



LEVEL OF DEPRESSION AMONG PREGNANT WORKING WOMEN OF IT INDUSTRY IN COIMBATORE

Shiney Thomas¹ and John Michael Raj²

¹Research Scholar, Registration Number. Ph.D-CB-DEC2014-0165 R&D Centre, Bharathiar University, Coimbatore.

²Former Professor, Department of Psychology, Bharathiar University, Coimbatore.

ABSTRACT :

Introduction: Depression is one of the mental states, affecting the thinking, feeling and behaviour patterns and disturbs the well-being of human beings (DSM-V, 2013). **Objectives:** The main objectives of the study are to study the demographic and socioeconomic background of the pregnant working women of IT industry and to assess the level of depression among them besides to find out the relationship between these variables. **Method:** A total of 40 pregnant women employees in an IT industry were interviewed for the present research. Beck's Depression Inventory developed by Beck (1968) was used to assess the level of depression among pregnant working women. **Result:** The findings reveal that there is a moderate level of depression and there is a statistically significant difference existing between the age, years of experience, monthly income and the depression among the pregnant women employees. **Conclusion:** Based on the findings it is concluded that there is a need to provide counselling to the pregnant women employees working in IT industries.

KEYWORDS : Depression, pregnant women, IT Industry, sample characteristics.

INTRODUCTION

Depression is one of the mental states affecting the thinking, feeling and behaviour patterns and disturbs the well-being of human beings (DSM-V, 2013). Today's women enter into various types of occupational avenues and contribute both for the societal as well as individual growth and development. The literature on depression highlights the fact that majority of the women suffer from depressive symptoms that definitely curtail proper functioning (Jafri, 2017). Among them only around 13.8% seek remedial scientific help (Sheila et al., 2003). Depression is a major public health problem in India. The World Health Organization (2017) has estimated that 4.6 per cent of the Indian population is suffering from depression. A more recent survey by the National Institute of Mental Health and Neurosciences in 2018 found that 2.7 per cent of the Indian population in 12 states has depression. (Government of India, 2018). Depression is a universal disorder that affects everyone irrespective of their age and gender among other things. It is a disorder that leads one to feel sad and not interested in normal everyday activities. It is also



known as clinical depression (Mayo Foundation for Medical Education and Research, 2018). Depression affects both the physical and mental health of an individual. It can not only impact the personal life of an individual but can also impact their school/college/work life. In most cases, the individual suffering from depression is unaware of the root cause of the problem but it does have a terrible impact on their lives (World Health Organisation, 2017). The World Health

Organization (2018) has estimated that on an average, 1.9 per cent of men and 3.2 per cent of women suffer from unipolar depression. Hence, it has been reported that depression is much more common among women than men because of hormonal, social, and other factors. There have been several studies on depression among working women. However, very few studies have focused on the working women in IT. Thus, to know the prevalence of depression of the women, who are working in IT companies, the present study has carried out (National Institute of Mental Health, 2018)

REVIEW OF LITERATURE

It was reported by Nandi et al. (1975) that the prevalence rates of depression in our country between 1.5/1000 to 37.74/1000 (Nandi et al., 1975). Furthermore, it may be noted that people living in rural areas are more likely to experience depression than those living in urban areas (Nandi et al., 1975); Kapoor and Singh, 1983). The researchers also discovered that women were much more likely to suffer from depression than men (Nandi et al., 1975; Kapoor and Singh 1983). With regard to women who are pregnant, it was found that 9.18 per cent of them suffer from depression in study carried out in the city of Mumbai, India (Ajinkya et al., (2013). There is a growing literature, indicating that prenatal depression can adversely affect fetal growth and nutritional status (Rahman et al., 2004, Patel et al., 2004, Stewart, 2007). The implications not only affect the mother and her child but also economic challenges thus involving the entire family. A few other studies indicate that depression is prevalent among 1.7 to 74 per cent of the Indian population (Reddy et al., 1998; Nandi et al., 2000). In a study carried out by (Sethi and Etila, 1979), it was found that sixty eight percent of the female respondents suffered from physical ailments such as obesity along with depression. In some studies conducted in primary health centres, it has been discovered that 21-40.45 per cent of the population suffers from depression (Kishore et al., 1996; Amin et al., 1998; Pothan, et al., 2003; Nambi et al., 2002). Teja et al. (1970), Bagadia et al. (1973), Raju, (1979), and Ponnudurai et al. (1981) have all reported that 5 to 26.7 per cent of people in psychiatric outpatient clinics suffer from depression. In terms of socio-demographic variables, studies have shown that depression is more common in women (Sethi, 1979; Poongotha, et al., 2009), younger subjects, (Ponnudurai, 1981) in subjects from poor economic background (Poongothai et al., (2009) and Bagadia et al., 1973). Rates of depressive illness in women of reproductive age group are reported to be twice than those in men (Nakamura, 2005). Some women may experience their first depressive episode during pregnancy, whereas others with a history of depression are at increased risk for its recurrence, continuation, or exacerbation (Nonacs and Cohen, 2002; Burt and Stein, 2002). Several studies have revealed that young maternal age (Chen, et al., 2004), lower women's educational level (Faisal-Cury and Rossi Menezes 2007), lower couple's income, stressful life events and unemployment (Rubertsson et al., 2005) are associated with depressive symptoms. Kazi et al. (2006) has reported that increasing age, lower educational levels, issues regarding husband abuse, extramarital affairs, not giving time to family and putting restrictions on the women and interference by in-laws, and heavy household works are significantly associated with depression during pregnancy. Increasing age is also reported as an associated factor for anxiety and depression among pregnant women. Balasubramanian et al., (2009) and (Vimala and Madhavi, 2009), in their study found that 84 per cent of the respondents experience medium level of depression. The researchers also suggested that age and experience have an impact on depression among female IT employees. Only a few have focused on examining depression among pregnant women working in the IT sector.

OBJECTIVES:

The main objectives of the present research are to study the age, years of experience and monthly income among pregnant working women of IT industry, to assess the level of depression among pregnant working women in IT industry, and to study the relationship between age, years of experience, monthly income and depression among pregnant working women of IT industry.

Hypotheses: Based on the objectives the following hypotheses were formulated. There is a significant relationship between age and depression among pregnant working women of IT industry. There is a relationship between years of experience and depression among pregnant working women of IT industry. There is a relationship between monthly income and depression of pregnant working women of IT industry.

Method: The universe of the study comprised of the pregnant women working in a private IT Industry at Coimbatore. The respondents, who were present on the day of data collection and willing to participate, only were included in the study. Thus a total of 40 pregnant women employees were interviewed for the present research. **Tool:** Beck’s Depression Inventory has been developed by Beck (1968) to assess the level of depression among pregnant working women. Each question has a set of at least four possible responses. They are 0 – No evidence, 1 – mild depression, 2 - moderate depression, 3 – severe depression. The final scores were calculated based on the scoring sheet given along with the tool. It consists of 21 questions about how the subject has been feeling for the past two weeks. It usually takes 10 min to complete the test. Descriptive statistics such as percentages analysis, means, and correlation tests were used to summarise the data and to determine the relationship between the independent variables and depression. Test of significant was also carried out at 5% level.

RESULT

Comparison of mean values show in Table - 1. It is seen from the Table 1 that 2 (5%) women age below 25 years, 9 (25%) women are in the age group of 25-26, 10(28%) each are in the age ranging from 27-28 and 29-30. The respondents, who are below 25 years, have higher level of depression than the others. The mean value shows that depression decreases as the age increases.

Also, it is seen from the table (Table 1) that 7 (21%) pregnant women have less than 2 years of experience, 20 (58%) pregnant women have between 3-5 years of experience and 7(21%) women have above 5 years of experience. Table 1 shows that those respondents, who have work experience ranging between 3-5 years have higher a mean score of depression than the others.

Table - 1 reveals that 20(58%) of the respondent’s monthly income is found to be below Rs.50,000 and with the mean depression score of 17.3704, 12 respondents’ (37%) monthly income is found to be between 50,000 – 75,000 and with the mean depression score of 20.0909 and 2(5%) respondents’ monthly income is found to be above Rs.75,000 and with the mean depression score of 26.0000.

Table -1: Personal Profile of the Respondents

Variables	Attributes	No. of Respondents	Percentage	Mean Depression	SD
Age	Below 25	2	5	34.0000	1.41421
	25-26	9	25	24.7000	6.30784
	27-28	10	28	17.3636	5.48220
	29-30	10	28	15.7273	6.79840
	31 and above	5	14	10.0000	4.04969
Years of Experience	Below 2	7	21	13.7143	2.28869
	3-5	20	58	18.4545	8.92683
	Above 5	7	21	21.8182	7.74362
Monthly Income	Below 50,000	20	58	17.3704	6.09633
	50,000 to 75,000	12	37	20.0909	11.60564
	Above 75,000	2	5	26.0000	9.89949

Table - 2: Level of Depression

S. No	Level of Depression	Frequency	Percent
1	Mild mood disturbance (11-16)	11	32
2	Borderline clinical depression (17-20)	7	21
3	Moderate depression (21-30)	12	35
4	Severe depression (31-40)	4	12
Total		34	100

The table - 2 depicts the level of depression among pregnant women. The results indicate that 11(32%) respondents are having mild mood disturbance, 7(21%) are having borderline clinical depression, 12(35%) are having moderate depression and 4(12%) are having severe depression.

Relationship between Personal Variables and Depression

Table - 3: Correlation between Age, Years of Experience, Monthly Income and Depression

Variables	R value	Sig.
Age	- 0.547	p <0.01
Years of experience	0.315	p <0.01
Monthly income	0.421	p <0.01

Table - 3 shows the correlation between age, years of experience, monthly income, and depression. Results clearly indicate that there is a significant relationship ($P < 0.01$) between age, years of experience and monthly income and the level of depression.

It is interpreted that higher is the age lower is the depression, higher the years of experience higher is the depression and higher the monthly income higher is the depression. Thus, age, years of experience and monthly income do influence the level of depression of the women employees.

LIMITATIONS

Due to the time and practical constraints, the researcher was unable to collect a bigger sample. Therefore, the sample may not be adequate to represent the universe. Thus, the findings of the present study may not be generalised to a large extent. Further study with a larger sample is suggested.

CONCLUSION

Given the details of the data analysed so far, it is clearly understood that the level of depression does differ from person to person and the study has only considered certain variables which has been found to influence the intensity of depression in pregnant women working in the IT industry and there is an urgent need to investigate further on this topic. The present study thus concludes that a moderate level of depression was found among the women employees. The study also concludes that age, years of experience and monthly income do significantly influence the depression among women employees in the IT industry.

REFERENCE

- Ajinkya, S., Jadhav, P. R., & Srivastava, N. N. (2013). Depression during pregnancy: Prevalence and obstetric risk factors among pregnant women attending a tertiary care hospital in Navi Mumbai. *Industrial psychiatry journal*, 22(1), 37.
- Amin, G., Shah, S., & Vankar, G. K. (1998). The prevalence and recognition of depression in primary care. *Indian Journal of Psychiatry*, 40(4), 364.

- Bagadia, V. N., Jeste, D. V., Dave, K. P., Doshi, S. U., & Shah, L. P. (1973). Depression: A study of demographic factors in 233 cases. *Indian journal of psychiatry*, 15(3), 209.
- Beck, A.T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961) An inventory for measuring depression. *Archives of General Psychiatry*, 4, 561-571.
- Burt, V. K., & Stein, K. (2002). Epidemiology of depression throughout the female life cycle. *The Journal of clinical psychiatry*, 63, 9-15.
- Chen, H., Chan, Y. H., Tan, K. H., & Lee, T. (2004). Depressive symptomatology in pregnancy. *Social Psychiatry and Psychiatric Epidemiology*, 39(12), 975-979.
- Faisal-Cury, A., & Menezes, P. R. (2007). Prevalence of anxiety and depression during pregnancy in a private setting sample. *Archives of women's mental health*, 10(1), 25-32.
- Government of India. (2018). Mental Health Issues. <http://www.pib.nic.in/Pressreleaseshare.aspx?>
- Kapoor, R., & Singh, G. (1983). An epidemiological study of prevalence of depressive illness in rural Punjab. *Indian journal of psychiatry*, 25(2), 110.
- Kazi, A., Fatmi, Z., Hatcher, J., Kadir, M. M., Niaz, U., & Wasserman, G. A. (2006). Social environment and depression among pregnant women in urban areas of Pakistan: importance of social relations. *Social Science & Medicine*, 63(6), 1466-1476.
- Kishore, J., Reddaiah, V. P., Kapoor, V., & Gill, J. S. (1996). Characteristics of mental morbidity in a rural primary health centre of haryana. *Indian journal of psychiatry*, 38(3), 137.
- Mayo Foundation for Medical Education and Research. (2018). Depression (major depressive disorder). Retrieved from <https://www.mayoclinic.org/diseases-conditions/depression/symptoms-causes/syc-20356007>
- Nakamura, R. (2005). Surgeon general's workshop on women's mental health. In *Workshop Report, Denver, Colo, USA*.
- Nambi, S. K., Prasad, J., Singh, D., Abraham, V., Kuruvilla, A., & Jacob, K. S. (2002). Explanatory models and common mental disorders among patients with unexplained somatic symptoms attending a primary care facility in Tamil Nadu. *National Medical Journal of India*, 15(6), 331-335.
- Nandi, D. N., Ajmany, S., Ganguli, H., Banerjee, G., Boral, G. C., Ghosh, A., & Sarkar, S. (1975). Psychiatric disorders in a rural community in West Bengal An epidemiological study. *Indian Journal of Psychiatry*, 17(2), 87.
- Nandi, D. N., Banerjee, G., Mukherjee, S. P., Ghosh, A., Nandi, P. S., & Nandi, S. (2000). Psychiatric morbidity of a rural Indian community: Changes over a 20-year interval. *The British Journal of Psychiatry*, 176(4), 351-356.
- National Institute of Mental Health. (2018). Depression in Women: 5 Things You Should Know. Retrieved from <https://www.nimh.nih.gov/health/publications/depression-in-women/index.shtml>
- Nonacs, R., & Cohen, L. S. (2002). Depression during pregnancy: diagnosis and treatment options. *The Journal of clinical psychiatry*, 63, 24-30.
- Patel, V., Rahman, A., Jacob, K. S., & Hughes, M. (2004). Effect of maternal mental health on infant growth in low income countries: new evidence from South Asia. *Bmj*, 328(7443), 820-823.
- Ponnudurai, R., Somasundaram, O., Balakrishnan, S., & Srinivasan, N. (1981). Depression—A study of 80 cases. *Indian journal of psychiatry*, 23(3), 256.
- Poongothai, S., Pradeepa, R., Ganesan, A., & Mohan, V. (2009). Prevalence of depression in a large urban South Indian population—The Chennai Urban Rural Epidemiology study (CURES-70). *PloS one*, 4(9), e7185.
- Pothen, M., Kuruvilla, A., Philip, K., Joseph, A., & Jacob, K. S. (2003). Common mental disorders among primary care attenders in Vellore, South India: nature, prevalence and risk factors. *International journal of social psychiatry*, 49(2), 119-125.
- PRID=1522778
- Rahman, A., Iqbal, Z., Bunn, J., Lovel, H., & Harrington, R. (2004). Impact of maternal depression on infant nutritional status and illness: a cohort study. *Archives of general psychiatry*, 61(9), 946-952.

- Raju, S. S. (1979). Frequency of depressive disorders in psychiatric clinics in India: A comparative analysis. *Indian Journal of Psychiatry*, 21(2), 176.
- Reddy, V. M., & Chandrashekar, C. R. (1998). Prevalence of mental and behavioural disorders in India: A meta-analysis. *Indian Journal of Psychiatry*, 40(2), 149.
- Rubertsson, C., Wickberg, B., Gustavsson, P., & Rådestad, I. (2005). Depressive symptoms in early pregnancy, two months and one year postpartum-prevalence and psychosocial risk factors in a national Swedish sample. *Archives of Women's Mental Health*, 8(2), 97-104.
- Sethi, B. B., & Prakash, R. (1979). Depression in Industrial population. *Indian Journal of Psychiatry*, 21(4), 359.
- Sheila M. Marcus, M.D., Heather A. Flynn, Frederic C. Blow, and Kristen L. Barry (2003). Depressive Symptoms among Pregnant Women Screened in Obstetrics Settings. *Journal of Women's Health*, 12(4).
- Stewart, R. C. (2007). Maternal depression and infant growth—a review of recent evidence. *Maternal & child nutrition*, 3(2), 94-107.
- Teja, J. S., Narang, R. L., & Aggarwal, A. K. (1971). Depression across cultures. *The British Journal of Psychiatry*, 119(550), 253-260.
- Vimala, B., & Madhavi, C. (2009). A study on stress and depression experienced by women IT professionals in Chennai, India. *Psychology research and behavior management*, 2, 81–91.
- World Health Organisation. (2017). Depression in India Let's Talk. Retrieved from http://www.searo.who.int/india/depression_in_india.pdf