# ORIGINAL RESEARCH

# Evaluation of depressive symptoms and psychological distress in high-risk pregnancy women

Dr. Rajeev Ranjan

Associate Professor, Department of Psychiatry, Dr S S Tantia Medical College Hospital & Research Centre, Shri Ganganagar, India

## **Corresponding Author**

Dr. Rajeev Ranjan

Associate Professor, Department of Psychiatry, Dr S S Tantia Medical College Hospital & Research Centre, Shri Ganganagar, India

Received: 22 January, 2022 Accepted: 27 February, 2022

### **ABSTRACT**

**Background:**Women with high-risk pregnancies often experience significant psychological distress due to a variety of factors. The present study was conducted to evaluate depressive symptoms and psychological distress women with high-risk pregnancy.

Materials & Methods:82 women with high-risk pregnancy reporting to psychiatric department with depressive symptoms and psychological distress were selected and their Edinburgh Postnatal Depression Scale (EPDS) and Brief Symptom Inventory 53-items (BSI-53) in antenatal period (Phase 1) was recorded. In the second phase, EPDS, BSI-53, and the posttraumatic stress disorder (PTSD) scale was recorded in postpartum period (Phase 2).

**Results:** The mean gestational age in phase 1 was 29.4 weeks and in phase 2 was 30.6 weeks, parity was 2.07 in phase 1 and 2.29 in phase 2, depression score (EPDS) was 7.5 in phase 1 and 7.1 in phase 2, total BSI-53 was 32.8 in phase 1 and 39.8 in phase 2 and GSI was 0.73 in phase 1 and 0.84 in phase 2. Depressive symptoms was seen in 16 and 56 and psychological symptoms in 25 and 47 in phase 1 and phase 2 respectively. Antenatal and postnatal period, mean depression score (EPDS) was 7.61 and 24.7, BSI-53 Somatization was 3.6 and 4.2, obsession-compulsion was 2.8 and 4.4, interpersonal sensitivity was 2.3 and 3.8, depression was 3.9 and 4.2, anxiety was 3.1 and 4.1, hostility was 2.7 and 2.5, phobicwas 2.5 and 2.8, paranoid ideation was 2.1 and 4.0, psychoticism was 1.8 and 3.9, total BSI-53 was 24.7 and 31.6, and GSI was 0.76 and 1.7 respectively. The difference was significant (P< 0.05).

Conclusion: The prevalence and persistence of postnatal depression in women with high-risk pregnancy found to be high.

**Keywords:** high-risk pregnancies, depression, postnatal

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution- Non Commercial-Share Alike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

# INTRODUCTION

Women with high-risk pregnancies often experience significant psychological distress due to a variety of factors. High-risk pregnancies come with an increased risk of complications for both the mother and the baby. This can lead to heightened fear and anxiety about the health and well-being of themselves and their unborn child. Uncertainty about the outcome of the pregnancy and the health of the baby can be extremely stressful. Not knowing what to expect can lead to feelings of helplessness and anxiety. 2Women with high-risk pregnancies often require more frequent medical appointments, tests. interventions. This constant monitoring can be overwhelming and increase feelings of stress and anxiety. Women with high-risk pregnancies may need to restrict their activities and avoid certain social situations to reduce the risk of complications.<sup>3</sup> This

can lead to feelings of isolation and loneliness, especially if they are unable to engage in activities they enjoy or spend time with friends and family. Some women may blame themselves for their high-risk pregnancy, whether it's due to their own health habits, genetics, or other factors. This can lead to feelings of guilt and self-blame, which can exacerbate psychological distress.<sup>4</sup> Mental health concerns may become more common during the prenatal and postpartum periods. Furthermore, certain women may undergo stressful events leading up to childbirth, and in the postpartum phase that follows, they may develop posttraumatic stress disorder Premature birth, miscarriage, (PTSD).<sup>5</sup> intrauterine growth restriction are among the unfavorable pregnancy outcomes that are more likely to occur in women with mental health issues. Additionally, research indicates that psychosocial

variables are important risk factors for mental health issues throughout pregnancy and the postpartum period. The present study was conducted to evaluate depressive symptoms and psychological distress women with high-risk pregnancy.

## **MATERIALS & METHODS**

The present study was conducted on 82 women with high-risk pregnancy reporting to psychiatric department with depressive symptoms and psychological distress. All were informed regarding

the study and their written consent was obtained. Data such as name, age, etc. was recorded. All filled the Edinburgh Postnatal Depression Scale (EPDS) and Brief Symptom Inventory 53-items (BSI-53) in antenatal period (Phase 1). In the second phase, EPDS, BSI-53, and the posttraumatic stress disorder (PTSD) scale was recorded in postpartum period (Phase 2).Data thus obtained were subjected to statistical analysis. P value < 0.05 was considered significant.

**RESULTS** 

**Table: I Assessment of parameters** 

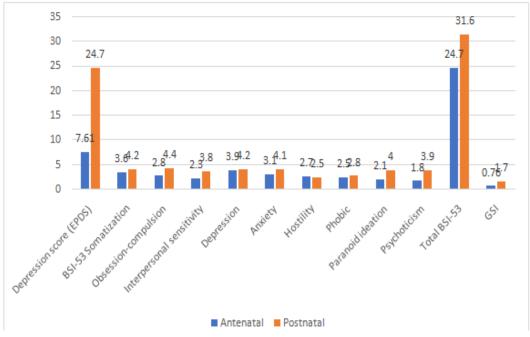
Parameters	Phase 1	Phase 2
Gestational age (weeks)	29.4	30.6
Parity	2.07	2.29
Depression score (EPDS)	7.5	7.1
Total BSI-53	32.8	39.8
GSI	0.73	0.84
Depressive symptom (n)	16	56
Psychological distress(n)	25	47

Table I shows that mean gestational agein phase 1 was 29.4 weeks and in phase 2 was 30.6 weeks, parity was 2.07 in phase 1 and 2.29 in phase 2, depression score (EPDS) was 7.5 in phase 1 and 7.1 in phase 2, total BSI-53 was 32.8 in phase 1 and 39.8 in phase 2 and GSI was 0.73 in phase 1 and 0.84 in phase 2. Depressive symptoms was seen in 16 and 56 and psychological symptoms in 25 and 47 in phase 1 and phase 2 respectively.

Table: II Comparison of mean scores of psychological variables of women

Parameters	Antenatal	Postnatal	P value
Depression score (EPDS)	7.61	24.7	0.01
BSI-53Somatization	3.6	4.2	0.03
Obsession-compulsion	2.8	4.4	0.02
Interpersonal sensitivity	2.3	3.8	0.05
Depression	3.9	4.2	0.04
Anxiety	3.1	4.1	0.03
Hostility	2.7	2.5	0.02
Phobic	2.5	2.8	0.01
Paranoid ideation	2.1	4.0	0.04
Psychoticism	1.8	3.9	0.01
Total BSI-53	24.7	31.6	0.02
GSI	0.76	1.7	0.01

Table II, graph I shows that in antenatal and postnatal period, mean depression score (EPDS) was 7.61 and 24.7, BSI-53 Somatization was 3.6 and 4.2, obsession-compulsion was 2.8 and 4.4, interpersonal sensitivity was 2.3 and 3.8, depression was 3.9 and 4.2, anxiety was 3.1 and 4.1, hostility was 2.7 and 2.5, phobic was 2.5 and 2.8, paranoid ideation was 2.1 and 4.0, psychoticism was 1.8 and 3.9, total BSI-53 was 24.7 and 31.6, and GSI was 0.76 and 1.7 respectively. The difference was significant (P< 0.05).



Graph: I Comparison of mean scores of psychological variables of women

### DISCUSSION

People who have gone through a terrible incident, like a natural disaster, a catastrophic accident, or sexual assault, may develop post-traumatic stress disorder (PTSD).<sup>7,8</sup> Adverse changes in thinking and mood (bad thoughts about yourself, others, or the world), avoidance (trying to avoid thinking or talking about the traumatic event), intrusive memories (flashback, recurrent, unwanted, distressing memories of the traumatic event), and arousal symptoms (irritability, hypervigilance, trouble sleeping or concentration).<sup>9</sup>The present study was conducted to evaluate depressive symptoms and psychological distress women with high-risk pregnancy.

We found thatmean gestational age in phase 1 was 29.4 weeks and in phase 2 was 30.6 weeks, parity was 2.07 in phase 1 and 2.29 in phase 2, depression score (EPDS) was 7.5 in phase 1 and 7.1 in phase 2, total BSI-53 was 32.8 in phase 1 and 39.8 in phase 2 and GSI was 0.73 in phase 1 and 0.84 in phase 2. Depressive symptoms was seen in 16 and 56 and psychological symptoms in 25 and 47 in phase 1 and phase 2 respectively. Hamidia et al<sup>10</sup>determined the extent to which the COVID-19 pandemic may aggravate depressive symptoms and psychological distress of women with high-risk pregnancy in postnatal period.122 pregnant women filled in the Edinburgh Postnatal Depression Scale (EPDS) and Brief Symptom Inventory 53-items (BSI-53). In the second phase, with the start of the COVID-19 pandemic from February to June, 30% of the participants (41/122) completed three questionnaires: EPDS, BSI-53, and the posttraumatic stress disorder (PTSD) scale in postpartum period.During the COVID-19 pandemic, from antenatal to postnatal period, the depression score of EPDS, total scores, all the subscales of BSI-53, and global severity index-53 increased in women with high-risk pregnancy. Furthermore, the persistence of antenatal depression occurred in 85.7% of the participants, and the onset of postnatal depression occurred in 80% of them. About 12% of the women also experienced PTSD symptoms during the postnatal period. We observed thatin antenatal and postnatal period, meandepression score (EPDS) was 7.61 and 24.7, BSI-53 Somatization was 3.6 and 4.2, obsession-compulsion was 2.8 and 4.4, interpersonal sensitivity was 2.3 and 3.8, depression was 3.9 and 4.2, anxiety was 3.1 and 4.1, hostility was 2.7 and 2.5, phobicwas 2.5 and 2.8, paranoid ideation was 2.1 and 4.0, psychoticism was 1.8 and 3.9, total BSI-53 was 24.7 and 31.6, and GSI was 0.76 and 1.7 respectively. Cankorur et al11 of 730 women recruited in their third trimester, 578 (79.2%) were re-examined between 2 and 6 months after childbirth. In those followed, onset of postnatal depression occurred in 13.9% and persistence of antenatal depression in 49.7%. After adjustment, worse emotional support from the mother-in-law was significantly associated with postnatal depression incidence (OR=0.93, 95% CI 0.87 to 0.99) and worse emotional support from the husband with postnatal persistence (OR=0.89, 95% CI 0.83 to 0.96) of antenatal depression. Family structure was not a risk or modifying factor.

The shortcoming of the study is small sample size.

# CONCLUSION

Authors found that the prevalence and persistence of postnatal depression in women with high-risk pregnancy found to be high.

### **REFERENCES**

 Meltzer-Brody S, Howard LM, Bergink V, Vigod S, Jones I, Munk-Olsen T, et al. Postpartum psychiatric disorders. Nat Rev Dis Primers. 2018;4:18022.

- Faramarzi M, Kheirkhah F, Barat S, Cuijpers P, O'Connor E, Ghadimi R, et al. Prevalence and factors related to psychiatric symptoms in low risk pregnancy. Caspian J Intern Med. 2020;11:211–8.
- Thiel F, Ein-Dor T, Dishy G, King A, Dekel S. Examining symptom clusters of childbirth-related posttraumatic stress disorder. Prim Care Companion CNS Disord. 2018;20:18m02322.
- Yildiz PD, Ayers S, Phillips L. The prevalence of posttraumatic stress disorder in pregnancy and after birth: A systematic review and meta-analysis. J Affect Disord. 2017;208:634

  –45.
- Haghparast E, Faramarzi M, Hassanzadeh R. Psychiatric symptoms and pregnancy distress in subsequent pregnancy after spontaneous abortion history. Pak J Med Sci. 2016;32:1097–101.
- Letourneau NL, Tramonte L, Willms JD. Maternal depression, family functioning and children's longitudinal development. J PediatrNurs. 2013;28:223– 34.
- Berthelot N, Lemieux R, Garon-Bissonnette J, Drouin-Maziade C, Martel É, Maziade M. Uptrend in distress and psychiatric symptomatology in pregnant women during the coronavirus disease 2019 pandemic. Acta ObstetGynecol Scand. 2020;99:848–55.
- 8. North CS, Surís AM, Pollio DE. A nosological exploration of PTSD and trauma in disaster mental health and implications for the COVID-19 pandemic. Behav Sci (Basel) 2021;11:7.
- Forte G, Favieri F, Tambelli R, Casagrande M. COVID-19 pandemic in the Italian population: Validation of a post-traumatic stress disorder questionnaire and prevalence of PTSD symptomatology. Int J Environ Res Public Health. 2020;17:4151.
- Wang YX, Guo HT, Du XW, Song W, Lu C, Hao WN. Factors associated with post-traumatic stress disorder of nurses exposed to corona virus disease 2019 in China. Medicine (Baltimore) 2020;99:e20965.
- 11. Hamidia A, Kheirkhah F, Faramarzi M, Basirat Z, Ghadimi R, Chehrazi M, Barat S, Cuijpers P, O'Connor E, Mirtabar SM. Depressive symptoms and psychological distress from antenatal to postnatal period in women with high-risk pregnancy: A prospective study during the COVID-19 pandemic. Indian journal of psychiatry. 2021 Nov 1;63(6):536-42.
- Cankorur VS, Abas M, Berksun O, Stewart R. Social support and the incidence and persistence of depression between antenatal and postnatal examinations in Turkey: A cohort study. BMJ Open. 2015;5:006456.