Original Research Article

Depression, anxiety and stress scale assessment among pregnant women in a tertiary care hospital

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A B S T R A C T

During pregnancy anxiety, depression, and stress will cause adverse outcomes for mothers and children. Anxiety and depression during pregnancy is associated with shorter gestation and can have long term complications on child. The study was conducted in Saveetha Medical College and Hospital by issuing structured questionnaire. The screening tool used is the DASS-21 stress ≥ 15. Pregnant women in low risk group be tween 18-40 years are included and pregnant women who is on psychiatric treatment, not able to communicate, high risk women were excluded. The maximum age group screened was 32 years and most of the women belonged to the lower socio economic status. 68.5% of these women have not received a formal education. In the study depression was seen in 4.28%, anxiety in 2.85 % and stress in 18.5% and they were found to be commonly occurring in the second and third trimester. The most commonest cause of depression was found to be due to previous abortions and domestic abuse.

Conclusion: This study suggests that issues like depression have to be dealt with seriously and steps have to be taken by the government and the community to improve maternal health.

1. Introduction

Pregnancy is a state of emotional well-being. However it's also known to increase the vulnerability to conditions like depression, anxiety, stress. It affects 1 in 4 women during their lifetime. Recent urban study found 78% experiences low to moderate antenatal psychosocial stress and 6% experienced high level[1] Depression is characterised by frequent feelings of guilt, loss of interest, decreased energy, low self-esteem, disturbed sleep, poor appetite, inability to concentrate. These problems can become recurrent and can dampen the mother's ability to take care of her responsibilities.[2] Depression is not diagnosed properly as it is often seen as a type of hormonal imbalance. The causes of depression during pregnancy are anxiety, history of depression, lack of social support, unplanned pregnancy, lack of medical insurance, domestic violence, lower income, no proper education, smoking and single status were associated with a greater likelihood of antepartum depressive symptoms.[3,4] Other risk factors include age, marital status, gravidity, unplanned pregnancy, previous history of stillbirth, abortions, level of social support, relationship problems, family or personal history of depression, infertility treatments, stressful life events, history of trauma.[5] The study will help identify pregnant women suffering from depression, anxiety and stress so that appropriate guidance and support can be provided to prevent maternal and fetal problems. Efficacious and cost-effective treatments are abundantly available and their awareness has to be increased.

2. Objective

The objectives of the study are:

1. To determine depression, anxiety and stress among pregnant women.
2. To obtain appropriate psychiatric opinion.
3. To counsel the women for appropriate therapy.

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3. Materials and Methods

The study was conducted in Saveetha Medical College and Hospital. Pregnant women between 18-40 years who attend Outpatient Department were included in the study. Pregnant women with low risk women without complications were included. Pregnant women who were not able to communicate, who are on psychiatric treatment were excluded. After ethical clearance and obtaining informed consent, seventy pregnant women were interviewed with the screening tool used is the DASS-21. The scale contains three subscales that cover depression (7 items), anxiety (7 items), and stress (7 items). Each item is scored from 0 (at all) to 3 (very much). The following cutoff score is used to assess the presence of the symptoms: Depression $\geq$ 10, anxiety $\geq$ 8, and stress $\geq$ 15. The study will help to identify pregnant women suffering from depression, anxiety and stress so that appropriate guidance and support can be provided to prevent maternal and fetal problems

4. Result

Table 1: Age distribution

Age	Number	Percentage
18-20	5	7.14%
21-25	32	45.7%
26-30	22	31.4%
31-35	8	11.4%
36-40	3	4.28%

Table 2: Education status

Status	Number	Percentage
No formal Education	48	68.57%
Primary School	14	20%
High school	8	11.4%
undergraduate	Nil	nil

5. Discussion

The study revealed that 4.28% of antenatal women had depression, 2.85% of them had anxiety and 18.5% had stress. All these women were seen to belong in the lower socioeconomic status of the society. It was found that depression, anxiety and stress was present in women with no formal education and those who have completed studying high school. Anxiety and stress was found to be more common among pregnant women who were in their second and third trimester. This shows that literate pregnant women have good network and social support, which is a protective factor in previous research. Consistent with literature, our findings show that women with inadequate support from
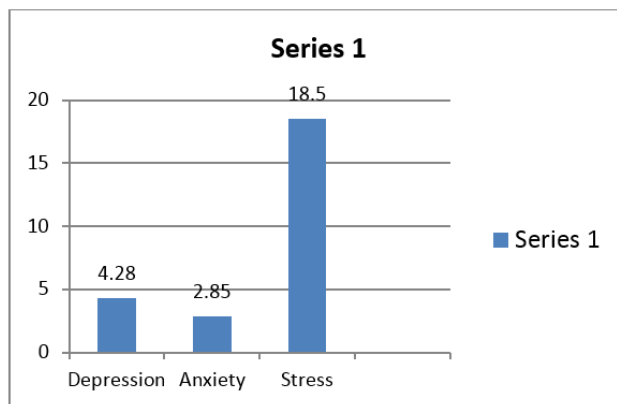

Fig. 1: Distribution of depression anxiety and stress in the study In the study depression was seen in 4.28% anxiety in 2.85 % and stress in 18.5%
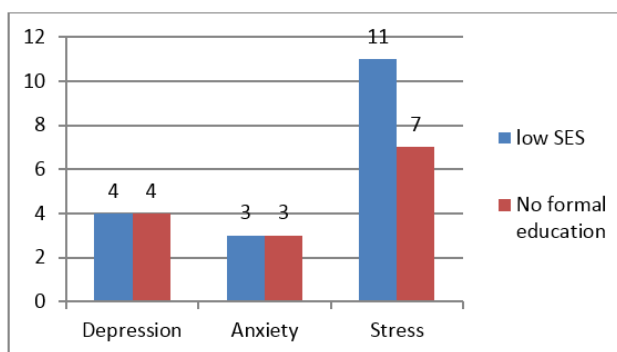

Fig. 2: Association of socioeconomic group, education status with depression, anxiety, and stress In the study depression, anxiety and stress were seen in low socioeconomic group and with no formal education

the partner and parents were at higher risk of developing antenatal and postnatal depression. This can worsen issues related to fatigue, mood changes and the demands of caring for the baby. Studies conducted in Pakistan have reported a prevalence in the range of 25%–70%.[6–8] Results were compared with some studies conducted in -china 37%.[9] Turkey, 27%[10] and 33% and Malaysia, 25%. Studies in high-income countries have shown an association between poor socioeconomic background, domestic violence, and ante partum depression and anxiety. This was also seen in studies conducted in low-income countries and studies conducted in Brazil.[11]

6. Conclusion

This study revealed that pregnant women belonging to lower sections of the society and those who were not literate were more vulnerable to depression, anxiety and stress. This proves that literacy improves self-efficacy and self-esteem and ensures that the women are well prepared to

Table 3: Various reasons for depression, anxiety and stress

Causes	Depression Mild	Moderatre	Severe	Anxiety Mild	Moderate	Severe	Strss Mild	Moderate	Sever	2nd Trimester	3rd Trimester
Previous abortion/ foetal loss	2	1	Nil	1	1	Nil	5	3	Nil	3	1
Domestic violence	1	1	Nil	1	1	Nil	5	2	Nil	1	1
Long period of Infertility	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Lack of family support	Nil	Nil	Nil	1	1	Nil	4	3	Nil	5	8

For all these women psychiatric opinion obtained counseling done and appropriate therapy were given

face the pregnancy and consequently motherhood. Since not properly educating women and community about the ill effects and dangers of overlooking these diseases can lead to poor nutrition, smoking, and suicidal behavior, which can then cause premature birth, low birth weight, developmental problems, cognitive and motor disturbances, long term learning disabilities, decreased grey matter density in childhood and agitation in adolescents. This calls for better education, support and care from all facets of the society.

7. Acknowledgement

8. Source of funding

9. Conflict of interest

None.

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