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The Influence of Job Demands and Work Stress on Prenatal Mental Health Among Pregnant Employees: A Cross-Sectional Study

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Abstract: *Mental health during pregnancy is a crucial aspect affecting maternal well-being and fetal development. Pregnant women who remain actively employed may experience various work-related pressures that can impact their psychological well-being. Work environment factors such as job demands and job stress can increase the risk of emotional problems during pregnancy. However, research examining these factors among pregnant employees is limited. This study aims to analyze the influence of job demands and job stress on prenatal mental health among pregnant employees. This study was conducted in Batam City Regency and involved 80 pregnant employees who met the inclusion criteria. A quantitative study with a cross-sectional design was used. Data were collected using a structured questionnaire consisting of the Job Content Questionnaire to measure job demands, the Perceived Stress Scale to assess job stress, and the Edinburgh Postnatal Depression Scale to evaluate prenatal mental health. Data analysis was performed using multiple linear regression. The results showed that job demands and job stress affected prenatal mental health among pregnant employees, with job stress showing a stronger influence. Higher levels of job pressure and stress were associated with increased psychological distress during pregnancy. These findings highlight the importance of supportive workplace policies, workload adjustments, and stress management programs to improve the mental well-being of pregnant workers and support nursing practice in maternal health care.*

Keywords: *Job Demands; Occupational Health; Pregnant Women; Psychological Stress; Working Women.*

1. INTRODUCTION

Women's participation in the workforce has continued to increase in recent decades. Many women remain active in the workforce even during pregnancy (Nakamura et al., 2022). This reflects the changing social roles of women and the increasing economic needs of families, encouraging women to remain involved in the workforce. However, pregnancy is a time accompanied by various physiological, psychological, and hormonal changes that can affect an individual's ability to cope with the pressures of the work environment (Mona et al., 2025b). Therefore, balancing work demands and health during pregnancy is a critical issue in the fields of occupational health and maternal health.

Mental health during pregnancy, or prenatal mental health, is an important aspect that affects the well-being of the mother and the development of the fetus (Chauhan & Potdar, 2022). Mental health disorders during pregnancy, such as stress, anxiety (Yulianti & Susanti, 2025), and depression, can harm the health of both the mother and the fetus (Jalal et al., 2024). Previous research has shown that Susanti et al (2024) showed that psychological distress during pregnancy can increase the risk of premature birth, low birth weight, and developmental disorders in children (Socol et al., 2025). Furthermore, unstable maternal psychological well-being can also impact the quality of family life and the child's postnatal care process. Therefore,

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maintaining mental health during pregnancy is an important part of efforts to improve maternal and child health.

In the context of working women, mental health during pregnancy is not only influenced by biological and social factors, but also by work environment factors (Colciago et al., 2020). One of the important factors that can influence the psychological well-being of workers is job demands(Dewi et al., 2024). Job demands refer to various aspects of work that require physical and psychological effort from workers, such as high workloads, time pressure, and emotional demands on the job (Bakker et al., 2021). When job demands are too high and not balanced with adequate resources, individuals can experience physical and mental fatigue, which ultimately triggers work stress.

The concept of job demands is widely explained within the theoretical framework of the Job Demands–Resources Model, which states that job characteristics can influence individual well-being through various psychological mechanisms (Lee & Jo, 2023). In this model, high job demands have the potential to cause work pressure and psychological fatigue if not balanced with adequate work resources. For pregnant women, the issue can be more challenging because they have to deal with bodily changes and various physiological needs compared to workers in general.

In addition to job demands, work stress is also a factor that can affect an individual's mental health. Work stress is a psychological response that occurs when an individual perceives that the demands of their job exceed their abilities or resources to cope (Mensah, 2021). In pregnancy, work stress can have a more significant impact because hormonal changes during pregnancy can increase emotional sensitivity and vulnerability to psychological stress (Zahara & Abdullah, 2025). High levels of stress during pregnancy are known to be associated with an increased risk of emotional disorders such as prenatal anxiety and depression (Susanti et al., 2023).

Previous research has shown that job demands and work stress are significantly related to the psychological well-being of female workers. High workloads, time pressures, and lack of support in the workplace are often associated with increased levels of stress and emotional exhaustion (Mukhlis et al., 2024). In pregnant women, this condition can worsen psychological well-being due to the biological changes that occur during pregnancy (Susanti et al, 2024). Therefore, unsupportive working conditions can potentially increase the risk of mental health disorders in pregnant women.

Although extensive research has been conducted on mental health during pregnancy, most studies have focused on biological and social factors, while the work environment has

received relatively little attention (Mona et al., 2025). Yet, for women who remain actively working during pregnancy, the work environment is a crucial part of daily life that can impact their psychological well-being. Furthermore, research specifically examining the influence of job demands and work stress on prenatal mental health in pregnant female workers is still limited, particularly in developing countries.

Based on this description, this study aims to analyze the influence of job demands and work stress on prenatal mental health in pregnant female workers. This study hypothesizes that higher job demands and higher levels of work stress are associated with poorer prenatal mental health among pregnant employees. The results of this study are expected to contribute to scientific research in the fields of occupational health and maternal health and serve as a basis for developing policies and interventions aimed at creating a more supportive work environment for women's mental health during pregnancy.

2. LITERATURE REVIEW

Prenatal Mental Health

Prenatal mental health refers to a woman's psychological well-being during pregnancy, including emotional stability, stress levels, anxiety (Susanti & Sari, 2020), and depressive symptoms (Gusak et al., 2024). Pregnancy is a period characterized by significant physiological, hormonal, and psychological changes that may increase vulnerability to mental health problems (Davis et al., 2021). Previous studies have shown that emotional distress during pregnancy can negatively affect both maternal health and fetal development, including increased risks of preterm birth, low birth weight, and difficulties in maternal–infant bonding (Discovery, 2025). Therefore, maintaining mental well-being during pregnancy is an essential component of maternal health care and an important focus in nursing and midwifery practice.

A variety of biological, psychological, and social factors influence mental health during pregnancy. In addition to hormonal changes and individual coping abilities, environmental factors such as family support, socioeconomic status, and occupational conditions can also influence maternal psychological well-being (Khamidullina et al., 2025). For pregnant women who remain active in the workforce, work-related factors may become an additional source of psychological pressure that can affect their emotional condition during pregnancy (Corchero-falcón et al., 2023).

Job Demands

Job demands refer to various physical, psychological, and organizational aspects of work that require sustained effort from employees.(Li et al., 2025) According to occupational health

literature, job demands may include high workloads, time pressure, emotional demands, and complex job responsibilities. When these demands exceed an individual's capacity to cope, they can lead to fatigue, emotional exhaustion, and decreased psychological well-being (Jamil et al., 2023).

Previous studies have indicated that high job demands are associated with increased levels of stress, burnout, and reduced mental well-being among workers. For pregnant employees, high job demands may present additional challenges because pregnancy involves physical changes, fatigue, and increased health needs. Consequently, excessive workloads or demanding work conditions may exacerbate psychological strain and negatively affect prenatal mental health (Dulla et al., 2025).

Work Stress

Work stress is defined as a psychological response that occurs when individuals perceive that work demands exceed their available resources or coping abilities. Work stress may arise from various factors, including workload pressure, role conflict, lack of support in the workplace, job insecurity, and interpersonal conflicts (Abdou et al., 2024).

Several studies have reported that work stress is significantly associated with mental health problems, including anxiety, depression, and reduced quality of life. During pregnancy, women may become more sensitive to stress due to hormonal fluctuations and emotional changes (Budiarti et al., 2025). Chronic stress during pregnancy has also been linked to adverse maternal and fetal outcomes, including increased risk of prenatal depression and postpartum psychological disorders (Tama et al., 2025).

The Job Demands–Resources Model

The correlation between job demands, work stress, and psychological well-being can be explained through the Job Demands–Resources (JD-R) Model. This theoretical framework proposes that job characteristics influence employee well-being through two main processes: the health impairment process and the motivational process (Claes et al., 2023). High job demands may lead to physical and psychological strain, which can ultimately impair health and well-being if not balanced with adequate job resources (Gynning et al., 2025). Within the context of pregnancy, high job demands may increase work stress and contribute to emotional exhaustion and psychological vulnerability. Pregnant employees may require additional workplace support, flexible work arrangements, and appropriate workload adjustments to maintain their psychological well-being (Andersen et al., 2022).

Based on this theoretical framework and previous empirical findings, job demands and work stress are considered important factors that may influence prenatal mental health among working pregnant women.

3. RESEARCH METHODS

Research Design

This study used a quantitative research design with a cross-sectional approach. This design was used to analyze the influence of job demands and work stress on prenatal mental health in pregnant female workers.

Research Time and Location

This research was conducted over four months, from December 2024 to February 2025. The study took place in the Batam City District work area, Riau Islands Province, Indonesia. This location was chosen because it has a large number of female workers, allowing the researcher to obtain respondents who met the research criteria.

Research Population and Sample

The study population comprised all pregnant women employed at various workplaces designated as research sites, totaling 150 individuals. Participants were recruited through workplace coordination with company management and antenatal health services. The sample size was calculated using the Slovin Formula with a 10% margin of error, yielding a minimum requirement of 60 respondents. To enhance the robustness of the statistical analysis, the final sample size was increased to 80 respondents. The sampling technique used in this study was purposive sampling.

The inclusion criteria for this study were: Pregnant women of any gestational age, actively employed, willing to participate as research respondents, and able to read and understand the research questionnaire.

The exclusion criteria for this study were: Respondents who did not complete the questionnaire completely, respondents who were experiencing serious health problems, and respondents who withdrew during the study period.

Variable Research

The dependent variable was prenatal mental health measured using the Edinburgh Postnatal Depression Scale (EPDS). The independent variables were job demands and work stress.

Research Instrument

The research instrument used was a structured questionnaire comprising three main variables: job demands, job stress, and prenatal mental health. Job demands were measured using an instrument adapted from the Job Content Questionnaire developed by Robert Karasek (Karasek & Amick, 1998). This instrument consists of 10 questions with a Likert scale of 1–5. Job stress was measured using an instrument adapted from the Perceived Stress Scale developed by Sheldon Cohen. This instrument consists of 10 questions with a Likert scale of 0–4. Prenatal mental health was measured using the Edinburgh Postnatal Depression Scale, developed by John Cox. This instrument consists of 10 questions, each rated on a 0–3 scale.

Efforts were made to minimize potential sources of bias during the research process. Clear inclusion and exclusion criteria were applied to ensure that participants met the study requirements. A purposive sampling technique was used to recruit pregnant employees who met the predetermined criteria. Data were collected using standardized, widely used instruments to improve measurement accuracy and consistency. Before completing the questionnaire, respondents were provided with clear instructions to reduce misunderstanding of the questions. In addition, respondents completed the questionnaires independently to minimize external influence and response bias. Data analysis was conducted using appropriate statistical methods to ensure the reliability of the study findings.

Data Collection Procedure

Data collection was conducted by distributing questionnaires to respondents who met the research criteria. Before completing the questionnaires, respondents were given an explanation of the research objectives and asked to provide consent to participate in the study. Respondents then completed the questionnaires independently based on their perceived circumstances. Respondents who returned incomplete questionnaires were excluded from the final analysis.

Data Analysis

Data were analyzed using multiple linear regression with SPSS Statistics software to determine the effect of job demands and job stress on prenatal mental health in pregnant female workers. Before regression analysis, a normality test using the Kolmogorov–Smirnov test was conducted to ensure that the data met the assumptions of parametric analysis. Descriptive analysis was used to characterize respondents and describe the distribution of study variables. No additional sensitivity analyses were conducted in this study because the analysis used a single regression model with complete data. The significance level used in this study was $p < 0.05$.

Ethical Considerations

Ethical approval for this study was obtained from the Research Ethics Committee of the Institute for Research and Community Service, Universitas Batam, before data collection. The study protocol was approved under ethical approval number 174/LPPM-UNIBA/PI-EC/XI/2024. All participants were informed of the study's purpose and assured that their participation was voluntary. Informed consent was obtained from all respondents before completing the questionnaire. Participants were also assured that their personal information would remain confidential and that the data collected would be used solely for research purposes. Respondents had the right to refuse or withdraw from the study at any time without any consequences.

4. RESULT AND DISCUSSION

Results

Respondent Characteristics

Table 1. Respondent characteristics.

Characteristics	(f)	(%)
Age		
< 25	18	22.5
25–34	42	52.5
≥ 35	20	25.0
Gestational age		
Trimester I	22	27.5
Trimester II	34	42.5
Trimester III	24	30.0
Job type		
Administration	30	37.5
Services	28	35.0
Light industry	22	27.5
Length of service		
< 2 years	20	25.0
2–5 years	36	45.0
> 5 years	24	30.0

Based on Table 1, this study involved 80 respondents who were pregnant and employed women. Respondent characteristics included age, gestational age, type of employment, and length of service. Based on Table 1, the majority of respondents were in the 25–34 age group (52.5%). Based on gestational age, the majority of respondents were in their second trimester (42.5%). The most common type of work was administrative work (37.5%), and most respondents had worked for 2–5 years (45.0%).

Descriptive Analysis of Research Variables

Table 2. Descriptive statistics of research variables.

Variable	Mean	SD	Min	Max
Job demands	32.4	5.6	20	45
Work stress	21.7	4.8	10	32
Prenatal mental health	11.3	4.1	3	20

Based on Table 2, the job demands variable had an average value of 32.4, while the work stress variable had an average value of 21.7. Meanwhile, the prenatal mental health variable had an average value of 11.3, indicating that some respondents were at risk for mild to moderate emotional disorders.

Normality Test

Table 3. Normality test results.

Variable	Kolmogorov-smirnov	Sig.
Job demands	0.92	0.200
Work stress	0.96	0.156
Prenatal mental health	0.94	0.178

The normality test results based on Table 3 indicate that all variables have significance values greater than 0.05. Therefore, the data are normally distributed and meet the assumptions for multiple linear regression analysis.

Multiple Linear Regression Analysis

Table 4. Results of multiple linear regression analysis.

Variable	B	Std. Error	t	95% CI Lower	95% CI Upper	p-value
Constant	2.315	1.284	1.80	-0.217	4.847	0.075
Job Demands	0.284	0.087	3.26	0.112	0.456	0.002
Work Stress	0.412	0.094	4.38	0.226	0.598	<0.001

Based on Table 4, multiple linear regression analysis showed that job demands significantly influenced prenatal mental health (B = 0.284, 95% CI: 0.112–0.456, p = 0.002). Work stress also had a significant effect and showed a stronger influence (B = 0.412, 95% CI: 0.226–0.598, p < 0.001).

Discussion

The results of this study indicate that job demands have a significant effect on prenatal mental health. Higher job demands experienced by pregnant women are associated with an increased risk of mental health disorders, including stress, anxiety, and mild to moderate depression. This phenomenon can be explained by the Job Demands–Resources (JD-R) Model, which posits that high workloads without adequate resources will lead to psychological exhaustion and decreased well-being (Scholze & Hecker, 2024). In pregnant women, hormonal

changes such as estrogen and progesterone, as well as other physiological changes, increase vulnerability to psychological stress.

Heavy physical tasks, tight deadlines, and high emotional interactions at work can trigger emotional exhaustion and mood disorders (T et al., 2023). This finding is consistent with research by Moon & Jung (2025)**,** which shows that female workers with high workloads are more susceptible to stress and depression (Moon & Jung, 2025), and Park & Lee (2024), who emphasized that excessive work responsibilities can affect psychological well-being (Park & Lee, 2024). Nakamura et al (2023) study added that an imbalance between job demands and job control increases the risk of prenatal depression, so it is important for companies to adjust workloads and provide a supportive work environment for pregnant workers (Nakamura et al., 2023).

In addition, this study found that work stress had a significant and more dominant influence than job demands on prenatal mental health. High perceptions of stress arose from time pressure, significant responsibilities, interpersonal conflict, and job uncertainty. Chronic stress can increase levels of the hormones cortisol and adrenaline, which affect mood, sleep quality, and psychological well-being (Sic et al., 2024). This is in line with the findings of Choe et al (2024), which showed that prenatal stress is correlated with an increased risk of anxiety and depression (Choe et al., 2024), and Zhang (2024), who explained that psychosocial stress affects coping abilities, sleep quality,(Zhang, 2024) and even fetal development (Susanti, Hassan, Al-Jaber, et al., 2024). This finding is also supported by Karl et al (2020), who showed that pregnant women with high work stress have a greater risk of postpartum depression (Musso et al., 2022). Social factors, such as support from family, supervisors, and coworkers, can moderate the impact of work stress; pregnant women with low social support tend to experience greater negative effects (Shamir, 2020).

The results of this study are consistent with previous international studies, such as Anca et al (2022), which showed that high levels of work stress during the third trimester were associated with emotional disorders, (Anca et al., 2022) and Wang et al (2022), which confirmed the Correlation between work pressure and anxiety and depression in pregnant female workers in China. The uniqueness of this study lies in the simultaneous analysis of Job Demands and Work Stress, which shows that although both are influential, Work Stress plays a dominant role. This emphasizes that individual perceptions of stress are a greater determinant of prenatal mental health than objective workload, so interventions should focus on stress management and psychosocial support, in addition to reducing workload.

Theoretically, this study strengthens the JD-R Model and the literature on work psychology in pregnant women by confirming that work demands significantly influence psychological well-being. However, the perception of work stress is a dominant factor in determining the risk of prenatal mental disorders (Kool et al., 2023). Practically, the results of this study have several important implications. For HR management and companies, it is necessary to adjust workloads, provide flexibility in working hours, and provide support resources for pregnant workers. Occupational health programs, such as stress management, psychological counseling, and mental health monitoring, should be integrated to support the well-being of pregnant workers. For healthcare workers, this information is crucial for early detection of the risk of mental disorders and planning preventive interventions.

However, this study has limitations. The cross-sectional design limits the ability to determine causal Correlations between job demands, work stress, and prenatal mental health. The data obtained were self-reported, potentially introducing perception bias. Furthermore, other variables such as family support, economic status, or prior history of psychological disorders were not analyzed, although they could influence the results. The study population was limited to pregnant female workers in a specific location, so generalization of the results should be done with caution.

Based on these findings and limitations, further research is recommended to use a longitudinal design to evaluate the long-term effects of job demands and work stress on prenatal and postpartum mental health. Future research should include moderator or mediator variables, such as social support, coping strategies, and work flexibility, to clarify the mechanisms of work stress influence. Furthermore, evaluation of effective interventions to reduce work stress, including relaxation programs, counseling, and work hour adjustments, is highly recommended. Multi-site and multi-sector studies can also increase the external validity and generalizability of the findings.

5. CONCLUSION

This study concludes that job demands and work stress significantly influence prenatal mental health among pregnant employees. These findings highlight the importance of workplace policies that support the mental well-being of pregnant workers. Future studies are recommended to use longitudinal designs to better understand the long-term effects of job demands and work stress on prenatal mental health.

REFERENCES

Abdou, A. H., El-amin, M. A. M., Farouq, E., Mohammed, A., Saleh, A., Albohnayh, M., Alismail, A. M., Almulla, M. O., Alsaqer, J. S., Mahmoud, M. H., Ibrahim, A., & Elshazly, A. (2024). Work stress, work-family conflict, and psychological distress among resort employees: A JD-R model and spillover theory perspectives. *Frontiers in Psychology, 15*, 1326181, 1-14. https://doi.org/10.3389/fpsyg.2024.1326181

Anca, R., Strete, G. E., Suciu, L. M., Ghiga, D. V., Andreea, S., & Claudiu, M. (2022). Psychological stress perceived by pregnant women in the last trimester of pregnancy. *International Journal of Environmental Research and Public Health, 19*(14), 1-10. https://doi.org/10.3390/ijerph19148315

Andersen, D. R., Mette, A., Momsen, H., Pedersen, P., & Maimburg, R. D. (2022). Reflections on workplace adjustments for pregnant employees: A qualitative study of the experiences of pregnant employees and their managers. *BMC Pregnancy and Childbirth, 1-9.* https://doi.org/10.1186/s12884-022-04749-1

Bakker, A. B., Vries, J. D. De, & Bakker, A. B. (2021). Job demands-resources theory and self-regulation: New explanations and remedies for job burnout. *Anxiety, Stress, & Coping: An International Journal, 34*(1), 1-21. https://doi.org/10.1080/10615806.2020.1797695

Budiarti, A., Hastuti, P., Fatimawati, I., & Sulistyawati, R. (2025). Determinants of psychological disorders among pregnant women in Indonesia: A cross-sectional study on the roles of social support, parity, and anxiety. *Journal of Applied Nursing and Health, 7*(3), 595-603. https://doi.org/10.55018/janh.v7i3.388

Chauhan, A., & Potdar, J. (2022). Maternal mental health during pregnancy: A critical review. *Cureus, 14*(10). https://doi.org/10.7759/cureus.30656

Choe, J. H., Yun, S. J., & Kim, H. Y. (2024). High-risk pregnancy nursing: Analyzing the impact of prenatal stress, maternal-fetal attachment, and social support on prenatal depression. *The Open Nursing Journal, 18*, e18744346318130, 1-10. https://doi.org/10.2174/0118744346318130240620115100

Claes, S., Vandepitte, S., Clays, E., & Annemans, L. (2023). How job demands and job resources contribute to our overall subjective well-being. *Frontiers in Psychology, 14*, 1220263, 1-11. https://doi.org/10.3389/fpsyg.2023.1220263

Colciago, E., Merazzi, B., Panzeri, M., Fumagalli, S., & Nespoli, A. (2020). Women's vulnerability within the childbearing continuum: A scoping review. *European Journal of Midwifery, 4*(18), 1-9. https://doi.org/10.18332/ejm/120003

Corchero-Falcón, M. R., Gómez-Salgado, J., & García-Iglesias, J. J. (2023). Risk factors for working pregnant women and potential adverse consequences of exposure: A systematic review. *International Journal of Public Health, 68*, 1605655. https://doi.org/10.3389/ijph.2023.1605655

Davis, E. P., Narayan, A. J., & Behavior, H. (2021). Pregnancy as a period of risk, adaptation, and resilience for mothers and infants. *HHS Public Access, 32*(5), 1625-1639. https://doi.org/10.1017/S0954579420001121

Dewi, Y., Armono, R. D., & Fatimah, F. (2024). The influence of job stress, job demands, and motivation on job satisfaction of Bantul Community Health Center Employees II. *Journal of Management and Digital Business, 4*(1), 66-79. https://doi.org/10.53088/jmdb.v4i1.912

Discovery, P. (2025). Comprehensive review of the impact of maternal stress on fetal development. *Pediatric Discovery*, *3*(3), 1-13. https://doi.org/10.1002/pdi3.70004

Dulla, N., Priyadarshini, S., Sahoo, M., Mishra, S., & Panda, S. (2025). Challenges of prepartum working professionals amid the pandemic: Navigating non-work responsibilities, burnout, work-life imbalance, and emotional exhaustion. *Covid*, *5*(9), 1-23. https://doi.org/10.3390/covid5090144

Gusak, N., Kendall, S., & Nizalova, O. (2024). Understanding of perinatal mental health and its psychosocial determinants through Ukrainian women's experience. *European Journal of Midwifery*, *8*(29), 1-9. https://doi.org/10.18332/ejm/188194

Gynning, B. E., Karlsson, E., Teoh, K., Gustavsson, P., Christiansen, F., & Brulin, E. (2025). Do job resources buffer the harmful effects of job demands on burnout complaints? A 1-year cohort study of Swedish healthcare professionals. *International Journal of Nursing Studies Advances*, *9*(August), 100397. https://doi.org/10.1016/j.ijnsa.2025.100397

Jalal, S. M., Alsebeiy, S. H., Mousa, N., & Alshealah, J. (2024). Stress, anxiety, and depression during pregnancy: A survey among antenatal women attending primary health centers. *Healthcare*, *12*, 2227, 1-14. https://doi.org/10.3390/healthcare12222227

Jamil, A., Sehat, R. M., Johari, Y. C., Hussein, W. S., Hasin, H., & Mara, U. T. (2023). Exploring the link between job stress and performance: Identifying the root causes. *International Journal of Academic Research in Accounting, Finance & Management Sciences*, *13*(3), 501-522. https://doi.org/10.6007/IJARAFMS/v13-i3/19073

Karasek, R., & Amick, B. (1998). The Job Content Questionnaire (JCQ): An instrument for internationally comparative assessments of psychosocial job characteristics. *Journal of Occupational Health Psychology*, *3*(4), 322-355. https://doi.org/10.1037/1076-8998.3.4.322

Karl, M., Schaber, R., Kress, V., Kopp, M., Martini, J., Weidner, K., & Garthus-Niegel, S. (2020). Precarious working conditions and psychosocial work stress act as a risk factor for symptoms of postpartum depression during maternity leave: Results from a longitudinal cohort study. *BMC Public Health*, *20*, 1505, 1-11. https://doi.org/10.1186/s12889-020-09573-w

Khamidullina, Z., Marat, A., Muratbekova, S., Mustapayeva, N. M., & Aimagambetova, G. (2025). Postpartum depression epidemiology, risk factors, diagnosis, and management: An appraisal of the current knowledge and future perspectives. *Journal of Clinical Medicine*, *14*(7), 1-16. https://doi.org/10.3390/jcm14072418

Kool, L., Jong, E. I. F., Mastenbroek, N. J. J. M., Schellevis, G., & Jaarsma, D. A. D. C. (2023). Midwives' occupational wellbeing and its determinants: A cross-sectional study among newly qualified and experienced Dutch midwives. *Midwifery*, *125*, 103776. https://doi.org/10.1016/j.midw.2023.103776

Lee, D. Y., & Jo, Y. (2023). The job demands-resource model and performance: The mediating role of employee engagement. *Frontiers in Psychology*, *14*, 1194018, 1-14. https://doi.org/10.3389/fpsyg.2023.1194018

Li, Y., Chen, C., & Yuan, Y. (2025). Evolving the job demands-resources framework to JD-R 3.0: The impact of after-hours connectivity and organizational support on employee psychological distress. *Acta Psychologica*, *253*, 104710. https://doi.org/10.1016/j.actpsy.2025.104710

Mensah, A. (2021). Job stress and mental well-being among working men and women in Europe: The mediating role of social support. *International Journal of Environmental Research and Public Health, 18*(2494), 1-18. https://doi.org/10.3390/ijerph18052494

Mona, S., Dasaryandi, K. R., & Susanti. (2025). Application of combined SEFT and SPEOS therapy to reduce anxiety and enhance breast milk production in postpartum mothers: Literature review. *ICCMS (Proceedings International Collaborative Conference on Multidisciplinary Science), 2*(2), 417-425. https://doi.org/10.70062/iccms.v2i2.181

Mona, S., Dasaryandi, K. R., & Susanti. (2025b). The effect of combined SEFT and SPEOS therapy on anxiety and breast milk production in postpartum women: A quasi-experimental study. *Majalah Kesehatan Indonesia, 6*(3), 119-126. https://doi.org/10.47679/makein.2025272

Moon, J., & Jung, H. (2025). Factors influencing depression among female professional caregivers as per employment type (Full-time vs. Part-time). *Healthcare, 13*(17), 1-12. https://doi.org/10.3390/healthcare13172242

Mukhlis, H., Harlianty, R. A., & Madila, L. (2024). Job stress and its influence on university staff's quality of life: The importance of work-life balance and coworker support. *Majalah Kesehatan Indonesia, 5*(2), 71-80. https://doi.org/10.47679/makein.2024213

Musso, F., Karl, J. A., Fischer, R., Druic, E., & Stan, A. (2022). Testing the effectiveness of the health belief model in predicting preventive behavior during the COVID-19 pandemic: The case of. *Frontiers in Psychology, 12*(January), 1-16. https://doi.org/10.3389/fpsyg.2021.627575

Nakamura, Y., Tsuno, Y. S., Wada, A., Nagasaka, K., Kawajiri, M., & Takeishi, Y. (2022). Occupational stress is associated with job performance among pregnant women in Japan: Comparison with similar age group of women. *BMC Pregnancy and Childbirth, 22*, 749, 1-8. https://doi.org/10.1186/s12884-022-05082-3

Nakamura, Y., Wada, A., Tsuno, Y. S., Nagasaka, K., & Kawajiri, M. (2023). Occupational stress and related factors among childless working women in their 20s-40s: A pregnancy perspective. *Environmental and Occupational Health Practice Yasuka, 5*(1), 1-12. https://doi.org/10.1539/eohp.2022-0017-OA

Novi Yulianti, & Susanti, S. (2025). Hubungan antara tingkat kecemasan ibu hamil trimester III dengan tekanan darah selama kehamilan. *Jurnal Siti Rufaidah, 3*(2), 49-56. https://doi.org/10.57214/jasira.v3i2.200

Park, M. Y., & Lee, J. (2024). Psychological well-being interactively affected by long working hours and caregiving activities. *Safety and Health at Work, 15*(4), 458-463. https://doi.org/10.1016/j.shaw.2024.10.006

Scholze, A., & Hecker, A. (2024). The job demands-resources model as a theoretical lens for the bright and dark side of digitization. *Computers in Human Behavior, 155*(October 2023), 108177. https://doi.org/10.1016/j.chb.2024.108177

Shamir, M. (2020). Social support, happiness, work-family conflict, and state anxiety among single mothers during the COVID-19 pandemic. *Humanities and Social Sciences Communications, 2024*, 1-12. https://doi.org/10.1057/s41599-024-03764-1

Sic, A., Cvetkovic, K., & Manchanda, E. (2024). Neurobiological implications of chronic stress and metabolic dysregulation in inflammatory bowel diseases. *Diseases, 12*(9), 1-21. https://doi.org/10.3390/diseases12090220

Socol, I. D., Abu-Awwad, A., Socol, F. G., Farcaș, S. S., Abu-Awwad, S. A., Dumitriu, B. I., Dumitriu, A. I., Iacob, D., Vasile, D. V., & Andreescu, N. I. (2025). Psychological vulnerability during pregnancy and its obstetric consequences: A multidimensional approach. *Healthcare (Switzerland)*, *13*(17), 1-15. https://doi.org/10.3390/healthcare13172211

Susanti, Hassan, H. C., & AlJaberi, M. A. (2024). Health education and prenatal yoga are effective in lowering pregnancy anxiety. *Malaysian Journal of Medicine and Health Sciences*, *20*(7), 133-137.

Susanti, Hassan, M. M., Al-Jaber, M. A., Elba, F., Binti Aron, R. A., & Poddar, S. (2024). Effect of complementary care pregnancy exercise to level of anxiety in pregnant women. *JK Practitioner*, *29*(1), 42-46.

Susanti, S., & Sari, I. N. (2020). The correlation number of parity on third trimester of pregnancy to anxiety in confronting birth labour. *Jurnal Midpro*, *12*(2), 259-264. https://doi.org/10.30736/md.v12i2.234

Susanti, S., Hassan, H. C., & Aljaberi, M. A. (2023). Self-efficacy and anxiety level of third-trimester primigravida. *International Journal of Health Sciences*, *1*(3), 370-380. https://doi.org/10.59585/ijhs.v1i3.143

Susanti, Silvia Mona, & Ana Faizah. (2024). Makna pendampingan persalinan berbasis masyarakat (MPPBM) pada kader kesehatan di wilayah kerja puskesmas Baloi Permai. *Jurnal Ilmu Kesehatan Dan Gizi*, *2*(3), 254-261. https://doi.org/10.55606/jig.v2i3.4344

T, R. Y., Nafisa, E., Harja, P., Azachra, A. C., Merlinda, E., Fadia, P., Wahyuni, R. T., & Dewi, V. F. (2023). The effect of hormones on physiological and psychological adaptations during pregnancy. *Journal for Quality in Women's Health*, *6*(2), 100-112. https://doi.org/10.30994/jqwh.v6i2.223

Tama, K. A., Kusrini, P., Estiningtyas, Q., Adnani, S., Susiarno, H., & Adepoju, V. A. (2025). The influence of maternal mental health disorders on pregnancy outcomes: A scoping review. *Public Health Indonesia*, *11*(2), 226-237. https://doi.org/10.36685/phi.v11i2.975

Wang, L., Yang, N., Zhou, H., Mao, X., & Zhou, Y. (2022). Pregnant women's anxiety and depression symptoms and influence factors in the COVID-19 pandemic. *Frontiers in Psychology*, *13*, 855545, 1-8. https://doi.org/10.3389/fpsyg.2022.855545

Zahara, M., & Abdullah, A. (2025). Analysis factors that influence prenatal stress levels and the impact of preparation on labour and delivery. *Malahayati International Journal of Nursing and Health Science*, *8*(6), 723-732. https://doi.org/10.33024/minh.v8i6.868

Zhang, J. (2024). The impact of stress on sleep quality: A mediation analysis based on longitudinal data. *Frontiers in Psychology*, *15*(October), 1-13. https://doi.org/10.3389/fpsyg.2024.1431234