# THE RELATIONSHIP BETWEEN KNOWLEDGE OF PREGNANT WOMEN IN THE THIRD TRIMESTER WITH THE LEVEL OF ANXIETY IN DEALING WITH CHILDBIRTH IN THE WORKING AREA OF PUSKESMAS PASAR IKAN BENGKULU CITY

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#### **ABSTRACT**

The lack of knowledge of pregnant women about preparation for childbirth is one of the causes of mothers experiencing anxiety when facing childbirth. This study aims to study the relationship between maternal knowledge of pregnant trimester III with anxiety level in dealing with childbirth in the Puskesmas Pasar Ikan. Type of research is analytic observational with cross sectional design. The population in this study were all third trimester pregnant women in the working area of Pasar Ikan Puskesmas. The number of samples was 31 trimester III pregnant women. The sample collection technique used was purposive sampling. Data collection techniques using primary data. The data analysis technique used the Chi-Square test (C2). To determine the closeness of the relationship, the Contingency Coefficient (C) test is used. The results showed that 31 trimester III pregnant women were 29 mothers (93.5%) who had good knowledge, 16 people (51.6%) had mild anxiety levels and there was no relationship between knowledge of third trimester pregnant women and anxiety levels in facing childbirth. It is hoped that the Puskesmas can make policies in an effort to improve the quality of health services regarding preparation for childbirth through counseling or health education.

Keywords: Anxiety, Knowledge, Pregnant mother.

# 1.INTRODUCTION

According to the World Health Organization (WHO), the global maternal mortality rate in 2017 was around 810 per 100,000 live births each day due to complications during childbirth, it is estimated that the total number of maternal deaths is 295,000, This figure is quite a decrease compared to 2015 which reached a maternal mortality rate of 303,000 deaths. The highest maternal mortality rate occurred in developing countries, as much as 415 per 100,000 live births compared to developed countries, which was 12 per 100,000 live births in Europe and North America, while 7 per 100,000 live births in Australia and New Zealand (WHO, 2019). Based on data and information on Indonesia's Health profile in 2017, the number of pregnant women in Indonesia was 5,324,562 people, while the number of mothers who gave birth or postpartum was 5,082,537 people (Kemenkes RI, 2018).

The maternal mortality rate (MMR) in Bengkulu Province in 2018 was 39 people, consisting of 4 pregnant maternal deaths, 10 childbirth maternal deaths and 25 postpartum maternal deaths. There was an increase in 2018 compared to 2017 which occupied the maternal mortality rate (MMR) as many as 28 people (Dinkes Provinsi Bengkulu, 2019).

This data shows that the importance of awareness of pregnant women about knowledge in preparation for childbirth so as not to cause maternal death and can cause mothers to feel anxious in facing childbirth. Childbirth is a series of events that ends with the expulsion of the baby at term or nearly term, followed by removal of the placenta and fetal membranes from the mother's body. (Kuswati&Meliana,2013 dalam Ristica, 2017).

Various causes of childbirth trauma basically stem from the mother's ignorance of childbirth. Maternal knowledge about the delivery process greatly affects the readiness of the mother to undergo labor, mothers who have less knowledge about childbirth have a high level of anxiety to panic as much as 13%. This is closely related to the knowledge of mothers about childbirth (Kartini, 2019).

Anxiety is a psychological disorder that can affect the smoothness of the delivery process, especially for mothers who are approaching labor, such as pregnant women in the third trimester. (Yanuarti, 2018). At the time of approaching labor, the mother will certainly feel anxious, afraid and anxious. This feeling will affect psychologically, especially in pregnant women, especially in the third trimester. Some psychological conditions that will occur, such as emotional changes and discomfort, so that pregnant women need the support of their husbands, family and medical personnel. These emotional changes are a result of worry, fear, doubt and doubt about the condition of her pregnancy. If pregnant women do not have preparation and knowledge about childbirth, the mother can be more anxious and show fear during labor (Janiwarty and Pieter (2013) in Rahmitha (2017)

According to Koelewejin (2017), women who have high (severe) anxiety are at risk for experiencing atric-postpartum problems, for example postpartum depression and can even experience postpartum stress syndrome. Research abroad states 12% of women say childbirth is a

scary time, so that mothers feel anxious, afraid and sick will cause stress which results in disruption of the delivery process. So eliminating anxiety and fear during childbirth is very important (Yanuarini, 2017).

Based on the research results from Lendy (2019), it shows that the results of the tau control test with a correlation value of 0.504, where the p value =  $0.001 < \alpha = 0.05$  at the 95% confidence level ( $\alpha$  0.05). There is a relationship between the knowledge of third trimester primigravida pregnant women with anxiety in dealing with childbirth. According to Harmia, 2015 the knowledge of pregnant women about the process and preparation for childbirth is one of the causes of anxiety that occurs in pregnant women, so the knowledge of mothers about labor preparation and the delivery process is very important.

#### 2.METHOD

This research was conducted in the working area of the Pasar Ikan Puskesmas, Bengkulu City, which was conducted on August 5 to September 5 2020. The design used in this study used analytic observational with a cross sectional approach. The population of this study were third trimester pregnant women who were in the working area of Pasar Ikan Health Center, Bengkulu City. The sampling technique used was purposive sampling, obtained by as many as 31 pregnant women. Data collection with primary data using a knowledge level questionnaire taken from Destari (2013) and the HARS anxiety level questionnaire (Hamilton Anxiety Rating Scale) taken from Rahmitha (2017). The data analysis technique was performed by univariate and bivariate analysis. Bivariate analysis using the Chi-Square test (c2). To determine the closeness of the relationship, the Contingency Coefficient statistical test is used (*C*).

#### 3.RESULT

#### 3.1.Univariate Analysis

This univariate analysis was conducted to obtain an overview of the independent variable (knowledge of pregnant women in trimester III) and the dependent variable (level of anxiety in facing childbirth) in the working area of Pasar Ikan Puskesmas, Bengkulu City.

Table 1. Description of knowledge of pregnant women in the third trimester of preparation for childbirth in the Work Area of the Pasar Ikan Puskesmas, Bengkulu City

Knowledge of pregnant women trimester III	Frequency	Percentage
Good	29	93,5
Enough	2	6,5
Total	31	100.0

From Table 1, it can be seen that of the 31 respondents who were in the PasarIkan Puskesmas working area, Bengkulu City, there were 29 people (93.5%) who had good knowledge and 2 people (6.5%) who had sufficient knowledge.

Table 2. An illustration of the level of maternal anxiety in facing childbirth in the Work

Area of the Pasar Ikan Puskesmas, Bengkulu City

Satisfaction	Frequency	Persentase	
Satisfied	19	16	
Less Satisfied	100	84	
Total	119	100	

From Table 2 above, it can be seen that of the 31 respondents in the Pasar Ikan Puskesmas work area, Bengkulu City, 16 (51.6) respondents had mild anxiety, while 9 people (29.0) respondents had moderate anxiety, 3 people (9.7) had severe anxiety and 3 other people (9.7) had no anxiety.

# 1. Bivariate Analysis

This analysis was conducted to determine the relationship between the independent variable (knowledge of pregnant women in the third trimester) and the dependent variable (anxiety level in dealing with childbirth) by using Chi Square analysis. To determine the evenness of the relationship, the Contingency Coefficient (C).

Table 3. The relationship between knowledge of pregnant women in the third trimester with the level of anxiety in facing childbirth in the Work Area of the Pasar Ikan Puskesmas,

Bengkulu City

Knowledge Level	Anxiety Level			Total	$\chi^2$		С	
	Heavy	Moderate	Light	Not Anxious				
Good	3	8	16	2	29	5,226	0,156	0,380
Enough	0	1	0	1	2			
Total	3	9	16	3	31			

Based on Table 3 above, it is known that 31 respondents were in the working area of the Pasar Ikan Health Center in Bengkulu City, 29 respondents have good knowledge, 3 people with severe anxiety, 16 people have mild anxiety, while 8 people have moderate anxiety, while 2 more mothers were not anxious about childbirth, and 2 of them had sufficient knowledge, there is 1 mother with moderate anxiety level and 1 mother is not anxious. Due to the 2x4 contingency table the Pearson Chi-Square test was used.

The results of the Perason Chi Square analysis showed that the value  $\chi^2 = 5.226$  with p-value = 0.156> 0.05 was not significant, so Ho was accepted and Ha was rejected. So there is no relationship between the knowledge of pregnant women in the third trimester with the level of anxiety in dealing with childbirth in the Pasar Ikan Puskesmas Work Area, Bengkulu City. The results of statistical tests showed that there was no relationship between the knowledge of third trimester pregnant women and the level of anxiety in facing childbirth.

### **4.DISCUSSION**

Based on the research in table 2, it was found that 31 respondents of pregnant women in the third trimester who were in the working area of Pasar Ikan Puskesmas, Bengkulu City. Most of the

respondents with good knowledge were 29 people (93.5%) and respondents who had sufficient knowledge were 2 people (6.5%). These results indicate that the knowledge of pregnant women in the third trimester of preparation before childbirth is very good, seen from the knowledge of the mother when filling out the questionnaire about preparation before delivery. In addition, mothers often find out information about preparation for delivery, both from health workers at the Puskesmas and in the mass media, and mothers can answer correctly about what preparations are needed and carried out ahead of later delivery.

Knowledge is the property or content of the human mind which is the result of the human effort to know. The knowledge of pregnant women about preparation for labor is the result of a pregnant woman's knowledge of nursing care that is concerned with labor preparation which consists of the definition of childbirth, time of delivery, place of delivery, preparation of babies and mothers before and after delivery and readiness of mothers to face childbirth (Nashrulloh, 2009).

Based on the results of the research in table 3 it can be seen that of the 31 respondents of pregnant women in the third trimester who were in the working area of the Pasar Ikan Puskesmas, Bengkulu City, only a small proportion of respondents who have a severe level of anxiety are 3 people (9.7%), Almost half of the respondents who had moderate anxiety level were 9 people (29.0%) and most of the respondents had a mild level of anxiety totaling 16 people (51.6%) and only a small proportion of respondents who did not experience anxiety when facing anxious childbirth amounted to 3 people (9.7%). This shows that only a small proportion of respondents have severe anxiety and most respondents have mild anxiety.

This is in line with research conducted by Usman, (2019) in the Jombang Community Health Center, which explains that the 123 respondents studied were all pregnant women who experienced anxiety when they were about to face childbirth. The majority of pregnant women experienced mild anxiety, 107 (87.0) respondents but there were 16 people (13%) who experienced moderate anxiety.

These results indicate that the level of maternal anxiety in facing childbirth is on average with a mild level of anxiety and only a small proportion of respondents do not experience anxiety when facing childbirth. There are many factors that can influence maternal anxiety besides the level of

knowledge, namely abnormal pregnancy conditions or the presence of comorbidities during pregnancy, the mother's age is too young or too old, the pregnancy of the first child, or unwanted pregnancy, inadequate economy, Lack of support from people closest to and acceptance of the environment, this can increase the anxiety of pregnant women when facing childbirth.

According to Linawati (2013) in Nurlailiyah (2015), explains that the anxiety experienced by pregnant women in facing childbirth can be influenced by several factors including the economic level, knowledge, education and family support. The low level of economy, knowledge, education and family support will certainly cause anxiety for pregnant women in facing childbirth. So it can be concluded that the level of anxiety of pregnant women cannot be measured through knowledge alone. There are many factors that can cause pregnant women to feel anxious when facing childbirth.

The results of research conducted in the working area of Puskesmas Bengkulu City showed that out of 31 respondents in table 4 who had good knowledge, 29 people had good knowledge, 3 of them (10.3%) mothers experienced severe anxiety. This shows that there are still mothers who have good knowledge but still experience severe anxiety. This can be because mothers only receive information from outside, such as from friends, neighbors and family not from direct health workers, This is what causes the mother to feel anxious because many stories or news that are conveyed and heard give the impression that childbirth is terrible and very painful, especially for primiparous pregnant women.

As for several other factors that can cause anxiety in the third trimester of pregnant women in facing childbirth, are the level of economy, education and family support. According to Aina, (2013) the economic level is proven to be very influential on the physical and psychological conditions of pregnant women. If the mother's economic condition is good, then the mother will get good physical and psychological well-being and vice versa if the mother has a bad economic condition, the pregnant woman will not get physical and psychological well-being. Apart from these factors, anxiety during pregnancy can be caused by physical changes, fear of childbirth and the transition to parenting.

Anxiety in pregnant women is an emotional reaction that occurs in pregnant women related to the concern of the mother with the welfare of herself and her fetus, the continuity of pregnancy, childbirth, the period after childbirth and when she has been a mother (Stuart, G, 2012). In addition, there were 8 (27.6%) mothers who had good knowledge and experienced moderate anxiety. This is because the mother has been exposed to information from mass media such as social media, Facebook, Instagram, Twitter and others so that the mother has a good level of knowledge but still experiences moderate anxiety. This could be because mothers rarely do ANC examinations or mothers rarely attend posyandu so that mothers are less exposed to direct information from health personnel, such as midwives and nurses.

In addition, there were 16 (55.2%) well-informed mothers who experienced mild anxiety. This is because the mother has received information about what labor preparations will be prepared later, besides the support from the husband, the mother's anxiety will decrease and the mother will feel more relaxed. The more relaxed a person is, the lower the level of anxiety the mother will be at labor. These results are in line with research conducted by Retnowati, (2016), which states that the husband's support can reduce the level of anxiety during childbirth, especially for primigravida mothers in facing childbirth.

In addition, there were 2 (6.9%) well-informed mothers who were not anxious at all in the face of childbirth. This is because some mothers who do not feel anxious have experienced a normal delivery without complications and abortion, so the mother has had previous experiences and already feels that the labor was not as bad as previously imagined.

Furthermore, from 2 mothers with sufficient knowledge, there was 1 person (50.0%) who had moderate anxiety levels. This is because mothers are less exposed to information from the mass media and health workers and the lack of support from their husbands is caused by mothers experiencing moderate anxiety. In addition, 1 of them did not experience anxiety at all but had a sufficient level of knowledge, this could be due to lack of information, but the mother had had previous birth experiences so that the mother did not feel anxious at all in the next pregnancy.

The results of the Contingency Coefficient test showed that the value of p-value = 0.156> 0.05 and C = 0.380 showed that there was no significant relationship between the knowledge of third trimester pregnant women with anxiety levels in dealing with childbirth in the work area of the fish market health center in Bengkulu City.

The results of this study are in line with research conducted by Nurlaliyah (2015), which states that there is no relationship between the level of knowledge of risk factors for childbirth with the level of anxiety facing childbirth in third trimester pregnant women at Puskesmas Sleman Yogyakarta with a p-value <0.566, it is stated that there is no significant relationship.

The results of this study are different from the results of research conducted by Safitri, (2018) which states that there is a relationship between knowledge and anxiety levels of primigravida pregnant women at Sundari General Hospital Medan where the correlation value of knowledge with the anxiety level of primigravida pregnant women is -0.843 with p Value  $<\alpha$  (0.000 <0.50) with a significance level of 5%.

The results of this study are also different from the results of research conducted by Harmia, (2015) based on statistical tests, it is found that  $\chi^2 = 13,971$  with p value  $<\alpha$  (0.05) or 0.00 <0.05 so that it was found that there was a significant relationship between the knowledge of pregnant women in the third trimester of the delivery process with the level of anxiety of mothers facing childbirth.

According to Kusumawati, (2010) that the better the mother's knowledge, the lower the level of anxiety felt by the mother and vice versa, the lower the mother's knowledge, the higher the level of anxiety felt by the mother when facing childbirth. This is certainly very different from the results of this study which show there is no relationship between the level of knowledge of pregnant women in the third trimester with the level of anxiety in facing childbirth.

The results of this study are in line with what was done by Shodiqoh, (2014) that there is a relationship between the psychology of pregnant women and the mental readiness to face

childbirth in Kalisdia Village, Uangaran Barat District with a P-Value = 0.005 < 0.05, then Ha is accepted. The family support can affect the mother's anxiety level.

As for the mother's income, it can have an impact on the level of anxiety where if the mother has enough income or income, the mother has a great opportunity to get better facilities in childbirth and prepare everything needed for the delivery process and welcome the birth of the baby to the fullest. Unlike mothers with low incomes, even though the mother already knows what to prepare for the delivery process, however, due to economic constraints, the preparations will be even less.

Pregnant women with high family support will change their response to sources of anxiety, on the other hand, the lack of family support can increase the anxiety of pregnant women which will affect themselves, their pregnancy and their fetus. This is in line with research conducted by Arifin, (2015) It is known that there is a relationship between family support and anxiety of pregnant women in facing the delivery process at Budilatama Public Health Center, Building District, Buol Regency, Central Sulawesi Province with a *P Value*= 0,036<0,05.

In this study, the researchers did not analyze the differences or not controlling for maternal parity so that both primigravida and multigravida maternal parity conditions carried out the same assessment of anxiety in dealing with childbirth. Even though in the face of childbirth, the level of anxiety experienced by primigravida and multigravida is very different, such as a primigravida mother who is about to give birth for the first time does not have enough experience about childbirth, the mother will experience greater anxiety than multigravida mothers who already have previous birth experiences. According to Linawati, (2013) explained that the anxiety experienced by primigravida occurs due to various factors, including tension, insecurity and worry that arise due to something uncomfortable and pleasant that is felt by the mother.

According to Kaplan and Sadock's research (2011) in Metasari (2016), that the anxiety experienced by primigravida mothers is because the mother experiences something new that she has never experienced and the new experience makes the mother feel uncomfortable. Meanwhile, a multigravida mother has had previous labor experiences so that the mother tends to feel less

anxious. The anxiety that can arise in multigravida mothers can be caused by previous experiences of childbirth, for example, difficulty in childbirth caused by the physical condition of the mother or the narrow pelvis, lack of social support, or economic problems (Jeyanthi dan Kevitha, 2008).

Although the results of the study show that the results are not related, it can be seen that the majority of mothers experience anxiety in dealing with childbirth, although at different levels and only a small proportion of mothers are not anxious in facing childbirth. This is because the level of anxiety in the mother in dealing with childbirth is a natural thing to happen because the delivery process is related to the life of the mother and the life of the baby. To overcome anxiety in dealing with childbirth, health workers need to provide education and information needed before childbirth so that mothers have a picture of childbirth so that it will reduce anxiety when facing childbirth. To overcome anxiety in facing childbirth, mothers are expected to seek more information related to the delivery process and what things must be prepared in the face of childbirth.

## **5.CONCLUSION**

- 1. 1 Out of 31 pregnant women, 29 (93.5%) had good knowledge.
- 2. Out of 31 pregnant women, 16 (51.6%) had mild anxiety.
- 3. There is no relationship between the knowledge of third trimester pregnant women with the level of anxiety in dealing with childbirth.

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