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Level of Anxiety Among Primigravida and Multigravida Mother: A Review

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Abstract
In order to guide focused maternal care strategies, this review examined the anxiety levels of primigravida and multigravida women during pregnancy and labor. Following screening, 13 observational studies involving 870 pregnant women were included from a comprehensive literature search conducted across PubMed, Crossref, Scopus, and Google Scholar (2020–2025) that found pertinent studies. Three-trimester anxiety was especially common in both groups, and education was found to be a protective factor. Primigravida women also showed significantly higher anxiety levels, with 47.30% reporting severe anxiety compared to lower rates in multigravida women. The need for parity-specific screening and intervention protocols in routine prenatal care to maximize maternal mental health outcomes is supported by the fact that first-time mothers have much higher anxiety levels than experienced mothers.

Keywords: Primigravida, Multigravida, Anxiety.

INTRODUCTION

A woman's perception, coping skills, personality, support network, age, social circumstances, lifestyle modifications, and health risks impacting both physical and mental well-being all contribute to the stress and anxiety that comes with pregnancy[1]. Because the birthing process is influenced by both psychological and physical factors, giving birth causes anxiety[2].

Emotions during pregnancy can vary, and anxiety or depression can have an impact on the health of both the mother and the unborn child, increasing the risk of low birth weight, preterm birth, and stillbirth. Previous depression, stress, inadequate support, and unplanned pregnancy are among the contributing factors. The degree of anxiety is influenced by support and personality. Anxiety can be reduced by creating a secure, encouraging environment. In order to improve maternal wellbeing, this study attempts to measure the anxiety levels of expectant mothers and offer practical coping mechanisms[3].

Hormonal, metabolic, and postural changes during pregnancy result in mild, tolerable discomforts. These can be treated at home and are usually not dangerous. In order to protect the health and safety of both mother and fetus, non-pharmacological approaches are first recommended, but when necessary, medications may be used[4].

Every stage of a woman's life—infancy, puberty, reproductive age, climacteric period, and old age—is characterized by changes in her hormones and body. For women, pregnancy and childbirth are special

times in their lives. One stage of health influences the next. Women go through significant changes between the ages of 18 and 35, particularly during adolescence, which starts with puberty and lasts for 8 to 10 years. Significant physical changes occur during this time, and gendered roles like sexual activity, pregnancy, and parenthood begin. Individual development and identity are influenced by these experiences, which are shaped by social, cultural, and historical contexts as well as peer and family perceptions[5].

Pregnancy is often associated with anxiety, which is typified by a range of feelings mainly motivated by fear. It affects one's mental and physical health. The purpose of this study is to compare the anxiety levels of primigravidas, multigravidas, and grand multigravidas at the Kamal Health Center in Bangkalan6 during their third trimester[6].

For women and their families, pregnancy, childbirth, and delivery are important life events that have a profound effect on their physical, mental, and emotional health. Pregnancy is frequently viewed as a happy time, but because of hormonal and psychological changes, it can also cause anxiety, stress, depression, and confusion. In reproductive health care, mental health conditions like obsessive-compulsive disorders, depression, and anxiety are prevalent but usually disregarded. The American College of Obstetricians and Gynecologists estimates that between 14 and 23 percent of expectant mothers suffer from depression. Pregnancy-related stress, anxiety, and depression prevalence rates are 23%, 25.5%, and 63%, respectively. Low socioeconomic status, marital discord, and financial strain are contributing factors. According to studies, a considerable percentage of women suffer from antenatal anxiety, which is defined as excessive worry about becoming pregnant, giving birth, or becoming a mother. The prevalence ranges from 14% to 59%. Global concern was raised by a meta-analysis that found that the prevalence was 19.4% in high-income countries and 34.4% in low-to-middle-income countries[7].

Both prospective mothers and fathers use pregnancy as a means of self-embodiment. Women may have different levels of anxiety in each trimester of pregnancy, and the type and severity of their worries may change over time[9].

Although pregnancy is a happy time, anxiety—a strong, enduring fear of what might happen—is frequently present. Fatigue, sweating, breathing, and a fast heartbeat are some of the symptoms. The purpose of this study is to evaluate the anxiety levels of primigravida mothers in their third trimester at GMCH, Chandigarh in relation to pregnancy outcomes[11]. Anxious pregnant women are more likely to experience depression, according to the WHO. In developed countries, 7–20% of people suffer from anxiety, while in developing countries, over 20% do. Pregnancy anxiety affects 28.7% of pregnant women in Indonesia. In Surabaya, 31% report having severe anxiety, 44% moderate anxiety, and 25% mild anxiety[12]. The intervention group's mean HARS scores decreased from 23.75 (pre-test) to 16.00 (post-test), indicating a significant reduction in anxiety levels. The control group, on the other hand, changed very little. Statistical significance was confirmed by the Mann-Whitney test result ($p = 0.001 < 0.05$)[13].

Methodology

Literature search strategy

To ensure the inclusion of the most recent evidence in this quickly developing field, a thorough systematic literature search was carried out to find pertinent studies published between 2020 and 2025. It was a calculated choice to include research done during and after the COVID-19 pandemic, which had a major effect on maternal mental health around the world, and to capture recent advances in our knowledge of antenatal anxiety.

Four important academic databases were used in the multi-database search strategy: PubMed, Crossref, Scopus, and Google Scholar. Peer-reviewed literature from interdisciplinary, medical, and psychological journals is widely covered thanks to this extensive database selection. While Scopus offered comprehensive coverage of scientific publications with robust citation analysis capabilities, PubMed gave access to biomedical and life science literature. Google Scholar enhanced the search by capturing literature and other academic sources, while Crossref made it easier to access scholarly content from several publishers.

Search Terms and Inclusion Criteria

Carefully chosen keywords that appropriately reflect the study's focus areas served as the guide for the literature search. "Anxiety," "Primigravida," and "Multigravida" were the main search terms. These were combined using the proper Boolean operators to increase search sensitivity while preserving specificity. These terms were chosen because they are clinically relevant and have been used consistently in psychiatric and obstetric literature.

The search strategy was expanded to include additional synonyms and related terms, such as "antenatal anxiety," "prenatal stress," "first-time mothers," "multiparous women," "pregnancy-related anxiety," and "maternal mental health." To guarantee the best possible retrieval of pertinent literature, the search approach was modified to fit the unique indexing system and search capabilities of each database.

Exclusion Criteria and Quality Assessment

The purpose of the exclusion criteria was to preserve the review's scientific integrity and applicability. Articles that did not meet the goals of the study, lacked peer review, or presented incomplete text were disqualified. Studies that only addressed postpartum anxiety, those with poor methodology, publications written in languages other than English and without translations, and case reports with small sample sizes were also not included in the analysis.

There were several steps in the screening process, starting with a review of the titles and abstracts and moving on to a full-text evaluation of articles that might be of interest. To guarantee the validity and dependability of the evidence included, each identified study was subjected to a quality assessment utilizing standardized evaluation criteria. The goal of this methodical approach is to offer a strong basis for comprehending prenatal anxiety patterns and guiding the creation of evidence-based clinical practice and policy in the field of maternal healthcare.

Result

Overall, 13 articles were found through database search. After screening the title, abstract, and the full text of the articles and removing non-relevant and duplicate studies, 13 observational studies with 870 primigravida and multigravida women were eligible to be included in our mini review analysis. Based on the comprehensive analysis of 13 different studies, the results consistently demonstrate that primigravida women experience significantly higher anxiety levels compared to multigravida women during pregnancy and childbirth, though findings show some variation across different populations and measurement scales. The majority of studies confirmed that primigravida mothers had predominantly severe anxiety symptoms, with rates ranging from 47.30% to 78% experiencing severe anxiety or high stress levels, while multigravida women typically showed more moderate anxiety levels (50-52% moderate symptoms). Statistical analyses across multiple studies revealed significant differences between groups using various

tests including Wilcoxon Mann-Whitney U test (p=0.006), Kruskal Wallis test (p=0.034), and Beck Anxiety Inventory comparisons (p<0.001). Educational status emerged as a consistent protective factor across studies, with lower educated women in both groups experiencing higher anxiety levels regardless of parity. Age distribution was predominantly 22-26 years in both groups, yet anxiety responses differed significantly by parity status. Trimester-specific analysis revealed that third-trimester anxiety was particularly prevalent, with 36% of pregnant women presenting high anxiety symptoms and 51.7% experiencing mild to moderate anxiety during this period. Some studies showed contradictory findings, with one reporting higher anxiety in multiparous women during the third trimester, while another found 58.5% of primigravida versus only 13.8% of multigravida mothers with severe anxiety. Intervention studies demonstrated that targeted approaches could significantly reduce anxiety levels in pregnant women, with Hamilton Anxiety Rating Scale (HARS) scores showing marked improvement from pre-test to post-test in intervention groups. Overall, the collective evidence supports that first-time mothers face greater psychological challenges during the perinatal period, warranting parity-specific screening and intervention protocols in routine prenatal care.

Discussion

There is strong evidence that primigravida and multigravida women experience significantly different levels of anxiety during pregnancy and labor, according to the results of this review of 13 observational studies that included 870 pregnant women. The findings have significant ramifications for maternal care and support networks since they consistently show that first-time mothers have higher anxiety levels than women who have given birth before.

Anxiety Prevalence and Severity

The prevalence of severe anxiety symptoms is higher among primigravida women (47.30%) than among multigravida women, which is the most startling finding. Numerous studies that demonstrate that primigravida mothers consistently report higher anxiety scores—up to 78% of first-time mothers, according to some studies—reinforce this pattern. These differences' statistical significance (p<0.05 in multiple analyses) demonstrates how important parity is in determining maternal anxiety levels.

It's interesting to note that although multigravida women exhibit a different pattern, with 52% reporting moderate anxiety symptoms, primigravida women exhibit higher rates of severe anxiety. This implies that prior birth experiences may lessen the severity of anxiety but do not completely eradicate it. The fact that anxiety is present in all parity groups suggests that worries about childbirth are present regardless of prior experience, though they become less severe with time.

Demographic and Temporal Factors

Significant demographic trends are shown by the studies, with younger women (ages 22–26) being most impacted in both groups. Higher levels of education are linked to fewer symptoms of anxiety in both primigravida and multigravida women, suggesting that education is a protective factor. The significance of thorough childbirth education and information sharing as anxiety-reduction techniques are highlighted in this findings.

The temporal analysis reveals intriguing differences between trimesters, with anxiety being most common in the third trimester. Third-trimester women had considerably higher anxiety levels (51.7% experiencing mild to moderate anxiety), whereas first- and second-trimester women had lower anxiety rates (56.7% and

70.7%, respectively) with no anxiety symptoms. This pattern implies that as delivery draws near, anxiety increases, most likely as a result of growing physical discomfort and labor anticipation.

Clinical Implications

Important clinical implications result from the significant differences in anxiety levels between primigravida and multigravida women (p-values ranging from 0.006 to 0.034). Targeted screening and intervention procedures should be put in place by healthcare providers, especially for new mothers who are most at risk for severe anxiety. The discovery that the intervention groups' anxiety levels significantly decreased (mean ranks decreased from 23.75 to 16.00) implies that the right interventions can successfully lower maternal anxiety.

Limitations and Future Directions

Although these results offer insightful information, causal inferences are limited by the observational nature of the studies. Future studies should concentrate on creating and evaluating evidence-based treatments that are especially suited to various parity groups. To create all-encompassing anxiety management techniques, more research is also needed into the roles of socioeconomic variables, cultural background, and support networks.

Conclusion

With ramifications for focused maternal care strategies, this review provides convincing evidence that primigravida women have noticeably higher anxiety levels than multigravida women. The necessity of parity-specific anxiety screening and intervention protocols in routine prenatal care is supported by the consistent findings across several studies.

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