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DEMOGRAPHIC FACTORS ASSOCIATED WITH ANXIETY AMONG PREGNANT WOMEN OF POST-PANDEMIC COVID-19 IN CENTRAL KALIMANTAN

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ABSTRACT

Introduction: Anxiety in the 3rd trimester of pregnant women increased during the COVID-19 pandemic, ranging from 45.9% to 62% and occurs due to either a maturity crisis or a fear of childbirth. It has an impact on the health of the mother and the fetus. A preliminary study at a private mother and children hospital in Palangka Raya in December 2022 showed that 7 out of 10 3rd trimester pregnant women experienced anxiety. **Aims**: to analyze the relationship between parity, education level, employment status, and income with anxiety level among 3rd trimester pregnant women at a private mother and children hospital in Palangka Raya post-pandemic COVID-19. **Method:** An observational study with a cross-sectional approach and a representative sample size was 255 respondents from 3rd trimester pregnant women using a non-probability sampling method and a questionnaire as the research instrument. Odds Ratios (ORs) and 95% Confidence Intervals (95% CIs) were calculated by using Multinomial Logistic Regression analyses. **Results:** Higher education was significantly associated with a low anxiety level (adj. OR 0.266, 95%CI 0.094-0.786; p= 0.012) as well as low income with moderate anxiety of 3rd trimester pregnant women (adj. OR 0.121, 95%CI 0.024-0.613; p=0.011). **Conclusion:** There is a relationship between education level as well as income and anxiety among 3rd trimester pregnant women at a private mother and children hospital in Palangka Raya.

Keywords: Anxiety, Education, Employment, Income, Parity And Pregnant Women

INTRODUCTION

Anxiety is an unpleasant emotional state, a feeling of fear and being threatened, unpleasant by something whose cause is not yet clear, creating anticipation for someone in dealing with it (Dorland, 2012; Sutejo, 2018). This is normal, especially for pregnant women in the whole trimester (Mukholil, 2018; Suyani, 2020; Yusnidar and Suriati, 2020). Physical changes, fear of the childbirth process, and worry about the fetus's health can cause anxiety in 3rd trimester of pregnant women (Yue et al., 2021). Anxiety increased during the Covid-19 pandemic, especially in pregnant women (Bender et al., 2020; Salehi et al., 2020), which was 15-23% of the total of more than 12 million pregnant women who had experienced problems from United Nations

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International Children's Data Emergency Fund (UNICEF) there's 30% of them had anxiety problems (Nowacka et al., 2021; Wu et al., 2021; Yuanti et al., 2021). From more than 373 million pregnant women, it was found that 28.7% or more than 107 million pregnant women experienced anxiety disorders, especially in the 3rd trimester in Indonesia in 2008 (Sarmita, Nurdin and Fattah, 2021; Setiawati, Qomari and Daniati, 2022) which had an impact on increasing the risk of uterine muscle contractions during labor, premature birth, and the incidence of low birth weight (LBW) (Baro'ah et al., 2020).

If anxiety problems are not treated, they can cause abnormal labor and even death (Suyani, 2020; Yusnidar and Suriati, 2020). The several factors influence anxiety, which is based on Kaplan and Sadock's theory of intrinsic and extrinsic factors and supported by Lawrence Green's behavioral theory about attitudes, knowledge, traditions, and beliefs are determined person's health behavior and the availability of health facilities and obstetric factors that increased the fear of Covid-19 (Arifin, Mutisari and Putra S, 2020; Giesbrecht et al., 2022; Pakpahan et al., 2022). In other research journals, other factors have been found, such as age, education, knowledge about COVID-19, parity, work, physical activity, chronic diseases, family support, income, and isolation rules along pandemic (Ding et al., 2021; Luo et al., 2022). There's a private mother and children hospital in Palangka Raya, Central Kalimantan, one of whose services focuses on maternal and child health services. In 2021, data on patient visits to obstetrical polyclinics was recorded at 5,990 people, including 1,768 pregnant women in the 3rd trimester who underwent pregnancy control (antenatal care) (Private Mother and Children Hospital, 2022). In December 2022, the researchers conducted a preliminary study using a survey technique using an anxiety questionnaire to obtain data on whether or not 3rd trimester pregnant women experienced anxiety. The survey showed that 7 of 10 pregnant women in the 3rd trimester experienced anxiety during the COVID-19 pandemic. There's still no data regarding the factors that influence anxiety in 3rd trimester pregnant women at a private mother and children hospital in Palangka Raya. For that reason, research is needed to analyze the relationship between demographic factors of parity, education, employment, and income with the anxiety of 3rd trimester pregnant women. In addition, this research also focuses on the experience of dealing with the Covid-19 pandemic, providing relevant information on this condition.

The Factors of Anxiety Among Pregnant Women

Anxiety can be summed up as an unpleasant emotional state, entire of worry, fear and a feeling of being threatened by something that has no apparent cause as an anticipation for the individual to take action to deal with it. (Dorland, 2012; Sutejo, 2018). In a state of anxiety, a person feels physiological sensations (such as palpitations and sweating), nervousness or fear. In addition to motor and visceral effects, anxiety affects thinking, perception, and learning. (Arifin, Mutisari and Putra S, 2020; Giesbrecht et al., 2022; Pakpahan et al., 2022). Pregnancy is a period of maturity crisis, which can cause anxiety due to psychological changes during pregnancy. This is normal, especially for pregnant women in the whole trimester. (Mukholil, 2018; Suyani, 2020; Yusnidar and Suriati, 2020). Physical changes, fear of the childbirth process, and worry about the fetus's health can cause anxiety in 3rd trimester of pregnant women and untreated anxiety can cause abnormal labor (Yue et al., 2021).

Pregnant women in the third trimester tend to experience high anxiety because they are worried about the birth process and the condition of the fetus that will be born, the impact increases the risk of low birth

weight (LBW) and premature birth, weakening of uterine muscle contractions during the birth process which can cause prolonged labor so that it can increase the incidence of infection and maternal fatigue (Baro'ah et al., 2020). If anxiety in pregnant women is not treated seriously, it will have physical and psychological impacts and effects, both on the mother and the fetus. If this is allowed to happen, the morbidity and mortality rates in pregnant women will continue to increase. Several factors influence anxiety, which is based on Kaplan and Sadock's theory of intrinsic (age, experience, self-concept and role) and extrinsic factors (medical condition, level of education, access to information, adaptation process (family support), socio-economic level, employment, type of action, therapeutic communication) and support by Lawrence Green's behavioral theory about attitudes, knowledge, traditions, and beliefs are determined person's health behavior and the availability of health facilities and obstetric factors that increased the fear of Covid-19 (Arifin, Mutisari and Putra S, 2020; Giesbrecht et al., 2022; Pakpahan et al., 2022). Other research journals have found other factors, such as age, education, knowledge about COVID-19, parity, work, physical activity, chronic diseases, family support, income, and isolation rules along pandemic. (Ding et al., 2021; Luo et al., 2022).

Based on previous research, it is known that the demographic factors that influence anxiety in pregnant women in the 3rd trimester still have wider variations. There is still no data regarding anxiety in pregnant women and the factors that affect it. The most recent aspect of this research is that there is still no research that links these three factors with anxiety in pregnant women, especially in the 3rd trimester in Palangka Raya.

Hypothesis 1: Parity, Education Level, Employment Status, and Income are associated with anxiety of 3rd Trimester Pregnant Women.

Hypothesis 2a: Parity associated with anxiety of 3rd Trimester Pregnant Women.

Hypothesis 2a: Education Level associated with anxiety of 3rd Trimester Pregnant Women.

Hypothesis 2b: Employment Status associated with anxiety of 3rd Trimester Pregnant Women.

Hypothesis 2c: Income related to anxiety of 3rd Trimester Pregnant Women.

METHODS

This was an observational analytic study with a cross-sectional approach. The researcher got data from the hospital's medical records. It was calculated that from 2020 to 2021, there was an average of 539 people per year who did pregnancy control/antenatal care (ANC) in an outpatient polyclinic in the Department of Obstetrics and Gynecology of Mother and Child Hospital in Palangka Raya, Central Kalimantan, Indonesia. The sample size was determined using the Slovin formula. The representative sample size for this study was 255 pregnant women in the 3rd trimester pregnant woman. The respondents were aged under 45 years, both work or not, with various educational levels like elementary school, junior high school, senior high school and college, was carried out in the month of January-March 2023 (post Covid-19 pandemic) with the technique of non-probability sampling.

There were inclusion and exclusion criteria. The following inclusion criteria were pregnant woman with a gestational age above 28 weeks, did not suffer from hypertension, diabetes, heart disease or asthma, received the COVID-19 vaccination, had no history of hospitalization with a diagnosis of COVID-19, ready to participate in research and be able to read and write. The exclusion criteria were pregnancy complications, psychiatric disorders and age over 45 years. The amount sample of this study was 255 respondents with independent variables were parity (low parity category if the number of children

was ≤2, intermediate parity category if the number of children was 3-4, and high parity category if the number of children was ≥5) (Riani, 2022), education (low education category if respondent was in Basic education (elementary school/Islamic elementary school and junior high school/Islamic junior high school or equivalent), intermediate education category if respondent was Secondary education (high school/vocational school/equivalent) and high education category if respondent was in Higher education (D3/S1/S2/S3)) (UU RI No.20 Tahun 2003) , employment (does not work category if the respondent was a housewives or retirees and work category if the respondent was employed as civil servant/ self-employed/farmer/fisherman/ laborer/trader, other), income (< Rp. 2,903,145 and ≥ Rp. 2,903,145) (BPS, 2018a), and dependent variable was delivery anxiety (no anxiety category if the Hamilton Anxiety Rating Scale (HAM-A) Indonesian Version (Ramdan, 2019) score was <14, low anxiety category if the score was 14-20, moderate anxiety category if the score was 21-27, severe anxiety category if the score was 28-41 and very severe anxiety category if the score was 42-56). The determination of the anxiety's criteria using The Questionnaire of Hamilton Anxiety Ratings Scales (HARS) developed by Max Hamilton in 1956. It was obtained from Iwan Muhamad Ramdan's research with the journal title Reliability and Validity Test Hamilton Anxiety Rating Scale (HAM-A) Indonesian Version (Ramdan, 2019). Research data information can be seen in Table 1.

The instrument used in this study was a questionnaire tested for validity and reliability, and valid results were obtained. The questionnaire was given directly (paper and pencils). It contained several questions and statements, consisting of a Statement of Consent (Informed Consent), a Research Procedure Explanation, a questionnaire containing respondents' identities and HARS of delivery anxiety. The Questionnaire of Hamilton Anxiety Ratings Scales (HARS), developed by Max Hamilton in 1956, consists of 14 statement items that have level score 0-4, the example of the statement is "I experience anxiety feeling in facing labor including: Feeling worried to the process of childbirth, bad feeling on undergoing the childbirth, fear of my own mind, fast angry or easily offended" (Ramdan, 2019). HARS meter has Cronbach's alpha score of 0.756 and added with attention check questions (attention check question) to be pasted in the middle of the questionnaire to overcome the research bias. Data analysis is stated with Odds Ratio (OR) by using the regression test of multinomial logistics on the confidence rate of 95% (α=0.05). The whole analysis was done by using IBM statistical application of Statistical Program for social Sciences (SPSS) For Windows version 26 at 95% confidence level (α=0.05).

This study was assessed by the Ethical Committee of Faculty of Medicine and Health Science of Universitas Lambung Mangkurat No. 007/KEPK-FK ULM/EC/I/2023. This study was conducted based on the specified criteria, which include explaining the study benefits and the respondents' rights, protecting the privacy of respondents, and upholding aspects of fairness and the principle of openness by explaining research procedures and informed consent. Written informed consent was given to participate.

RESULT

Univariate Analysis Results

Univariate analysis was used to describe the variables of parity, education, employment, income, and anxiety. This study's data is about parity, education, employment, income, and anxiety. Based on the data in Table 1 from 255 respondents the majority of respondents had low parity (69%), the latest education was high school (53%), mothers did not work (70.6%) with an average monthly income of less than Rp. 2,903,145 (75.3%). The majority of

respondents had low anxiety (60%), followed by no anxiety (36.5%) and moderate anxiety (3.5%). This research also shows that there were no respondents who experienced severe or very severe anxiety.

Table 1. Table of 3rd Trimester Pregnant Women Characteristics at a Private Mother and Children Hospital in Palangka Raya 2022

	Variable	Total n = 255
1.	**Parity**	
	a. Low	176 (69.0%)
	b. Intermediate	72 (28.2%)
	c. High	7 (2.8%)
2.	**Last education**	
	a. Low	36 (14.1%)
	b. Intermediate	135 (53.0%)
	c. High	84 (32.9%)
3.	**Employment (work)**	
	a. Does not work	180 (70.6%)
	b. Work	75 (29.4%)
4.	**The average income in a month**	
	a. < Rp. 2,903,145	192 (75.3%)
	b. ≥ Rp. 2,903,145	63 (24.7%)
5.	**Anxiety**	
	a. No Anxiety	93 (36.5%)
	b. Low	153 (60.0%)
	c. Moderate	9 (3.5%)
	d. Severe	0 (0.0%)
	e. Very Severe	0 (0.0%)
	Total	100 (100%)

BIVARIATE AND MULTIVARIATE ANALYSIS RESULTS

In bivariate and multivariate analysis, it used the Multinomial Logistic Regression test by looking at the Crude OR and Adjusted OR values that are significantly related if the p-value <0.05. Bivariate and multivariate result in Table 2 shows about the results of relationship between several dependent variables and the independent variables studied. On multivariate analysis, high parity, medium parity, intermediate education, no work, and income under Rp. 2,903,145, were not meaningful to explain the risk of experiencing low anxiety (Adj. OR 0.351, CI 95%: 0.066-1.863; Adj. OR 1.021, CI 95%: 0.552-1.888; Adj. OR 0.720, CI 95%: 1.369-5.356; Adj. OR 0.660, CI 95%: 0.316-1.379; Adj. OR 1.718, CI 95%: 0.835-3.535). Of the four independent variables in the relationship with low anxiety, only the variable of high education had a significance of p<0.05 (p=0.012). So, the variable of high education had the most dominant relationship to low anxiety of 3rd trimester pregnant women (Adj. OR 0.266, CI 95%: 0.094-0.748) (Table 2).

On multivariate analysis, the income which was less than Rp. 2,903,145, was riskier experiencing moderate anxiety as much as 0.121 times compared with income more than Rp. 2,903,145 (Adj. OR 0.121, CI 95%: 0.024-0.613) and statistically significant. Of the four independent variables in the relationship with moderate anxiety, only the income variable was less than Rp. 2,903,145 had a significance of p<0.05 (p=0.011). So, the income variable less than Rp. 2,903,145 had the most dominant relationship with moderate anxiety in 3rd trimester pregnant women in Table 3 (Adj. OR 0.121, CI 95%: 0.024-0.613).

Table 2. *Odds Ratio of* Low Anxiety Levels with Parity, Education Level, Employment Status, and Income of 3rd Trimester Pregnant Women at a Private Mother and Children Hospital in Palangka Raya 2022

Variable	Anxiety		Anxiety			
	No (n=93)	**Low (n=153)**	***Crude* OR (95% CI)**	***p-value***	***Adjusted* OR (95% CI)**	***p-value***
Parity						
High	4 (4.3)	3 (2.0)	0.446 (0.097 - 2.057)	0.300	0.351 (0.066 - 1.863)	0.219

Variable	Anxiety		Anxiety			
	No (n=93)	**Low (n=153)**	***Crude* OR (95% CI)**	***p-value***	***Adjusted* OR (95% CI)**	***p-value***
Intermediate	26 (28.0)	44 (28.8)	1,006 (0.565 - 1.790)	0.984	1.021 0.552 - 1.888)	0.947
Low	63 (67.7)	106 (69.3)	1		1	
Education						
High	45 (48.4)	38 (24.8)	0.292 (0.122 - 0.699)	0.006 *	0.266 (0.094 - 0.748)	0.012 *
Intermediate	39 (41.9)	89 (58.2)	0.790 (0.339 - 1.841)	0.585	0.720 (1.369 - 5.356)	0.479
Low	9 (9.7)	26 (17.0)	1		1	
Employment						
Does not work	60 (64.5)	112 (73.2)	1.502 (0.862-2.618)	0.151	0.660 (0.316-1.379)	0.269
Work	33 (35.5)	41 (26.8)	1		1	
Income						
< Rp. 2,903,145	62 (66.7)	126 (82.4)	2.333 (1.282-4.247)	0.006 *	1.718 (0.835-3.535	0.141
≥ Rp. 2,903,145	31 (33.3)	27 (17.6)	1		1	

OR = Odds ratio; CI = confidence interval; *=statistically significant (p<0.05); Adjusted for parity, education level, employment status, and income.

Table 3. *Odds Ratio of* Moderate Anxiety Levels with Parity, Education Level, Employment Status, and Income of 3rd Trimester Pregnant Women at a Private Mother and Children Hospital in Palangka Raya 2022

Variable	Anxiety		Anxiety			
	No (n= 93)	**Moderate (n= 9)**	***Crude* OR (95% CI)**	***p-value***	***Adjusted* OR (95% CI)**	***p-value***
Parity						
High	4 (4.3)	0 (0,0)	NA	-	NA	-
Intermediate	26 (28.0)	2 (22.2)	0.692 (0.135 - 3.557)	0.660	0.760 (0.134 - 4.307)	0.757
Low	63 (67.7)	7 (77.8)	1		1	
Education						
High	45 (48.4)	1 (11.8)	0.200 (0.011 - 3.502)	0.271 0.672	0.069 (0.022 - 1.917)	0.115
Intermediate	39 (41.9)	7 (77.8)	1.615 (0.176 - 14.830)		0.616 (0.054 - 7.033)	0.697
Low	9 (9.7)	1 (11.1)	1		1	
Employment						
Does not work	60 (64.5)	8 (88.9)	4.400 (0.527 - 36.723)	0.171	3.297 (0.283 - 38.428)	0.341
Work	33 (35.5)	1 (11.1)	1		1	

Variable	Anxiety		Anxiety			
	No (n= 93)	**Moderate (n= 9)**	***Crude* OR (95% CI)**	***p-value***	***Adjusted* OR (95% CI)**	***p-value***
Income						
< Rp. 2,903,145	62 (66.7)	4 (44.4)	0.400 (0.100 - 1.596)	0.194	0.121 (0.024 - 0.613)	0.011*
≥ Rp. 2,903,145	31 (33.3)	5 (55.6)	1		1	

OR = Odds ratio; CI = confidence interval; *=statistically significant (p<0.05); Adjusted for parity, education level, employment status, and income.

DISCUSSION

Parity and Anxiety Relationship of 3rd Trimester Pregnant Women

This research showed that the majority of 3rd trimester pregnant women at a private mother and children hospital in Palangka Raya had low parity (69%). Based on study results obtained that high and intermediate parity were not significant to explain the risk of experiencing either low anxiety (Adj. OR 0.351, CI 95%: 0.066-1.863; Adj. OR 1.021, CI 95%: 1.552-1.888) or moderate anxiety (NA) and no statistically meaningful. So, it concluded that parity had no relation to the anxiety of 3rd trimester pregnant women at a private mother and children hospital in Palangka Raya. Moreover, the results of this study found that parity was not related to low and moderate anxiety without the influence of other factors that the researchers could not consider. Unlike other research that anxiety will increase in 3rd trimester with low parity because it is related to the mother's experience when they begin to imagine the birth process, which has never been experienced before (Safa'ah et al., 2022). New turmoil will begin to emerge in the face of childbirth, the mother's psychological and emotions being filled with thoughts and feelings of responsibility as a mother towards the baby to be born (Syamsiah, Rahmadani and Wulandari, 2022)

Experience and knowledge relate to a person's psychological aspects when facing the birthing process. Theory from Laili Arifin (2007) stated that by looking at the experience of giving birth. There are 2 groups of mothers, namely those who have already given birth but had an unpleasant experience and the group of mothers who are the first time or have never given birth but receive previous information from other people scary stories and experiences about the birthing process (Arifin, 2007). The anxiety of 3rd trimester pregnant woman can't be avoided in life and the level of anxiety varies depending on each individual. So, mental or psychological preparation is needed in facing childbirth, that is by using coping mechanisms to start self-preparing, to think positively, and to control emotional stability, and also to receive support from husband, family, and knowledge from competent health workers (Syamsiah, Rahmadani and Wulandari, 2022)

Education and Anxiety Relationship of 3rd Trimester Pregnant Women

This research showed that the majority of 3rd trimester pregnant women at a private mother and children hospital in Palangka Raya had moderate education (53%). The result of multivariate analysis, only the variable of higher education had a significance of p<0.05 (p=0.012), so it had the most dominant relationship to low anxiety in 3rd trimester pregnant women (Adj. OR 0.266, CI 95%: 0.094-0.748 (Table 2), and there was no relationship

between education and moderate anxiety, and it was not significant to explain the risk of experiencing moderate anxiety (Table 3). The group of pregnant women with higher education is riskier of experiencing low anxiety, which is 0.266 times compared to those with low education. So, the higher education level makes low anxiety occur in the 3rd trimester pregnant women at a private mother and children hospital in Palangka Raya (significance $p<0.05$ ($p=0.012$) (Table 2). These results are not like Suyani's research that education level has a relationship with anxiety because person's education level impacts of knowledge and mindset in implementing coping mechanisms (Situmorang, Rossita and Rahmawati, 2020; Suyani, 2020).

Higher education is related to increasing knowledge in both formal and informal education. Higher education obtains information from both other people and the mass media. The more information you receive, the more knowledge you gain about health (Wahyuni, 2021). Factors that can influence health behavior according to Lawrence Green are determined by the knowledge gained from education. The higher a person's education, the better the understanding of pregnant women in maintaining physical and mental health in facing the pregnancy and birth process that they will undergo, and good knowledge will have a positive impact on pregnant women in preventing the transmission of Covid-19 and complying with applicable health protocols (Arifin, Mutisari and Putra S, 2020; Pakpahan et al., 2022).

Employment and Anxiety Relationship of 3rd Trimester Pregnant Women

This research shows that 3rd trimester pregnant women at a private mother and children hospital in Palangka Raya majority had no work (70.6%). In the multivariate analysis, it was found that there was no relationship between work status and low anxiety. It was not significant to explain the risk of experiencing low anxiety (Adj. OR 0.660, CI 95%: 0.316-1.379), and there was no relationship between work and moderate anxiety and was not significant to explain the risk of experiencing moderate anxiety (Adj. OR 3.297, CI 95%: 0.283 – 38.428) (Tables 2 and 3). This result follows the research of (Halman, Umar and Limbong, 2022) that work is not related to feelings of anxiety in pregnant women, but it's opposite with Suyani's research finances of working people and those who do not work are indeed different from the perspective of the burden on each person's mind and the addition of other factors such as workload, and household which can cause stress and anxiety (Suyani, 2020). Pregnant women who have jobs have social interactions with people around their work environment, so it will be easier for them to get information and experience about pregnancy. Therefore, it can influence the perspective and coping mechanisms of pregnant women, but this does not happen to everyone (Murdayah, Lilis and Lovita, 2021). Anxiety can arise and happen to anyone and anywhere and can be influenced by other factors such as burden, household, and support from family, so whether there is work or not is not completely related to feelings of anxiety in pregnant women (Halman, Umar and Limbong, 2022).

Income and Anxiety Relationship of 3rd Trimester Pregnant Women

This research shows that 3rd trimester pregnant women at a private mother and children hospital in Palangka Raya majority had an average monthly income below Rp. 2,903,145 (75.3%). In the multivariate analysis, overall, with low finances, it was found that there was no relationship between income and low anxiety. It was not intended to explain the risk of experiencing low anxiety (Adj. OR 1.718, CI 95%: 0.835-3.535) however, there was a relationship between income with moderate anxiety and significant to explain the risk of moderate anxiety (Adj. OR 0.121, CI 95%: 0.024-0.613) (Tables 2 and 3). The group of pregnant women with income below Rp.

2,903,145 (around 194.85 USD per month) are riskier of experiencing moderate anxiety, which is 0.121 times compared to income above Rp. 2,903,145. So, there is a relationship between the lower level of income and higher the moderate anxiety in pregnant women in the 3rd trimester at a private mother and children hospital in Palangka Raya (significance $p<0.05$ ($p=0.011$) (Table 2). The Regional/Provincial Minimum Wage or UMR in Central Kalimantan in 2020 is IDR. 2,903,145) (Central Bureau of Statistics [BPS], 2023). Based on this research, the average monthly income of mothers/households is below Rp. 2,903,145/month (75.3%) or low economic status. In the multivariate analysis, in the analysis of moderate anxiety, it was found that the respondents with incomes below Rp. 2,903,145 were 0.121 times riskier of experiencing moderate anxiety compared to those with incomes above Rp. 2,903,145 (Adj. OR 0.121, CI 95%: 0.024-0.613) was statistically significant.

This is opposite to Halman's research that income is not related to anxiety (Halman, Umar and Limbong, 2022). Other research found that individuals who rated their health poorly and reported specific physical symptoms had higher levels of stress, anxiety and depression (Wang et al., 2020). Similarly, (Feng, Ma and Zhong, 2019) observed that low socioeconomic status was correlated with higher levels of trait anxiety. Furthermore, (Melita, Rodríguez-Bailón and Willis, 2023) highlighted that economic status, mainly being poor, was significantly associated with anxiety. A family's economic status or income is related to someone's life in terms of providing their needs for clothing, food, and shelter. Income is about the purchasing power of needs so the level of higher income get more easier to families, especially for 3rd trimester pregnant woman to get nutritional intake and to be able to access information quickly and easily and can have pregnancy checked at better health service centers, also to support in terms of financing the delivery process and the baby's needs after birth and a supportive environment (Halu, 2019).

Limitations and Future Direction

The limitation of this research to analyze the relationship between demographic factors of parity, education, employment, and income with the anxiety of 3rd trimester pregnant woman at a private mother and children hospital in Palangka Raya, but not other factors which can also influence anxiety in pregnant women of 3rd trimester pregnant woman, which are multifactorial. Other variables still cannot be excluded, so their inclusion is a weakness of this research. Future researchers will need to consider other factors and different situations (not just the Covid-19 situation) and uncover other types of mental health issues that may impact the health of mothers and babies. Apart from that, this research is limited to one hospital in the city of Palangka Raya, so more extensive research is needed, not limited to just one hospital, in order to get a more complete picture with a more significant number of respondents. In addition to a broad geographical scope, future researchers will need to consider local cultural factors that may influence the mental health of pregnant women (Shahid et al., 2021). A study highlighted the necessity of multidisciplinary mental health services and culturally sensitive interventions for minority pregnant women, especially those from low-income backgrounds (Ge et al., 2021).

CONCLUSION

The results based on this research of 3rd trimester pregnant women at a private mother and children hospital in Palangka Raya, it was found that the majority of 255 respondents had low parity (69%), had intermediate education (53%), were non-working mothers (70.6%) with low average income (in a month is under Rp. 2,903,145)

(75.3%). The majority of respondents had low anxiety (60%), followed by no anxiety (36.5%) and moderate anxiety (3.5%). This research also shows that there were no respondents who experienced severe or very severe anxiety. There was an educational relationship dominated by higher education with low finances and a relationship between income below Rp. 2,903,145 with moderate finances. So, the higher the education, the higher the low finances, and the lower the income, the higher the moderate finances for 3rd trimester pregnant women at a private mother and children hospital in Palangka Raya. The study also found that economic status plays an important role in pregnant women's anxiety levels.

In this research, education and economics are factors related to maternal anxiety. Therefore, a policy that can be offered to the government is to implement education program on anxiety and mental health issues using materials tailored to the level of education and economic status. Maternal and child practitioners can also incorporate anxiety-related topics into activities for pregnant women, such as at Posyandu (integrated health service posts), and provide knowledge about the factors, impacts, and solutions for dealing with anxiety to health workers.

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