

Depression in Mothers of Children with Mental Retardation Reporting at Tertiary Care Hospital

Ahla Malik¹, Washdev¹, Kheenpal Das¹, Sameeha Aleem² and Raza Ur Rehman¹

ABSTRACT

Objective: To determine prevalence of depression in mothers of children with mental retardation using the ICD-10 criteria for depression.

Material & Method: This cross sectional study was conducted at Psychiatry outpatient Department, Civil Hospital Karachi. Three hundred twenty three mothers were included in the study and interviewed between the periods of October 2014 to April 2015. Mothers of children with mental retardation were assessed for depressive disorder using ICD-10 criteria for depression. Data was entered and analyzed using Statistical Package for Social Sciences (SPSS) version 16. P value less than 0.05 was considered significant.

Results: Number of depressed mothers who have mentally retarded child was more as compared to non depressed mothers. The association of depression to their marital status was found to be significant (p-value 0.009) revealing that single parenting mothers were more vulnerable to depression as compared to children living with both parents. Most of the depressed mothers were more educated (p-value 0.00) and were mostly graduates, and had their child in the older age group that is 9 to 12 years (p-value 0.03) and had a female child. (Table 2) effected (p-value 0.00). The association of maternal age and socioeconomic status with depression was found to be insignificant (p-value 0.43 and 0.37 respectively).

Conclusion: This study reveals a high prevalence of depression in mothers of mentally retarded children and highlights the need for help. Strategy should be reinforced in the clinical settings to screen such mothers for Depression.

Key words: Depression, mothers, children, mental retardation.

How to cite this article: Malik A, Washdev, Das K, Aleem S, Rehman R. Depression in mothers of children with mental retardation reporting at tertiary care hospital. J Dow Uni Health Sci 2016; 10(3): 92-95.

INTRODUCTION

Mothers of children with mental retardation suffer through more psychiatric disorders, poor health and stress as compared to mothers of normally developing and growing children¹. High level of stress in mothers of these children is predicted by low economic and income issues², inadequate support^{3,4}. Problems of these mentally retarded or learning disabled children such as social communication deficits, anger outburst, self-harming behavior increase level of stress in mothers of such children^{5,6}. Although positive aspect of raising and caring mentally retarded children is increasingly growing⁷ but studies done on such mothers are

consistently finding susceptibility of these mothers to anxiety and depressive symptoms or disorders^{8,9}. These mothers were also found to have symptoms like insomnia, poor sleep quality¹⁰. Chronic stress in these mothers is manifested by blunted diurnal cortisol trajectories^{11,12}, reduced immune system¹³, and accelerated telomere shortening¹⁴. Neurodevelopmental disorders are quite prevalent and among the top five medical conditions affecting children of even developed countries such as United States¹⁵. Therefore the disease burden on parents of these children is alarmingly high, which adds to increasing and growing cost of developmental disabilities towards society¹⁶.

Studies have also shown that mothers who are depressed or under high levels of stress are less able to care for their learning disabled children and eventually these children make less developmental progress¹⁷.

Therefore this study was aimed to determine depression in mothers of mentally retarded children so that they can be diagnosed earlier in course of disease, managed adequately and subsequently able to care their disabled child in better way.

1 Department of Psychiatry & Behavioral Sciences, Dow University of Health Sciences and Civil Hospital, Karachi, Pakistan.

2 Consultant Psychiatrist, Karwan-e-Hayat Karachi, Pakistan.

Corresponding: Dr. Washdev, Department of Psychiatry & Behavioral Sciences, Dow University of Health Sciences, Karachi, Pakistan.

Email: devamar88@gmail.com

Objective: To determine prevalence of depression in mothers of children with mental retardation using the ICD-10 criteria for depression.

MATERIALS & METHODS

This cross sectional study was conducted at Psychiatry *outpatient* Department of Civil Hospital Karachi: a tertiary care public sector health facility in Karachi. Three hundred twenty three mothers were included in study between the periods of 13th October 2014 to 13th April 2015 through convenient sample technique. Mothers whose child developed features of Mental Retardation during the age of 1 to 5 year were included in study. Many mothers and their child were referred to the Psychiatry department from the Pediatrics department for management of behavioral disturbance and delayed milestones. The children were assessed for mental retardation according to ICD-10 criteria and for formal IQ testing they were referred to Institute of Physical and Mental Rehabilitation – Dow University of Health and Sciences. Mothers between 25 and 45 years of age were included and those with other psychiatric or medical illness were excluded. Ethical permission was obtained from Ethical Review Board of department. After informed consent demographic data were taken on semi structured proforma. After collecting the bio data of the mother and the effected child, the presence of depression was evaluated through ICD-10 criteria for Depressive disorder. Data was entered and analyzed using Statistical Package for Social Sciences (SPSS) version 16.0. Frequency and percentage were calculated for all categorical variables like marital status and education of mother, family type that is nuclear or joint, economic status and outcome variable that is maternal depression and child's gender.

Effect modifiers were controlled through stratification of age, marital status, educational status of mother and other demographic variables. Chi square test was applied value was considered significant when less than 0.05.

All procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the Helsinki Declaration of 1975, as revised in 2008. Informed consent was obtained from all patients for being included in the study.

RESULTS

After screening through inclusion and exclusion criteria 323 mothers were included in the study and mean age of these mothers was around 32.94 ± 5.79 years. The mean age of their children was 8.47 ± 1.89 years, the ratio of male and female child was almost equal, and the number of years mother had known about their child's illness was 4.18 ± 2.20 years.

Among the 323 mothers, 171 (52.94%) showed signs of clinical depression and 152 (47.05%) had no depression.

The association of depression to mothers living as separated or divorced was found to be significant (p-value 0.009) revealing that single parenting mothers were more vulnerable to depression (Table 1). Most of the depressed mothers were more educated (p-value 0.00) and were mostly graduates (Table 1), and had their child in the older age group that is 9 to 12 years (p-value 0.03) (Table 2). Mothers having mentally retarded female child were found to be more depressed as compared to those having male child (p-value 0.00). Similarly mothers whose child has Mental Retardation in last 5 years (Table 2) were found to be more depressed as compared to mothers having learning disabled child for more than 5 years (p-value 0.00).

Table 1: Demographics of Depressed Mother in comparison to non-depressed

S. No.	Mother's Character		Depressed Mother		Non Depressed Mother		P Value
			n=171	%age	n=152	%age	
1	Age	25-35	96	55.81	92	60.53	0.432
		36-45	75	43.60	60	39.47	
2	Marital Status	Married (Dual Parenting)	147	85.47	144	94.74	0.009
		Widow/Divorce (Single Parenting)	24	13.95	8	5.26	
3	Social Economic Status (Income)	<Rs.10000	72	41.86	72	47.37	0.371
		>Rs.10000	99	57.56	80	52.63	
4	Education	Not Educated	24	13.95	44	28.95	0.00
		Primary	36	20.93	32	21.05	
		Secondary	32	18.60	48	31.58	
		Intermediate	39	22.67	20	13.16	
		Graduate	40	23.26	8	5.26	
5	Family	Nuclear	123	71.51	52	34.21	0.00
		Joint	48	27.91	100	65.79	

Table 2: Children characteristics of depressed and non depressed mother

S. No.	Character		Depressed Mother		Non Depressed Mother		P Value
			n=171	%age	n=152	%age	
1	Child Age	5-8 years	83	48.53	92	60.52	0.034
		9-12 years	88	51.46	60	39.47	
2	Gender	Male	68	39.77	96	63.16	0.00
		Female	103	60.23	56	36.84	
3	Child Illness Duration	<5years	135	78.95	76	50.00	0.00
		>5years	36	21.05	76	50.00	

The association of maternal age and socioeconomic status with depression was found to be insignificant having p-value 0.43 and 0.37 respectively (Table 1).

DISCUSSION

It has been well established that the diagnosis of a child with Mental Retardation adversely affects both parents especially mothers¹⁸. In our study also we were able to replicate the same results and a very high prevalence of depression was revealed in this group of mothers.

In the Indo Pak however the family structure is very different from the west where social support to such mothers from grandparents and other relatives is scarce. This is readily available in most cases in our set up. Our results also match with this finding that females who lived a joint family set up reported depression much less frequently as compared to those who had little help with the child at home and depression was evidently more prevalent in the mothers that were raising their child without their spouse and lack of support has been found to be one of the strongest predictors of depression by studies in the past¹⁹.

Mothers who received more education reported depression more probably because they knew more about the forthcoming challenges and later on consequences, hence worried more about their child's future.

Poverty and low socioeconomic status has been shown to be directly proportional to depression in the past²⁰, however this study was unable to prove it, which might be because of the convenient sampling which is one the weaknesses of our study.

It was indicated in previous studies that older mother had better coping skills²¹, however our study revealed that mothers whose children were in the older age group and whose children were females had a much higher prevalence of depression. This may be due to time duration mothers are looking after their mentally retarded child and stigma associated with especially

female mentally retarded children in our society. Also mothers who had known about their child's illness more recently showed more signs of clinical depression. In fact mothers who had no depression at the time of study reported being depressed in the past when they had been initially told about their child's diagnosis. This finding is also consistent with results of some studies done in the 18th and 19th century.

In spite of the fact that other independent variables are insignificant to maternal depression like maternal age and socioeconomic status, there is a probability that such results are due to confounders, which can't be adjusted due to study design limitation. Therefore Multicenter large study is recommended to overcome this limitation.

It is therefore strongly recommended to screen all such mothers so that help can be offered to them because both physical and mental wellbeing of the children is directly proportional to the care they receive from their mothers. Healthier the mother, the better she can contribute towards the development of her child.

CONCLUSION

Having a child with a diagnosis of mental retardation is one the biggest setbacks in a mother's life. This study reveals a high prevalence of depression in such mothers and point towards importance of treating these mothers adequately and early in course of illness. Strategy should be planned in the clinical settings to screen such mothers for Depression and manage them properly.

REFERENCES

1. Miodrag N, Hodapp RM. Chronic stress and health among parents of children with intellectual and developmental disabilities. *Curr Opin Psychiatry* 2010; 23:407-11.
2. Parish SL, Rose RA, Weiss-Grinstein M, Richman EL, Andrews ME. Material hardship in US families raising children with disabilities. *Exceptional Children*. 2008; 75:71-92.

3. Hassall R, Rose J, McDonald J. Parenting stress in mothers of children with an intellectual disability: The effects of parent cognition in relation to child characteristics and family support. *J Intellect Disabil Res* 2005; 496:405-18.
4. Anderson LL, Larson SA, Wuorio A. 2010 FINDS national survey technical report part 1: family caregiver survey. Minneapolis, MN: University of Minnesota; 2011.
5. Dykens EM. Psychopathology in children with intellectual disability. *J Child Psychol Psychiatry* 2000; 41:407-17.
6. Neece CL, Green SA, Baker BL. Parenting stress and child behavior problems: a transactional relationship across time. *Am J Intellect DevDisabil* 2012; 117:48–66.
7. Dykens EM. Toward a positive psychology of mental retardation. *Am J Orthopsychiatry* 2006; 76:185-93.
8. Singer GH. Meta-analysis of comparative studies of depression in mothers of children with and without children with developmental disabilities. *Am J Ment Retard* 2006; 111:155-69.
9. Taylor JL, Warren ZE. Maternal depressive symptoms following autism spectrum diagnosis. *J Autism Dev Disord* 2012; 42:1411-8.
10. Gallagher S, Phillips AC, Carroll D. Parental stress is associated with poor sleep quality in parents caring for children with developmental disabilities. *J Pediatr Psychol* 2010; 35:728-37.
11. Seltzer MM, Greenberg JS, Hong J, Smith LE, Almeida DM, Coe C, et al. Maternal cortisol levels and behavior problems in adolescents and adults with ASD. *J Autism Dev Disord* 2010; 40:457-69.
12. Dykens EM, Lambert W. Trajectories of diurnal cortisol in mothers of children with autism and other developmental disabilities: relations to health and mental health. *J Autism Dev Disord* 2013; 43:2426-34.
13. Gallagher S, Phillips AC, Drayson MT, Carroll D. Parental caregivers of children with developmental disabilities mount a poor antibody response to pneumococcal vaccination. *Brain Behav Immun.* 2009; 23:338-46.
14. Epel ES, Blackburn EH, Lin J, Dhabhar FS, Adler NE, Morrow JD, et al. Accelerated telomere shortening in response to life stress. *Proc Natl Acad Sci USA* 2004; 101:17312-5.
15. Halfon N, Houtrow A, Larson K, Newacheck PW. The changing landscape of disability in childhood. *Future Child* 2012; 22:13-42.
16. Ganz ML. The lifetime distribution of the incremental societal costs of autism. *Arch Pediatr Adolesc Med* 2007; 161:343-9.
17. Osborne LA, McHugh L, Saunders J, Reed P. Parenting stress reduces the effectiveness of early teaching interventions for autistic spectrum disorders. *J Autism Dev Disord* 2008; 38:1092-103.
18. Muhammad WA, Imtiaz AD, Snehal S, Mohsin AC, Alia A, Madeeha A, et al. Anxiety and depression among parents of children with intellectual disability in Pakistan. *J Can Acad Child Adolesc Psychiatry* 2013; 22:290-5.
19. Brian AB. Examining the relationship between stress and lack of social support in mothers of children with autism. *Focus Autism Other Dev Disabl Winter* 2002; 17:208-15.
20. Vikram P, Merlyn R, Nandita DS. Gender, poverty and postnatal depression: A study of mothers in Goa, Ind *Am J Psychiatry* 2002; 159:43-7.
21. Freidrich WN, Cohen DS, Wiltturner LT. Family relations and marital quality when a mentally handicapped child is present. *Psychol Reports* 1987; 61:911-9.

