

Depression, Stress and Coping among Women with Pregnancy

Shiney Thomas^{1*}, S. John Michael Raj²

ABSTRACT

Background: Ask any pregnant women how she feels and often the answer will be one of exasperation “I feel fat; I’m so tired; I’m over it; I’m so hormonal and moody”. But for as many of pregnant women this normal mood shift can become a serious case of the pre-baby blues and an increased level of stress leads to the level of depression. However, some of them can cope up with their level of depression and stress. **Aim:** The present study aim is to assess the Depression, Stress and Coping among Women with Pregnancy. The sample size is around 30 pregnant women aged between 18-25 years of age using purposive sampling. Tools used are socio demographic data, Beck Depression Inventory, NIMHANS Stress Coping Scale. **Results:** The results show that there is no significant difference between the stress and coping skills in the levels of depression. There is no relationship between the depression with stress and coping. Most of the women are good in effective coping skills. **Conclusion:** Pregnancy women mood has been changed by time to time. Majority of the pregnant women have mild to moderate levels of depressive features. The mental health professionals will be provide counseling to cope with pregnancy pain.

Keywords: Stress, Coping, Depression and Pregnant Women

In the current scenario, women are more vulnerable to develop any kind of psychopathology during perinatal period (Lewis, 2015). Meanwhile, the rate of psychiatric admission is increased postnatal, mostly because of the raised risk of psychosis in the first month after childbirth. In contrast, depression during pregnancy has been relatively neglected. Indeed, pregnancy was thought to protect women against depression (Harvard Medical School, 2017). Studies of prenatal psychopathology have mostly examined prenatal mood as a predictor of postnatal depression. 23% of those who had postnatal depression had a start during pregnancy (Imran and Haider, 2010). Depressed mood during pregnancy has also been associated with poor attendance at prenatal clinics, substance misuse, low birth weight, and preterm delivery. Psychopathological symptoms during pregnancy have physiological consequences for the fetus, which may explain some of these effects (Hofberg, 2003).

Researches suggesting that there is no difference in the pattern of symptoms of depression during pregnancy or postnatal. Thus, postnatal depression does not seem to be a distinct syndrome (Toit and Kruger, 2017). There were various studies that focused on the risk factors

¹Ph.D., Research Scholar, Bharathiar University, Coimbatore, Tamil Nadu, India

²Former Professor, Department of Psychology, Bharathiar University, Coimbatore, Tamil Nadu, India

*Responding Author

Received: March 17, 2020; Revision Received: April 17, 2020; Accepted: May 30, 2020

Depression, Stress and Coping among Women with Pregnancy

for pregnant women. Among those studies, social support has been regarded as a potential resource for relieving stress and depression in pregnant women. Social support has a positive effect on health, many researchers have found that it can serve as a mediator between stress and psychological problems (Ren et al., 2015). Thus, it is reasonable to assume that social support could also exert a similar function in helping pregnant women who have experienced a major earthquake, generally deemed to be a major stressful event.

The impact of social support on the depression of pregnant women at the epicenter immediately after a major earthquake remains unknown (Ren et al., 2015). Apart from social support, effective coping strategies might also protect pregnant women from developing mental health problems when they experience it. In other words, how a pregnant woman appraises an event may shape its impact and how she responds. Thus, the outcomes of individuals under stress may also depend on their coping strategies.

Studies prove that 94% prevalence of stress during pregnancy (Woods, 2009). In India, prevalence of antenatal psychosocial stress was 42% (Kafle et al., 2010). Similarly, a study in Sweden detected 14% prevalence of psychiatric morbidity during antenatal period (Pantha et al., 2014). Stress during pregnancy was significantly related with age of the respondent, but in Indian people stress, either in first trimester or in the third trimester, was not related with age of the respondent (Pantha, 2014).

Women experiencing more than 3 stressful life events during first trimester of pregnancy were more likely to score higher. Similarly, women staying in nuclear family were more likely to be stressed. During the first trimester of pregnancy, women are more likely to experience nausea, vomiting and altered mood due to hormonal change due to pregnancy. Women with family support find easier to cope with these conditions compared to women who do not have family support with them (Ahmed et al., 2017). There was no significant difference of the stress among pregnant women in the first and third trimester. In India stress was related with the number of stressful life events, level of satisfaction with the less coping skills, heavy work during pregnancy (National Academy of Medical Sciences, 2014).

It's very hard to study and evaluate stress as a factor in pregnancy period. Basically, everyone feels some level of stress in day to day life. It seems to be a part of the human condition. And every person process that stress differently. A minor irritation to one person might be the cause of a nervous breakdown in another. Every pregnant woman worries at least a little bit during the pregnancy, whether it's about the pregnancy or about other life factors. Some worry a lot. This has most likely been going on since the beginning of time, and yet the majority of pregnant women give birth to healthy babies (Pantha et al., 2014).

Stress during pregnancy also found that women reporting higher levels of stress seemed to have an 80% higher risk of stillbirth when compared to women with intermediate levels of stress. In addition, a 2006 study found evidence that Cortisol levels increased above average for pregnancy meant an increased risk of early miscarriage, such as within the first three weeks after conception (Nepomnaschy, 2006). Depression is as being a risk factor for further miscarriages in women who had recurrent miscarriages (Wu, 2017). Women reporting high stress in early pregnancy did not have a higher risk of miscarriage when looking at stress alone, but the study did find that women under stress were more likely to use drugs like cigarettes and marijuana, which might be risk factors for miscarriage independently. Taking this as a key factor to develop further studies about depression, stress and how the pregnant

Depression, Stress and Coping among Women with Pregnancy

women come up with their pregnancy. This will help to develop specific effective counseling strategies to reduce stress and depression during depression.

METHODOLOGY

Aim: To assess the Depression, Stress and Coping among Women with Pregnancy

Objectives:

1. To identify the stress and depression level of pregnant women.
2. To explore how the pregnant women coping up with the stress and depression.
3. To assess the stress and coping among Pregnant women through identifying the level of Depression.

Hypothesis

There is a significant relationship between Stress and Coping with level of depression.

Sample

Around 30 samples of pregnant women aged between 18 years to 35 years were selected using purposive sampling method and who are in different duration of pregnancy. The data was collected in five different gynecology clinics in and around Coimbatore.

Tools

Socio demographic data: Socio demographic details are collected from the sample like age, gender and school name which is the basic details that have been collected from the samples.

Beck Depression Inventory - II: The Beck Depression Inventory (BDI-II), created by Aaron T. Beck, is a 21- item self-report inventory, one of the most widely used psychometric tests for measuring the severity of depression. Each item is rated on a 4-point Likert-type scale ranging from 0 to 3, based on the severity in the last two weeks. The total score ranges from 0 to 63, with higher scores indicating more severe depressive symptoms. It has strong internal consistency, test-retest reliability and good concurrent and discriminant validity.

Stress and Coping Questionnaire: The stress questionnaire developed by Latha Satish, consists of 52 items arranged from questions from mild, moderate and severe stress (which affects the adjustment of the individual). This lists the life experience based on the amount of change or adjustment one has to make to life rather than the undesirability of events themselves. It also has a control index where the subject has to record whether he/she has completed, partial or no control over the experienced stressful situation. The answer options are 'YES', and 'NO' if these are not applicable, indicate the amount of control such as whether partial, complete, or no control over the situation. The items reliability value was 0.86. a test reliability on a sample of 30 subjects was found to be 0.969 ($P < 0.01$). The content validity based on judges rating was 0.86.

Procedure

The informed consent was given to the sample before conducting the test. First, they have to fill their socio – demographic details, and then the Beck depression inventory and NIMHANS stress coping scale administered for 30 samples. Thus, the data was collected for statistical analysis and for the further findings.

RESULTS AND DISCUSSION

Based on present study hypothesis, frequency, percentage, Mean and Standard deviation, correlation and t test using SPSS 20 were tabulated and discussed.

Table 1 shows the frequency and percentage of the Socio-demographic data of pregnant women

S.No.	Variables	Category	Frequency	Percentage (%)
1	Age	18 - 25	5	16.6
		26 - 35	25	83.4
2	Family type	Joint	13	43.3
		Nuclear	17	56.7
3	Occupation	Professional	8	26.7
		Non- professional	22	73.3
4	Educational qualification	School	7	23.3
		College	23	76.7
5	Pregnancy duration	4	2	6.7
		5	2	6.7
		6	6	20
		7	6	20
		8	4	13.3
		9	10	33.3
6	Care taker	Husband	25	83.3
		Others	5	16.7
7	First pregnancy	Yes	17	56.7
		No	13	43.3

Table 1 shows the frequency and percentage of the socio-demographic data like age, family type, occupation, educational qualification, pregnancy duration, care taker and first pregnancy. There are 13 different age group of pregnant ladies in the present sample group and their frequencies in age of 18, 21, 24, 26, 32, 33 and 35 is 1 and they are in 3.3% sample group. The frequency is 2 and the percent is 6.7% at the age of 25 and 27. The frequency is 4 and percentage is 13.3% in the age of 28, 29 and 34. At the age of 30 their frequency is 7 and the percent is 23.3%. On concise, 16.6% of pregnant women in the age range from 18 – 25 years and 83.4% of pregnant women in the age range in 26 – 35 years. In joint family the frequency is of 13 and the percentage is 43.3%. In nuclear family the frequency is 17 and percentage is 56.7%. Based on their occupation in professional side the frequency is 8 and 26.7% of the sample group, in non-professional group the frequency is 22 and 73.3% of sample group. On basis of their educational qualification the sample group of school level education has a frequency of 7 and 23.3% and the sample group of college level education has a frequency of 23 and 76.7% of the total sample group. The sample groups based on the pregnancy duration are in various months, in the duration of 4 and 5 months the frequency is 2. Between 6 and 7 months the frequency is 6 and the percentage is 20.0%. There are 10 samples in the pregnancy duration of 9 months. The frequency in 8th month pregnancy duration is 4 and 13.3% of the total sample size.

The percentage for the age group 26-35 is high of and the educational qualification percentage of college also is high may be because of the educational thirst in people till the post graduation level in their academics at least in correspondence. Most of the men and women wanted to stay alone and form nuclear family may be due to the confronting factors

Depression, Stress and Coping among Women with Pregnancy

as privacy, over pampering, adjustment issues between mothers in law. This may be one of the reasons for the husbands to be the care taker and the increase in nuclear families and that brings the reason hype in the percentage of the care takers as husband and the nuclear family variable.

Table – 2 shows the relationship between the stress and coping with the level of depression

Variables	Stress	Coping
BDI	0.242	0.193

Table-2 shows that there exists no significant relationship between levels of depression with the stress and coping. From this table we can infer that the hypothesis that there is a significant relationship between Stress and Coping with level of depression is rejected.

Table 3: Mean Standard Deviation and T-test of level of Depression with level of stress and coping among pregnant women.

Variables	Level of Depression	N	Mean	Std. Deviation	t - test	Sig.
Stress	Low	18	6.06	2.127	-1.023	0.316
	Mild	9	7.11	3.219		
Coping	Low	18	32.39	6.809	0.552	0.586
	Mild	9	30.67	9.165		
Stress	Mild	9	7.11	3.219	-0.725	0.477
	Moderate	3	7.00	1.732		
Coping	Mild	9	30.67	9.165	-0.398	0.695
	Moderate	3	34.00	2.646		
Stress	Low	18	6.06	2.127	0.056	0.957
	Moderate	3	7.00	1.732		
Coping	Low	18	32.39	6.809	-0.604	0.559
	Moderate	3	34.00	2.646		

Table 2 shows the mean, standard deviation and t-test level of depression with level of stress and coping among pregnant women. On analysis of mean and Standard deviation, for low level of stress (N=18), the mean is 6.06, standard deviation is 2.127. The mild level of stress the (N=9) Mean is 7.11, standard deviation 3.219. Moderate level of stress has (N=3), percentage is 10%, Mean is 7.00, Standard deviation is 1.732. For low level of coping (N=18), percentage is 60%, mean is 32.39, standard deviation is 6.809. Mild level of coping (N=9), percentage is 30%, Mean is 30.67, Standard deviation is 9.165. Moderate level of coping has (N=3), Percentage is 10%, Mean is 34.00, Standard deviation is 2.644.

There is no significant difference between low and mild in terms of stress; low and mild in terms of coping since the significance is 0.316 and 0.586 respectively. There is no significant difference between mild and moderate level in terms of depression and mild and moderate level of coping since the significant values are 0.477 and 0.695 respectively. There is no significant difference between low, moderate level of stress and low, moderate level of coping since the significant values are 0.957 and 0.559 respectively.

Depression, Stress and Coping among Women with Pregnancy

In contrast to this study, few quantitative studies show that there are pregnant women showing severe and moderate depression. “The study showed that 33.3% of the pregnant women showed moderate and 18.5% showed severe depression. Women living in refugee camps more often reported clinical cases of depression. 14.3% of these women showed moderate and 8.8% showed severe symptoms of anxiety. Depression and anxiety symptoms were closely associated with each other”(Abdel Aziz Mousa Thabet, 2017). A study contrasts the coping strategy in the pregnant women is “pregnant women with irrational beliefs had a significant direct correlation with avoidance coping strategies ($r=0.24$, $P = 0.05$). Also, types of irrational beliefs were significantly related to the dimensions of perinatal coping strategies ($P<0.001$) (Farideh Khavari et al., 2017).

CONCLUSION

The women in the age group of 26-35 are highly educated and hence their coping skills are also simultaneously developed. Most women in the present era are well developed to establish and run a nuclear family with low stress and high coping ability even in pregnancy periods. There is no significant difference between the levels of stress and coping with levels of depression. The study implies that, the present study has low sample size, sample size can be increased so that the difference between the people from urban and rural areas can be assessed, physiological area and financial status is omitted in the study (nutrients intake and other intakes for health) that leads to stress and depression, the data can be more appropriate when the sample duration of the pregnancy is selected like each tri-semester or half the pregnancy period and test tube pregnancy and pregnancy by technological means are avoided.

REFERENCES

- Andrew J. Lewis, Emma Austin, Rebecca Knapp, Tina Vaiano and Megan Galbally (2015). “Perinatal Maternal Mental Health, Fetal Programming and Child Development Healthcare 2015, Pg. 02.
- Anwar E Ahmed, Alhanouf N Albalawi, Asmaa A Alshehri Rand M AlBlaihed and Majid A Alsalamah. (2017). “ Stress and its predictors in pregnant women: a study in Saudi Arabia”. The Dove Press Journal. Pg 97-107.
- Eslam Farhat Murtaja, RN, Abdel Aziz Mousa Thabet, (2017). Anxiety and Depression among Pregnant Women in the Gaza Strip. Open Journal psychology and cognitive sciences. <http://dx.doi.org/10.17140/PCSOJ-3-136>.
- Fan Qu, Yan Wu, Yu-Hang Zhu, John Barry, Tao Ding, Gianluca Baio, Ruth Muscat, Brenda K. Todd, Fang-Fang Wang, and Paul J Hardiman.(2017). Association between psychological stress and miscarriage: A systematic review and meta-analysis. Scientific Reports. Pg: 1731.10.1038/S41598-017-01792-3.
- Farideh Khavari (MSc), Nahid Golmakani, Azadeh Saki, Hamid Reza Aghamohammadia Serbaf. “The Relationship between Prenatal Coping Strategies and Irrational Beliefs in Pregnant Woman”. Journal Of Midwifery And Reproductive Health.DOI: 10.22038/JMRH.2017.9921.
- Harvard Medical School (2017). Depression During Pregnancy And After, <http://www.depressionafterdelivery.com>.
- Hofberg K and Ward MR. (2013). “Fear of Pregnancy And Child Birth”, Postgrad Med J 2003; 79:505–510
- Jianhua Ren , Xiaolian Jiang , Jianrong Yao,Xirong, Li,Xinghui Liu ,Meiche Pang, Vico Chiang. (2015). “Depression social Support, and Coping Styles among Pregnant Women after the Lushan Earthquake in Ya’an, China”. Plus One, <https://doi.org/10.1371/journal.pone.0135809>.

Depression, Stress and Coping among Women with Pregnancy

- Kafle PP1, Pakuryal KN, Regmi RR, Luintel S (2010). "Health problems and social consequences in teenage pregnancy in rural Kathmandu valley". *Nepal Medical College Journal* 12 pg: 42-44.
- Nazish Imran and Imran Ijaz Haider. (2010). "Screening of antenatal depression in Pakistan: risk factors and effects on obstetric and neonatal outcomes", *ASIA- PACIFIC PSCHIATRY*, volume 2, issue 1, pg 26-32.
- Pablo A. Nepomnaschy, Kathleen B. Welch, Daniel S. McConnell, Bobbi S. Low, Beverly I. Strassmann, and Barry G. (2006). "Cortisol levels and very early pregnancy loss in humans". *PNAS Proceedings Of The National Academy of Sciences of The UNITED States of America*. 103 (10) 3938-3942.
- Sandesh Pantha, Bruce Hayes, Bharat KumarYadav , Paban Sharma , Ashis Shrestha and Pragya Gartoulla.(2014). "Prevalence of Stress among Pregnant Women Attending Antenatal Care in a Tertiary Maternity Hospital in Kathmandu". *Women's Health Care*, 3:5.
- Sarah M. Woods, Jennifer L. Melville, Yuqing Guo, Ming-Yu Fan and Amelia Gavin, (2010). Psychosocial stress during pregnancy Permalink, *Journal American Journal of Obstetrics and Gynecology*, pg: 202(1)
- Simoné du Toit and Mary kruger. (2017). "The experience of postpartum distress in the transition to motherhood: A study of one group of low-income mothers in South Africa", Thesis dissertation presented in fulfillment of the requirements for the degree of Masters of Arts (Psychology) in the Faculty of Arts at Stellenbosch University.

Acknowledgements

The author appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interest

The author declared no conflict of interest.

How to cite this article: S Thomas & S J Michael Raj (2020). Depression, Stress and Coping among Women with Pregnancy. *International Journal of Indian Psychology*, 8(2), 152-158. DIP:18.01.297/20200802, DOI:10.25215/0802.297