



## Employment, Income, Health Insurance, Accessibility to Healthcare Facility, Age, and Prenatal Anxiety in Indonesia

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### ABSTRACT

Most of pregnancy women experienced anxiety during pregnancy, both of in high-income and low-middle income countries. Financial security supported by the easiness access to the healthcare facility were important to the antenatal anxiety. Mother's age, mother's and husband's working status will decrease anxiety in facing delivery. This study aimed to examine the effect of socioeconomic factors including working status, family income, health insurance, accessibility to the healthcare facility, and mother's age to the prenatal anxiety of women in Indonesia. This study was a cross sectional study conducted between April-May 2022 to examine the effect of socioeconomic factors to the prenatal anxiety. 155 pregnancy women in a Maternal Clinic participated in this study, chosen used consecutive sampling. Multiple linear regression has been used to explore the predictive and protective factors related to the prenatal anxiety. Majority of mother and husband's age were 20-35 years old, with most of them graduated from Senior High School. Mother's working status were dominated by mother without employment and or housewives while husband worked in non-government institution. Only few of mother used the private insurance as their healthcare insurance and public transportation to go to the healthcare facility. Two of socioeconomic factors found significantly affected the prenatal anxiety including the distance to access the healthcare facility ( $.020, \beta: -.163$ ) and wife's age ( $.000, \beta: -.510$ ). The distance between residence to the healthcare facility and mother's age were socioeconomic factors affected the prenatal anxiety. Other factors could help mother have better preparation in pregnancy and facing delivery.

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#### Kata kunci:

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### ABSTRAK

Mayoritas Ibu hamil mengalami kecemasan selama kehamilan, baik pada negara-negara dengan pendapatan tinggi dan menengah ke bawah. Keamanan keuangan didukung dengan kemudahan dalam mengakses fasilitas kesehatan penting bagi kecemasan sebelum persalinan. Usia ibu, status bekerja Ibu dan suami akan membantu menurunkan kecemasan menghadapi persalinan. Penelitian ini bertujuan untuk menguji pengaruh faktor sosial dan ekonomi yang terdiri dari status bekerja, pendapatan keluarga, asuransi kesehatan, akses terhadap fasilitas kesehatan, dan usia Ibu terhadap kecemasan persalinan Ibu di Indonesia. Penelitian ini merupakan penelitian cross-sectional yang dilaksanakan pada April-Mei 2022 untuk menguji faktor sosial dan ekonomi dengan kecemasan persalinan. Mayoritas usia Ibu dan suami berada pada rentang 20-35 tahun, dengan pendidikan terakhir Sekolah Menengah ke Atas. Status bekerja Ibu

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didominasi oleh Ibu tidak bekerja atau Ibu rumah tangga sementara suami banyak bekerja di institusi non-pemerintah. Hanya sebagian Ibu menggunakan asuransi pribadi sebagai asuransi kesehatan dan transportasi umum untuk menuju ke fasilitas kesehatan. Dua dari faktor sosial dan ekonomi berpengaruh secara signifikan terhadap kecemasan persalinan yakni akses terhadap fasilitas kesehatan ( $.020$ ,  $\beta$ :  $-.163$ ) dan usia Ibu ( $.000$ ,  $\beta$ :  $-.510$ ). Jarak antara tempat tinggal menuju fasilitas kesehatan merupakan faktor sosial dan ekonomi yang berpengaruh terhadap kecemasan persalinan. Faktor lainnya memungkinkan Ibu untuk memiliki persiapan lebih baik dalam kehamilan dan proses persalinan.

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## INTRODUCTION

Tremendous physical and psychological changes during pregnancy affected mother's physical and mental health. One of physiological change that affect mother's psychological status is the hormonal change. Hormonal change during pregnancy resulting the psychological change such as unstable mood that could lead to the anxiety and depression. In condition of anxiety, the body will be in alert position. At that time, the adrenalin has increased, produced high tension and affected overall woman's emotional status (Schwartz & Graham, 2020). Most of women did not aware that the physical change during pregnancy was highly related to the emotional distress. Mother put the emotional or psychological change as the common things that might happened in pregnancy. As the result, mother did not care their psychological changes (Ayu et al., 2019).

A report showed that more than 10% of women around the world experienced mental disorder such as anxiety during pregnancy. The anxiety rate was higher in low to middle economic countries (Dennis et al., 2017; Waqas et al., 2015). In New Zealand, also in the Switzerland the number of prenatal anxiety and distress more than 30% in community settings while in China more than 20% (Barber & Starkey, 2015; Lu et al., 2020; Ratcliff et al., 2015). Mother with the history of anxiety during pregnancy have chance about three times to have depression after delivery (Mohamad Yusuff et al., 2016). The disorder could last to the post delivery and worsening the birth outcome. Postpartum blues, postpartum depression, moreover the psychosis could develop if the prenatal anxiety did not treat well (Anderson et al., 2019; Uguz et al., 2019).

In Indonesia, more than 50% experienced distress in severe level also anxiety during pregnancy (Ayu et al., 2019; Nurrizka et al., 2021). Maternal psychological health is still not become priority in Indonesia. Maternal and Child Health program is still focused on the nutrition more than the mental issue (Syam et al., 2020). High number of anxieties in antenatal and post-natal in low-middle income country (LMIC) was related to the lack of mother's knowledge about psychological issue for women during the pregnancy and post labor period. Moreover, some of women with mental health disorders was lack of treatment in ILMC. Community's perspective which put it as the stigma have big portion to affect the condition (Gelaye et al., 2016). Mother who has experienced more than once in labor tend to have lower anxiety compared to the primiparas. Previous experience could be helpful to describe the whole process of pregnancy and the possible condition during labor (Angesti & Febriyana, 2021).

Anxiety during pregnancy could affect mother's lifestyle which including their physical activity, diet pattern, exercise pattern, and sleeping pattern. Mother with anxiety during pregnancy tend to have unstable mood for doing activities and indirectly impacted to the baby's growth (Gelaye et al., 2016). The condition lead to put the delay in baby's growth and development in pre and post-natal. (Akçalı Aslan et al., 2014). The anxiety also discourage mother to have better self-care during pregnancy until after delivery (Corbett et al., 2020). Prolonged anxiety will also impact to the baby caring after delivery. Mother might decrease the competency on caring the baby due to their mental condition (Ningsih & Nuzuliana, 2021).

Mother's age was also related to the anxiety. A study showed that adolescents' mother in Indonesia experienced several negative feelings during pregnancy. Most of them feel unprepared to face the pregnancy (Angesti & Febriyana, 2021). Adolescents' mothers have low self-efficacy and self-expectation for childbirth which will also put them careless about pregnancy and process of delivery. This age also related to the less active to gather information related pregnancy by asking the healthcare personnel (Rahmawati et al., 2019). Women's aged in 20-35 years old has better opportunity to have pregnancy safely (Zainiyah & Susanti, 2020). Younger age gave more opportunity to mother to visit the healthcare personnel. Mother in 20 years old have high chance to have maternal visit numbers around several countries (Adedokun & Yaya, 2020). The higher opportunity to visit maternal clinic in age after 20 could not last too long. Some mother with older age (>35 years old) decreased their visit numbers in maternal visits (Ariani, 2022).

A young marriage couple faced the stressful event when the wife has the first pregnancy. In this situation, couple forced to adapt with stressors related to the baby, their marriage relationship, also the financial issue related to their household (Rahmawati et al., 2019). A study found that employment or working status also the profession were not associated with the anxiety during pregnancy (Nurbaeti et al., 2018). While other studies found the strong effect of employment status to the anxiety level in pregnancy. Mother who was supported by the employed couple found less anxiety (Akçalı Aslan et al., 2014). A study found that mother with employed husband visited the healthcare facility to get Antenatal Care (ANC) two times more than unemployed one. Mother without difficulties in affording ANC cost also will have higher maternal visit number (Ariani, 2022). Employed husband who had prepared financially, especially have no difficulties to prepare the ANC costs (Tekelab et al., 2019). COVID-19 pandemic resulting a lot of people lost their job which also impact to their monthly

income, including family with mother in pregnancy. This condition increased the burden not only for husband but also for whole family and increase mother's anxiety (Ahlers-Schmidt et al., 2020; Li et al., 2020).

Pregnancy without planning could be another factor contribute to the anxiety. This issue related to the family's financial issues which not only impact to the mother but also could impact to the husband and whole family. Mother who lived in family with high income could have less anxiety during pregnancy (Yang et al., 2023). Mother who has the financial security with their own income will fill safer and less anxious during pregnancy (Ningsih & Nuzuliana, 2021).

Together with the anxiety related to the baby condition, process of delivery, mother also found distress due to of medical cost need which also associated with the possible quality medical service (Ayu et al., 2019). Health insurance ownership was associated with the anxiety level during pregnancy. In Indonesia, National Health Insurance (JKN) provided various services which helpful to increase mother psychological health (Sulistiyo et al., 2022). Mother who has health insurance found to have mild level anxiety (Solihah, 2019).

In Indonesia, mother has suggested to visit at least four time to the nearest healthcare facilities. The visit started from the beginning pregnancy to the last trimester (Anis et al., 2022). Accessibility to the healthcare facility, especially for maternal clinic, has high contribution in lowering maternal anxiety. When the facility is reachable, mother could get more information by asking communication to the healthcare provider, as the person who trusted by mother (Huang et al., 2021). The distance for more than 10 km to the healthcare facility affected lower number of maternal visit compared than the distance < 5 km. Transportation availability also became important factor of mother visits to maternal clinic (Ariani, 2022).

Financial needs have increased during pregnancy. The tension leads the conflict between mother, spouse, and their family. Husband's working status also found impacted to the antenatal anxiety. The preparation for antenatal care during pregnancy and delivery including the transportation, also the distance affected the mother's anxiety. Younger age mother tends to have higher anxiety although the older had higher risk in pregnancy. Several socioeconomic factors were important to pregnancy mother. Better socioeconomic status will help mother to have better preparation and reduce the anxiety. In this study, the socioeconomic factors assumed will affect the prenatal anxiety of pregnant women in Indonesia. This study aimed to examine the association between working status, family income, health insurance, wife's age and accessibility to the healthcare and the mother anxiety during pregnancy.

## METHODS

### Participant characteristics and research design

This study was correlational study using cross-sectional approach (LoBiondo-Wood & Haber, 2017). Population in this study were mother who was in the third semester during data collection period. Mother who was in the last trimester who visited the clinic during study period, agreed by the consent, able to read and write, participated in this study. Mother with the referral needs has been excluded through this study. Finally, 155 mothers participated in this study.

### Sampling procedures

Consecutive sampling has been used in this study to choose mother who were attending maternal visit at the clinic during study (LoBiondo-Wood & Haber, 2017). This data has been collected within two months (April-May 2022) in maternal clinic of a City at East Kalimantan Province, Indonesia. Respondents had been approached during visit at the clinic, explained about the aim of study then asked for the willingness. After filling the consent, participant filled the questionnaire by their self. Research assistants will be on respondents' side during filling the questionnaire in order to give further explanation related to the items that respondents felt unclear. The assistants also check for the completeness to prevent any missing data in the analysis process. The study only used questionnaire without giving any intervention for respondent, which will not harm physically, mentally, and financially for respondent. Each respondent has been approached during visit, without other appointment out of clinic which might increase financial need for each respondent. As the reward, each mother received a gift.

### Sample size, power, and precision

Sample of this study were total of 155 women who visited during data collection. In this study, data has been collected with the research assistants who familiar to take primary data using questionnaire. Each research assistants have been trained about the aim of study, data collection procedure, and ethic related to the study.

The questionnaire used in this study including the sociodemographic questionnaire which explored the data from pregnant women and their husband. Since socioeconomic factors needed, the sociodemographic questionnaire included all factors explored in this study (mother's age, working status (mother & spouse), total of family income, kind of insurance used to have maternal examination or maternal care in the clinic, the distance between residence to go to the clinic, transportation used by mother to reach clinic, and mother's age. The second questionnaire was the Indonesian version of Hamilton Anxiety Rating Scale (HARS). HARS has been validated for Indonesian version and culturally accepted to use measuring anxiety in pregnant women (Hamilton, 1959; Ramdan, 2019).

### Measures and covariates

This study used primary data through the questionnaire which had distributed equally and self-filled by the respondents. Additional data has gathered using secondary data from maternal clinic.

#### Socioeconomic Factor

Mother's age measured through the actual age and divided to the three category consist of <20 years old, 20-35 years old, and > 35 years old (Sungkar & Surya, 2020). Working status for husband is divided based on the working institution including the government institution and non-government institution. Working status for mother was divided to the government institution or housewife. Family income measured using report from respondent. It has divided to two parts; as mutual as or higher than regional minimum wage and lower than regional minimum wage. Health insurance was measured through the kind of health

insurance owned by the respondent. Availability to the healthcare facility has measured through the distance between residence to the maternal clinic also the information about the transportation used to go to the healthcare facility.

#### Prenatal Anxiety

Mother's prenatal anxiety measured using Hamilton Anxiety Rating Scale (HARS) which has been widely used worldwide to measure the anxiety. HARS consisted of 14 items to measure the unpleasant feelings related to the anxiety with five Likert rating scale (0 (not experiencing) - 4 (severe)). The lowest total score was 0 and the highest total score was 56 (Hamilton, 1959; Ramdan, 2019).

#### Data analysis

Data were retrieved through the questionnaire then being coded and cleaned using SPSS version 20. Descriptive data analyzed using frequency distribution (percentage and frequency) for socioeconomic factors. Independent variable as the numerical data (anxiety level) analyzed descriptively using mean, standard deviation, and minimum-maximum score. Further analysis to explore between variables, the data has been analyzed using the multiple linear regression to explore the socioeconomic variables which affect the prenatal anxiety. Factors including wife's age, family income, husband's working status, mother's working status, national health insurance, the distance to healthcare facility, and the transportation to the healthcare facility. P-value ( $<0.05$ ) were used to determine the significant factor between variables (LoBiondo-Wood & Haber, 2017).

## RESULTS AND DISCUSSION

#### Sociodemographic

The respondent's characteristics (see table 1) were divided to two parts between respondents (pregnant mother) and respondent's spouse (husband). Majority of respondents and their spouse were at 20-35 years old, with the Senior High School as the most education for both husband and pregnant mother. Some mother worked in government institution while others were unemployed. The mean of total score of anxiety level was 23.57, while the highest score was 50. Regarding to the economic factors, most of mother were supported by the husband who work in private institution. Few of respondents have family income lower than the regional minimum wage. Mothers were supported by the National Healthcare Insurance (JKN), and private transportation with the shorter distance to the healthcare facility at most ( $<5$  km).

#### Socioeconomic Factors and Prenatal Anxiety

Table 2 showed the result of multiple linear regression in predicting the socioeconomic factors related to the prenatal anxiety. Total score of each respondent's anxiety level gathered from the HARS questionnaire result. The total score of anxiety level has been used as the independent variable while the socioeconomic factors became predictors. The socioeconomic factors including from both respondents and their spouse aspects (working status), mother's age, and

total family income. Factors that affected prenatal anxiety were one of factor related to the accessibility to the healthcare facility (the distance to healthcare facility ( $\geq 5$  km) (.020)) and demographic factor which was the wife's age (.000).

**Table 1**  
**Sociodemographic Characteristics (n=155)**

Characteristic	n	%
<b>Personal factors</b>		
A. Mother		
Age(years)		
< 20	3	1.9
20-35	132	85.2
> 35	20	12.9
Education		
Elementary School	2	1.3
Junior High School	16	10.3
Senior High School	92	59.4
Undergraduate	45	29.0
Working Status		
Housewife/Unemployment	145	93.5
Civil Servant	10	6.5
Anxiety Level	Mean ( $\pm$ SD) 23.57 ( $\pm$ 8.656)	Min- Max 6-50
Husband		
Age(years)		
< 20	2	1.3
20-35	124	80.0
> 35	29	18.7
Education		
Elementary School	2	1.3
Junior High School	5	3.2
Senior High School	106	68.4
Undergraduate	42	27.1
Working Status		
Non-Civil Servant	146	94.2
Civil Servant	9	5.8
<b>Economic factors</b>		
Family Income		
< Regional Minimum Wage (Rp. 3,137,675.60 (USD 209))	15	9.7
$\geq$ Regional Minimum Wage (Rp. 3,137,675.60 (USD 209))	140	90.3
Health Insurance		
National Health Insurance (JKN)	153	98.7
Private	2	1.3
Distance to Healthcare Facility		
< 5 km	119	76.8
$\geq 5$ km	36	23.2
Transportation to Healthcare Facility		
Public	3	1.9
Private	152	98.1

#### Wife's Age and Prenatal Anxiety

In this study, pregnant mother's age found significantly contributed the mother's anxiety. Maternal age is related to the healthy condition during pregnancy. Younger age could associate with the problems related to the social and psychological while in the older age, mothers' emotional status highly affected by the hormonal changes during pregnancy. Pregnancy in the younger age such as in the adolescents put mothers in high tension due to lack of preparation (Ayu et al., 2019). Majority of mother were at



the range of 20-35 years old. Mother's age range in 20-35 years old was safe for mother to have pregnancy. This age range also best time to have pregnancy since it was productive age regarding to the maternal age (Zainiyah & Susanti, 2020). Similar study found that the majority of mother's age was 20-35 years old. This study also found that age was significantly related to the ANC visits. Mother with this age found more frequent to have maternal visits (ANC) compared with mother aged >35 years old and <20 years old

(Ariani, 2022). ANC help mothers to improve physical and psychological health and get more knowledge related to the pregnancy and delivery (Sulistiyo et al., 2022). Although the visit numbers have not explored in this study, it is assumed that the age could affected the prenatal anxiety through the mother's development. Other study mentioned that after 20 years old, the opportunity to have maternal visits was higher for pregnancy women (Adedokun & Yaya, 2020).

**Table 2**  
**Associated factor of prenatal anxiety using multiple linear regression (n=155)**

Variable	<i>B</i>	<i>SE B</i>	<i>p</i>
Family income ( $\geq$ With Regional Minimum Wage)	-2.228	2.051	.279
Health Insurance (National Health Insurance (JKN))	.009	5.356	.999
Distance to healthcare facility ( $\geq$ 5 km)	-3.336	1.415	.020
Transport to healthcare facility (Public)	-.126	4.321	.977
Husband's working status (Civil Servant)	1.161	2.560	.651
Wife's working status (Civil Servant)	.524	2.496	.834
Wife's age	-.799	.111	.000

Note: n = 155. The reference group: Family income (Less than Regional Minimum Wage), health insurance (Non-JKN), distance to healthcare facility (<5 km), transport to healthcare facility (private), husband's working status (Non-Civil Servant), and wife's working status (Non-Civil Servant). Another variable is continuous (wife's age).

Abbreviation: *B* = unstandardized beta coefficient; *SE B* = standard error for unstandardized beta,  $\alpha = 0.05$ ; *p* = probability value. Significant associations (*p*-values < .05) are in boldface.

#### *Family Income and Prenatal Anxiety*

Family income found not significantly affected the prenatal anxiety in this study. It was assumed insignificantly relation might cause by the cost has decreased since most of the maternal services, yet the emergency Caesarean Surgery has covered by the National Health Insurance (JKN) that owned by majority of respondent. Majority of mother in this study found to have a total family income as mutual as or higher than the minimum regional wage. In 2022, the minimum regional wage at Samarinda City, Indonesia was Rp. 3,137,675.60 (USD 209) (Gubernur, 2021).

There was contradictive view about family income to the prenatal anxiety. Some studies support that family income could affect the prenatal anxiety but some studies also couldn't find its relation (Biaggi et al., 2016). In outpatient population, higher income was related to the lower score of anxiety in Indonesia (Mumang et al., 2020). Recent study in Indonesia, found that family income was related to the unhealthy condition during pregnancy. Low income was related to the poor living conditions in family and financial difficulties, that might produce tension between mother and husband which could also impact to the marriage relationship (Ayu et al., 2019; Syam et al., 2020). In contrary, supporting to the result of this study, other study found that family income did not significantly affected the anxiety because socioeconomic factor associated weekly to the maternal anxiety (Nurbaeti et al., 2018). Increasing poverty year by year also became another factor contribute to the antenatal anxiety in LMIC (Dennis et al., 2017). Some mothers face difficulties to prepare ANC costs, but some mothers also took benefit by having less cost using the facilities from national health insurance (JKN) (Ariani, 2022).

#### *Health Insurance and Prenatal Anxiety*

In this study, majority of mother were member of the National Health Insurance named as Jaminan Kesehatan

Nasional (JKN) while only few mothers using private health insurance. All citizens with JKN will have mutual quality of services in each class, the different just about the facilities (Erlangga et al., 2019).

The inclining proportion of membership coverage in the national health insurance program in Indonesia is highlighted at the national and regional levels. In 2018, 78.51% of the Indonesian population was categorized as national health insurance beneficiaries. The proportion was increased to 93.76% in 2023 (per April). Identically at the national level, the mandatory health insurance program increment was found in East Kalimantan Province, especially in Samarinda City. The proportion of national health insurance membership was dramatically inclined from 58.07% to 99.26% in 2016 and 2023, respectively (National Social Security Council of the Republic of Indonesia, 2023). Universal health coverage (UHC) in Samarinda, defined as 95% of total coverage or more, was achieved in 2023.

By using JKN, mother had four times opportunity to use it for antenatal care (ANC). In the ANC, mother will be cared physically and mentally. However, the COVID-19 situation changed the number of mother visit in ANC. This situation happened due to mother's anxiety about the transmission for them and their baby. Moreover, in the COVID-19 pandemic, mother faced the poor-quality services at the first referral healthcare facility. The new referral system that applied by JKN during the COVID-19 pandemic affected to the prolonged in line at the first referral healthcare facility to visit the healthcare provider (Sulistiyo et al., 2022). In addition, Caesarian Surgery will also be covered by the JKN health insurance. This coverage was a big benefit for mother to help them decrease the anxiety in case if there is emergency Caesarian needed due to of emergency situation (Anis et al., 2022).

Good health insurance will provide good quality healthcare services. Having a good health insurance also will ensure the caring facilities. Good quality service and good facilities will make mother felt less anxious compared with

the poor one (Nisar et al., 2020). A study mentioned that by having health insurance, mother felt helpful to secure their self and their baby in facing the labor process. Owning the health insurance especially help to reduce the anxiety at the first phase of labor (Solihah, 2019).

#### *Accessibility to Healthcare Facility and Prenatal Anxiety*

In this study, the accessibility to healthcare facility was evaluated through the distance between residence to the healthcare facility and the transportation used by family to go to the healthcare facility. Between those two factors, the distance to the healthcare facility was significantly affected the prenatal anxiety. In contrary, the shorter distance found to have more anxiety compare to the longer one. A study found that the easiness in access a good care at the healthcare facility is the key to prevent anxiety during antenatal pregnancy (Nisar et al., 2020).

The easiness of transportation access has influenced the number of ANC visit of pregnant mother. During second wave of COVID-19, the ANC visit number has decreased in a city at East Java province. More than 20% of mother mentioned that the problem was difficulty to access transportation to the healthcare facilities to get the ANC. Moreover, further distance of residence to the healthcare facility also decreased the number of maternal visits (Ariani, 2022).

In Indonesia, the government tried to improve mother's preparation for the labor process through the ANC. The program could be provided in the maternal clinic by the healthcare professional. The number of visit has differed in each semester. In several areas, the number of visits has increased to be six times during Covid-19 pandemic with the online visit as the available choice for mothers (Anis et al., 2022).

Mother with the JKN insurance could access the first referral healthcare facilities near by their living site. By having the routine ANC, mother could improve their knowledge related pregnancy and prepare worse things in delivery (Sulistiyo et al., 2022). Mother with the private health insurance could access any facilities without determining the distance between their residence to the healthcare facilities (Erlangga et al., 2019).

#### *Working Status and Prenatal Anxiety*

In this study, both of husband and wife's working status found insignificantly affect mother's prenatal anxiety. Although it was not significant, financial preparation was important for mother and husband as a family to face the pregnancy and delivery. Similar result found in a study explore the level of anxiety of pregnant women in Indonesia. The study found that working status not related to the mother's anxiety (Sabrin et al., 2021). A study also found that husband and mother's occupation were not related to the depression after delivery significantly (Sheeba et al., 2019). A study mentioned that women without employment or as a housewife found to have higher anxiety (Tang et al., 2019). In the COVID-19 pandemic, mother who works also experienced anxiety during pregnancy (Zhang & Ma, 2021). In order to keep financial stability, women continued working during pregnancy, in addition in COVID-19 pandemic situation, indirectly raised mental health problems (Lee et al., 2020). High workload in the working status also contributed to the mother's anxiety during pregnancy. Women who works more than 40 hours per week will have

higher chance to have moderate work stress (Widowati et al., 2021).

Women who earn money by their self during pregnancy were more financially prepared to have a baby. In this situation, women felt less anxiety to think about the financial things which will be needed during labor and their future (Ningsih & Nuzuliana, 2021; Tang et al., 2019). Women with a spouse without employment found to have higher risk for prenatal anxiety (Akçalı Aslan et al., 2014). Husband and wife's working status found related to the mother's maternal visit. Mother who was employed visited for the ANC more than the unemployed one. In addition, pregnant mother who lived together with the employed husband have more frequently to have ANC which could decrease the mother's anxiety (Ariani, 2022).

#### **LIMITATION OF THE STUDY**

In this study, the socioeconomic factors were explored through the self-report of patients without any direct observation to each respondent's residence as the additional data. Working status for husband explored limited in the general variety whether the husband worked in government or non-government institution. The job variety for husband who worked in non-government institution has not clearly explored in this study. The non-government institution could include from the self-entrepreneurship or self-business which put husband received unstable monthly income that might affect the family financial readiness in facing pregnancy and delivery. Mother's working status also explored through the mother's self-report which mostly were housewives. There was no further exploration related to the additional income of each housewife whether the pregnant mother own the online business or no. Several of mothers in this era, with the available network could produce higher monthly profit through the online business compared to the working women. Sometimes, their profit also could be higher than the husband. Total of family income also reported through the questionnaire while most of respondents might use only the income for spouse as the main resource of monthly income without considering the possible other sources. The health insurance has explored through the secondary data which limited only divided by owning the National Health Insurance (JKN) or private insurance. Indonesia nowadays has increased the number of health insurance ownership in each region, including Kalimantan Timur. Since limited by the secondary data, the data could not provide the payment variety of JKN which is important to see the family financial level that might related to their economic factors. The accessibility to the healthcare facility in this study has been explored only through two factors. Other factors related to the residence's demographical condition of each respondent might affect the transportation used to go to the healthcare facility. The public transportation has not clearly described by the research assistant in order to increase familiarity of kind of public transportation which might include the online transportation.

#### **CONCLUSIONS AND SUGGESTIONS**

Socioeconomic factors found affected the prenatal anxiety during pregnancy. Mother's age contributed to the

mother's anxiety during pregnancy, together with the distance from residence to healthcare facility. In order to have less anxiety in pregnancy and after delivery, pregnant mother and the spouse could increase the financial security through the both working status. Financial preparation for the pregnancy, delivery, and after delivery should be well planned and prepared before pregnancy to reduce prenatal anxiety. Future research needs to explore the national health insurance variety through the kind of ownership based on the payment method to have further description related to the national health insurance.

## ETHICAL CONSIDERATIONS

This study followed the ethic protocol from Universitas Mulawarman, Indonesia No. 128/KEPK-FK/VIII/2022 Each respondent filled the agreement using the informed consent form. The questionnaire had distributed and analyzed anonymously with the limited access only by researcher to use for publication.

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## Conflict of Interest Statement

The authors declare no conflict of interest in this study.

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