

## ANXIETY LEVELS OF PRIMIPARA MOTHER WITH THE LENGTH OF LABOR PROGRESS IN THE FIRST ACTIVE PHASES AT COMMUNITY HEALTH CENTRE MATARAM CITY

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### ABSTRACT

**Introduction:** According to data from the Department of Health (2018) , infant mortality rate (IMR) in the first semester was as many as 10.294 cases, and the maternal mortality rate (MMR) in the first semester was as many as 1712 cases. Continuity and Duration of labor are essential factors in determining the number of IMR and MMR. Several factors affecting labor duration are power, passenger, passage, and maternity mother psychological.

**Purpose:** To understand the correlation between primipara mothers' anxiety levels with the length of labor progress in the first active phases.

**Method:** This research used observational analytic method with a cross-sectional design and a purposive sampling technique. The research period was two months, with total respondents were 40 people. Statistical analysis was done using Spearman rank correlation test.

**Results:** 40 pregnant primipara mothers underwent labor at Mataram City Community Health Centre in June - August 2019. We found about four respondents have heavy levels of anxiety, in which all of them had no progress in delivery labor. Based on the statistical tests using the spearman rank, there is a strong, positive ( $\pi = 0.714$ ) and significant correlation ( $P = 0,000$ ) between anxiety level of primipara mothers with the length of labor progress in the first active phase.

**Conclusion:** There is a significant correlation between primipara mother anxiety levels with the period length of labor progress in the early active phases at Babakan community health center Mataram City. Researchers have shown that the higher the anxiety level, the longer the labor progress, and vice versa. This result must be explored further because of anxiety that affects mothers' condition during labor and affects uterine contractions and cervical dilatation that determine the smooth labor process.

**Keyword:** Anxiety, the active phase of first-stage labor, primipara

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## INTRODUCTION

Pregnancy and childbirth in humans become an essential focus of attention in human life. A pregnant woman usually experiences ambivalent feelings that are positive and negative for the baby's presence. Positive feelings such as happiness and do not give rise to feelings of guilt. Negative emotions such as excessive anxiety (distress) about the pain during delivery. <sup>(1)</sup> In 2018, Infant Mortality Rate (IMR) NTB reported the number of cases of infant mortality is 953 cases from 103.926 live births, down compared to 2017 with the number of cases of infant mortality cases from 103.132 live births (Dikes NTB). In Mataram, there were seven maternal mortality cases in 2015, which dropped to six maternal mortality cases in 2016. In 2017 there was an increase to eight cases of maternal death cases. Based on the causes of maternal deaths, 20% were due to bleeding, 10% due to infection, 10% due to eclampsia, and 60% for other reasons. <sup>(3)</sup>

Among the causes of the high infant mortality rate was the incidence of prolonged labor. According to data from the Health Research Association (RISKESDAS) 2018, prolonged labor is the second most common labor complication. premature rupture of membranes (PROM) was first with a

percentage of 5.6%, followed by prolonged labor with a percentage of 4.3% of total 23.2% of childbirth complications. The prevalence of prolonged labor in province of West Nusa Tenggara (NTB) is 4.5% fifth place national, while the first was Yogyakarta, with a percentage of 7.9%, and of the total percentage of complications of prolonged labor contributed 4.3%. <sup>(4)</sup>

Three factors are known to affect the delivery process (primigravidae or multigravida), known as the 3 "P's": 1) Power (power), 2) Passage (birth canal), and 3) Passenger (fetus). Another "P" factor that is thought to influence the progress of laboris Psyche, including anxiety. Excessive anxiety (distress) and depression in pregnant women put them at risk for preterm labor and labor time progress. <sup>(5)</sup>

Psychological factors in the face of labor is a factor that affects whether or not the birth process goes smoothly. During this time, psychological factors were not the main focus of attention from birth attendants. <sup>(8)</sup>

Every expectant mother delivering her first child will experience higher anxiety than a pregnant woman who had previously given birth. Anxiety in mothers may be caused by their fear of health, gestational age, financial difficulties, and other staples of life. <sup>(11)</sup> along with

preparing peak physical condition, birthing mothers must prepare a stable psychological condition to decrease excessive anxiety in the face of labor and her baby's birth. <sup>(12)</sup>

## METHOD

This research is a quantitative research study with an observational design. The approach used is a cross-sectional. <sup>(21)</sup> This study's population were pregnant women enrolled in the program registers maternal and Child Health (MCH) PHC Babakan, Mataram, West Nusa Tenggara. This place is taken as a research site because it is the origin of researchers who have explored in March 2019.

This research sample is all the primiparous birth mothers who came to the maternity health center Babakan that meet the inclusion and exclusion criteria. The minimum number of samples that have been determined using the Slovin formula is 40 people.

This study's sampling technique was non-probability sampling where everyone does not have the same opportunities to become respondents. Non-probability sampling is sometimes called purposive sampling.

The procedure of this research, there is information for consent and informed consent. Information for consent was given to all mothers who come to the Babakan

Health Center. Then, the selection of mothers who will be the subject of study using inclusion and exclusion criteria. Mothers who became the subject of research (which has fulfilled the inclusion and exclusion criteria) signed informed consent.

Measuring instrument used to obtain the level of anxiety was questionnaires. filling out the questionnaire was done when the mother was still in the first stage of the latent phase. Then to the data for labor progress was gain by using partograph. the observation of the labor progress with partograph was assisted by Babakan Health Center midwife at the time of the study.

## RESULTS

**Table 1. Characteristics of Respondents Respondents by Age Research**

| Age   | Frequency | Percentage (%) |
|-------|-----------|----------------|
| 20-30 | 28        | 70             |
| 31-40 | 12        | 30             |
| Total | 40        | 100            |

Table 1 shows the characteristics of respondents by age in Puskesmas Babakan Mataram.

**Table 2. Characteristics of Respondents Respondents by Educational Research**

| Education          | Frequency | Percentage (%) |
|--------------------|-----------|----------------|
| Elementary         | 4         | 10             |
| Junior High School | 10        | 25             |
| Senior High School | 18        | 45             |
| College            | 8         | 20             |
| Total              | 40        | 100            |

Table 2 shows the characteristics of respondents by education in Babakan Health Center in Mataram.

**Table 3. Characteristics of Respondents by Level Anxiety Research**

| Anxiety level  | Frequency | Percentage (%) |
|----------------|-----------|----------------|
| Mild anxiety   | 20        | 50             |
| Medium anxiety | 16        | 40             |
| Severe anxiety | 4         | 10             |
| Total          | 40        | 100            |

Table 3 shows the respondents' characteristics according to the level of anxiety in Babakan Health Center, Mataram.

**Table 4. Characteristics of Respondents Research in Labor Progress Duration**

| Progress Maternity | Frequency | Percentage (%) |
|--------------------|-----------|----------------|
| Yes                | 28        | 70             |
| No                 | 12        | 30             |
| Total              | 40        | 100            |

Table 4 shows survey respondents' characteristics according to the length of

labor progress in Babakan Health Center, Mataram.

### **Analysis of Correlation between Anxiety Levels with Labor Progress Duration**

In mild anxiety levels, as many as 20 respondents had "no progress of labor". At the level of anxiety, from 16 respondents, eight people had no labor progress, and the other did have labor progress. In severe anxiety level all four respondents had no progress of labor.

Statistical analysis using the Spearman rank test showed the value of the correlation coefficient between primiparous mothers anxiety levels and the length of labor progress is 0.714 with a P-value of  $< 0.001$ . It can be said that there is a strong positive correlation and significant, between the level of anxiety primiparous mothers with stage 1 the length of labor progress in the health center of the active phase of Babakan.

These results are consistent with the hypothesis that there is a relationship between primiparous mothers' anxiety levels and the length of the advanced stage of labor is one of the active phases. This result means that the higher the level of anxiety, the longer the progress of labor.

## DISCUSSION

From the research, statistical test result with the Spearman rank shows the P-Value of  $< 0.001$ . This value is smaller than  $\alpha$  (0.05), which means there is a significant correlation between maternal anxiety levels primiparity to the length of the first stage of labor progress phase active. Maternal factors such as anxiety, lack of preparation, and fear, can interact with other factors that cause prolonged labor. Some women feel that childbirth is the most traumatic experience in life. The emergence of fear, pain, anxiety can be caused by a new environment. If the birth mothers are faced with such a situation, it will trigger stress hormones (e.g. catecholamine) and adrenaline. The release of these hormones can inhibit the release of the hormone oxytocin, which is a hormone produced naturally by the body that aims to stimulate uterine contractions. If the hormone oxytocin is inhibited, it will weaken the strength of uterine contractions<sup>(23)</sup>

Anxiety correlates with the mechanism of fear-tension-pain. Anxiety in maternal induces tension at the circular muscle at the bottom of the uterus or stiffness of the cervix and hypoxia uterus, which may result in pain during contractions of the uterus. Pain impulses transmitted to the cerebral cortex via the

thalamo-limbic system and consequently will add a sense of anxiety.<sup>(24)</sup>

## CONCLUSION

Research conducted at the Babakan Health Center in Mataram shows a strong correlation between anxiety and significant progress with the first stage of labor duration of the active phase. Psychological factors in the face of labor is a factor that affects whether or not the birth process goes smoothly.

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