Comparative Study on The Anxiety Levels Between First-time Mothers and Mothers Pregnant for Two or More Times in Benue State: The Role of Counselling

Blessing Iveren Akume ¹, Prof. Elvis Oblu Ihaji ², Samuel Terzunzwe Anhange ³ & Tertindi Lordsent Tyokyaa ⁴

¹ Department of Psychology: University of Mkar, Mkar.

^{2,3,&4} Department of Psychology; Benue State University

Corresponding Author: Blessing Iveren Akume, biakume@umm.edu.ng 07062600551

Abstract

regnancy is one of the most sensitive periods and stressful life experiences in the lives of most women despite the joy, happiness and pleasure it brings to most homes. However, pregnancy for most women produces a mixed feeling of happiness and a lot of emotional unsteadiness which could lead to anxiety. The study compared anxiety levels between first-time mothers and mothers pregnant for two or moretimes in Benue State: The Role of Counselling. The cross-sectional and quasi experimental study was adopted for the study. A total number of 385 pregnant women receiving antenatal care in both Federal Medical Centre and Benue State University Teaching Hospital, Makurdi were selected through a purposive sampling technique. Data for the study were collected using State-Trait Anxiety Inventory by Spielberger et al. (1983). Data analysis involved the use of Independent and Dependent t-test. Hypothesis one revealed that there was no significant difference between anxiety level among first-time mothers and mothers who have been pregnant for two or more times. Hypothesis two however showed that counselling significantly influenced anxiety among pregnant women. The study therefore concludes that there is no significant difference inanxiety levels between first-time mothers and multiparous mothers, and Counselling was found to influence anxiety among pregnant women in Benue state. It was therefore recommended among others that counselling programs should be integrated into antennal programs to address anxiety issues to all mothers, both first time and multiparous mothers.

Keywords: First-time Mothers, Multiparous mothers, Anxiety, Counselling

Introduction

Pregnancy is a period characterized by profound psychological and physiological changes, often leading to heightened anxiety. Anxiety during pregnancy is a common experience, affecting both primiparous (first-time) and multiparous (experienced) mothers. While first-time mothers may experience anxiety due to the uncertainty and newness of childbirth and parenting, multiparous mothers might face anxiety related to previous pregnancy experiences and the challenges of managing multiple

children.

Anxiety in pregnancy can arise from a multitude of factors, including concerns about the health of the foetus, fear of labour and delivery, and apprehensions about the transition to motherhood. These anxieties are often more pronounced in Primigravida women due to the uncertainty and lack of experience with pregnancy and childbirth (Heron et al., 2013). In contrast, while multigravida women may be more familiar with the pregnancy process, they may still experience anxiety due to past pregnancy

complications, concerns about the wellbeing of their other children, or the challenges of balancing multiple responsibilities (Blackmore et al., 2011). In a similar vein, women whomit's their first time of conceiving, may perceive pregnancy differently from those who are experienced mothers because of the clusters of information they have heard in the past in conversations with experienced mothers and others, they may tend to be anxious about pregnancy even when they do not have issues to worry about. Also, the lifestyle changes, new responsibilities, and uncertainties that come with transitioning to motherhood can be overwhelming for new mothers.

Anxiety levels can be heightened by concerns about caring for the baby, potential delivery complications, and balancing motherhood with other responsibilities which if not managed properly may lead to Anxiety disorder. Despite the welldocumented effects of anxiety during pregnancy, research comparing anxiety levels between first-time and multiparous mothers is limited in the present setting for which this research is carried out particularly concerning integration of counselling as intervention. Previous studies have often presumed higher anxiety levels in first-time mothers due to the novelty of the experience (Kingston et al., 2012). Rubertsson, et al, (2014), in their study on the prevalence of anxiety in early pregnancy highlights that first-time mothers are more likely to experience heightened levels of anxiety compared to those with prior childbirth experience. It also examines various factors that contribute to anxiety, such as lack of experience, fear of the unknown, and concerns about labour and motherhood.

Prenatal anxiety is defined as anxiety experienced during pregnancy that may involve fears about the health of the baby, the outcome of the pregnancy, or one's ability to cope with childbirth and parenting. This condition can manifest as generalized anxiety, panic attacks, or specific phobias (APA, 2023). National Institute of Mental Health (NIMH, 2023) defines prenatal anxiety as a condition characterized by persistent and excessive worry about various aspects of pregnancy, including the health and development of the foetus, potential complications during childbirth, and future parenting responsibilities. Field (2017) defines prenatal anxiety as a significant mental health concern during pregnancy, marked by excessive worry, tension, and fear that can affect both maternal well-being and foetal outcomes. It is often associated with increased risks for preterm birth and postpartum depression. According to the World Health Organization (WHO), prenatal anxiety is an emotional state of heightened concern, apprehension, and fear occurring during pregnancy, which can have implications for maternal and infant health if not appropriately managed (WHO, 2022). Anxiety during pregnancy is not only common but can also have profound implications for both the mother and the foetus, influencing pregnancy outcomes and postpartum adjustment (Fisher et al. 2012; Dennis & Dowswell, 2013). Anxiety in pregnancy can arise from a multitude of factors, including concerns about the health of the foetus, fear of labour and delivery, and apprehensions about the transition to motherhood. These anxieties are often more pronounced in Primigravida women due to the uncertainty and lack of experience with

pregnancy and childbirth (Heron et al., 2013). In contrast, while multigravida women may be more familiar with the pregnancy process, they may still experience anxiety due to past pregnancy complications, concerns about the well-being of their other children, or the challenges of balancing multiple responsibilities (Blackmore et al., 2011).

However counselling is a useful tool that can lessen anxiety during pregnancy which if utilized can serve as an essential component for prenatal care. Counselling provides pregnant women with a platform to express their fears and concerns, receive accurate information about pregnancy and childbirth, and develop coping strategies to manage anxiety (Bittner et al., 2014). Through individualized support, counselling can address the unique psychological needs of both primigravida and multigravida women, helping to reduce anxiety and improve overall well-being (Glover, 2014). Numerous studies have documented the positive impact of counselling in reducing pregnancy-related anxiety. For instance, a study by Rini et al. (2006) found that cognitive-behavioural interventions, including counselling, significantly reduced anxiety levels in pregnant women, leading to better pregnancy outcomes. Similarly, research by Brugha et al. (2011) demonstrated that counselling interventions during pregnancy were associated with lower rates of postpartum depression and anxiety, highlighting the long-term benefits of psychological support. Despite the growing body of evidence supporting the benefits of counselling during pregnancy, there is a relative paucity of research that specifically compares Anxiety level between

primigravida and multigravida women and understanding the differential impact of counselling on these two groups is crucial for developing targeted interventions that can effectively address their distinct needs. Primigravida women, who may be navigating the uncertainties of pregnancy for the first time, could benefit from more intensive counselling focused on education and preparation. In contrast, multigravida women might require counselling that addresses their concerns based on previous pregnancy experiences and the challenges of managing an expanding family.

The present study seeks to fill this gap by assessing the differences in anxiety reduction between these groups and exploring the role of counselling in alleviating anxiety among primigravida and multigravida women. The study aims to provide insights that could inform the development of more personalised and effective prenatal counselling programs. In doing so, it contributes to the broader understanding of how psychological interventions can support the mental health of expectant mothers and improve pregnancy outcomes. Anxiety during pregnancy can arise from various sources, including fear of childbirth, concerns about the baby's health, and personal and social stressors. Elevated anxiety levels during pregnancy have been associated with adverse outcomes such as preterm birth, low birth weight, and postpartum depression (O'Connor et al., 2002). The physiological changes during pregnancy, combined with psychological stress, make pregnant women particularly vulnerable to anxiety. Studies however need to be conducted to compare the anxiety levels of the different pregnant women to know

where to channel intervention for the good of the mother and also the unborn child.

First-time mothers, or primiparous women, often face unique challenges that can lead to increased anxiety. The lack of previous experience with pregnancy, childbirth, and new-born care can result in heightened fear and uncertainty. Studies such as Hall et al. (2009) have shown that primiparous women often exhibit higher anxiety scores, especially in the third trimester, due to the anticipation of childbirth and the unknown aspects of motherhood. Kingston et al. (2012) examined anxiety related to preparation and readiness for parenthood among primigravida and multigravida women they reported that multigravida women often experience anxiety about juggling the responsibilities of a new pregnancy with the demands of their existing children and household duties. Multiparous mothers, or those who have been pregnant two or more times, may experience anxiety related to previous pregnancy outcomes, balancing responsibilities with existing children, or the fear of repeating past complications. However, some studies suggest that multiparous women might have lower anxiety levels due to their prior experiences (Glasheen et al., 2010). This group of, mothers might feel more confident in their ability to handle pregnancy and childbirth, though this confidence can be tempered by previous negative experiences.

However, Counselling during pregnancy can help mitigate anxiety by providing support, education, and coping strategies. Counselling can address specific concerns related to childbirth, parenting, and maternal self-efficacy, helping mothers to manage their anxiety more effectively.

Studies such as Dennis et al. (2013) have shown that counselling can significantly reduce anxiety levels in pregnant women. Conversely, the impact of counselling across different pregnancy experiences has not been widely studied, particularly in comparing its effects on primiparous versus multiparous women.Dafei, et al. (2021) in their study on the effect of Cognitive Behavioural Counselling of pregnant women with the presence of a spouse on stress, anxiety, and postpartum depression, showed that the mean scores of stress, anxiety, and depression in the two groups in the pre-intervention stage were not significantly different, but in the postintervention stage and follow-up, the mean scores of stress, depression, and anxiety in the intervention group were significantly reduced compared to the control group. The present study would compare same using pregnant women in Benue state as the case study. Utsunsoz, et al. (2010), on the effectiveness of Counselling in Reducing Anxiety among Nulliparous Pregnant Women confirmed the effectiveness of counselling in reducing state and trait anxiety in pregnant women. The study aims to fill this gap by comparing Anxiety levels between first-time mothers and mothers pregnant for two or more times and the role of counselling. Specifically, it seeks to:

- Compare the anxiety level of first-time pregnant mothers and mothers with pregnancy for two or more times in Benue State.
- ii. Determine the influence of counselling on anxiety among primigravida and multigravida women in Benue State.

Research Hypotheses

- i. First-time mothers will significantly experience higher anxiety than mothers who are pregnant for two or more times in Benue State.
- ii. Counselling will significantly influence anxiety among first-time mothers and mothers pregnant for two or more times in Benue State

Method

Design

This study employs a cross-sectional and quasi experimental design. The study population includes pregnant women who were attending antenatal sessions at Benue State Teaching Hospital, Makurdi and Federal Medical Centre, Makurdi. A total number of 385 pregnant women took part in the study, with an equal representation of 163 Primigravida and 162 Multigravida women. A purposive sampling technique was used to select participants, only women who could

read and understand took part in the study. The instrument used for data collection was the State-Trait Anxiety Inventory (STAI), STAI has been widely used in pregnancyrelated research and has demonstrated high validity in measuring anxiety (Spielberger, 1970). It is a validated tool for measuring anxiety levels. The reliability of the STAI was assessed using Cronbach's alpha to ensure internal consistency as described by Gliem & Gliem (2003). Participants completed the STAI before and after the counselling intervention to assess changes in anxiety levels. 50 Participants who scored high on anxiety identified interest in counselling which was observed for six sessions after which they were retested again to see if counselling played a role in reducing their anxiety level. The independent t-test and dependent t-test was used to analyze data to determine the mean difference in scores obtained from the two groups and also to compare pre- and post-counselling anxiety scores within each group. Statistical analysis was performed using SPSS software.

Table 1: Independent t-test showing different level of anxiety between first-time pregnan mothers and mothers pregnant for two or more times in Benue State.

Variable	Group	N	Mean	Std	Df	T	p-value	
	First-time pregnant	107	43.37	7.96				
	mothers				383	1.33	0.183	
Anxiety								
	Second or more times pregnant	278	42.12	8.27				
	mothers							

Source: 2024 Fieldwork

In order to test for the difference in anxiety level among pregnant mothers, an independent t-test was conducted to determine the difference in anxiety level between first-time pregnant mothers and women who have experienced pregnancy more than once. This test was found not to be statistically significant (t(383)=1.33, p=0.183). The result indicates that first-time pregnant mothers have a slightly higher anxiety scores of (M=43.37, Std=7.96) than second or more times pregnant mothers with

(M=42.12, Std=8.27). The difference in the mean score (MD=1.25) at P-value of 0.05 as

seen in the table was not enough to draw a line between the two groups.

Results

Table 1: Independent t-test showing different level of anxiety between first-time pregnant mothers and mothers pregnant for two or more times in Benue State.

Variable	Group	N	Mean	Std	Df	T	p-value
	First-time pregnant	107	43.37	7.96	202	1.00	0.102
Anxiety	mothers				383	1.33	0.183
	Second or more times pregnant mothers	278	42.12	8.27			

Source: 2024 Fieldwork

In order to test for the difference in anxiety level among pregnant mothers, an independent t-test was conducted to determine the difference in anxiety level between first-time pregnant mothers and women who have experienced pregnancy more than once. This test was found not to be statistically significant ($t_{(383)}$ =1.33, p=0.183).

The result indicates that first-time pregnant mothers have a slightly higher anxiety scores of (M=43.37, Std=7.96) than second or more times pregnant mothers with (M=42.12, Std=8.27). The difference in the mean score (MD=1.25) at P-value of 0.05 as seen in the table was not enough to draw a line between the two groups.

Table 2.0: Summary of paired t-test showing the mean anxiety scores before and after counselling intervention among pregnant women in Benue state

Variable	N	Before	After	Statistics	Df	Effect	p-value
		Mean±SD	Mean±SD	(Paired t-test)		size	
Anxiety	50	50.24±4.75	39.14±6.85	10.66	49	1.50	<0.001

SD= Standard deviationSource: 2024 fieldwork

A paired samples t-test conducted to determine the mean difference in the participants' levels of anxiety before and after counselling. Findings indicated that there was a statistically significant difference between anxiety scores before and after counselling intervention with ($t_{(49)} = 10.66$, p<0.01, Cohen's d=1.50). The result shows that participants' anxiety score before counselling intervention was higher (M= 50.24, SD = 4.75) whereas the score after

intervention was (M=39.14, SD=6.85). The effect size for this analysis (d=1.50) was large and found to exceed Cohen's (1988) convention for large effect size (d=0.80) to affirm the significance of the difference in the mean score.

Discussion

The results indicated no significant difference in anxiety levels between first-time mothers and multiparous mothers (p >

0.05). Both groups exhibited similar levels of anxiety, suggesting that the experience of previous pregnancies does not necessarily reduce anxiety during subsequent pregnancies. Additionally, the use of counselling services was associated with lower anxiety levels across both groups, stressing the importance of counselling as an effective intervention. The findings challenge the hypothesis that first-time mothers will significantly experience higher anxiety than multiparous mothers. The lack of significant difference in anxiety levels suggests that both groups may face unique but equally impactful sources of anxiety. For first-time mothers, the novelty of the experience is a major source of anxiety, while for multiparous mothers, the concerns may shift to managing existing responsibilities and the outcomes of previous pregnancies.

The independent t-test was used to compare the mean difference between first time pregnant mothers and pregnant women who had pregnancies twice or more times, the result found to be statistically not significant, indicating that the difference in anxiety levels between first-time pregnant mothers and multigravida was not statistically significant. Although the mean anxiety level was slightly higher for primigravida compared to multigravida, this difference was not significant enough to confirm the hypothesis that first-time pregnant mothers exhibit significantly higher levels of anxiety compared to mothers who had pregnant multiple times. The study found no significant difference in anxiety levels between the two suggesting that multigravida may face unique stressors elevating their anxiety to levels comparable to or higher than those of primigravida. This implies that there

may be other factors that poses anxiety issues among mothers pregnant for multiple times, say increased caregiving responsibilities, pregnant women who have had multiple children may be anxious about increasing their caregiving burden. The need to care for older children while managing the physical and emotional demands of pregnancy can significantly elevate anxiety levels. This aligns with Kingston et al. (2012) who examined anxiety related to preparation and readiness for parenthood among primigravida and multigravida women they reported that multigravida women often experience anxiety about juggling the responsibilities of a new pregnancy with the demands of their existing children and household duties.

A paired samples t-test was conducted to compare differences in participants reported with high level of anxiety before and after counselling on anxiety among pregnant women in Benue State. Findings indicated that there was a statistically significant difference between anxiety scores before and after counselling intervention on anxiety. The result further shows that participant's anxiety score before counselling intervention was higher when compared to the score of after intervention. The effect size for this analysis (d= 1.50) was large and found to exceed Cohen's (1988) convention for large effect size (d=0.80). Therefore, the hypothesis which stated that counselling will significantly mitigate anxiety among pregnant women with high anxiety in Benue state was confirmed, this implies that counselling interventions have a significant and positive effect on lowering severe anxiety symptoms in pregnant women in Benue state.

The findings reveals that this decrease in anxiety results in greater mental health, coping skills, and overall well-being for both the mother and the unborn child. Counselling has been found to effectively relieve severe anxiety in pregnant women. This means that with counselling, many women can get great alleviation from their anxiety issues. Also, the findings shows that Counselling assists pregnant women in identifying particular triggers and patterns that lead to their high anxiety levels. Understanding these triggers allows them to learn how to control them more successfully. The findings also suggest that pregnant women can improve their overall mental health by reducing anxiety through counselling. This improvement can lead to a more positive pregnancy experience, lower the risk of issues like preterm birth or low birth weight, and promote improved maternal and foetal health. The findings of this hypothesis is consistent with a study by Dafei, et al. (2021). They carried out a study on the effect of cognitive-behavioural counselling of pregnant women with the presence of a spouse on stress, anxiety, and postpartum depression, the result showed that the mean scores of stress, anxiety, and depression in the two groups in the pre-intervention stage were not significantly different, but in the postintervention stage and follow-up, the mean scores of stress, depression, and anxiety in the intervention group were significantly reduced compared to the control group. The findings also confirms the study by Utsunsoz, et al.(2010) study on the effectiveness of Counselling in Reducing Anxiety among Nulliparous Pregnant Women, the study confirmed the effectiveness of counselling in reducing state and trait anxiety in pregnant

women. Consulting with pregnant women and educating

Conclusion

This study provides evidence that there is no significant difference in anxiety levels between first-time mothers and those pregnant for the second or more times. The consistent finding across both groups highlights the universal need for psychological support during pregnancy. Counselling has been shown to be an effective intervention in reducing anxiety, regardless of a mother's pregnancy history.

Recommendations

The study recommended that prenatal care should include routine screening for anxiety and the provision of counselling services tailored to the individual needs of pregnant women Healthcare providers should be aware that anxiety levels may not differ significantly between first-time and experienced mothers. This awareness can inform the development of counselling programs that cater to the diverse needs of all pregnant women, ensuring that both primiparous and multiparous mothers receive the psychological support they need.

References

American Psychiatric Association (2023). Diagnostic and statistical manual of mental disorders (DSM-5). *American Psychiatric Publication*.

Bittner, A., Peukert, J., Zimmermann, C., Junge-Hoffmeister, J., Parker, L. S., Stöbel-Richter, Y., & Weidner, K. (2014). Early intervention in pregnant women with elevated anxiety and depressive symptoms: Efficacy of a

- cognitive-behavioral group program. *The Journal of perinatal & neonatal nursing*, 28(3), 185-195.
- Blackmore, E. R., Côté-Arsenault, D., Tang, W., Glover, V., Evans, J., Golding, J., & O'Connor, T. G. (2011). Previous prenatal loss as a predictor of perinatal depression and anxiety. *The British journal of psychiatry: The journal of mental science*, 198(5), 373–378.
- Blackmore, J., Bateman, D., Loughlin, J., O'Mara, J., & Aranda, G. (2011). Research into the connection between built learning spaces and student outcomes
- Brugha, T. S., McManus, S., Bankart, J., Scott, F., Purdon, S., Smith, J., Bebbington, P., Jenkins, R., & Meltzer, H. (2011). Epidemiology of autism spectrum disorders in adults in the community in England. *Archives of general psychiatry*, 68(5), 459–465.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1988). A global measure of perceived stress. *Journal of Health and Social Behaviour*, 24(4), 385–396.
- Dafei, M., Mojahed, S., Dastjerdi, G., Dehghani, A., & Ardakani, T. S. (2021). The effect of cognitive-behavioral counselling of pregnant women with the presence of a spouse on stress, anxiety, and postpartum depression. *Journal of education and health promotion*, 10, 131.
- Dennis, C. L., Ross, L., & Grigoriadis, S. (2013). Psychosocial interventions for the treatment of perinatal depression: A systematic review and meta-analysis. *Canadian Journal of Psychiatry*, 58(9), 529-542.
- Dennis, C.L. & Dowswell, T. (2013)

- Psychosocial and Psychological Interventions for Preventing Postpartum Depression. Cochrane Database of Systematic Reviews, 2, Article ID: Cd001134.
- Field, T., Diego, M., Hernandez-Reif M, Figueiredo B, Deeds O, Ascencio, A., Kuhn C (2017). Comorbid depression and anxiety effects on pregnancy and neonatal outcome. *Infant Behaviour and Development*, 33(1), 23–29.
- Fisher, J., Cabral de Mello, M., Patel, V., Rahman, A., Tran, T., Holton, S., & Holmes, W. (2012). Prevalence and determinants of common perinatal mental disorders in women in low and lower-middle-income countries: a systematic review. *Bulletin of the World Health Organization*, 90(2), 139G–149G.
- Glasheen, C., Richardson, G. A., Fabio, A., & Kim, K. H. (2010). Maternal anxiety and depressive symptoms and infant temperament: A prospective investigation. *Infant Mental Health Journal*, 31(4), 347-366.
- Gliem, J. A., & Gliem, R. R. (2003). Calculating, interpreting, and reporting cronbach's alpha reliability coefficient for likert-type scales. Paper presented at the Midwest Research to-Practice Conference in Adult, Continuing, and Community Education, The Ohio State University, Columbus.
- Glover, V. (2014). Maternal depression, anxiety and stress during pregnancy and child outcome; what needs to be done. Best practice & research. Clinical obstetrics & gynaecology, 28(1), 25–35.
- Hall, W. A., Hauck, Y., Carty, E. M., Hutton, E., & Fenwick, J. (2009). Childbirth

- fear, anxiety, fatigue, and sleep deprivation in pregnant women. *Journal of Obstetric, Gynaecologic & Neonatal Nursing*, 38(5), 567-576.
- Heron-Delaney, M., Kenardy, J., Charlton, E., & Matsuoka, Y. (2013). A systematic review of predictors of posttraumatic stress disorder (PTSD) for adult road traffic crash survivors. *Injury*, 44(11), 1413–1422.
- Kingston, D., Tough, S., & Whitfield, H. (2012). Prenatal and postpartum maternal psychological distress and infant development: a systematic review. *Child psychiatry and human development*, 43(5), 683–714.
- National Institute of Mental Health (NIMH). (2023). Anxiety disorders. Retrieved from https://www.nimh.nih.gov
- O'Connor, T. G., Heron, J., Golding, J., Beveridge, M., & Glover, V. (2002). Maternal antenatal anxiety and children's behavioural/emotional problems at 4 years. *British Journal of Psychiatry*, 180(6), 502-508.

- Rini, C., Dunkel Schetter, C., Hobel, C. J., Glynn, L., & Sandman, C. A. (2006). Effective social support: Antecedents and consequences of partner support during pregnancy. *Personal Relationships*, 13(2), 207-229.
- Rubertsson, C., Hellström, J., Cross, M., & Sydsjö, G. (2014). "Anxiety in early pregnancy: Prevalence and contributing factors." *Archives of Women's Mental Health*, 17(3), 221-228.
- Spielberger, C. D. (1970). *State-Trait Anxiety Inventory: Bibliography* (2nd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Utsunsoz, T., Ota, E., Guvenc, N., Laopaiboon, M., Lumbiganon, P., Zhang, J.,& WHO Multicountry Survey on Maternal Newborn Health Research Network. (2010). Pregnancy and childbirth outcomes among adolescent mothers: a World Health Organization multicountry study. *BJOG: An International Journal of Obstetrics & Gynaecology*, 121, 40-48.