

CO-MORBIDITY OF MENTAL HEALTH PROBLEMS AMONG WORKING AND NON-WORKING MOTHERS OF CHILDREN WITH INTELLECTUAL DISABILITY

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ABSTRACT

OBJECTIVES

To investigate severity of depression, anxiety and stress among working and non-working mothers of children with intellectual disability and to find out the severity of depression, anxiety and stress among mothers of children with Down's syndrome, cerebral palsy and conduct disorders.

STUDY DESIGN

A Comparative Study

PLACE OF STUDY

Rehabilitation Centers & Special Schools of Karachi, Pakistan

SUBJECTS AND METHODS

Sample of present study was comprised of 100 mothers. Mothers were divided into working (N=61) and nonworking (N=39) category. The sample was further categorized into three groups according to type of comorbidity of their children such as; mothers with Down's syndrome children (N=33), mothers with CP children (N=37) and mothers of children with conduct disorders (N=30). Sample was collected from the different rehabilitation centers and special schools of Karachi. The age range of the mothers was 35-45 years. Detailed demographic information were taken and Depression, Anxiety and Stress Scale (DASS, Urdu Version) was administered.

RESULTS

Findings showed that severity of depression, anxiety and stress was found higher in working mothers (i.e. 88.5%, 93.4% & 77.0% respectively) as compared with non-working mothers of children with special needs (i.e. 79.5%, 71.8% & 59.0% respectively). Further findings showed that severity of these three was found higher in mothers of children with conduct disorders (i.e. 96.7%, 96.7% & 83.3%) as compared with mothers of children with CP (i.e. 83.8%, 85.5% & 59.5%) and down's syndrome (i.e. 75.8%, 72.7% & 69.7%).

CONCLUSION

Findings show that mothers of children with Down's syndrome, Cerebral Palsy and Conduct disorders are at high risk of depression, anxiety and stress related disorders. Further, working mothers are more vulnerable towards mental health problems as compared with non-working mothers.

KEYWORDS

Depression, Anxiety, Stress, Down's syndrome, Conduct Disorder, Cerebral Palsy.

INTRODUCTION

Child with any kind of disability can be a major persistent stressor for mother in terms of having responsibility to look after child's special needs throughout the life. Most common stressors in mothers of children with special needs are impairment in child's functioning with issues related to it causing excessive burden on mother who is considered mainly responsible to look after the child as compared with the involvement of her spouse. Moreover, difficulty in approaching adequate treatment services, limited financial resources, lack of understanding and awareness of child's problems, lack of social support and issues of stigma & social embarrassment also play an important role in adding stressors in mothers. Other variables like children's emotional, behavioral, intellectual, academic problems and impairment in social interaction can also disturb mental health of mothers.¹ Children with Down's syndrome, cerebral palsy and conduct disorders have various kinds of problems such as speech impairment, motor disturbances, poor social interaction, behavioral problems and low intellectual functioning which can cause severe behavioral issues. These stressors are considered more painful for the mother due to chronic course, usually poor prognosis and a burden of continuous care for these children. With the passage of time these children are likely to develop behavioral problems like aggression, stubbornness, hyperactivity, and impulsivity and mothers usually find difficult to manage these issues. Various studies have supported that mental health problems are common in mothers of children with intellectual disability.²⁻⁶

Working mothers of children with special needs are perceived to have high degree of mental health problems as compared with non-working mothers due to their added professional commitments and paucity of available time⁷. Al-Kuwari reported that working mothers with low income and low education perceived more mental health problems⁸. Aslam et al reported that mothers working over low wages, hectic routines and subsequent workload had frequent mental health problems⁹.

It is also observed that mothers of handicapped children having poor prognosis face significant stress and have limited opportunities to avail better services for children such as treatment and education¹⁰. If unable to provide the better facilities to these children, the mothers develop regret with guilt & self-blaming that is likely to create emotional disturbance in form of disturb mood, irritability, aggression, and conflicts with family members¹¹⁻¹³. They also find it difficult to manage stressful circumstances¹⁴.

Increase in psychiatric morbidity among mothers of children with intellectual disabilities is very alarming and needs to be studied in local perspective so that magnitude of this problem can be assessed and early identification and effective management strategies can be planned. Present study aims to investigate the co-morbidity of psychiatric disorders among working and non-working mothers and to assess the severity of depression, anxiety and stress among mothers of children with Down's syndrome, cerebral palsy and conduct disorders.

SUBJECTS AND METHODS

PARTICIPANTS

Study was carried out at different rehabilitation centers and special schools of Karachi. Total sample of current study was targeted to be 100 mothers. Mothers of children diagnosed with intellectual disability were taken in the study; mothers were further divided into three groups of children on the basis of co morbidity such as; mothers with Down's syndrome children, mothers with CP children and mothers of children with conduct disorders. Further, mothers were classified into working mothers and nonworking mothers groups. Mothers having more than one disable children were excluded from the research. Those mothers who had lost their partner were also not included in the research.

INSTRUMENTS

Urdu version of Depression, Anxiety and Stress Scale (DASS Lovebird & Lovibond, 1995) was administered to participants of study. DASS is comprised of 42 items scale which is originally developed by Lovebird & Lovibond¹⁵ to investigate the negative emotional state of depression, anxiety and stress over the past one week. DASS is categorized into three sub-scales with equal numbers of items DASS-Depression (14-items), DASS-Anxiety (14-items) and DASS-Stress (14-items). Each item is scored on 4-points rating scale ranging from 0 (did not apply to me at all over the last week) to 3 (applied to me very much or most of the time over the past week). DASS determine the severity level from mild to severe level of depression, anxiety and stress. Scores less than 9, 7, 14 on depression, anxiety and stress are considered within normal range. Score within 13, 9 and 18 of depression, anxiety and stress indicate mild level of depression, anxiety and stress. While score within 20, 14 and 25 indicate moderate level and scores above 21, 15, 26 indicate severe level of depression, anxiety and stress. Urdu version of DASS is validated in Pakistan.¹⁶

PROCEDURE

Permission was taken from the authorities of rehabilitation centers and special schools. Researcher explained the aim of the research project and assured all participants that gathered information & identity will remain confidential. Written informed consent was taken from participants. Demographic form and Urdu version of Depression, Anxiety and Stress Scale (DASS) was administered to participants of study.

RESULTS

The sample consisted of 100 mothers. Mothers with Down's syndrome children were 33, mothers with CP children were 37 and

mothers of children with conduct disorders were 30. Among sample of 100, working mothers were 61 and nonworking mothers were 39. Among sample working mothers were 61 (N=61) and nonworking mothers were 39 (N=39). The age range of the mothers was 35-45 years (Mean Age=40.55, with SD=3.67). Mothers living with joint family set-up were 41% and mothers with nuclear family system were 59.0% (see table 1).

Findings show that level of depression, anxiety and stress was found higher in working mothers (i.e. 88.5%, 93.4% & 77.0%) as compared with non-working mothers of children with special needs (i.e. 79.5%, 71.8% & 59.0%) see table 2. Further, findings show that level of depression, anxiety and stress was found higher in mothers of children with conduct disorders (96.7%, 96.7% & 83.3%) than mothers of children with cerebral palsy (i.e. 83.8%, 85.5% & 59.5%) and down's syndrome (i.e. 75.8%, 72.7% & 69.7%) see table 3.

In perspective of demographic information, findings show that frequency of depression was found higher in mothers with age of 40 years and above (87.7%) as compared with mothers with age less than 40 years (81.4%) while frequency of anxiety and stress were found higher in mother with age less than 40 years (88.4% & 79.1%) than mothers with age 40 years and above (82.5% & 63.2%) see Table⁴.

According to educational level depression was found more frequent in graduate mothers (88.9%) as compared with primary (84.6%), middle (84.0%) and matric (82.9%). Anxiety and stress was found more frequent in mothers with primary education (92.3% & 92.3%) as compared with their counterparts with more education. Moreover, the frequency of depression, anxiety and stress were found more in mothers who were married for more than 10-15 years (93.8%, 93.8% & 79.2%) as compared with mothers with less than 10 years of marriage (i.e. 57.1%, 78.6% & 78.6%) and mothers with above 15 years of marriage (i.e. 84.2%, 76.3% & 55.3%). Mothers with income of less than Rs 15000 perceived depression, anxiety and stress more (98.3%, 91.4% & 79.3%) as compared with mothers who had income between Rs15000- 30000 (i.e. 86.2%, 85.2% & 65.5%) and above Rs 30000 (i.e. 23.1%, 53.8% & 38.5%). Further depression, anxiety and stress were found more in mothers living in a joint family set-up (i.e. 90.5%, 85.7% & 71.4%) as compared with mothers were living in nuclear set-up (i.e. 81.0%, 84.5% & 69.0%) see table 4.

Table 1
Demographic characteristic of Working & Non-Working mothers of Intellectually Disabled children

	Ranges	Working Mothers (N=61)%	Non-working Mothers (N=39)%	Total Mothers (N=100)%
Age	Below 40	29(47.5)	14(35.5)	43 (43.0)
	40 & Above	32 (52.5)	25(64.1)	57 (57.0)
Education	Primary	9(94.8)	4(10.3)	13(13.0)
	Middle	12(19.7)	13(33.3)	25(25.0)
	High	17(27.9)	18(46.2)	35(35.0)
	College	23(37.7)	4(10.3)	27(27.0)
Marriage period	Below 10 years	8(13.1)	6(15.4)	14(14.0)
	10-15 years	32(52.5)	16(41.0)	48(48.0)
	15 Above	21(34.4)	17(43.6)	38(38.0)
Monthly income	<15,000	39(63.9)	19(48.7)	58(58.0)
	15,000-30,000	16(26.2)	13(33.3)	29(29.0)
	30,000>	6(9.8)	7(17.9)	13(13.0)
No. of children	01	15(24.6)	7(17.9)	22(22.0)
	2-4	28(45.9)	19(48.7)	47(47.0)
	5 above	18(29.5)	13(33.3)	31(31.0)
Family structure	Joint	25(41.0)	17(43.6)	42(42.0)
	Nuclear	36(59.0)	22(56.4)	58(58.0)

Table 2
Different levels of severity on the variables of Depression, Anxiety and Stress in sample population

Co-morbid Variables	Severity	Working Mothers (N=61) (n)%	Non-working Mothers (N=39) (n)%	Total (N=100) (n)%
Depression	Mild	3 4.9	3 7.7	6 6.0
	Moderate	4 6.6	5 12.8	9 9.0
	Severe	54 88.5	31 79.5	85 85.0
Anxiety	Mild	1 1.6	5 12.8	6 6.0
	Moderate	3 4.9	6 15.4	9 9.0
	Severe	57 93.4	28 71.8	85 85.0
Stress	Mild	3 4.9	8 20.5	11 11.0
	Moderate	11 18.0	8 20.5	19 19.0
	Severe	47 77.0	23 59.0	70 70.0

Table 3
Levels of Severity on the variables of Depression, Anxiety and Stress among Mothers of Children with down's syndrome, Cerebral Palsy and Conduct Disorder

Co-morbid Variables	Severity	Mothers of children with Down's syndrome (N=33)%	Mothers of children with Cerebral Palsy (N=37) %	Mothers of children with Conduct disorder (N=30)%
Depression	Mild	4 12.1	2 5.4	0 0.00
	Moderate	4 12.1	4 10.8	1 3.3
	Severe	25 75.8	31 83.8	29 96.7
Anxiety	Mild	5 15.2	1 2.7	0 0.00
	Moderate	4 12.1	4 10.8	1 3.30
	Severe	24 72.7	32 85.5	29 96.7
Stress	Mild	5 15.2	5 13.5	1 3.30
	Moderate	5 15.2	10 27.0	4 13.3
	Severe	23 69.7	22 59.5	25 83.3

Table 4
Frequency of Mothers scored in severe range on the variables of Depression, Anxiety and Stress across various levels of demographic characteristics

	Ranges	N	Depression N=85 (%)	Anxiety N=85 (%)	Stress N=70 (%)
Age	Below 40	43	35 (81.4)	38 (88.4)*	34 (79.1)*
	40 & Above	57	50(87.7)*	47(82.5)	36(63.2)
Education	Primary	13	11(84.6)	12(92.3)*	12(92.3)*
	Middle	25	21(84.0)	21(84.0)	19(76.0)
	Metric	35	29(82.9)	28(80.0)	19(54.3)
	Graduation	27	24(88.9)*	24(88.9)	20(74.1)
Marriage period	Below 10 years	14	8(57.1)	11(78.6)	11(78.6)*
	10-15 years	48	45(93.8)*	45(93.8)*	38(79.2)*
	15 Above	38	32(84.2)	29(76.3)	21(55.3)
Monthly income	<15,000	58	57(98.3)*	53(91.4)*	46(79.3)*
	15,000-30,000	29	25(86.2)	25(85.2)	19(65.5)
	30,000>	13	3(23.1)	7(53.8)	5(38.5)
No. of children	01	22	18(81.8)	17(77.3)	17(77.3)*
	2-4	47	40(85.1)	42(89.4)*	35(74.5)
	5 above	31	27(87.1)*	26(83.9)	18(58.1)
Family structure	Joint	42	38(90.5)*	36(85.7)*	30(71.4)*
	Nuclear	58	47(81.0)	49(84.5)	40(69.0)

DISCUSSION

Present study findings show that depression, anxiety and stress were found more among mothers of both groups—working & non-working but were noticeably more frequent in working mothers as compared with non working mothers of children with intellectual disability. These findings are consistent with the study of White and Hastings¹⁷ who concluded that hectic work, tough job schedules and low quality of life influence working mother's mental health. These results are also supported by work of Adhikari¹⁸ who found high degree of anxiety & depression among working mothers as compared with non-working mothers in his study. The working mothers remain under significant stress as they cannot spare enough time to look after their children's need due to professional commitments.

Findings of our study also suggest that nature of child's illness also affects mother's mental health. In our study mothers of children with conduct disorders were found more frequently depressed, anxious and stressful as compared with mothers of children with cerebral palsy and Down's syndrome. Possible explanation of this observation is persistent stress in mothers dealing with children of conduct disorder displaying markedly disturbed behavior in the form of stubbornness, disobedience, physical aggression and violation of societal norms.

Present study results also show that depression, anxiety and stress were found more in relatively old age mothers as compared with the younger ones in the sample while better literacy level of mothers reduced the frequency of depression, anxiety and stress. Further findings reported that mothers with low income group, joint family set-up and duration of marriage between 10-15years were found at high risk of depression, anxiety and stress.^{19,20}

CONCLUSION

It is concluded that mothers of children with intellectual disability are at high risk of mental health problems; especially in working mothers of such children, mental health issues are significantly high. It is also concluded that disturbed behavior of children with conduct disorder cause significant stress in their mothers which can lead to stress, anxiety and depression as compared with children with other developmental disorders. The variables like old age, low socio-economic status, joint family system and longer duration of marriage increases susceptibility to develop depression, anxiety and stress in mothers of intellectually disabled children.

LIMITATIONS

Present study was conducted over small group of participants. Furthermore this study focuses over the problems of only working and non-working mothers of intellectually disabled children with cerebral palsy, Down's syndrome and conduct disorders. Therefore, study findings cannot be generalized over general population.

RECOMMENDATIONS

Present study strongly recommend screening of mental health problems in mothers of children with intellectual disability and this aspect seem to be an alarming condition for clinical psychologists,



psychiatrists, social workers and other mental health practitioners as well as policy makers. Moreover, to create awareness and to provide psycho-education to mothers about the nature of children's problems is key factor to reduce their distress. Facilities of rehabilitations centers, special schools, and vocational training institutions can help in educating the children in various domains thus reducing the distress of parents.

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Undertaking statement

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Sr. #	Author Name	Affiliation of Author	Contribution	Signature
1	Qasir Abbas PhD Fellow	Clinical Psychologist at Dr. A. Q. Khan Center, Institute of Behavioral Sciences	Data collection, scoring and write up	
2	Riaz Ahmad, PhD	Professor at Institute of Clinical Psychology, University of Karachi, Karachi	Technical support and supervision, statistical analysis, and reviewed the article	
3	Dr. Sohail Ahmad	Professor of Psychiatry at Dr. A. Q Khan Center, Institute of Behavioral Sciences	Write up and technical support	