

Original Research Article

Mental health among pregnant women: a comparative study between primi and multigravida subjects

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ABSTRACT

Background: Worldwide about 10% of pregnant women and 13% of women who have just given birth experience a mental disorder, primarily depression. In developing countries this is even higher, i.e. 15.6% during pregnancy and 19.8% after child birth. As this study indicates the impact of pregnancy on mental health of antenatal women. Mental health during pregnancy has great significance not only for women but it may also impact a child's growth and psychological development recognizing the need of mental health care for antenatal women motivated present study. Aim of the study is to assess the mental health among the pregnant women.

Methods: The research design used in this study is survey research design. The sample comprises of 90 women in primi and multigravida. The study was conducted in the department of gynaecology of Geetanjali Medical College and Hospital Udaipur, Rajasthan India.

Results: Purposive randomized sampling was used to conduct the research appropriate test used to carry out the study. The result shows that mental health of multigravida is poor in comparison to primigravida.

Conclusion: Study concludes that there is significant difference in the mental health of the subjects between the group of multigravida and primigravida and there is no significance difference in the mental health observed within the group of primi and multigravida subjects.

Keywords: Mental health, Trimesters, Primigravida, Multigravida and pregnant women

INTRODUCTION

Pregnant women may have depression or anxiety: Anxiety is a feeling of worry or fear over things that might happen. If you worry a lot anyway, many things can stress you out during pregnancy. Worldwide about 10% of pregnant women and 13% of women who have just given birth experience a mental disorder, primarily depression. In developing countries this is even higher, i.e. 15.6% during pregnancy and 19.8% after child birth.^{3,9} Mood and anxiety disorders are common in women during their childbearing years.⁸ Some other mental health issues during pregnancy such as bipolar disorder (episodes of low-energy depression and high-energy mania, post-traumatic stress disorder (PTSD), panic attacks (sudden, intense physical responses with a feeling of unexplained and paralyzing fear), obsessive-

compulsive disorder (OCD), eating disorders (like bulimia or anorexia nervosa). Pregnancy and the postpartum period are considered to be relatively high-risk times for women with pre-existing psychiatric illnesses, especially for depressive episodes in women. The prevalence of depression has been reported to be between 10 and 16% during pregnancy in India.^{2,7}

There are many emotional changes during the different trimesters. In the first trimester may be emotional fluctuations between positive feelings (such as excitement, happiness, and joy) and rather negative ones (such as disbelief, anticipation, worry, and tearfulness). This depends on a variety of factors, such as pregnancy ailments (nausea/ vomiting, reflux diseases, insomnia), planned/ unplanned pregnancy, financial situations, family support, a perception of lifestyle restriction, and a

sense of loss of independence. Second trimester, although the mood fluctuations continue even during the second trimester, the negative feelings could sometimes lessen. This is due to reduced nausea/ vomiting, more adaptation to changes, some idea about the pregnancy care (from healthcare professionals). Research has suggested that the mental health problems (such as anxiety and depression) occur less commonly in the second trimester (in comparison to the first and third trimesters). And in third trimester negative emotional feelings could come back more again during this time. This could be due to increasing discomfort (such as due to pelvic girdle pain/ a backache), insomnia, tiredness/ exhaustion. Moreover the following psychological changes become more prominent during the third trimester (compared to the first and second trimester)

Pregnancy is the carrying of one or more offspring, known as a fetus or embryo, inside the womb of a female. Human pregnancy is the most studied of all mammalian pregnancies. Childbirth usually occurs about 38 weeks after conception; in women who have a menstrual cycle length of four weeks, this is approximately 40 weeks from the last normal menstrual period (LNMP). Pregnancy is typically broken into three periods, or trimesters, each of about three months. While there are no hard and fast rules, but these distinctions are useful in describing the changes that take place over time. The first 12 weeks of pregnancy are considered to make up the first trimester.

Pregnancy is typically broken into three periods, or trimesters, each of about three months. While there are no hard and fast rules, but these distinctions are useful in describing the changes that take place over time. Correlates of antenatal psychological distress. A host of salient risk factors for antenatal psychological distress have been identified in the literature. Rich-Edwards et al. (2006) in a US population study (n=1662) found that the strongest predictor for antenatal depressive symptoms.⁵

Significance of the study

The available literature clearly indicates the adverse impact of pregnancy on mental health of antenatal women. More precisely, antenatal period is substantiated as vulnerable to develop mental health difficulties due to hormonal alterations and other external factors. A physiological and psychological change in this period further increases the risk of mental illness or disorder among antenatal women. Since, mental health during pregnancy has great significance not only for women but it may also impact a child's growth and psychological development, antenatal health care has been given central attention in the field of clinical investigation. Recognizing the need of mental health care for antenatal women motivated present study. Additionally, looking towards paucity in literature with inconsistent findings on the mental health status in relation to number of pregnancy and trimester of pregnancy for antenatal

women, the present study has been designed to fill the gap by exploring mental health status of pregnant women in relation to gravida and trimester.¹⁰

Aim

To assess the mental health among the pregnant women.

Objectives of the study

To study and compare the mental health of pregnant women in relation to their number of pregnancy (primigravida and multigravida). To study and compare the mental health of primigravida women in relation to their time period of pregnancy (first trimester, second trimester and third trimester). To study and compare the mental health of multigravida women in relation to their time period (first trimester, second trimester and third trimester).

Hypothesis

There will be a significant difference in the mental health status of primigravida and multigravida women. There will be a significant difference in the mental health status across first trimester, second trimester and third trimester among Primigravida women. There will be a significant difference in the mental health status across first trimester, second trimester and third trimester among Multigravida women.

Defining the keywords

Mental Health: is a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community.

Trimesters: is a conception to about the 12th week of pregnancy marks the first trimester. The second trimester is weeks 13 to 27, and the third trimester starts about 28 weeks and lasts until birth.

Primigravida: A "Primigravida" is a woman who is pregnant for the first time or has been pregnant once.
Multigravida: A "multigravida" or "secondi gravida" is a woman who has been pregnant more than once.

METHODS

Study design

The study was a 2×3 factorial design.

Sample

After the permission is granted by the ethical committee of Geetanjali Medical College and Hospital Udaipur, Rajasthan, the study was conducted in the outpatient department of gynaecology, a Sample of 90 pregnant

women in primi and multigravida from Geetanjali Medical College and Hospital Udaipur, Rajasthan. By Purposive randomized sampling method. The research design used in this study is survey research design. The nature of present research is explorative. The whole sample will be constituted of two groups namely primigravida (45) and multigravida (45). Further, both these groups will be divided into three sub-groups namely first trimester, second trimester and third trimester according to the time period of pregnancy with equal number of antenatal women. The sample distributing is depicted as following-

Parameters of the study

Independent variable (IV)

Number of pregnancy, primigravida, multigravida.

Time period of pregnancy

First trimester, second trimester, third trimester.

Dependent variable (DV)

Mental health.

Tools used

Mental Health Inventory developed by Dr. Jagdish and Dr. A.K. Srivastava (1996) to assess mental health of pregnant women. The inventory consists of 56 items including 32 false-keyed (negative) [* marked] and 24 true-keyed (positive) statements. The reliability coefficients of different dimensions of MHI were found to be more than 0.70 which was determined by split-half method using odd-even procedure. The reliability coefficient of overall mental health was 0.73. The construct validity of inventory was found to be 0.54. The item wise description of the tool is given in Table 1. This scale consists of five domain of mental health which are described as i) Positive Self Evaluation (PSE), ii) Perception of Reality (PR), iii) Integration of Personality (IP), iv) Autonomy (AUTNY), v) Group Oriented Attitude (GOA) and vi) Environmental Competence (EC).

Procedure

90 pregnant women were taken as the subjects for the research study. Mental health inventory was used to

access the mental health of individual during pregnancy. Random sampling was used among 90 pregnant women particularly is which 45 women were primigravida and 45 were multi gravida. The data was collected from the current sample in their first, second and third trimesters. screening of the mental health inventory (was done in) is consist of six domains which are Positive Self Evaluation (PSE), ii) Perception of Reality (PR), iii) Integration of Personality (IP), iv) Autonomy (AUTNY), v) Group Oriented Attitude (GOA) and vi) Environmental Competence (EC), where the raw score were obtained from the samples and calculated accordingly.

Inclusion criteria

Subject only pregnant women, primigravida and multigravida. Both rural and urban subjects will be taken for the study. Subject who do not have any psychological disorder before pregnancy. Subjects who can read and write both Hindi and English language.

Exclusion criteria

Subject who don't understand Hindi and English language. Subject who have any psychological disorder before pregnancy. Previous major surgery. Single/divorcee/widow mother.

Analysis of data

The scores obtained on different tests of the study were analysed statistically. In analysis of data statistical procedure such as one way ANOVA was employed. It was used to find out the significance of results.

RESULTS

The present study focuses on the assessment of mental health of pregnant women who fall under primi and multigravida. This study depicts that the pregnancy is the period of significant change. Henceforth pregnant women could be vulnerable and prone to develop perinatal mental health issues. Results as shown above indicate that there is significant difference in the mental health of the subjects between the group of multigravida and primigravida in there 1st, 2nd, and 3rd trimester. There is no significance difference in the mental health observed within the group of primi and multigravida subjects.

Table 1: Mean, SD, p value and F ratio of multigravida (1st, 2nd, and 3rd trimester).

Trimester	N	Mean	SD	F	P value	Significant
1	45	58.9556	8.5969	0.59163	0.55488	<0.5
2	45	58.8667	9.302			
3	45	57.2667	6.7602			

The F ratio value is 0.59163, the p value is 0.554884. The result is not significant at p<0.5.

Table 2: Mean, SD, p value and F ratio of primi gravida (1st, 2nd, and 3rd trimester).

Trimester	N	Mean	SD	F	P value	Significant
1	45	69.8	9.268	0.96012	0.385506	<.05
2	45	67.4667	10.058			
3	45	70.0889	10.1843			

The F ratio value is 0.96012, the p value is 0.385506. The result is not significant at p<0.05.

Table 3: Mean, SD, p value and F ratio of primigravida and multigravida in 1st 2nd and 3rd trimester in between group.

Trimester	N	Mean	SD	F	P value	Significant level
First trimester						
1	45	69.8	9.268	33.13622	<0.00001	Significant at <0.5
2	45	58.9556	8.5969			
Second trimester						
1	45	67.4667	10.058	17.73235	<0.5	Significant at <0.5
2	45	58.8667	9.302			
Third trimester						
1	45	70.0889	10.1843	49.51454	<0.05	Significant at <0.05
2	45	57.2667	6.7602			

First trimester: The f ratio value is 33.13622 the p<0.000061. The result is significant at <0.5. Second trimester: The f ratio value is 17.73235 the p<0.00001 the result is significant at <0.5. Third trimester: The f ratio value is 49.51454 the p<0.00001 the result is significant at <0.05.

DISCUSSION

Common mental health disorders like depressive and anxiety disorders are frequent in perinatal women.⁷ Pregnancy prompts your body to make lots of hormones. These hormones can affect your mind and your body. It's common to feel tired, forgetful, or moody. And you also may be focused on other things, like body changes, symptoms, money worries, and all the ways your life is about to change.

It is common to go through many changes in a pregnancy. Here are some examples:

First trimester

Extreme fatigue or morning sickness can affect your daily life. Many women feel moody (as with premenstrual syndrome). It's common to feel happy or anxious about a new pregnancy. Or maybe you feel upset if your pregnancy wasn't planned.

Second trimester

Fatigue, morning sickness, and moodiness usually improve or go away. You may feel more forgetful and disorganized than before. You may feel lots of emotions about things like the way you look or feeling the baby move.

Third trimester

You may still feel forgetful. As your due date nears, it is common to feel more anxious about the childbirth. You

may worry about how a new baby will change your life. As you feel more tired and uncomfortable, you may be more irritable than before.

For some women, serious anxiety or depression problems improve during pregnancy. For others, they do not improve. Do you get no pleasure from daily life? Do you have a lot of trouble sleeping? Do you feel sad, tearful, or guilty? Or anxious, irritable, hopeless, or worthless? Have you had big changes in your appetite, or do you have trouble concentrating? If so, talk to your doctor or midwife. Without treatment, mental health problems can get in the way of a healthy pregnancy.¹⁰

Maternal mental health research is a public health priority due to its impact on both maternal and child health. Psychological disturbances during pregnancy are associated with inadequate antenatal care, low-birth weight and preterm delivery, while in the postpartum, it is associated with diminished emotional involvement, neglect and hostility towards the newborn. The perinatal period, which includes both antenatal and postnatal phases, is very significant both for the mother as well as for her child. Although the impact of maternal mental health on child development starts from conception. Mental health problems during the period are also known to vary across trimesters. There is also a reported relationship between the numbers of stressful life events experienced in the year prior to pregnancy and depressive symptoms during pregnancy.⁶ The quality of prenatal maternal mental health, from psychological stress and depressive symptoms to anxiety and other nonpsychotic mental disorders, profoundly affects fetal neurodevelopment. This study shows that the effects of positive maternal mental health are likely to be specific

and distinct from the sheer absence of symptoms of depression or anxiety. This study depicts that pregnancy is a time of significant change. Therefore pregnant women could be vulnerable to develop perinatal mental health illness. Fluctuation in mood and emotions both positive and negative during this time of pregnancy in the second trimester women have less negative feeling as compared to the first and the third trimester. According to the independent comparative study low mood, moderate anxiety and emotional changes were becoming more prominent during the third trimester because of hormonal physiological and psychological changes.

CONCLUSION

The study concludes that there is significant difference in the mental health of the subjects between the group of multigravida and primigravida and there is no significant difference in the mental health observed within the group of primi and multigravida subjects. Every pregnancy journey and experience is unique. Therefore, the expectations could be quite different from the actual reality. Healthcare professionals should make every effort to explore the expectations. Expectations could have a significant impact on the pregnancy/ birth experience. Depression and anxiety are the most common mental health problems during pregnancy many women will experience both. Depression and anxiety also affect women in the first year after childbirth. During pregnancy and the postnatal period, anxiety disorders, including panic disorder, generalised anxiety disorder (GAD).

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