) [23, 24].

RESULTS OF THE STUDY

Table 1: Magnitude of depressive symptoms in parents of both the groups based on HAM-D score

SEVERITY OF DEPRESSION (HAM-D Scores)	GROUP		
	CASES n=60(%)	CONTROL n=60(%)	
NO DEPRESSION (HAM-D <7)	28 (46.7%)	51 (85%)	
HAM-D SCORE >7	32(53.3%)	9(15%)	
DEPRESSION HAM-D SCORE >7	MILD DEPRESSION (HAM-D score 8-13)	23(38.3%)	8(13.3%)
	MODERATE DEPRESSION (HAM-D score 14-18)	8(13.3%)	1(1.7%)
	SEVERE DEPRESSION (HAM-D score 19-22)	1 (1.7%)	0 (0%)

*p value significant at 0.05 level , Chi square value =20.39,*Fischer Exact P value<0.001

HAM-D-Hamilton Depression rating scale

Table 1 depicts severity of depression based on scores of HAM-D. It was seen that 53.3% parents of MR children had depression as compared to control group (15%) based on HAM-D scores, out of which mainly mild depressive symptoms were more predominant (38.3%) and in control group 13.3% had mild depression, 13.3% had moderate depression in parents of cases as compared to control group (1.7%). Severe depression present only in 1.7% parents of cases statistically significant difference (p value < 0.001) between the HAM-D score of parents of cases and control.

Table 2: Magnitudes of anxiety symptoms in parents of both the groups based on HAM-A score

SEVERITY OF ANXIETY HAM-A SCORES	GROUP		
	CASE n=60(%)	CONTROL n=60(%)	
No anxiety (HAM-A score 0-7)	34 (56.7%)	55 (91.7%)	
HAM-A score >7	26(43.33%)	5 (8.33%)	
Anxiety (HAM-A score, >7)	Mild (HAM-A score 8-17)	21 (35.0%)	5 (8.3%)
	Moderate (HAM-A score 18-24)	5(8.3%)	0 (0)
	Severe (HAM-A score >25)	0	0

*p value significant at 0.05 level, Chi square value =19.80,*Fischer Exact P value<0.001

HAM-A-Hamilton Anxiety rating scale

Table 2 depicts severity of Anxiety based on scores of HAM-A. It was seen that 43.3% parents of MR children had anxiety as compared to control group (8.3%) based on HAM-A scores, out of which mainly mild anxiety symptoms were more predominant (35%). In control group 8.3% had mild anxiety and no parents had moderate anxiety while, in parents of cases, 8.3% had moderate anxiety. Statistically significant difference (p value < 0.001) between the HAM-A score of parents of cases and control.

DISCUSSION OF RESULTS

When parents were assessed for depressive and anxiety symptoms on HAM-D and HAM -A, apart from syndromal disorder, it was noted that parents of children with MR had significantly higher depressive symptoms which was consistent with previous study by Dave et al. 2014[25]. In that study, authors found that anxiety and depression significantly high in parents of intellectually disabled children.

In our study, while depressive symptoms were positive in 53.3% in case group parents, they were positive in only 15% of parents of normal children. When parents were compared on severity of HAM-D, we found that 38.3% parents in case group met the cut off for mild depression and 13.3% parents met the cut off for moderate depression

and 1.7% met the cut off for severe depression This finding was similar to previous study by Nagarkar et al. 2014[26], where the proportion of parents with moderate depression was slightly more than parents of mild depression and proportion of parents with severe depression also very high possible reason could be they do not exclude medical and psychiatric co-morbidity in children, which may further increase the burden of parents. Also, it was seen that mean scores for HAM-D in children with MR were significantly high as compared to controls.

When parents were evaluated for anxiety symptoms on HAM-A, it was found in the current study that a higher percentage of parents of children with MR had anxiety symptoms (43.3%). On further evaluation for severity of anxiety symptoms, it was noted that 35% of parents of MR children met the cut off for mild anxiety and 8.3% met the cut off for moderate anxiety and it was significantly higher than parents of normal children. Also, in current study the scores obtained on HAM-A were higher than parents of normal children. In the study by Mita Majumdar et al 2005 [27] and by Kumar 2001[28] also similar findings were noted. They had reported higher scores on HAM-A in parents of mentally retarded children. Stress among parents is not an inevitable consequence of having mentally retarded children. A combination of multiple stressors appears to predict the likelihood of the parents experiencing stress and anxiety.

CONCLUSION:

The results of the present study suggest that parents of children with MR are more likely to have psychological distress. On further evaluation, these parents were found to have more depressive and anxiety disorders than normal controls. The present study suggested that the prevalence of anxiety and depressive symptoms was significantly more in parents of children with MR than normal controls.

LIMITATION:

Since it was a tertiary care hospital based study, it would be difficult to generalize the results to all children with mental retardation. Sample size was small, thus generalization of the findings to the population at large is difficult and needs further validation with a larger sample size. Parents were not evaluated for presence or absence of life events which might also lead to development of depressive and anxiety disorders in parents of MR children.

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