OPEN ACCESS

Saudi Journal of Medicine

Abbreviated Key Title: Saudi J Med
ISSN 2518-3389 (Print) |ISSN 2518-3397 (Online)
Scholars Middle East Publishers, Dubai, United Arab Emirates
Journal homepage: https://saudijournals.com

Original Research Article

A Study on the Mental Health Status of Mothers of Young Children in Urban Tamilnadu

Pon Padmanabhan[1], I. K. Annie[1*], A. John William Felix[1]

[1]Department of Community Medicine, Rajah Muthiah Medical College and Hospital, Annamalai University, Chidambaram, Tamil Nadu, India

DOI: 10.36348/sjm.2021.v06i10.002 | **Received:** 28.08.2021 | **Accepted:** 02.10.2021 | **Published:** 07.10.2021

***Corresponding Author:** I. K. Annie

Abstract

Background: Mental health is one of the major public health concerns today. Women, who play multiple active roles in their families experience stress at all levels. This study was conducted to assess the mental health status and its contributory factors in mothers having young children in the urban area of Tamilnadu, India. ***Methods:*** A descriptive cross-sectional study was conducted among 200 mothers of young children, regarding their mental health status. All relevant information was collected using a pre-tested, predesigned interview schedule and the parental stress scale. ***Results:*** This study has shown that 22% of the mothers were at moderate stress level. Correlation analysis has shown that magnitude of stress is higher in mothers with more number of children and the level of stress is high among mothers having low income for their family. ***Conclusions:*** A preventive program including screening of mothers for stress and other psychosocial hazard along with sensitising the need for identifying and seeking help in time will help them to have a better mental health.

Keywords: Mental health status, Stress.

INTRODUCTION

Mental health is a state of mental well being, and not just absence of psychiatric disease. It is a level of cognitive or emotional wellbeing, where an individual has the ability to enjoy life and procure a balance between life activities and efforts to achieve psychological resilience. Stress is defined as the one which you feel overwhelmed or unable to cope as a result of pressures that are unmanageable [1]. The mental well being of an individual is determined by various factors and their inter-relationships that work at multiple levels. A good mental health is essential for overall well being, productivity, and for an active contribution to the families, communities and in the society.

The morbidity associated with mental health is seen in different ways. It can be characterised by abnormal thoughts, perceptions, emotions, and behaviour, which can affect an individual in their relationship with others. Among the mental health disorders, stress, anxiety and depression are the commonest conditions. depression is the commonest condition. According to WHO, 5% of the adults suffer from depression alone. In recent years, the morbidity associated with mental illness has received a greater attention, particularly in gender specific determinants. Analysis of mental health indices reveals that the pattern of psychiatric disorder and psychological distress among women are different from men [2]. Women are more at risk for mental disorders due to rapid changes in the social and cultural environment [3]. Symptoms of depression, anxiety and unspecified psychological distress are more common in women than men [3, 4].

Globally, the burden of mental disorder is so huge, that more than a billion people suffer from behavioural and mental disorders. Depression is a common mental disorder and one of the main causes of disability worldwide. Globally, an estimated 264 million people are affected by depression [1]. More women are affected than men (WHO, 2019). The varying prevalence, 9.5 to 102.8 per 1000 population, of mental and behavioural disorders is been recorded in India through the epidemiological studies, over a period of 1964 to 20013. Majority of mental health disorders are from low- and middle-income countries, hence it has become a major health problem worldwide [5].

In India, studies have shown women experience stress most of the time, owing to multiple role they play [6]. They do not have any ample time to relax in between their daily routine activities [5]. Men and women differ from their way of communication, expression of their feelings and their response to stressful events significantly [7]. Low income mothers are more prone for development of mental health disorders such as depression, schizophrenia and uni polar mental disorders. Women working in urban environment face various challenges involving social and economic conditions [8].

Mother is the most important person in growth and development of the children. Low income in family and parenting stress play an important role in child development Level of income, education and the socioeconomic status has a direct effect on their psycho social development [9]. Mothers are in work burden and stress in normal day to day activities while taking care of their children. For working mothers both work related stress and family work aggregate the level of stress, and into depression [10, 11].

Low income mothers are more prone for suicide, depression and other chronic mental disorders and 16.3% mothers in India are in depression [8]. Non supportive relation and poor working environment may end up in mental distress. Social supports play a major role in mental well-being of the mothers and any loss of social support may end up in depression [2]. Hence this study is to assess the mental health status and to identify the factors associated with the mental health in mothers of young children in Tamilnadu.

MATERIALS AND METHODS

This descriptive cross sectional study was conducted after obtaining the ethical clearance from the institutional ethical Committee. The study was carried out in Chidambaram, a municipality located in Cuddalore district of Tamilnadu, over a period of 12 months, from November 2019 to October 2020. According to census 2011, Chidambaram comprised of 33 wards and 146 streets with a population of 85,458. Rajah Muthiah medical college and hospital (RMMCH) which is under Annamalai university is located in this scenic place. This study was carried out in the field practice area of Urban Health Centre under division of community medicine, RMMCH. Out of the 33 wards, 6 are under the service area of the urban health centre. One ward out of the six under service area was selected for convenience. The selected ward has 11 streets and the survey started from the left side first house on the first street and subsequent houses were surveyed till the required sample size is reached.

The study included women, married and having children under the age of 14 years, after getting informed written consent. The mothers who were diagnosed from any major mental illness or organic brain disease were excluded from the study. The prevalence rate of mental stress was 15% according to previous study done by Manuel *et al.*, [12].

Keeping this as aprior information, the sample size for the present study was calculated using nMaster sample size software with level of confidence interval as 95% and absolute precision as 5% the required sample size is 196. And the study was done among 200 participants.

The study Participants were interviewed using a pre-tested semi structured questionnaire and parental stress scale [13]. The pretested semi structured questionnaire contains socio demographic details, like age, education, occupation, and family details. Parental stress scale is a standardised instrument to measure the levels of stress experienced by parents, taking into account positive and negative aspects of parenting. It is an 18 item, self report scale, or interviewer administered scale, score ranging from 1 to 5 depending on whether they agree or disagree on items, in terms of their typical relationship with their child or children. The score ranges from 18 to 90. And lower the score, lower the level of stress and higher the score, higher the stress. Score 18-35 score level implies no stress, 36-53 mild, 54-71 moderate, 72-89 severe and 90 signifies the highest level of stress.

Collected data were entered in Microsoft Excel and statistical analysis is done, using statistical package for social sciences (SPSS) software version 21. The statistical method applied is descriptive statistics. The association between various demographic factors and the level of stress was done by Pearson correlation coefficient.

RESULTS

In our study, of the 200 participants, 36% (72) belongs to 26 to 30 years of age group followed by 29.5% (59) belongs 31 to 35 years of age group. Majority of women, 59.5% were married between the age 20 to 25 years. 62% of the participants had less than 10 years of married life. Majority of the participants, 175 (87.5%) had the presence of their husband with them, while, 6 % of them had their husbands working away from home (Table 1).

Table 1: Socio demographic details of the study participants (n=200)

Variables	Categories	Number	Percentage
Age (in Years)	20-25	30	15
	26-30	72	36
	31-35	59	29.5
	36-40	30	15
	>40	9	4.5
Age at marriage	<20	57	28.5
	20-25	119	59.5
	>25	24	12
Years of married life	1-5	61	30.5
	6-10	63	31.5
	11-15	50	25
	16-20	20	10
	>20	6	3
Marital status	Living with Husband	175	87.5
	Widow/separated	13	6.5
	Husband away at work	12	6
Number of children	1	75	37.5
	2	101	50.5
	3	24	12
Age of the first child	≤1	6	3
	>1-5	75	40
	6-10	62	34
	11-13	42	23
Educational status	Middle school	42	21
	Higher secondary	94	47
	degree	42	21
	PG/professional	22	11
Type of family	Nuclear	112	56
	Joint	84	42
	Extended	4	2
Occupation	House wife	67	33.5
	unskilled	84	42
	skilled	24	12
	professional	25	12.5
Per capita income	>7008	47	23.5
	3504-7007	63	31.5
	2102-3503	51	25.5
	1051-2101	35	17.5
	<1050	4	2

Half of the study participants, 101(50.5%) were having 2 children followed by 37.5% (75) of mothers having single child. Among the participants, 75 (40%)of them were having children between the age group of 1 to 5 years followed by 34% (62) of mothers having children between age group of 6 to 10 years. One third of the participants were graduates or post graduates and a one third of the participants were house wives (33.5%). Majority of the participants, 112 (56%) belonged to a nuclear family. A quarter of the participants were from middle class family, and 31.5% from upper middle class and 17.5% from lower middle class (Table 1).

Our study has shown that the level of stress in mothers having children under the age of 14 years,22% of the participants were having moderate stress level, while 68% of them had mild stress and 10 % of them had no stress, according to the parental stress scores (Fig 1).

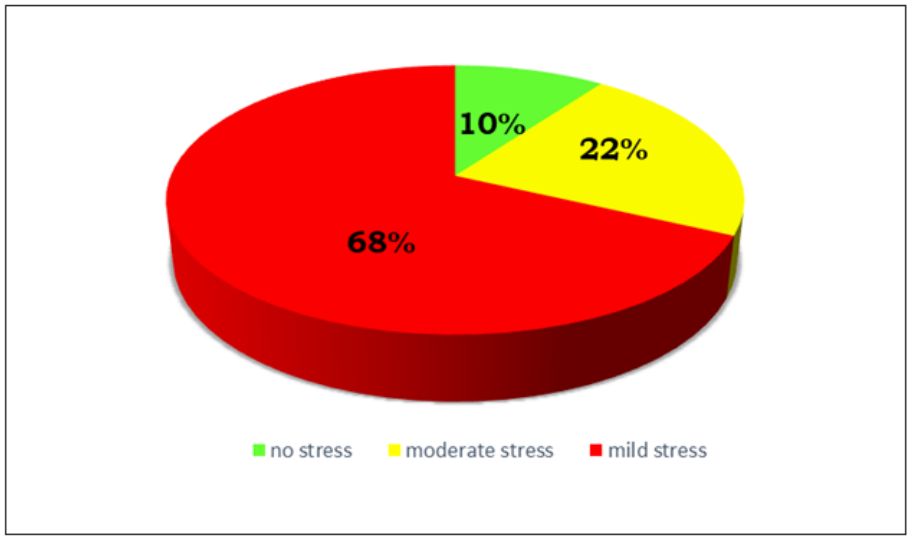

Fig 1: Level of stress in mothers

Table 2: Mean and Standard deviation of mental health score by selected variables

VARIABLES	NO	MEAN	SD	T-TEST	P VALUE
Occupation				3.394	0.001
Housewife	67	44.75	7.5		
Working Mothers	133	48.71	7.9		
Living with Husband					
Yes	176	47.15	8.02	1.117	0.273
No	24	49.04	7.737		
Type of Family				0.479	0.632
Nuclear Family	112	47.63	7.427		
Joint Family	88	47.07	8.691		

Table 2 shows that working mothers were more stressed out while comparing with House wives or the unemployed mothers in our study and other variables had no significant Association.

Table 3: Relationship between stress score and selected demographic variables

Variable	Pearson correlation coefficient r-value	P-value
Age	0.068	0.336
Age at marriage	-0.018	0.801
Years of married life	0.079	0.264
No of children	**0.207**	**0.003**
Age of 1st child	0.127	0.073
Income	**-0.230**	**0.001**

Table 3 shows the correlation between selected variables and outcome. In that number of children was positively correlated with the r value 0.207 & p value of 0.003, income was negatively correlated with the r value of -0.230 & p value of 0.001.

DISCUSSION

The mental well being of a woman is affected by several factors, like social, cultural and socio economic factors. The present study which was done to assess the mental health status of women having young children and to find out the factors associated with the mental health status. Mental health is often considered as health without stress. Our study has revealed among the mothers having children under the age of 14 years, 22% of them have experienced moderate level of stress while 68% of them had mild stress and 10% of them had no stress. This is similar to a study done in West Bengal5, where all the participants had experienced stress at various levels. Another study done in Bhuvaneswar has shown 32.9% of the women had poor mental health [14].

Our Study has shown that working mothers were more stressed out while comparing with House wives or the unemployed mothers in our study. A study done in Rajkot city of Gujrat has shown similar results

where significant difference in mental health with respect to both working and non-working women [15].

Correlation between the number of children and the stress level reveals a positively correlation with the r value 0.207 & p value of 0.003, where as the per capita income was negatively correlated with the r value of -0.230 & p value of 0.001. In our study, of the 200 mothers examined, mothers with more number of children were at greater stress level and stress level increased as the income of the family decreased.

Studies have shown that women who had the support of their husbands, and who were sharing their problems had good mental health [11]. However in our study, there wasn't any significant association between the level of stress and whether they were living with their husband. This could be because only a very few women (12.5%) were living without their husbands.

LIMITATIONS

This descriptive cross sectional study has not established a causal association between the independent variables and the poor mental health. This study included women having children up to the age of 14 years from the urban area, and has also excluded the mothers having children with special needs. This reduces the ability of the study to generalise into a larger population. Again the study had crossed over to the time of pandemic and the lockdowns, there could have been a bias in their self reporting predictor variables.

CONCLUSION

This study on the mental health status of mothers having children under the age of 14 years have shown that 68% of them had experienced mild stress and 22% of the mothers were at moderate stress level. We have seen in this study, that the magnitude of stress was higher in mothers with more number of children and the stress was higher among mothers with low income for their family. Although there are some limitations in our study, this findings is a pointer for an early intervention to improve the mental health status of women, by identifying the risk factors or the predictors for poor mental health.

Funding: No funding sources.

Conflicts of Interest: None declared

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