# A Comparative Study on Depression among Working and Non-Working Women in Chennai, Tamil Nadu, India.

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## **Research Article**

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## ABSTRACT

Depression is a state of low mood and aversion to activity that can affect a person's thoughts, behavior, feelings and sense of well-being. This mood disorder is becoming more common among middle aged female population and especially the factors associated are unique in this population. So this study was done to assess the burden of depression and its risk factors among adult female working and non-working population. This study was conducted as a community based cross sectional study among adult females of working and non-working population during June and July 2013. House to house survey was done by selecting the study participants randomly from the field practice area of department of community medicine, ACS Medical College and Hospital. The data were collected using preformed and pretested questionnaire which has two parts viz. general socio demographic information, risk factors and Patient Health Questionnaire - 9 by personal interview. The results were expressed in percentages and chi-square test was done to assess the test of significance. Totally 309 working women and 309 nonworking women were interviewed and the results showed that severe Depression was present in 2.9% (9) and 2.3% (7) in Working and Non-Working Female Population respectively. The factors associated with depression among working women in this study were economic problems (p < 0.003), workplace problems (p < 0.001), relationship problems (p < 0.003) 0.003) and no personal life satisfaction (p < 0.002), but among nonworking women economic problems (p = 0.016), family problems (p =0.01), relationship problems (p = 0.028) and no personal life satisfaction (p < 0.002) were risk factors for depression. In summary, we report that the overall prevalence of depression was still high, so it is necessary to initiate and implement the health policy towards family and work place counseling services to overcome depression and to improve their quality of life among both working and non-working female population.

### INTRODUCTION

Depression is a common illness worldwide, with an estimated 350 million affected. It is a leading cause of disability worldwide, and is a major contributor to the global burden of disease. It often starts at the young age and affects women more commonly than men. It affects not only the person affected but also the family and the society. Almost 1 million people commit suicide because of depression <sup>[1]</sup>. The report on Global Burden of Disease estimates the point prevalence of unipolar depressive episodes to be 1.9% for men and 3.2% for women, and the one-year prevalence has been estimated to be 5.8% for men and 9.5% for women. It is estimated that by the year 2020 if current trends for demographic and epidemiological transition continue, the burden of depression will increase to 5.7% of the total burden of disease and it would be the second leading cause of disability-adjusted life years (DALYs), second only to ischemic heart disease <sup>[2]</sup>. In view of the morbidity, disability and global burden, depression has always been a focus of attention of researchers throughout the world. Various studies were done to assess the prevalence, psychosocial factors, cultural factors, co-morbidity, and treatment and prevention aspects of

depression among various age groups. After a thorough literature review there were no large scale studies done on working women population. So this study was done to compare the prevalence and risk factors of depression among working and non-working women.

#### MATERIALS AND METHODS

The study was conducted as a community based cross sectional study among 18 years and above age group women residing in the field practice areas namely Adayalampattu and Parivakkam of ACS Medical College and Hospital, Chennai in between June and July 2013. Urban field practice area has approximately 2000 houses and rural field practice area has approximately 2500 houses. "House to House Survey" was done in both the areas and the people who were aged 18years and above women were interviewed using the questionnaire after getting informed consent. If there is a working women in that house who was not available during our visit, then an appointment was fixed on Sundays or other days whenever possible for the woman. Our study excluded the individuals above 18 years with the following criteria: those who had history chronic medical illness, any other co morbid illness. The study tool used was questionnaire which had two parts, one with general informations like socio-demographic profile, risk factors of depression viz. self reported factors like economic problems, relationship problems, family problems, work place problems, personal satisfaction in life etc. The second part of the questionnaire is Patient Health Questionnaire (PHQ - 9) [3], a screening questionnaire for depression which is a quick depression assessment scale based on 9 questions. The choices and scorings given were not at all (0), several days (1), more than half the days (2), nearly every day (3). Finally depression was assessed by adding the scores, if the scores between 0 to 4 - no depression, 5 to 9 - mild depression, 10 to 14 moderate depression, 15 to 19 - moderately severe depression and 20 to 27 means severe depression. The results were expressed in percentages and chi-square test was done to assess the test of significance. The data were analyzed with Epi-info software Version 3.5.1(2008) and Chi-square test was used as the test of significance.

#### RESULTS

Totally 309 working women and 309 non-working women were interviewed and their mean age of the study population was 33.6 with the range of 18 to 75 years. Mean age of non-working women was 39.3 and of working women is 27.98. Among the study participants 114 (36.9%) and 280 (90.6%) were married in working and non-working women population respectively. Among the working women majority 163 (52.7%) were belonged to class I whereas 27 (8.8%) were in class IV and V socioeconomic status. But among the non-working women 173 (60%) were in class IV and V socio economic status. One hundred eighty eight study (60.8%) participants among the working women felt that they time spent with their family (husband, children, other family members) was insufficient. Only 110 (17.8%) study participants were still in joint family of which 38 (12.3%) from working and 72 (23.3%) from non-working population. Habits of eating more (binge eating), beauty consciousness, less economic problems, less family problems were predominantly seen among the working women whereas poor personal life satisfaction, family and relationship problems were more seen among non-working women. 35 (11.4%) and 44 (14.3%) of the working and non-working women replied that they were not able to look after their children properly due to various reasons like insufficient time, family problems, economic problems, workplace stress etc. Among these reasons economic problems was the major reason for non-working women and insufficient time and workplace stress were the major reasons for working women. Generally 13 (4.3%) of the non-working women and 8 (2.6%) of the working women felt extreme difficulty in facing problems (Table 1 and 2).

#### **Depression prevalence**

Among the study population 130 (42%) of the non-working women and 116 (38%) of the working women had no depression, whereas 7 (2.26%) of the non-working and 9 (2.91%) of the working women had severe depression. Moderate depression was present among 56 (18.1%) non-working and 44 (14.2%) working women whereas moderately severe depression was present among 17(5.5%) and 13 (4.2%) of the study population.

#### Analysis

Chi square test was done to assess the relationship between the risk factors and the grades of depression separately for working and non-working women. The factors associated with depression among working women in this study were economic problems (p = 0.003), workplace problems (p < 0.001), relationship problems (p = 0.003) and no personal life satisfaction (p = 0.002), but among non-working women economic problems (p = 0.001), family problems (p = 0.011), relationship problems (p = 0.002) were risk factors for depression.

## Table 1: Frequency distribution of study participants

Variable	Working women	Non-working women
	(n = 309)	(n = 309 )
Education class		
Graduates	283 (91.6%)	35 (11.3%)
High school	6 (1.9%)	106 (34.3%)
Middle school	11 (3.6%)	63 (20.4%)
Some schooling	9 (2.9%)	105 (34%)
Marital status	0 (2.070)	200 (0 170)
Married	114(36.8%)	280(90.6%)
Separated/Widowed/Unmarried	195(63.2%)	29(9.4%)
Socio economic status	100(00.270)	20(0.173)
Class I	163(52.7%)	32(10.4%)
Class II	95(30.7%)	39(12.7%)
Class III	24(7.8%)	65(21%)
Class IV	18(5.8%)	109(35.2%)
Class V	9(3.0%)	64(20.7%)
Type of family	3(3.376)	04(20.170)
Joint	38(12.3%)	72(23.4%)
Nuclear	271(87.7%)	237(76.6%)
Hours spent with family	211(011170)	201(10.070)
Insufficient	188(60.8%)	158(51.2%)
Sufficient	121(39.2%)	151(48.8%)
Habits of eating more (Binge eating)	121(00.270)	101(10.070)
No	277(89.6%)	291(94.2%)
Yes	32(10.4%)	18(5.8%)
Personal life satisfaction		(,
No	59(19%)	94(30.5%)
Yes	249(81%)	215(69.5%)
Menstrual problems	× ,	× ,
No	256(82.8%)	239(77.4%)
Yes	53(17.2%)	70(22.6%)
Beauty consciousness		
No	194(62.7%)	220(71.2%)
Yes	115(37.3%)	89(28.8%)
Economic problems		
No	205(66.4%)	85(27.5%)
Yes	104(33.6%)	224(72.5%)
Family problems		
No	197(63.7%)	149(48.3%)
Yes	112(36.3%)	160(51.7%)
Relationship problems		
No	242(78.4%)	205(66.4%)
Yes	67(21.6%)	104(33.6%)
Work place problems	2(2)	202(102%)
NA	0(0)	309(100%)
No	247(80%)	0(0)
Yes	62(20%)	O(0)
Hard to look after the children	200(67.6%)	40(12 50()
NA No	209(67.6%)	42(13.5%)
Yes	65(21.0%) 35(11.4%)	223(72.2%)
	35(11.4%)	44(14.3%)
Obesity classification (WHO) Underweight	31(10%)	26(8.5%)
Normal weight	183(59.2%)	153(49.5%)
Overweight and Obese	95(30.8%)	130(42%)
	90(00.0%)	130(4270)

## Table 2: Occupational Group versus Level of Difficulty in Facing the Problems

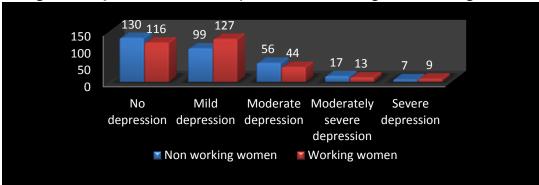
		Occupational Group		
		Non-working women	Working women	Total
How Did You Face Your (Family/Economic/Other) Problems?	Extremely Difficult	13(4.3%)	8(2.6%)	21
	Very difficult	41(13.3%)	40(13.0%)	81
	Somewhat difficult	91(29.4%)	131(42.4%)	222
	Not difficult at all	164(53%)	130(42%)	294
	TOTAL	309	309	618

## DISCUSSION

Depression is a significant contributor to the global burden of disease and affects people in all communities across the world. While depression is the leading cause of disability for both males and females, the burden of depression is 50% higher for females than males. In fact, depression is the leading cause of disease

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burden for women in both high-income and low- and middle-income countries <sup>[4]</sup>. Similarly a study conducted to analyze the gender difference in depression showed that females' subjects showed more prevalence than males of somatic depressive symptoms as well as pure depression symptoms <sup>[5]</sup>. This scenario of depression among females instigated the investigator to assess the new dimension of depression and its risk factors among working and non-working females. Our study had shown that the prevalence of moderate depression, moderately severe depression and severe depression were 100 (16%), 30 (4.85%) and 16 (2.6%) among adult female population of both working and non-working women respectively. The prevalence and category of depression among two different populations showed an unusual trend in this study i.e. moderate (9% in working and 7% in non-working) and moderately severe depression (2.75% in non-working and 2.1% in working) was seen more among non-working women (1.14%) (Figure – 1).





This could be due to the working women were able to manage with symptoms of depression when it is moderate and when it crosses certain limit working women experience more depression. Similar type of study done among working and non-working women in Rajkot conducted by Revati et al <sup>[6]</sup> showed that non-working woman have a good mental health than the working woman. As far as the risk factors for depression were concerned in this study, both the groups experienced the same risk factors but the working women had the important risk factor which is work place stress which lead to depression among working women which was statistically significant. Similarly the other common risk factors for both the groups was marital status (married females), higher socioeconomic status which were associated with depression. But as the grading of depression increases, both the group experienced similar prevalence which was not statistically significant. In contrast to our study, Subramani et al. CURES study showed that low income, separated and divorced women were the factors associated with depression <sup>[7]</sup>. In this study the mean age of severe depression among the study population was 30.8 with 95% Cl 27.62 to 33.99. Similarly a large scale study conducted in Chennai (CURES – 70) showed that the overall prevalence of depression among female subjects was 16.3% and the mean age of depression was 43.2 in both males and females <sup>[7]</sup>. But our study had shown that the mean age of 30.8, which indicates the women are not only more prone to depression but also the age of onset of depression was also less compared to males.

### CONCLUSION

In summary, we report that the overall prevalence of depression was still high and was associated with the higher socio economic status, married females, family problems, economic problems. Our comparative study of depression among working and non-working women population had explored that both the groups were showing similar type of trend of depression with the working women showing more prevalence of depression than the non-working women. It is necessary to initiate and implement the health policy towards family and work place counseling services to overcome depression and to improve their quality of life among both working and non-working female.

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