

THE EFFECTS OF ANXIETY TOWARDS LABOR DURATION DURING A PANDEMIC COVID – 19

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ABSTRAK KECEMASAN TERHADAP LAMANYA PERSALINAN SAAT PANDEMI COVID-19

Latar Belakang : COVID-19 telah dinyatakan sebagai pandemi dunia oleh WHO (World sebagai pandemic pada tanggal 9 Maret 2020. Artinya, virus corona telah menyebar secara luas di dunia. Kepala Badan Nasional Penanggulangan Bencana (BNPB) melalui Keputusan nomor 9 A Tahun 2020 diperpanjang melalui Keputusan nomor 9 A Tahun 2020 yang di perpanjang dari Keputusan nomor 13 A tahun 2020 menetapkan Status Keadaan Tertentu Darurat Bencana Wabah Penyakit Akibat Virus Corona di Indonesia

Tujuan : Penelitian ini bertujuan untuk mengetahui adanya pengaruh kecemasan terhadap lamanya persalinan saat pandemic covid-19

Metode : Penelitian menggunakan metode analitik observasional komparatif dengan pendekatan potong lintang (cross sectional). Pengambilan sampel dilakukan menggunakan rumus slovin dengan besaran sampel 40 orang dan presentasi kelonggaran sebanyak 5% didapatkan sampel sejumlah 36 orang. Analisis data univariat dan bivariat dilakukan dengan *uji Spearman Rank*

Hasil :didapatkan bahwa didapatkan proporsi tingkat kecemasan responden selama masa pandemic covid-19 sebagian besar adalah tidak memiliki kecemasan sebanyak 25 orang (69,4%). Berdasarkan hasil penelitian didapatkan lama persalinan yang dialami responden selama masa pandemic covid-19 sebagian besar adalah normal sebanyak 22 ibu (61,1%) Berdasarkan hasil *uji Spearman Rank* menyatakan bahwa tidak ada pengaruh kecemasan dengan lama persalinan. Dengan diperoleh nilai sig atau p-value sebesar 0,968. Nilai sig atau p-value yang diperoleh $0,968 > 0,05$ maka tidak terdapat korelasi yang signifikan antar variable yang dihubungkan.

Kesimpulan: Kesimpulan penelitian ini yaitu tidak adanya pengaruh kecemasan terhadap lama persalinan saat pandemic covid-19.

Saran: Penelitian lebih lanjut menggunakan variable penelitian dan tempat yang berbeda sehingga dapat tergali lebih banyak lagi karakteristik ibu hamil yang belum terpaparkan pada penelitian ini.

Kata Kunci: Kecemasan, Kehamilan, Pandemi Covid-19, Persalinan

ABSTRACT

Background: COVID-19 has been declared a world pandemic by WHO (World as a pandemic on March 9 ,2020 . The Corona Virus has spread widely in the world. The Head of the National Disaster Management Agency in Indonesia through decision about Decree number 9A of 2020 who was extended through Decree number 13A of 2020 Indonesia status is Emergency Disaster of Corona Virus (COVID-19)

Purposes: To know the effect of anxiety toward duration of labor during the covid 19 pandemic at anny rahardjo main clinic.

Method: The research used comparative observational analytic research method with cross sectional approach. Sampling using the slovin formula with a sample size of 40 sample and with 5 % allowance presentation obtained a sample of 36 people. Univariate and bivariate analysis data used the Spearman Rank

Result: The results of the study showed that the proportion of respondents' anxiety levels during the covid-19 pandemic was mostly not having anxiety as many as 25 people (69.4%). Based on the results of the study, it was found that the length of labor experienced by respondents during the covid-19 pandemic was mostly normal as many as 22 mothers (61.1%). The obtained sig value or p-value of 0.968. The sig value or p-value obtained is $0.968 > 0.05$ then there is no significant correlation between the variables that are connected.

Conclusion: The conclusion of this study is that there is no effect of anxiety toward duration of labor during the covid-19 pandemic

Suggestion: Further research using different research variables and places so that more characteristics of pregnant women can be explored that have not been revealed in this study.

Keywords: Anxiety, Covid-19 Pandemic, Labor, Pregnancy

INTRODUCTION

COVID-19 has been declared a world pandemic by WHO (WHO, 2020). The Head of the National Disaster Management Agency through Decree number 9 A of 2020 which is extended from Decree number 13 A of 2020 stipulates the Status of Certain Disaster Emergency Situations due to Corona Virus Disease in Indonesia.

Indonesia (BNPB Information Sector, 2020). There was an increase in cases and spread to between regions, the Government issued Government Regulation number 21 of 2020 regarding the existence of Large-Scale National Restrictions (PSBB) to accelerate the handling of Corona Virus Disease 2019 (COVID-19) (Government Regulation (PP), 2020). Presidential Decree No. 11 of 2020 concerning Public Health Emergency Status was also stipulated, which was later updated with Presidential Decree No. 12 of 2020 declares non-natural disasters spreading COVID-19 as a National Disaster (Presidential Decree KEPPRES) Number 12 of 2020, 2020). The government has the responsibility to guarantee every citizen to obtain basic health services as stipulated in Government Regulation no. 2 of 2018 concerning Minimum Service Standards and accompanied by Minister of Health Regulation number 4 of 2019 concerning Technical Standards for Fulfilling Basic Service Quality in Minimum Service Standards in the Health Sector.

As of August 18, 2021 Covid-19 has infected globally and Indonesia has experienced 303,000 cases of Covid-19 with a total of 228,000 recovered cases and 11,151 cases died, positive confirmed cases from the age of toddlers 2.5%, children 7.7%, 24.4% adolescents, 31% adults, and 23.9% elderly. In dealing with the COVID-19 non-natural disaster outbreak, a Large-Scale Social Restriction (PSBB) policy was implemented to prevent the transmission of Covid-19. This condition resulted in a considerable impact in the continuation of public health services (Pusdatin Ministry of Health, 2020)

Knowledge of the presence of COVID-19 infection and pregnancy is still limited and there are not many specific actions in handling pregnant women with the COVID-19 virus. These limited data, as well as several cases of handling Coronavirus such as (SARS-CoV and MERS-CoV) and the current case of COVID-19, show that pregnant women belong to a group at higher risk of serious

illness, morbidity and mortality when compared to the population. others in general.

Every mother who is about to enter labor will experience feelings of fear, worry, and anxiety, especially for mothers with primigravida / primipara parity. Feelings of anxiety experienced can increase pain, make the muscles become more tense and the mother will feel tired quickly and then lead to delays in the delivery process. Problems that often occur during pregnancy in both primigravida and multigravida pregnant women are feelings of anxiety.

Anxiety is a feeling of confusion and worry about a situation that will occur and sometimes the cause is not clear. These feelings occur erratically and lead to a feeling of helplessness. When experiencing feelings of anxiety in the face of labor, the brain will automatically regulate, preparing the body to feel pain or pain. As a result, when the mother gives birth, the perception of pain increases. Psychological conditions experienced by the mother will greatly affect the development of the baby (Sulistyawati, 2009). Anxiety factors, lack of preparation for childbirth, and fear can affect other factors that eventually lead to prolonged labor.

One of the factors that cause anxiety is the low knowledge of primigravida mothers about childbirth. Pregnant women, especially in their first pregnancy, need to be given education and information related to physical and mental health during pregnancy, childbirth, postpartum, and baby care. This information should be provided by professional and experienced personnel so that the information is obtained correctly. In addition, activities are needed to form or improve knowledge, attitudes, and practices in maintaining and improving health education regarding labor preparation and childbirth.

RESEARCH METHODOLOGY

This type of research was conducted using a comparative observational analytical research method with a cross-sectional approach, which is a study to link the anxiety of third trimester pregnant women in facing labor during the COVID-19 pandemic with the progress of labor as measured by approach, observation and data collection at the same time there is a certain period of time. The research subjects were all mothers who gave birth normally, and the object of the study was the level of anxiety and duration of the first stage of labor, the location of the research was the Anny Rahardjo Main

Clinic. Sampling was carried out using the Slovin formula with a sample size of 40 people and a 5% leeway presentation obtained a sample of 36 people.

RESEARCH RESULT

Univariate Analysis

Univariate analysis was carried out to see the distribution of the dependent variable, namely the level of anxiety and the independent variable, namely the length of labor

Characteristics of Respondents

Table 1
Frequency Distribution of Respondents' Age at Anny Rahardjo's Main Clinic

Respondents' Age	N	%
19 - 24 years	1	2,8
25 - 29 years	19	52,8
30 - 34 years	10	27,8
35 - 40 years	6	16,7
Total	36	100

Table 2
Frequency Distribution of Respondents' Parities at Anny Rahardjo's Main Clinic

Parities	N	%
Primipara	14	38,9
Multipara	19	52,8
Grande Multipara	3	8,3
Total	36	100

Table 1 and table 2 show the subjects in the study as many as 36 respondents. A total of 1 person (2.8%) was between 19-24 years old, mostly 19 people (52.8%) were between 25-29 years old, as many as 10 people (27.8%) were between 30-34 years old and as many as 6 people (16.7) aged 35-40 years. Meanwhile, 14 respondents (38.9) were primiparous, most of them were 19 people (52.8%) were multiparous, and 3 people were grandemultipara.

Anxiety Level

Based on the table, data shows that the anxiety level of pregnant women at the Anny Rahardjo Main Clinic shows that the majority of 25 respondents have no anxiety as many as 25 people (69.4%), as many as 7 people (19.4%) have mild anxiety levels, and as many as 4 people (11.1%) had a moderate level of anxiety

Table 3

Frequency Distribution of Respondents' Anxiety Levels at Anny Rahardjo's Main Clinic

Anxiety Level	N	%
No Anxiety	25	69.4
Mild Anxiety	7	19.4
Moderate Anxiety	4	11.1
Total	36	100

Labor Duration

Table 4
Distribution of the Frequency of Labor at the Main Clinic Anny Rahardjo

Labor	N	%
Vaginal	22	61,1
Caesarean	14	38,9
Total	36	100

From table 4, it is known that the length of labor in the first and second stages of the 38 mothers giving birth at the Anny Rahardjo Main Clinic were mostly with a normal length of delivery as many as 22 mothers (61.1%) and with an abnormal length of labor in the first and second stages of 14 mothers (38.9%).

Bivariate Analysis

Data Normality Test

Table 5
Normality Test Results The Effect of Anxiety on Length of Delivery at the Main Clinic Anny Rahardjo

One Sample Shapiro Wilk			
	Statistic	N	Sig.
Anxiety	0.882	36	0.001
Labor duration	0.749	36	0.000

N = respondent number Sig= Significance

In this study, the normality test used by the researcher was *Shapiro Wilk* because the sample was less than 50 people with the conclusion that if $p > 0.05$, it means that the research data is normally distributed, and vice versa if $p < 0.05$ then the existing data is not normally distributed. Table 5 shows the results of the normality test of the research data that the data were not normally distributed because both variables had $p < 0.05$. Because the distribution of research data is not normal, the correlation test used is the *Spearman Rho . correlation test*

Spearman Rank Correlation Test

Table 6
Spearman Rank Test Results The Effect of Anxiety on Length of Delivery at the Main Clinic Anny Rahardjo

<i>Spearman Rho</i>	<i>Sig. 2-tailed</i>	<i>α</i>	<i>C</i>
Anxiety	0.968	0.05	1.000
Labor duration	0,968	0.05	0.007

sig. 2-tailed = Significance α = value ;
C = correlation

After the Spearman Rank test, the sig value or p-value is 0.968. The sig value or p-value obtained is $0.968 > 0.05$, so there is no significant correlation between the variables connected. It can be concluded that in table 6 there is no relationship between the influence of anxiety and the length of labor at the Anny Rahardjo Main Clinic

Cross Table

Based on table 7 shows that the third trimester pregnant women who had no anxiety experienced normal delivery as many as 15 people (60%), pregnant women who had mild anxiety levels experienced normal childbirth as many as 5 people (71.4%) and pregnant women who had anxiety levels. were experiencing normal delivery (50%). Meanwhile, pregnant women who did not have anxiety experienced an abnormal delivery as many as 10 people (40%), pregnant women who had a mild level of anxiety, experienced an abnormal birth as many as 2 people (28.6%), and pregnant women who experienced a moderate level of anxiety. , experienced abnormal delivery as many as 2 people (50%).

Table 7
Cross Table of the Effect of Anxiety on the Labor Duration at Anny Rahardjo's Main Clinic

Anxiety	Labor Duration				Total	P Value	r
	Vaginal		Caesarean				
	n	%	n	%			
No Anxiety	15	60%	10	40%	25	100%	0,968 0,007
Mild Anxiety	5	71,40%	2	28,60%	7	100%	
Moderate Anxiety	2	50%	2	50%	4	100%	
Total	22	61,10%	14	38,90%	36	100%	

DISCUSSION

Anxiety Level

Based on the results of the study, the level of anxiety in third trimester pregnant women during the COVID-19 pandemic tended to have no anxiety, namely as many as 25 people (69.4%), mild anxiety levels as many as 7 people (19.4%) and moderate anxiety levels as many as 4 people (11.1%).

The same research conducted by Rozikhan and Titik (2021) during the COVID-19 pandemic found that 42.9% of pregnant women in the third trimester during the COVID-19 pandemic did not experience anxiety, while pregnant women who experienced anxiety only had mild anxiety. The COVID-19 pandemic is considered not to have much effect on anxiety in pregnant women, especially the third trimester, it is proven that the results of existing research are not much different from the results of research when there is no COVID-19 pandemic (Rozikhan & Titik Sapartinah, 2021)

As for other studies, the measurement of anxiety was not only carried out in third trimester pregnant women, but also anxiety measurements in first and second trimester pregnant women.

Research shows that pregnant women as many as 67.1% did not experience anxiety, as many as 22.9% experienced mild anxiety levels, 4.3% experienced moderate levels of anxiety and 5.7% experienced severe anxiety levels. (Islami et al., 2021)

The results are different from the research of Asmariyah, et al (2021) where the overall conclusion is that pregnant women's anxiety during the Covid-19 pandemic is 3.7% not having anxiety, 39.8% mild anxiety level, 37% moderate anxiety level , the level of severe anxiety was 19.4% and no one experienced anxiety in the severe/panic category (0%). (Asmariyah et al., 2021)

Preparations for delivery are very diverse and affect the ability to manage the coping skills of women in labor and their partners. The results of the study (Mercer, Hackley, and Bostrom, 1983) found that support for the emotional level of a partner during labor was predicted to have a positive influence on the birth experience. Confidence in pregnancy in coping management during labor has been shown to be associated with pain during labor (Lowe, 1991) . (Ari, 2016)

The results showed that the majority of third trimester pregnant women did not experience anxiety during pregnancy. The Covid-19 pandemic raises levels of anxiety in pregnant women ranging from mild, moderate, to severe levels of anxiety. Most of the third trimester pregnant women are not anxious due to several internal and external factors. In the third trimester, there will be psychological changes that are more complex and increasing compared to the psychological changes of the previous trimester. This is triggered by the growing condition of pregnancy and preparation for childbirth.

According to the researcher's assumption, the absence of anxiety is influenced by readiness for delivery and the choice of place of delivery where the positive number of Covid-19 is increasing at this time, many pregnant women choose to give birth at the clinic because they feel safer and more comfortable than in the first health facility or at home. sick. The increasing number of positive covid-19, the variety of people who check their health and the assumption that the first health check-up and hospitals are symptomatic people Covid-19 makes pregnant women more worried about being exposed to the Covid-19 virus.

In addition, clinics and maternity homes carry out good screening during this COVID-19 pandemic situation. In addition to limiting visits, PCR test services, on-site antigens to requiring to bring a negative test result letter, this makes pregnant women feel safer and more comfortable when giving birth in clinics or maternity homes. Of course, only normal and non-pathological deliveries can be performed in clinics or maternity homes.

Labor Duration

Based on the results of the study, the length of labor in the first and second stages of 36 mothers giving birth at the Anny Rahardjo Main Clinic was mostly with a normal length of delivery as many as 22 people (61.1%) and with an abnormal length of labor in the first and second stages of labor as many as 14. people (38.9%).

As for other studies that examined only primigravida mothers, there was a relationship between the level of anxiety and the occurrence of prolonged labor in women giving birth in the first stage of the active phase of primigravida, having a moderate relationship, with a positive direction, which means that the more the mother experiences anxiety, the longer the labor occurs getting higher. (Setiani et al, 2020).

Labor is a process of expulsion of the fetus that occurs at term pregnancy around 37-42 weeks, and is born spontaneously with a back of the head

presentation that lasts for approximately 18 hours, without complications to the mother or fetus (Prawirohardjo, 2002). Factors that influence the diagnosis of labor are passage (mother's pelvis), uterine contraction power and mother's pushing force, passanger (fetus), psychological (mother who will give birth) and helper (Setiani et al., 2020)

A qualitative study (Khazoyan et al, 1994) shows the desire of women for their partners to accompany childbirth as an expression of love, understanding and patience. Birth preparation is very diverse and can affect the coping management ability of women who will give birth through their partners (Ari, 2016)

Based on the data above, the researcher can conclude that the length of maternal labor during the COVID-19 pandemic is still within normal limits. This is because the husband and family support factors as birth attendants as well as a comfortable birthing environment that provides a sense of security for third trimester pregnant women can reduce pain and anxiety so that childbirth takes place normally.

The Effect of Anxiety on the Labor Duration

The data analyzed showed that 15 pregnant women in the third trimester who had no anxiety experienced normal deliveries (60%). Pregnant women who had mild anxiety levels experienced normal childbirth as many as 5 people (71.4 %) and pregnant women who had moderate levels of anxiety experienced normal delivery. delivery (50%). Meanwhile, 10 pregnant women with no anxiety experienced abnormal delivery (40%), 2 pregnant women with mild anxiety experienced abnormal delivery (28.6%), and pregnant women with moderate anxiety level and labor abnormal as many as 2 people (50%).

As for other studies explaining the results as many as 14 (42.4%) respondents who experienced anxiety experienced prolonged labor and as many as 11 people (33.3%) respondents who experienced anxiety who did not experience prolonged labor, while as many as 8 people (24.2%) respondents are not anxious who do not experience prolonged labor (prolong). Based on the Contingency Coefficient test using computerization, a p value of 0.005 was obtained, because the -value < 0.05 then H0 was rejected, and H1 was accepted. (Setiani et al., 2020)

The results of another study conducted by Fatihatul et al (2017) concluded that there was a relationship between the level of anxiety and the length of labor at the Padang City Health Center and Independent Practice Midwife with a p value of 0.001 ($p < 0.05$). This relationship is getting stronger with the visible difference in the length of labor between

mothers giving birth at the Puskesmas and at BPM (Hayati, 2018).

The statement of the results of Rozikhan and Titik (2021) research is very relevant at this time where the covid-19 pandemic has been running for quite a long time and does not make the situation of the covid-19 pandemic restless so that people get used to the new normal situation in the era of the covid-19 pandemic so that the problem of the covid-19 pandemic -19. (Rozikhan & Titik Sapartinah, 2021)

The level of anxiety in childbirth affects the length of labor, because it will stimulate the hypothalamus as the central nervous system of the limbic system that regulates emotions. The hypothalamus will then stimulate work on the sympathetic nervous system, causing vasoconstriction of organs and tissues, including the uterus. As a result, the blood supply to the uterus is decreasing, causing inadequate oxygen and nutrients to the uterine muscle cells. This interferes with the metabolism of uterine muscle cells, the energy they produce is reduced so that interfere with uterine contractions. If uterine contractions are interrupted, labor will last longer. (Hayati, 2018)

According to Natoatmodjo (2005), the information provided in full, regarding the state of pregnancy, including the presence of comorbidities, makes pregnant women more prepared for all the possibilities that will occur while going through the labor process and mothers do not feel burdened with fear and anxiety. In addition to information from health workers, support from husbands is an important external factor for pregnant women. Biological factors and psychological factors can also affect anxiety in pregnant women. Biological factors are health, strength during pregnancy, and smooth delivery of the baby. Meanwhile, psychological factors are the mother's mental readiness during pregnancy, until delivery where there is anxiety, tension, happiness, and various other feelings, as well as problems such as miscarriage, appearance and ability to give birth . (Asmariyah et al, 2021)

Length of labor is closely related to plasma epinephrine and norepinephrine levels in multiparas. Longer labor is associated with higher catecholamine levels , which are associated with a measure of patient anxiety (Lederman, et al, 1985). Another study found that women who experience severe pain or distress are more likely to experience inefficient labor (Wuitchik et al, 1989) (Ari, 2016)

Based on the results of the study, the authors assume that there is no influence of anxiety on the length of labor due to the support of the husband or the closest person, preparation for delivery and the

sense of security and comfort that arises from choosing a delivery place that is quite minimal in risk of Covid-19 transmission. The community has also implemented and is getting used to life in the new normal era. So that the anxiety faced by mothers when facing the birth process will be reduced. Mothers will feel more calm and relaxed when facing the birth process, in addition to other worries, but with assistance and a safe environment, it can reduce maternal anxiety.

CONCLUSION

There is no effect of anxiety on the length of labor during the COVID-19 pandemic. Society in general is used to the new normal era so that the anxiety experienced by pregnant women is reduced because they feel safe and comfortable being influenced by a birthing place with good health protocols so there is minimal risk of Covid-19 transmission. Even so, the results found where mothers who entered the category of no anxiety had numbers that were not much different from mothers who experienced moderate levels of anxiety about the length of labor. Therefore, it is worth reconsidering the influence of anxiety on the length of labor

SUGGESTION

Suggestions for further research using research variables and different places so that more characteristics of pregnant women can be explored that have not been exposed in this study.

REFERENCES

- Ari, K. (2016). *Maternity and Newborn Midwifery Care*. Health HR Center . BPPSDMK KEMKES.
<http://bppsdmk.kemkes.go.id/pusdiksdmk/wp-content/uploads/2017/08/Asuhan-Kebidanan-Persalinan-dan-BBLKkomprehensif.pdf>
- Asmariyah, Novianti, & Suriyati. (2021). Anxiety Levels of Pregnant Women During the Covid-19 Pandemic In Bengkulu City. *Journal Of Midwifery* , 9 (1), 1–8. BNPB Information Sector. (2020). *Decree of the Head of the National Disaster Management Agency Number 13 A of 2020 concerning the Extension of the Status of Certain Disaster Emergency Situations due to Corona Virus Disease in Indonesia* . Bnpb.Go.Id. <https://bnpb.go.id/berita/elektron Indonesia>
- Hayati, F. (2018). Differences in Maternal Anxiety Levels in Public Health Centers with Independent Practice Midwives. *Baiturrahim*

- Jambi Academic Journal*, 7 (1), 85.
<https://doi.org/10.36565/jab.v7i1.69>
- Islami, I., Nasriyah, N., & Asiyah, N. (2021). Differences in Maternal Anxiety Scores During a Pandemic. *Journal of Nursing and Midwifery*, 12 (1), 164.
<https://doi.org/10.26751/jikk.v12i1.924>
- Presidential Decree (KEPPRES) Number 12 of 2020. (2020). *Determination of Non-Natural Disasters for the Spread of Corona Virus Disease 2019b (COVID-19) as National Disasters*. Regulation.Bpk.Go.Id.
<https://peraturan.bpk.go.id/Home/Details/135718/keppres-no-12-tahun-2020>
- Government Regulation (PP). (2020). *Large-Scale Social Restrictions in the Context of Accelerating the Handling of Corona Virus Disease 2019 (COVID-19)*. Regulation.Bpk.Go.Id.
<https://peraturan.bpk.go.id/Home/Details/135059/pp-no-21-tahun-2020>
- Center for Data and Information of the Ministry of Health. (2020). *COVID-19 Distribution Map*. Covid19.Go.Id. <https://covid19.go.id/peta-sebaran-covid19>
- Rozikhan & Titik Sapartinah. (2021). DIFFERENCES IN AN ANXIETY LEVEL OF PREMIGRAVIDA PREGNANT WITH MULTIGRAVIDA IN THE COVID-19 PANDEMIC ERA IN KENDAL REGENCY. *Midwifery Care Journal*, 2 (Anxiety, Pregnancy, Covid).
- Setiani, CDF, Titisari, I., & Antono, SD (2020). The Relationship between Maternal Anxiety Levels with the Occurrence of Prolonged Labor (Prologue) in Maternal Mothers in First Stage of Primigravida Active Phase. *Journal of Health Sciences*, 8 (2), 1689–1699.