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Difference in Pregnancy Related Stress Levels Between Primigravida and Multigravida Women

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ABSTRACT

Pregnancy is a physiological process accompanied by physical, hormonal, and psychological changes that may trigger pregnancy-related stress. Maternal stress during pregnancy can disrupt hormonal balance, reduce immune function, adversely affect fetal development, and increase the risk of pregnancy complications. This study aimed to pregnancy-related stress level between primigravida and multigravida women attending a primary healthcare center in Malang City, Indonesia. This quantitative study employed a comparative cross-sectional design. The study was conducted at Janti Public Health Center, Sukun District, Malang City, from May–June 2025 among 64 pregnant women, comprising 32 primigravidas and 32 multigravidas, selected using purposive sampling. The inclusion criteria were primigravida and multigravida pregnant women with low-risk pregnancies who could operate mobile phones, while the exclusion criteria were pregnant women who received psychological therapy. Pregnancy-related stress were measured using the Pregnancy Stress Rating Scale (PSRS-36) and analyzed using the Mann-Whitney test (α = 0.05). The results showed that most primigravida experienced moderate (37.5%) and high (31.2%) levels of pregnancy-related stress, while multigravida were predominantly moderate (62.5%). There was a significant difference between the two groups (p = 0.046) with an average level of pregnancy-related stress in primigravida of 36.80 higher than in multigravida of 28.20. This study shows levels of pregnancy-related stress in primigravida mothers are higher than those in multigravida mothers, confirming that previous pregnancy experiences play a role in maternal psychological adaptation. These findings contribute to the understanding of pregnancy-related stress in the context of primary healthcare in Indonesia. Therefore, integrating pregnancy-related stress screening into routine antenatal care, as well as providing education and family support for first-time pregnant women, should be considered as strategies for early detection and management of pregnancy-related stress during pregnancy.

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INTRODUCTION

Pregnancy is a critical period characterized by substantial psychological, hormonal, and psychological changes that may increase women's vulnerability to psychological stress. Pregnancy-related stress refers to emotional distress arising from concerns about maternal and fetal health, bodily changes, childbirth, and the transition to parenthood. This

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condition can adversely affect both maternal well-being and fetal development. Although a certain degree of stress is considered a normal adaptive response during pregnancy, persistent or excessive stress has been associated with adverse maternal and neonatal outcomes, including gestational hypertension, preeclampsia, preterm birth, low birth weight, impaired fetal development, and postpartum mental health disorder. Consequently, maternal mental health has become an essential component of comprehensive antenatal care (ANC), alongside routine physical and obstetric assessments.

Pregnancy-related stress remains a major public health concern worldwide. The prevalence of pregnancy-related remains high worldwide, affecting approximately 26% of pregnant women across all trimesters and increasing to 52% in the third trimester. In low- and middle-income countries, maternal psychological distress is often exacerbated by socioeconomic challenges, limited access to mental health services, and inadequate psychosocial support (14). These conditions underscore the importance of integrating mental health assessment into routine maternal healthcare to facilitate early identification and timely intervention. In Indonesia, psychological well-being has received less attention than physical health within routine antenatal services. Around 33.93% of pregnant women in Indonesia experience stress during the third trimester, while studies in Malang have reported moderate to high anxiety levels among nearly 30% of pregnant women. A preliminary survey conducted at Janti Public Health Center, Malang City, on December 30, 2024, involving 15 pregnant women, also demonstrated varying degrees of pregnancy-related stress. These findings indicate that maternal psychological distress remains an important issue within primary healthcare settings and warrants greater clinical attention.

Pregnancy experience is considered one of the factors influencing maternal psychological adaptation. Women experiencing their first pregnancy (primigravida) commonly encounter uncertainty regarding physical changes, labor, childbirth, and future parenting responsibilities. In contrast, women with previous pregnancy experience (multigravida) may have developed more adaptive coping mechanisms through earlier reproductive experiences. According to Lazarus and Folkman's stress and coping theory, previous experiences influence cognitive appraisal and coping responses, thereby affecting individual perceptions of stressful events (10). Nevertheless, pregnancy experience alone may not fully explain maternal stress because socioeconomic conditions, family support, and healthcare accessibility may also contribute to psychological well-being during pregnancy.

Previous studies have primarily investigated the prevalence, determinants, and psychosocial correlates of antenatal stress (2,5,7,9,18). However, relatively few studies have directly compared pregnancy-specific stress between primigravida and multigravida women using standardized measurement instruments, particularly within Indonesian primary healthcare settings. Furthermore, existing evidence has largely focused on identifying associated factors rather than examining whether previous pregnancy experience itself contributes to differences in maternal stress severity. Consequently, evidence comparing stress levels between these two groups remains limited, especially in community-based antenatal care services.

Addressing this knowledge gap is important because identifying groups at greater risk of psychological distress may facilitate more targeted maternal mental health interventions. Women experiencing their first pregnancy may require additional psychological preparation, structured antenatal education, and family-centered support to improve adaptation during pregnancy. Conversely, although multigravida women possess previous pregnancy experience, they may continue to experience psychological stress related to increased family responsibilities, financial pressures, or previous adverse pregnancy outcomes. Understanding these differences may therefore support the development of evidence-based strategies for integrating psychological assessment and intervention into routine

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antenatal care. To our knowledge, few studies in Indonesia have specifically compared pregnancy-related stress between primigravida and multigravida women using the Pregnancy Stress Rating Scale (PSRS-36) within primary healthcare settings. This study therefore addresses an important evidence gap by evaluating differences in maternal stress levels between these two groups at Janti Public Health Center, Malang City. We hypothesized that primigravida women would experience significantly higher levels of pregnancy-related stress than multigravida women because of limited pregnancy experience and reduced psychological preparedness.

Therefore, this study aimed to compare stress levels between primigravida and multigravida pregnant women attending Janti Public Health Center, Malang City. The findings are expected to contribute to the evidence supporting routine psychological screening during antenatal care and to inform the development of targeted maternal mental health interventions, particularly for women at greater risk of pregnancy-related psychological distress in primary healthcare settings.

METHOD

This quantitative observational study a comparative cross-sectional design. The study was conducted at Janti Public Health Center, Malang City, from May to June 2025. The study population consisted of all pregnant women attending antenatal care (ANC), during the study period totaling 74 individuals, with a sample of 64 respondents selected through purposive sampling, comprising 32 primigravida and 32 multigravida women. Data were collected once during respondents' ANC visits using self-administered questionnaires without any intervention from the researchers.

The inclusion criteria were primigravida and multigravida pregnant women with low-risk pregnancies based on screening using the Kartu Skor Poedji Rochjati (Poedji Rochjati Score Card [KSPR] and who were able to complete the electronic questionnaire independently using a mobile phone., The exclusion criteria included pregnant women undergoing psychological therapy or using psychotropic medications. The independent variable was pregnancy status (primigravida and multigravida), and the dependent variable was pregnancy-related stress measured using the Pregnancy Stress Rating Scale (PSRS-36), consisting of 36 Likert-scale items with a total score range of 0–144 categorized into low, moderate, high, and very high stress levels. The instrument demonstrated good validity and reliability, with a Cronbach's alpha coefficient of 0.92.

Prior to bivariate analysis, data normality was assessed using the Shapiro–Wilk test, which indicated that the data were not normally distributed. Therefore, differences in stress levels between primigravida and multigravida women were analyzed using the non-parametric Mann–Whitney U test with a significance level of $\alpha = 0.05$. All respondents were informed about the study objectives and procedures and provided written informed consent before participation. This study received ethical approval from the Health Research Ethics Committee of Poltekkes Kemenkes Malang under ethical clearance number No. DP.04.03/F.XXI.30/00749/2025.

RESULTS

The study included 64 pregnant women, comprising 32 primigravida and 32 multigravida participants. The results are presented in four sections: participants' characteristics, comparison of pregnancy-related stress levels, normality assessment of stress scores, and analysis of the Pregnancy Stress Rating Scale (PSRS-36) dimensions.

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Table 1. Demographic and Obstetric Characteristics of the Participants

Characteristics of Pregnant Women	Primigravida		Multigravida	
	f	**%**	**f**	**%**
Age				
<20 years	4	12.5	0	0
20-35 years	28	87.5	32	100
>35 years	0	0	0	0
Total	32	100	32	100
Education				
Primary school	0	0	2	6.3
Junior high school	3	9.4	6	18.8
Senior High School	19	59.4	19	59.4
Higher education	10	31.3	5	15.6
Total	32	100	32	100
Work				
Housewife	10	31.3	22	68.8
Employee	6	18.8	3	9.4
Self-employed	5	15.6	4	12.5
Other occupations	11	34.4	3	9.4
Total	32	100	32	100
Monthly household iIncome				
< IDR 3,507,693/	12	37.5	18	56.3
>IDR 3,507,693/	20	62.5	14	43.8
Total	32	100	32	100
Gestational age				
0-12 weeks	7	21.9	5	15.6
13-27 weeks	17	53.1	16	50
28-40 weeks	8	25	11	34.4
Total	32	100	32	100

Table 1 summarizes the demographic and obstetric characteristics of the study participants. Participants in both groups were predominantly aged 20–35 years, accounting for 87.5% of the primigravida group and 100.0% of the multigravida group. Senior high school was the most common educational level in both groups (59.4%). Housewife was the most frequently reported occupation among multigravida women (68.8%), whereas 34.4% of primigravida women reported other occupations. Monthly household income of ≥ IDR 3,507,693 was more common among primigravida women (62.5%), while 56.3% of multigravida women reported an income below IDR 3,507,693. The largest proportion of participants in both groups were in the second trimester (13–27 weeks), representing 53.1% of primigravida women and 50.0% of multigravida women.

Table 2. Comparison of Pregnancy-Related Stress Levels Between Primigravida and Multigravida Women

Stress Level	**Primigravida**			**Multigravida**			**Mann–Whitney U**	**Z statistic**	***p-value***
	f	**%**	***Mean Rank***	***f***	**%**	**Mean Rank**			
Low	5	15.6	36.28	6	18.8	28.72	372.000	-1.996	0.046
Moderate	12	37.5		20	62.5				
High	10	31.3		5	15.6				
Very high	5	15.6		1	3.1				
Total	32	100		32	100				

Table 2 presents the distribution of pregnancy-related stress levels in both groups. Moderate stress was the most frequently observed category among primigravida women (37.5%) and multigravida women (62.5%). High and very high stress levels were reported

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more frequently among primigravida women than among multigravida women. The Mann–Whitney U test demonstrated a statistically significant difference in stress scores between the two groups (p = 0.046).

Table 3. Normality Test of Pregnancy-Related Stress Scores

Group	Shapiro–Wilk Statistic	p-value
Primigravida (n=32	0.912	0.014
Multigravida (n=32)	0.926	0.028

Table 3 presents the results of the Shapiro–Wilk normality test. The stress scores were not normally distributed in either the primigravida group (p = 0.014) or the multigravida group (p = 0.028). Since both p-values were <0.05, the Mann–Whitney U test was used for subsequent analysis.

Table 4. Mean Scores of Pregnancy Stress Rating Scale (PSRS-36) Dimensions

PSRS-36 Dimensions	Primigravida		Multigravida	
	Means	Standard Deviation	Means	Standard Deviation
Maternal and fetal safety	17.84	9.120	15.81	6.995
Baby care and family relationships	12.28	7.722	10.28	7.867
Maternal role	15.91	8.406	14.13	5.701
Social Support	6.63	4.612	4.25	3.724
Physical and functional changes	12.31	7.558	11.22	6.073

Table 4 summarizes the mean scores of each PSRS-36 dimension. The highest mean score in both groups was observed for the maternal and fetal safety dimension, with mean scores of 17.84 ± 9.120 among primigravida women and 15.81 ± 6.995 among multigravida women. The lowest mean score was observed for the social support dimension in both groups, with mean scores of 6.63 ± 4.612 and 4.25 ± 3.724, respectively.

DISCUSSION

Stress Levels in Primigravida Pregnant Women

The present study demonstrated that primigravida women experienced higher pregnancy-related stress than multigravida women, with maternal and fetal safety emerging as the predominant source of stress. Although participants exhibited varying levels of stress, moderate and high stress were the most frequently observed categories among primigravida women. These findings suggest that first-time pregnancy is associated with greater psychological vulnerability, particularly during the second and third trimesters when concerns regarding fetal well-being, childbirth, and maternal readiness become increasingly prominent.

Our findings are consistent with previous studies conducted in Indonesia and other low- and middle-income countries, which have consistently reported that primigravida women are more likely to experience pregnancy-related stress than women with previous pregnancy experience. Aziz et al. (2025) reported that approximately one-quarter of pregnant women experience antenatal stress worldwide, with prevalence increasing substantially during late pregnancy. Similarly, Hastanti et al. (2021) found that primigravida women were more vulnerable to psychological distress because of uncertainty surrounding pregnancy and childbirth. Collectively, these studies support the present findings and suggest that limited pregnancy experience and uncertainty regarding childbirth contribute substantially to maternal psychological distress. The relatively higher stress observed in this study may also reflect contextual factors specific to primary healthcare settings in Indonesia,

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including differences in access to maternal health information, psychological preparedness, and the availability of psychosocial support services.

These findings may be explained by the transactional theory of stress proposed by Lazarus and Folkman, which emphasizes that psychological stress arises when individuals perceive environmental demands as exceeding their available coping resources. During a first pregnancy, women undergo cognitive appraisal of unfamiliar physical, emotional, and social changes while simultaneously preparing for childbirth and parenthood. Limited previous experience may reduce maternal self-efficacy and coping capacity, thereby increasing uncertainty and fear of childbirth. In addition, concerns regarding financial preparedness, infant care, and changing family responsibilities may further intensify pregnancy-related stress among primigravida women.

Socioeconomic conditions and employment status may also have contributed to the observed stress levels. Women engaged in informal employment often experience greater economic insecurity, reduced employment benefits, and limited workplace social support, all of which may increase psychological burden during pregnancy. Compared with studies conducted in settings that provide stronger social and institutional support, the present findings suggest that contextual socioeconomic challenges within Indonesian primary healthcare settings may amplify pregnancy-related stress among first-time pregnant women.

Analysis of the Pregnancy Stress Rating Scale (PSRS-36) dimensions demonstrated that concerns related to maternal and fetal safety represented the highest source of stress in both study groups. This finding is consistent with previous reports by Al-Mutawtah et al. (2023), indicating that worries about fetal health, childbirth, and maternal safety remain central components of pregnancy-related stress. In the present study, however, this dimension appeared to be more prominent than other stress domains, reinforcing the importance of addressing health-related concerns during routine antenatal care. Conversely, the social support dimension demonstrated the lowest mean score in both groups, suggesting that participants generally perceived adequate support from family or their social environment. Nevertheless, adequate social support alone may not sufficiently alleviate pregnancy-related stress, indicating that structured psychological support and comprehensive antenatal education remain necessary, particularly for primigravida women.

From a clinical perspective, these findings highlight the importance of integrating routine psychological assessment into antenatal care (ANC). Standardized screening using pregnancy-specific instruments such as the Pregnancy Stress Rating Scale (PSRS-36) may facilitate early identification of women at risk of psychological distress, particularly during the second and third trimesters. Midwives working in primary healthcare facilities should be equipped to recognize early signs of pregnancy-related stress, provide basic psychological counseling, and initiate appropriate referrals when indicated. Furthermore, strengthening structured antenatal education programs that address pregnancy adaptation, childbirth preparation, newborn care, and coping strategies may improve maternal confidence and reduce psychological distress among first-time pregnant women.

At the policy level, these findings support the integration of maternal mental health into routine maternal healthcare programs. Midwife-led psychological support interventions, stress management education, family involvement, and community-based pregnancy classes may represent practical approaches for improving maternal psychological well-being. Integrating routine mental health screening into standard ANC protocols would further strengthen comprehensive maternal healthcare by addressing both physical and psychological needs throughout pregnancy.

Stress Levels in Multigravida Pregnant Women

The present study demonstrated that multigravida women generally experienced lower pregnancy-related stress than primigravida women, although moderate stress remained the

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predominant category. These findings indicate that previous pregnancy experience may reduce, but does not eliminate, psychological distress during pregnancy. Analysis of the Pregnancy Stress Rating Scale (PSRS-36) further showed that concerns regarding maternal and fetal safety remained the primary source of stress among multigravida women, although the mean score for this dimension was lower than that observed among primigravida women.

Consistent with previous studies, prior pregnancy experience appears to facilitate the development of more adaptive coping strategies when women encounter the physiological and psychological demands of pregnancy. According to Lazarus and Folkman's transactional theory of stress and coping, previous experience enhances cognitive appraisal and strengthens coping resources, enabling individuals to respond more effectively to stressful situations. Consequently, multigravida women may demonstrate greater maternal self-efficacy and confidence in managing pregnancy-related challenges than women experiencing pregnancy for the first time. Similar findings have been reported by Cho and Park (2020), who observed lower stress levels among multigravida women. Collectively, these studies suggest that previous pregnancy experience functions as a protective factor by improving coping capacity. Nevertheless, the present findings indicate that such experience buffers rather than completely prevents pregnancy-related stress.

These findings may also be explained by contextual socioeconomic conditions. Most multigravida women in this study were housewives, and many lived in households with incomes below the regional minimum wage. Compared with studies conducted in higher-income settings, where multigravida women generally report lower stress levels because of greater financial security and stronger social support systems, the present findings suggest that economic hardship may sustain psychological distress despite previous pregnancy experience. According to the Family Stress Model proposed by Conger and Conger (2021), financial strain can adversely influence psychological well-being, particularly when increasing economic demands coincide with expanding family responsibilities. In the present study, multigravida women not only managed the current pregnancy but also cared for existing children, which may have intensified perceived pregnancy-related stress.

Compared with findings from other countries, where stress among multigravida women is more strongly associated with individual coping capacity, this study suggests that broader socioeconomic circumstances play a more substantial role within Indonesian primary healthcare settings. Economic constraints, caregiving responsibilities, and dependence on a single household income may collectively contribute to sustained psychological distress. Therefore, this study extends existing evidence by demonstrating that although previous pregnancy experience enhances coping capacity, it may not fully offset the influence of socioeconomic adversity on maternal psychological well-being.

Analysis of the PSRS-36 dimensions demonstrated that concerns regarding maternal and fetal safety remained the dominant source of pregnancy-related stress among multigravida women. Similar findings have been reported in previous studies, indicating that worries about fetal health, pregnancy complications, and childbirth continue to be major contributors to maternal psychological distress regardless of pregnancy experience. In contrast, the social support dimension demonstrated the lowest stress score, suggesting that multigravida women generally perceived stronger emotional and practical support from family members and their surrounding social environment. Nevertheless, despite these supportive relationships, concerns regarding maternal and fetal well-being remained prominent. This pattern may reflect the influence of previous adverse pregnancy experiences, advancing maternal age, or the additional responsibilities associated with caring for existing children while preparing for another birth.

From a clinical perspective, these findings emphasize that antenatal care (ANC) services should not focus exclusively on primigravida women. Multigravida women also remain vulnerable to pregnancy-related stress and should receive routine psychological

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assessment throughout pregnancy. Integrating standardized screening instruments such as the Pregnancy Stress Rating Scale (PSRS-36) into routine ANC visits may facilitate early identification of women experiencing psychological distress. Midwives should also provide individualized counseling that considers previous pregnancy experiences, identifies unresolved negative experiences, and strengthens adaptive coping strategies.

Furthermore, structured antenatal education programs should incorporate stress management training, including relaxation techniques, problem-focused coping, emotional regulation, and preparation for childbirth and newborn care. Family-centered prenatal counseling should also actively involve partners and other family members to strengthen emotional, informational, and practical support throughout pregnancy. Considering the influence of socioeconomic conditions observed in this study, brief counseling on financial planning, prioritization of essential maternal needs, and referral to available community support programs may further enhance comprehensive antenatal care within primary healthcare settings.

Overall, these findings indicate that although previous pregnancy experience serves as an important protective factor, it does not completely eliminate pregnancy-related stress. The persistence of moderate stress among multigravida women suggests that psychological adaptation during pregnancy is influenced by a complex interaction between prior reproductive experience, coping capacity, family responsibilities, and socioeconomic conditions. This study therefore provides additional evidence that maternal mental health services within Indonesian primary healthcare should extend beyond first-time pregnancies and adopt a comprehensive approach that integrates routine psychological screening, individualized counseling, family involvement, and structured psychosocial support for all pregnant women.

Differences in Stress Levels between Primigravida and Multigravida Pregnant Women

The present study demonstrated that primigravida women experienced significantly higher pregnancy-related stress than multigravida women. This finding is consistent with previous studies conducted in Indonesia and other Southeast Asian countries, which have consistently reported that women experiencing their first pregnancy are more vulnerable to psychological distress than those with previous pregnancy experience. Compared with reports from several international studies, where elevated antenatal stress generally affects approximately one-fifth to two-fifths of pregnant women, the stress levels observed among primigravida women in this study appear relatively higher. These findings suggest that first-time pregnant women receiving care at Janti Public Health Center may experience a greater psychological burden and highlight the importance of early identification and management of pregnancy-related stress within antenatal care (ANC) services.

Our findings are consistent with those reported by Sari and Chalid (2022), who demonstrated that insufficient support from partners and family members increases emotional vulnerability during first pregnancies. Collectively, previous studies indicate that limited pregnancy experience, uncertainty regarding childbirth, and inadequate psychosocial support contribute substantially to pregnancy-related stress among primigravida women. The more pronounced difference observed in the present study suggests that additional contextual factors within Indonesian primary healthcare settings may further increase psychological vulnerability during first pregnancies.

These findings may be explained by Lazarus and Folkman's transactional theory of stress and coping. During a first pregnancy, women experience unfamiliar physiological, emotional, and social changes that require continuous cognitive appraisal and adaptation. Because primigravida women have limited prior experience, they may demonstrate lower maternal self-efficacy and less developed coping strategies when responding to pregnancy-related challenges. Uncertainty regarding childbirth, concerns about fetal well-being, and

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fear of assuming the maternal role may collectively intensify psychological distress. In contrast, multigravida women generally possess previous pregnancy experience that strengthens coping capacity and facilitates more adaptive responses to similar stressors.

The higher stress scores observed in the maternal and fetal safety dimension further support this explanation. Similar findings were reported by Hastanti et al. (2021), who identified limited knowledge and pregnancy experience as important contributors to stress among primigravida women. However, the greater magnitude of concern observed in the present study suggests that informational gaps and uncertainty may be more substantial within the local context. Compared with countries where structured antenatal education and childbirth preparation programs are routinely integrated into maternal healthcare, limited access to comprehensive pregnancy education and psychological counseling in Indonesian primary healthcare settings may contribute to greater concerns regarding pregnancy outcomes and childbirth.

Beyond pregnancy experience, broader cultural and healthcare system factors may also influence maternal psychological well-being. Within the Indonesian context, expectations regarding motherhood, varying levels of partner involvement, and reliance on family-based support shape women's experiences throughout pregnancy. Although family support may serve as an important protective factor, limited availability of structured psychological services within routine maternal healthcare may leave pregnancy-related concerns insufficiently addressed. Consequently, the observed differences in stress levels appear to reflect not only differences in reproductive experience but also contextual influences related to healthcare accessibility, cultural expectations, and psychosocial support.

From a clinical perspective, these findings emphasize the need to strengthen psychological care within routine ANC services. Primigravida women should be recognized as a priority group for early psychological assessment because of their greater vulnerability to pregnancy-related stress. Routine screening using standardized instruments such as the Pregnancy Stress Rating Scale (PSRS-36) should be integrated into ANC visits to facilitate timely identification of women at risk. Women identified with elevated stress levels should receive structured psychological counseling and appropriate follow-up care.

Furthermore, antenatal education programs should extend beyond conventional health education by incorporating stress management strategies, including relaxation techniques, adaptive coping skills, emotional regulation, and comprehensive preparation for childbirth and newborn care. Family-centered prenatal counseling should also actively involve partners and family members to strengthen emotional, informational, and practical support throughout pregnancy. These interventions are feasible for implementation within primary healthcare settings and may contribute to improving maternal psychological well-being while reducing pregnancy-related stress.

Although this study provides important evidence regarding differences in pregnancy-related stress between primigravida and multigravida women, several limitations should be acknowledged. The cross-sectional design precludes conclusions regarding causal relationships and does not allow assessment of changes in stress levels throughout pregnancy. In addition, the relatively small sample size and recruitment from a single primary healthcare facility may limit the generalizability of the findings. Several psychosocial variables, including family support, previous adverse pregnancy experiences, maternal self-efficacy, and coping strategies, were also not comprehensively evaluated and may have influenced pregnancy-related stress.

Future longitudinal and multicenter studies involving larger and more diverse populations are recommended to examine changes in pregnancy-related stress across pregnancy trimesters and to evaluate the effectiveness of psychological interventions and structured antenatal education programs in reducing maternal stress. Such evidence would

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further support the development of comprehensive maternal mental health services within primary healthcare.

Overall, this study contributes additional evidence demonstrating that pregnancy-related stress differs significantly according to pregnancy experience within the Indonesian primary healthcare context. By comparing primigravida and multigravida women using the Pregnancy Stress Rating Scale (PSRS-36), this study provides context-specific evidence supporting the integration of routine psychological screening, individualized counseling, and structured psychosocial interventions into comprehensive antenatal care programs.

CONCLUSION

This study demonstrated a statistically significant difference in pregnancy-related stress between primigravida and multigravida women attending Janti Public Health Center, Malang City ($p = 0.046$). Primigravida women had a higher mean rank (36.80) than multigravida women (28.20), indicating greater psychological distress during pregnancy. Among the dimensions of the Pregnancy Stress Rating Scale (PSRS-36), concerns related to maternal and fetal safety represented the predominant source of stress, whereas stress associated with social support was comparatively lower in both groups. This study provides evidence on pregnancy-related stress among primigravida and multigravida women in an Indonesian primary healthcare setting using the Pregnancy Stress Rating Scale (PSRS-36). The findings suggest that previous pregnancy experience may contribute to better psychological adaptation during pregnancy, while highlighting the importance of addressing pregnancy-related stress as part of comprehensive antenatal care. From a clinical perspective, routine psychological screening using validated instruments such as the PSRS-36 should be integrated into antenatal care services to facilitate the early identification of pregnant women at risk of psychological distress. These services may be strengthened through midwife-led psychological support, structured antenatal education, family-centered counseling, and other evidence-based psychosocial interventions aimed at improving maternal mental well-being and the quality of maternal healthcare. Future multicenter longitudinal studies with larger and more diverse populations are recommended to evaluate changes in pregnancy-related stress across gestation and to examine the effectiveness of culturally appropriate psychological interventions. Further research should also investigate the influence of contextual factors, including family support, socioeconomic conditions, cultural beliefs, and access to psychological services, on pregnancy-related stress among pregnant women.

AUTHOR CREDIT REPORT

The first author was responsible for developing the research idea, formulating the problem, determining the research design, collecting data, analyzing data, and writing the thesis. The second author provided guidance, input, and supervision during the planning and implementation stages. The third and fourth authors provided methodological guidance and refined the thesis writing to ensure its adherence to scientific principles.

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STATEMENT ON CONFLICT OF INTEREST

The authors declare that they have no conflicts of interest in the conduct of this research, data analysis, or writing of this thesis. The entire research process was conducted independently in accordance with scientific principles and research ethics.

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