

Anxiety Levels among High-risk Pregnant Women in a Selected Hospital of Bagalkot

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ABSTRACT

Background: Pregnancy at high risk is a worldwide health issue affecting patients across the world. Diagnosis of high-risk pregnancy causes severe emotional distress among patients. High-risk pregnant patients are more likely to experience depression, anxiety, and discomfort. This paper raises an important mind-body issue, since high-risk pregnancy women have faced anxiety worry. Anxiety is certainly elevated in high-risk pregnancies and psychological therapies are likely to reduce anxiety and increase the likelihood of pregnancy. The fear regarding the course of treatment, however, is less certain.

Methods: A quantitative research approach was adopted for the present study. Convenience sampling technique was used to select 50 subjects. The paper pencil technique and generalized anxiety disorder scale was used for collecting data. Both inferential and descriptive statistics was used for data analysis.

Results: Majority (76%) of respondents had mild anxiety levels, 10% had a moderate anxiety, and 14% had minimal anxiety levels. With a standard deviation of 5.21%, the total mean anxiety score was determined as 48.2%. To evaluate the association of sociodemographic factors and anxiety levels in pregnant women at risk, a Chi-square test was employed.

Conclusion: The main concern of present decade is the psychological issues faced in high-risk pregnancy. Assessment of anxiety level in high-risk pregnant women will help to identify the prevalence of anxiety and raise awareness. A nurse can play a crucial role in educating high-risk pregnant women about anxiety management techniques.

Key-words: Anxiety levels, Generalized anxiety disorder scale, High-risk pregnant mothers, Sociodemographic variables.

INTRODUCTION

When compared to normal pregnancies, high-risk pregnancy carries a higher probability of unfavorable outcomes for the mother or the fetus. Currently there are no specific rules for differentiating "high-risk" from "low-risk" pregnancies; yet, some conditions have been studied and determined to increase the risk of adverse results on mother or fetus.

These ailments can be divided into prenatal health issues, and prenatal health issues including specific fetal disorders^[1].

Certain pregnant women experience intense emotional reactions, such as dread, anger, and guilt, when informed that their pregnancy is high-risk. Furthermore, some research indicated that compared to pregnancies without this label, "high risk" pregnancies may result in more needless testing, heightening anxieties and decreasing the pregnant woman's sense of control over her circumstances. Research on managing anxiety in high-risk pregnancies has been identified as relevant, despite lacking high-quality studies on the subject at the moment^[2].

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Pregnancy (gestation) is the physiological process by which a fetus develops inside the mother's body. Healthcare professionals use a term "high-risk pregnancy" to describe a pregnancy in which there is a greater chance of difficulties during pregnancy or childbirth than there would be in a typical pregnancy for either the mother or the fetus ^[3]. To ensure the greatest results, women with high-risk pregnancies should be cared for by a dedicated team of medical professionals. Pregnancy difficulties from a prior pregnancy, conditions during pregnancy or delivery, or pre-existing disorders such as diabetes or high blood pressure can all lead to high-risk pregnancies ^[3].

Pregnancies with unexpected health or pregnancy issues related to the fetus or pregnancies that may compromise the health of mother or the fetus are classified as high-risk pregnancies. High-risk pregnancies are more likely to cause anxiety and depression, but hospitalization might worsen these conditions ^[4]. 'High-risk pregnancy' refers to any situation that may disrupt the normal course of pregnancy, with an emphasis on issues about the mother's and fetus's health. It also includes situations where the psychological profile may change, potentially leading to more complications if the expectant mother is hospitalized ^[5].

According to a specific description, anxiety is the body's warning signal that an unknown and incompatible threat is approaching, signaling an impending danger and allowing the organism to respond most effectively. But, this hormonal response shifts from healthy anxiety to pathological anxiety when it is severe and out of proportion to the actual risk ^[6]. Pregnancy-related emotional distress in the mother can have a detrimental effect on the development of the fetus. It may have long-term negative repercussions on the health of the mother, the child, and the family. Multisystem adaptation mechanisms in pregnant women may be triggered by maternal emotional distress and worry ^[7].

MATERIALS AND METHODS

Research Design- A descriptive research design and a quantitative research approach were adopted for this study. Fifty high-risk pregnant women were selected by convenience sampling from selected hospitals in Bagalkot, India. The paper pencil technique was used to obtain sociodemographic variables such as the age of the mother (in years), types of family, religion, educational

qualification, occupation, monthly income of the family, family support, weeks of gestation, parity, trimester, place of incidence, health behaviour, weight, and husband support. A generalized anxiety disorder (GAD) scale was employed for data collection.

The scale consists of 7 items numbered 0 to 21, with higher scores indicating a higher anxiety level. Anxiety levels between 0 and 4 would be regarded as minimal-level anxiety; 5 to 9 would be considered mild-level anxiety; 10 to 14 would be regarded as moderate-level anxiety; and 15 to 21 would be considered as severe-level anxiety. Both descriptive and inferential statistics were used to analyze the obtained data.

Inclusion criteria

- Women who can read and write Kannada;
- Those available during data collection;
- Women who consent to participate in the research.

Exclusion criteria

- Noncooperative women;
- Those women who were ill at the time of data collection.

Statistical Analysis- The data analysis complied with the study's goals. Descriptive statistics (frequency and percentage distribution SD plots) and inferential statistics (chi-square) were used to analyze the data.

Ethical Approval- Ethical approval was obtained from the B.V.V.S. Sajjalashree Institute of Nursing Sciences ethics committee, Bagalkot, Karnataka, India. Written consent was obtained from each participant.

RESULTS

The assessment of anxiety score among pregnant women at risk shows that the highest percentage (76%) of women had mild anxiety, followed by 14% with minimal anxiety and 10% with moderate anxiety. Table 1 shows the percentage distribution of anxiety levels in pregnant subjects at risk.

A substantial correlation was found between the level of anxiety and gestational trimester, week of gestation, health behavior, and weight of pregnant women (Table 2).

Table 1: Percentage distribution of anxiety levels in high-risk pregnant women.

Anxiety level			
	Range of scores	Frequency	Percentage (%)
Minimal anxiety	0-4	7	14
Mild anxiety	5-9	38	76
Moderate anxiety	10-14	5	10

Table 2: Association of anxiety scores and related sociodemographic characteristics in high-risk pregnant women.

Socio-demographic variables	Chi square value	p-value	Significance
Age	0.5208	0.47	NS**
Religion	2.39	0.12	NS**
Educational status	0.08	0.76	NS**
Occupation	0.66	0.41	NS**
Family monthly income	0.33	0.56	NS**
Parity	2.95	0.08	NS**
Family support	0.29	0.58	NS**
Trimester	5.94	0.01	S*
Weeks of gestation	9.92	0.00	S*
Place of incidence	0.14	0.70	NS**
Health behavior	6.75	0.00	S*
Weight	4.25	0.03	S*
Type of family	0.73	0.39	NS**
Husband support	0.032	0.85	NS**

Table value=0.01; df=1; *significant; **non-significant

DISCUSSION

The prevalence of anxiety levels among high-risk pregnant mothers in this study indicated that the majority (76%) of respondents had a mild level of anxiety, 14% had minimal anxiety, and 10% had moderate anxiety. A nonsignificant association was found between levels of anxiety and the sociodemographic variables of high-risk pregnant

women. Comparable outcomes were reported by Paz *et al.* [8], who conducted a descriptive, cross-sectional study on 100 high-risk pregnant women at HULW, Brazil. Their results indicated that 68% of pregnant women experienced heat, fear of the worst happening, emotional instability, a faster heartbeat, and nervousness. However, they identified the risk factors for anxiety as gestational trimester, length of hospital stays, and history of abortions. Another study by Sinesi *et al.* [9] identified several anxiety symptoms and domains as promising factors for screening antenatal and pregnancy-related anxiety, including symptoms of panic, elevated levels of worry about the baby's health, and fear of childbirth.

The Beck Anxiety Inventory (BAI) and Spielberg State-Trait Anxiety Scale questionnaire (STAI-T) [10] indicated a statistically significant difference between low-risk and high-risk pregnancies regarding trait-state anxiety levels about COVID-19 outbreak. During the COVID-19 pandemic, high-risk pregnant women reported higher rates of anxiety than pregnant women with no risk factors.

Studies showing a positive correlation between anxiety levels in high-risk pregnant women and sociodemographic characteristics are available in the literature. A significant positive association was found by Sinaci *et al.* [11] between anxiety and gestational age, sleeping, watching TV, and drinking caffeinated beverages. An increased level of anxiety among working mothers and those with low socioeconomic status were also reported.

Another remarkable correlation reported in a few studies was anxiety score in high-risk pregnant women and their practice towards COVID-19. In one of those studies, Ahmed *et al.* [12] opined that the majority of expectant mothers were terrified of contracting COVID-19 and passing the virus to their unborn children. Anxiety and the fear of the coronavirus spreading were positively correlated.

Unlike the present study that involved high-risk pregnant women, Smorti *et al.* [13] conducted a cross-sectional study involving 32 women with low-risk pregnancies and 30 hospitalized high-risk pregnant women. Compared to the low-risk pregnancy group, the hospitalized high-risk group reported higher levels of general anxiety and despair. The low-risk group expressed more worry about their appearance than the high-risk group.

Some additional factors are also found to influence pregnant women at high risk and their anxiety levels, like gravidas, parity, etc. Ketan *et al.* ^[14] conducted a cross-sectional study on 290 multigravida women in the third trimester. Anxiety levels were found to have a weakly positive connection with foetal bonding. Women, who were primi gravidas and those who were childless had higher levels of prenatal attachment.

In agreement with our results, a study by Anyebe *et al.* ^[15] reported moderate to severe psychological distress in over 40% of high-risk pregnant women, followed by Only 21.6% were probably in good health, with the remaining 36.3% having a minor condition. On an anxiety scale, none of the women indicated alarming levels of anxiety; the majority (87.3%) reported low levels, and the remaining 12.7% reported moderate levels. Similar results were reported by Bagade *et al.* ^[16] on 70 low-risk Indian pregnant women. They concluded that 78.57% of pregnant women had anxiety associated with pregnancy, followed by 32% had moderate anxiety, 33% had mild anxiety, and 5% were suffering from severe anxiety. Considering the component of anxiety, 74.3% of women were afraid of giving birth, 74.3% were concerned about their looks, and 77.1% were worried about having a disabled child.

The present study supports Rinhring *et al.* ^[17], conducted on 30 antenatal mothers with high-risk pregnancies selected by a convenient sampling technique, showing statistically significant results. Additionally, Kaur *et al.* ^[18] in their study concluded that 16.9% had severe anxiety, 42.1% had a mild to moderate level of anxiety, and 40.9% had minimal anxiety before intervention.

CONCLUSIONS

The study concluded that psychological issues faced in high-risk pregnancy is a major concern faced by pregnant women nowadays that psychosocial care and routine screening for anxiety and depression are necessary for high-risk pregnant women. Assessment of anxiety level will not only help in determining the prevalence of anxiety but will also raise awareness among pregnant women. The GAD scale was proved as an effective tool in this study that can be employed as a scientific, logical, and cost-effective strategy for screening high-risk pregnant women suffering from anxiety issues. Additionally, the crucial role of nursing professionals cannot be neglected in educating high-risk pregnant

women about anxiety management techniques.

CONTRIBUTION OF AUTHORS

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