

## The Relationship between Old Parturition and Post Date with Asphyxia Incidence in Newborns

Galuh Pradian Yanuaringsih<sup>1</sup>,  
Sri Inti<sup>2</sup>, Masadi<sup>3</sup>, Hindun  
Mardiana<sup>4</sup>, Driana Permata<sup>5</sup>

<sup>1</sup>Midwifery  
Undergraduate Study  
Program, Kadiri  
University, Indonesia

**Email:**

galuhpradian@unik-kediri.ac.id

### ABSTRACT

Factors that affect the occurrence of asphyxia are: preeclampsia, placental abruption, old partus, pregnancy over time, umbilical cord, premature infant. Based on the preliminary survey it was found that 53,9% of asphyxia occur. Research Objectives to see the relationship between old part and post date with the incidence of Asphyxia In Gambiran Hospital Kediri. The type of research used is Cross sectional. The independent variable is old and post date, Dependent of Asphyxia Event. Populasinya all maternity mothers and newborns In RSUD Gambiran City Kediri. a number of 299 respondents, the number of samples 172 respondents. Simple random sampling technique. Based on the result of univariate analysis that experienced old partus counted 28 respondents (16,3%), post date 40 respondents (23,3%), asphyxia 108 respondent (62,8%). Based on bivariate analysis test using spearman rank correlation obtained post date and old partus with the same value  $p$ value is  $p$ value = 0,000 with correlation strength of 0.274 which means the level of relationship in the low category While post date obtained Correlation strength of 0.281 with low category. Based on the multivariate analysis test using Multiple Logistic Regression, the significant variables to the occurrence of Asphyxia in newborn are old partus ( $p$ value = 0.002 <0.05), post date ( $p$ value = 0,000 <0,05) then  $H_0$  is rejected and  $H_1$  is accepted meaning there is a relationship between the old partus and post date with the incidence of asphyxia in newborns at Gambiran Hospital Kediri. It is hoped that an emergency service will be improved so that the old mothers who are suffering from old partus can be treated promptly, so as to avoid maternal and fetal death.

**Keywords:** Blood sugar levels, Brown rice, Menopause

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### INTRODUCTION

The infant mortality rate is one of the indicators in determining the health status of children. Every year newborn or neonatal deaths reach 37% of all deaths in children under five. Every day 8,000 newborns in the world die from causes that cannot be prevented. The majority of all infant deaths, about 75% occur in the first week of life and between 25% to 45% of these deaths occur within the first 24 hours of an infant's life. The main causes of newborn or neonatal death in the world include 29% premature births, 25% sepsis and pneumonia and 23% are babies born with asphyxia and trauma. Birth asphyxia occupies the 3rd cause of infant mortality in the world in the early period of life (WHO, 2012).

Asphyxia is the failure to initiate and continue breathing spontaneously and regularly at birth or shortly after birth. Babies may be born asphyxiated (primary asphyxia) or may be able to breathe but then become asphyxiated some time after birth (secondary asphyxia). (Sudarti, 2014).

Infant Mortality Rate (IMR), and Toddler Mortality Rate (AKABA). Attention to efforts to reduce neonatal mortality (0-28 days) is important because neonatal mortality contributes to 59% of infant deaths. Based on the results of the Indonesian Demographic and Health Survey (IDHS) in 2012, the Neonatal Mortality Rate (AKN) in 2012 was 19 per 1,000 live births. This figure is the same as the AKN based on the 2007 Family Health IDHS and only decreased by 1 point compared to the 2002-2003 IDHS, which is 20 per 1,000 live births. (Indonesian Health Profile, 2014).

Factors causing asphyxia in newborns, including maternal factors, namely, maternal hypoxia, maternal age less than 20 years or more than 35 years, maternal parity, hypertension and hypotension. Then the placental factors, namely, placenta previa, and placental abruption. Factors from the fetus are premature, multiple pregnancies, umbilical cord disorders and factors from labor, namely artificial labor / recommended delivery, and prolonged labor, namely labor more than 18 hours (Manuaba, 2012)

Based on the initial survey conducted, as many as 20 babies who experienced asphyxia of which 7 (35%) were caused by Post Date and 6 (30%) were caused by long labor, 4 (20%) were caused by low birth weight and 3 (15%) were caused by low birth weight. macrosomia. This shows the high incidence of asphyxia caused by prolonged labor and post date at Gambiran Hospital, Kediri City

By looking at the high risk of death and various attacks of complications in the first week, every newborn should get standardized examinations more often (at least 2 times) in the first week. This step is taken to find out early if there is a disease or danger sign in the neonate so that help can be given immediately to prevent the disease from getting worse which can cause death. Neonatal visits are one of the interventions to reduce newborn mortality (Indonesian Health Profile, 2014).

To improve the survival of neonatal health services, it must be carried out in an integrated and sustainable manner, while human resources and facilities are still limited and not evenly distributed, so it is necessary to form regionalization of neonatal health services (Sudarti, 2013).

## MATERIALS AND METHODS

### Design and Samples

This research was conducted at Gambiran Hospital in 2021 with the Cross Sectional method, based on the research objectives including the correlational analytical research design, based on data sources including secondary data.

### Data Collection

The sample of the study was some mothers giving birth and newborns in January - March 2021 at Gambiran Hospital, Kediri City.

### Data Analysis

In this study, the multivariate analysis technique of Multiple Logistics Regression was used.

## RESULTS

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	Sig	Exp (B)
Partus lama	,002	10,726
Post date	,000	6,095

To determine the effect of the variable Post Date and Old Parturition on the Asphyxia variable in newborns, it was done using the Multiple Logistics Regression Test. The results of the multivariate test showed that the significant variables on the incidence of asphyxia in newborns were prolonged labor (p value = 0.002 < 0.05), post date (p value = 0.000 < 0.05) H<sub>0</sub> was rejected and H<sub>1</sub>

was accepted, meaning that there was a relationship between prolonged labor and post date with the incidence of asphyxia in newborns at Gambiran Hospital, Kediri City in 2021.

Based on table 5.9 it can be interpreted that the variables that affect the incidence of asphyxia are prolonged labor and post date. The strength of the relationship can be seen from the value of OR or Exp (B). The strength of the relationship of the Asphyxia variable was long labor (OR=10,726), post date (OR=6,095).

The large effect of prolonged labor on the asphyxia variable with a value of (OR=10,726) means that mothers who experience prolonged labor have a risk of (10,726) times experiencing asphyxia in newborns. The large influence of post date on the asphyxia variable with a value (OR = 6.095) means that mothers who experience post-date have a risk of (6.095) times experiencing asphyxia in newborns

## DISCUSSION

Factors that influence the occurrence of asphyxia include maternal factors: preeclampsia and eclampsia, placenta previa and placental abruption, prolonged labor, obstructed labor, late pregnancy (after 42 weeks of gestation), umbilical cord factors: umbilical cord entanglement, short umbilical cord, baby factors: premature babies, congenital abnormalities, delivery with action (Depkes RI, 2009). The risk factors for the incidence of asphyxia are very diverse and many things affect and are related to the incidence of asphyxia. The results of several studies indicate that there is a significant relationship between prolonged labor, low birth weight, premature rupture of membranes, delivery with surgery, maternal age less than 20 years or more than 35 years, fetal position abnormalities (Fahrudin, 2003).

According to the researchers from the results of the study, it was found that there was a relationship between prolonged labor and the incidence of asphyxia in newborns because it would make the mother run out of energy and disrupt the supply of oxygen from the mother to the baby, thus triggering asphyxia. From the results of the study, it was found that long labor is at higher risk of experiencing asphyxia, this is in accordance with the theory stated by Hendarso (2014) that long labor at risk of giving birth asphyxia is due to impaired blood circulation so that oxygen supply from mother to baby is reduced. If there is impaired gas exchange or O<sub>2</sub> transport during pregnancy or delivery, it will cause more severe asphyxia. The solution to reduce the incidence of asphyxia requires quality antenatal care, normal delivery care and neonatal health services by professional personnel who primarily have midwifery skills through training. It is hoped that with skilled personnel, quality services will be obtained so that in the end it can help reduce the incidence of prolonged labor and post date on the incidence of asphyxia in newborns.

## CONCLUSION

There is a relationship between prolonged labor and post date with the incidence of asphyxia in newborns at Gambiran Hospital, Kediri City in 2021

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## CONFLICTS OF INTEREST

The author declares that they have no conflict of interest

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