# The effect of the characteristics of pregnant women and stress on the psychological well-being

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#### Abstract

Introduction: Pregnancy affects physical and psychological changes. Especially during the Covid-19 period, there is a possibility of stress. The health problems of pregnant women that are not handled optimally are related to psychological problems, this will affect the success of the postpartum period, including during the breastfeeding process. Therefore, it is necessary to conduct research related to stress conditions in pregnant women which will affect the psychological well-being of pregnant women. Objective: to determine the characteristics of the mother and the stress of pregnant women affects psychological well-being. Method: observational analysis with a cross-sectional design. The research population of pregnant women in the antenatal class with a sample of 60 people with data collection techniques using systematic random sampling. The results showed: there was an effect of maternal characteristics (age, gestational age, parity) on psychological well-being. And there is the effect of stress on psychological well-being with a p value of 0.000.

**Keywords**: pregnancy; psychological wellbeing; stress

# **INTRODUCTION**

Pregnancy affects psychological, social aspects both positively and negatively, where these conditions affect mental well-being such as depression and anxiety (Parfitt & Ayers, 2014). Constantly high demands and stress can cause psychological, physical, and behavioral health problems (Lestari & Widyawati, 2016). Stress can be cited as an important factor in determining psychological health and well-being and can harm both (Sunday et al., 2017). Individuals who experience continuous conflict and stress gradually affect their psychological well-being (Saxbe 2018). Individuals whose psychological well-being is fulfilled tend to view their lives positively, are able to develop themselves optimally and more optimally and have goals in life (Mahmudah et al., 2016).

Stress affects the role of parents during pregnancy (Choiriyah, 2016). Longitudinal research on parental self-efficacy on 235 primiparous women aged 21-43 years who perceived stress, depression, and anxiety. In this study perinatal stress was associated with parental self-efficacy. Wernand and colleagues examined parental self-efficacy and depression and anxiety in 533 primiparous women, finding that psychopathology was greater in all trimesters of pregnancy (Brunton et al., 2020), in



addition to a prospective cohort study assessing depressive symptoms and associated factors among 838 women who were pregnant for the first time, found that respondents did not experience depression from the third trimester of pregnancy to 12 weeks postpartum, but increased in the first pregnancy, later due to social isolation and due to an unsatisfactory marriage (Abdollahi et al., 2016).

Impact of COVID Pandemic 19 has also led to some changes in behavior patterns, one of which is social distancing. These changes increase psychological problems such as anxiety and depression in the mother during pregnancy (Leonard, 2020), (López-Morales et al., 2021), (Mofrad et al., 2021). The results of the study found symptoms of anxiety and stress, depression was found in cases when women were not pregnant 5% and women during pregnancy 8-10% (Sanadi et al., 2016). Pregnant women are considered as vulnerable subjects who have risk factors for emotional changes and stress because it will have an impact on the mother and fetus, namely poor fetal development, preterm birth and low birth weight babies (LBW). Children with preterm birth or low birth weight are at risk for emotional or cognitive problems, including hyperactivity, anxiety, or language delays (Arisanti, 2021). Support in the transition period will go well, where parents during the transition period really need a lot of support in preparation to become parents so that they can improve psychological well-being (Ramluggun et al., 2020), (Holopainen & Hakulinen, 2019). Stress that occurs in pregnant women will be at risk in the next process, including the postpartum period and breastfeeding. This is exacerbated if the mother's age is less than 18 years, this age group is at risk for mental disorders, stress, depression and trauma (Nabit et al., 2019), (Sulistiawati & Pratiwi, 2021). The period of pregnancy is part of the life cycle that requires special attention in the health sector. Pregnant women have the means to share information, namely in antenatal classes, but psychological problems in the health of pregnant women have not been maximally addressed, even though these conditions affect the quality of life of mothers and children. Based on this phenomenon, the researcher wanted to see the effect of maternal characteristics and stress levels of pregnant women on psychological wellbeing.

#### RESEARCH METHODS

This study used observational analysis with a cross-sectional design. The research population of pregnant women in the antenatal class with a sample of 60 pregnant women at the Banyumas Regional Health Center with data collection techniques using systematic random sampling (Sugiyono 2018). The variables in this study were: maternal characteristics consisting of; maternal age, gestational age, parity, stress level and psychological well-being. Questionnaires were taken from ryff and DSS (Octaviani et al., 2018). This data uses categorical so that the data is processed using chi square. The measuring instrument used is a standard scale to measure stress levels, namely thescale *Depression Anxiety Stress* 42 (DASS-42) by Lovibond and Lovibond (1995). DASS-42 is a subjective scale consisting of 42 question items that were formed to measure the negative emotional status of depression, anxiety, and stress (Mubarak et al., 2015).

Measured by the scale "Psychological well-beingThe Ryff scales of Psychological well-beingis" which is the original copyrighted scale from Ryff which has been translated by Hesti (2016) and rearranged by Debbi Radifta Jayafa (2018). This scale consists of six multidimensional aspects of psychological well-being and uses the Likert method totaling

36 question items with four answer choices, namely STS (very inappropriate), TS (not appropriate), S (appropriate), and SS (very appropriate), consisting of 18 unvaforable questions and 18 favorable questions (Sesillia, 2020).

This research has been declared to have passed the ethical test with the number: B.LPPM-UHB/585/11/2021, by the research ethics research team at Harapan Bangsa University.

## RESULTS AND DISCUSSION

#### **Research Results**

Most of the respondents were of healthy reproductive age (20-35 years) (75%) with gestational age entered in the 2nd trimester (56.7%) and were pregnant with more than 1 or multigravida (51.7%). In the stress variable, most pregnant women are under moderate stress (36.7%), but some are in a very severe stress condition (15%), with the highest psychological well-being in the low category (88.3%).

**Table 1.** Characteristics of respondents and research variables (n=60)

Characteristics of	Results	
Maternal age <20 years 20-35 years >35 years	11 (18.3%) 45 (75.0%) 4 (6.7%)	
Gestational age Trimester 1 Trimester 2 Trimester 3	7 (11.7%) 34 (56.7%) 19 (31.7%)	
Pregnancy Primigravida Multigravida	29 (48.7%) 31 (51.7%)	
Stress of pregnant women Normal Low Moderate Severe Very severe	3 (5.0%) 7 (11.7%) 22 (36.7%) 19 (31.7%) 9 (15.0%)	
Psychological well-being Low Medium High	53 (88.3%) 7 (11.7%) 0 (0%)	

Then cross tabulation was performed between maternal characteristics and stress and psychological well-being. The results of the analysis in table 2 show that maternal age affects psychological well-being with a P value of 0.000 < 0.005, gestational age also affects psychological well-being with a p value of 0.000, parity affects psychological

well-being with a p value of 0.035, and stress affects psychological well-being with a p value 0.000

**Table 2.** Distribution of a cross between the characteristics of the psychological wellbeing

variables	Psychological wellbeing		P value
Characteristics	Low	Medium	
Age . <20 years . 20-35 years . >35 years old	6 (10% 44 (73.3%) 3 (5%)	5 (8.3%) 1 (1.67%) 1 (1.67%)	0.000
Gestational age Trimester I trimester II trimester III	6 (10%) 30 (50%) 17 (28.3%)	1 (1.67%) 4 (6.67%) 2 (3.33%)	0.000
Gravida Primi Multi Grande	23 (38.3%) 30 (50%) 0 (0%)	6 (10%) 1 (1.67% 0 (0%)	0.035
Stress · Normal · Low · Moderate · Severe · Very severe	0 (0%) 3 (5%) 22 (36.67%) 19 (31.67%) 9 (15%)	3 (5%) 4 (6.67%) 0 (0%) 0 (0%) 0 (0%)	0.000

## **DISCUSSION**

In this study, maternal age affects psychological well-being with a p value of 0.000 < 0.005, where low welfare is found in mothers aged 20-35 years of reproductive health of 73.3%. Anyone is susceptible to stress, not limited by age, educational background or work. A survey conducted in America stated that the millennial age group (18-33 years) and generation X (34-47 years) experienced the highest stress levels on average (Saxbe, 2018)

Gestational age also affects psychological well-being with a p value of 0.000 where low psychological well-being occurs in second trimester pregnant women (50%), this is not in accordance with a study conducted in China, based on gestational age, it was found that pregnant women in the first trimester had moderate to severe levels of anxiety (28%) compared with second and third trimester pregnancies (Zhou et al., 2020). This may be due to past experiences during pregnancy before, being a factor that also affects stress. A longitudinal study by Razurel, Kaiser, Antonietti, Epiney, and Sellenet examining 235 primiparous women aged 21-43

years found that perinatal stress was associated with parental self-efficacy, so that the more significant stress was, the more ineffective women felt about motherhood. Another study of 533 primiparous women, found that greater psychopathology was associated with less self-efficacy in all trimesters of pregnancy (Brunton et al., 2020), another study of 838 pregnant women who did not experience depression for the first time from the third trimester of pregnancy to 12 weeks postpartum., and the incidence of depression increases in the first trimester due to unsatisfactory household relationships (Abdollahi et al., 2016).

Parity affects psychological health with a p value of 0.035, where the low category occurs in pregnant women who are multigravida by 50%. This is consistent with Marta's research, showing that depression rates did not differ between primiparous and multiparous women, or between pre and postpartum assessments. In contrast, after delivery, primiparous women reported higher scores of environmental mastery and self-acceptance than multiparous women. In addition, this process increased from pregnancy to postpartum among primiparous women, and it was seen that scores of all dimensions of psychological well-being among multiparous women were similar. (Marta Bassi, 2017).

From the results of this study it was found that stress affects psychological wellbeing with a p value of 0.000, where the lowest welfare occurs in people who are under moderate stress (36.67%), even 15% in the category of severe stress. This is in line with research (Budiarti & Hanoum, 2019) and (Octaviani et al., 2018) which state that coping stress affects a person's psychological well-being. This stress will also have an impact on individual well-being. Individual levels of well-being are higher when individuals feel less stressed. Individual well-being is also related to mental health conditions. In the view of traditional psychology, a state of well-being and a healthy mental state means describing the condition of the absence of stress, guilt and even depression as well as selfcontrol over other negative symptoms (Manita et al., 2019), unmanaged stress can have a major impact on health, physical and mental well-being that lead to various diseases such as depression (Clemente & Hezomi, 2016). Results This study is in line with previous research which found that there was a negative relationship between stress and well-being (Manita et al., 2019). Another study also found that there is a negative and significant role of Subjective Wellbeing (SWB) on stress, where if the SWB is high, the stress will be low, and vice versa if the SWB is low, the stress will be high, the percentage of stress affecting well-being is 29.2% and 70.8% is influenced by other factors (Wijaya, 2017).

### **CONCLUSION**

The results show that the characteristics of pregnant women (mother's age, gestational age, parity and stress of pregnant women affect the psychological well-being of pregnant women. From this study, it is expected that there will be a role for health workers, families to provide support to pregnant women, pregnant women are expected to apply management stress to improve coping with stress during pregnancy. Further research is needed to see the role of husbands in emotional support to pregnant women.

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