

**RELATIONSHIP BETWEEN LOW WEIGHT, PREMATURE AND HISTORY OF MOTHER HYPERTENSION WITH SCORE VALUE SCORE NEW BABY BORN IN RSUD PASAR REBO EAST JAKARTA**

**Yesi Putri<sup>1</sup>**

Dehasen University<sup>1</sup>

Jl. Merapi Raya No 34 Sawah Lebar Bengkulu, Indonesia

email: [putriyesi29@gmail.com](mailto:putriyesi29@gmail.com)<sup>1</sup>

**ABSTRACT**

*Indicators that are sensitive enough to see the success of health development in a country is the infant mortality rate (IMR). Apgar assessment is very important because in order to minimize morbidity and infant mortality. The purpose of this study was to determine the relationship of low birth weight, premature, and a history of maternal hypertension with an Apgar score < 7 in newborns. This study uses descriptive analytic research with cross sectional approach. Samples numbered 89 newborns in Pasar Rebo Hospital. The research data using secondary data from medical records. The data obtained will be analyzed using univariate and bivariate and delivered with a frequency distribution table and narration. Results of analysis using chi-square test was obtained there is a relationship between low birth weight (p -Value = 0.000), Premature (p -Value = 0.000), history of hypertension mother (p -Value = 0,040) Rated Apgar scores < 7 in newborns. The conclusion from this study is there is a relationship between low birth weight, Premature, and history of hypertension with Value Apgar scores < 7 at the Newborn in the General Hospital of Pasar Rebo, East Jakarta.*

**Keywords :** *Apgar, hypertension Mother, Low Birth Weight, Premature.*

**INTRODUCTION**

Indicator sensitive enough for see the success of health development in a country is the infant mortality rate (AKB). Infant death is death that is occurs in babies before reaching age one year. As for the causes of infant death, namely: asphyxia, birth trauma, infection, prematurity, congenital abnormalities, and causes other. If not died, circumstances this will leave problem on baby form disability physically and mentally. (Saifuddin, 2010).

Maternal health services and neonatal is one of the determining elements health status. Health services neonatal starts before the baby is born, through the health services provided to pregnant women. Growth and neonatal period infant development is the most critical period because can cause illness and death baby. (Safrina, 2011).

Millennium achievement targets Development Goals (MDGs) 2015 in reducing the Maternal Mortality Rate and Infant Mortality Rate is a priority major in health development. Proportion of women receiving care antenatal at least once during pregnancy is around 81% for the period 2005-2011, but to the recommended minimum of four or more visits were accordingly down to around 55%. In ASEAN Indonesia ranks third, after Timor Leste and Bangladesh. (WHO, 2012).

Child health efforts, among others expected to be able to reduce the number Child Death. Death rate indicator related to children is Numbers Neonatal Mortality (AKN), Mortality Rate Infants (IMR), and the Infant Mortality Rate (AKABA). Based on the survey results Demography and Health of Indonesia (IDHS) in 2012, the Neonatal Mortality Rate (AKN) in 2012 was 19 per 1000 live births, decreased from 20 per 1000 live births in 2007 and 23 per 1000 live births according to the IDHS 2002. Attention to reduction efforts Neonatal Mortality Rate (0-28 days) to be important because of neonatal mortality contributed to 56% of deaths baby. (Depkes, 2012).

AKB in DKI Jakarta seems to continue has decreased from 1990-2012. In 1990 the AKB was in DKI Jakarta represents every 1,000 births alive, about 43 babies died. In the year of 1995 IMR decreased to 30 deaths babies per 1,000 live births. As for numbers infant mortality based on IDHS (Survey Indonesian Health Demographics) in 2012, IMR in DKI Jakarta Province is 22 per 1,000 live births. MDGs target for IMR in 2015 was 23 deaths babies per 1,000 live births, and their meaning DKI Jakarta Province has achieved the target MGDs with a goal of 4, lowering the numbers infant mortality in the period 1990-2015. DKI Jakarta Provincial Health Office year 2012 there were 148,939 live births, and it was recorded that 1,129 babies died before reach the first age (0-11 months). Jakarta East including the contributor of Figures The highest infant mortality with 231 babies die. (Depkes, 2012).

The benefits of this research are expected can provide information as well as can increase knowledge and insight science and research is expected to be provide information and can add knowledge and scientific insight into learning students about the Apgar score on newborn baby. The purpose of this study is To know the relationship Weight Low Birth Body, premature, and history maternal hypertension with an Apgar score <7 in newborns at the General Hospital Pasar Rebo area.

## **RESEARCH DESIGN AND METHODOLOGY**

This research is a research analytic with cross sectional design is a research to study dynamics of correlation between factors risk with effect, by way of approach, observation or data collection at once at one point (point time approach) (Sujarweni, 2014). Where are the variables independentya (free) is body weight Low Birth (LBW), Premature, and history of maternal hypertension. While the variable dependentya is the Apgar score <7 in newborns.

The population in this study are all newborns in the Perinatology Room Pasar Rebo Regional General Hospital as many as 789 people. Sample is partial of all objects studied and considered represents the entire population. Sample inside This study amounted to 89 people.

Technique this sampling is a non technique random sampling by means of quota sampling which is sampled from all newborns at Pasar Rebo Hospital. Samples should also meet the inclusion criteria, so that obtained the number of samples taken is 89 babies.

In this study the collection technique data using secondary data, instruments used in data collection is the status of the patient obtained from medical records of RSUD Pasar Rebo.

The data used is data secondary. This secondary data collection done by recording the results of the record medical at Pasar Rebo Hospital which includes LBW, prematurity, history of maternal hypertension and the Apgar score  $<7$  in newborns.

Univariate analysis was used for see the frequency distribution of each variable under study, both variables independent and dependent variables. Data analysis is processed using the system computerized. In this research analysis data in the form of univariate analysis and analysis bivariate. Univariate analysis, namely aiming to explain or describe each research variable (Notoatmodjo, 2010). Bivariate analysis was carried out for see the relationship of independent variables and dependent variable with computerization. Proof of Chi-Square test with levels confidence (Confidence Interval) 95% or  $\alpha$  0.05. (Sujarweni, 2014).

## **FINDINGS AND DISCUSSION**

This research is research with using Cross research design Sectional. Where is the measurement of the independent variables (dependent) carried out together on time of research. Research by Cross The sectional was unable to provide an explanation regarding causal relationships. Data used is secondary data taken from medic records or status books newborn patients who experience Value Apgar score  $<7$ , LBW, Premature and History of Maternal Hypertension in 2015 at Pasar Rebo Regional General Hospital East Jakarta, this research cannot be separated from limitations, including limitations the author's knowledge, costs, research time that the author did immensely short, some limitations in determine the variables.

### **Relationship BBLR to Value Events Apgar Score $<7$ newborns**

Based on the results of statistical tests using the chi square test, the value is obtained p-Value =  $0.000 < \alpha$  (0.05). This matter prove there is a relationship between BBLR with Apgar Score  $<7$  new babies was born in the Pasar Regional General Hospital East Jakarta Rebo. From the value Odds Ratio (OR) obtained from the test statistics get the result 10,000

(3,03632,935) which means BBLR babies have a chance 10 times get an Apgar Score <7 compared to babies who are not BBLR.

This research is in accordance with the theory saifuddin, who stated the baby at the rate slow intrauterine growth and as extras born before term. This baby is small, both because of early labor nor the intrauterine growth being disturbed will result in BBLR and will experience respiratory problems affect the Apgar score of the new baby born. (Rukiyah, 2013).

### **Premature Relationship to Events Apgar Score value <7 newborns**

Based on the results of statistical tests using the chi square test, the value is obtained p-Value = 0.000 <  $\alpha$  (0.05). This matter prove there is a relationship between Premature with an Apgar Score <7 infants newborn at the Regional General Hospital Pasar Rebo, East Jakarta, 2015. From OR value obtained from statistical tests the results obtained 17,024 (4,810-60,248) which means that premature babies have a chance of 17 times get an Apgar Score <7 than premature babies. Premature babies are babies that are born at less than 37 weeks of gestation. Babies born prematurely have weight Low Birth Body, but babies who are have Low Birth Weight yet naturally experiencing premature birth. Preterm pregnancy will produce a baby the maturity of the organs and the abnormalities that are others in the baby's body are not yet perfect (prematurity) so as to result low apgar value. (Abdoerachman et al, 2007)

### **Relationship History of Maternal Hypertension on the incidence of the Apgar Score <7 newborn baby**

Based on the results of statistical tests using the chi square test the value is obtained p-Value = 0.040 <  $\alpha$  (0.05). This matter prove there is a relationship between History of Maternal Hypertension with Apgar Score Score <7 newborns in hospital General of Pasar Rebo, East Jakarta. From the Odds Ratio (OR) value obtained from statistical tests obtained results 5,231 (1,158-23,620) which means that the baby is have a history of maternal hypertension 5 times chance of getting Apgar Score <7 compared to infants without History of Maternal Hypertension.

## CONCLUSION

Based on the research results conducted by researchers entitled relationship between BBLR, Premature, and History Maternal Hypertension with an Apgar Score <7 in Newborns in General Hospitals Pasar Rebo area, East Jakarta. From the research conducted, it was obtained babies who experience an Apgar score <7 totaled 72 babies (80.9%), babies who were experiencing BBLR amounted to 70 babies (78.7%), babies who experienced premature amounted to 71 infants (79.8%), and infants who experienced history of maternal hypertension totaled 81 infants (91.0%). BBLR with an Apgar score <7 babies newborn has a p-value =0,000. This means that there is a relationship meaning between BBLR with an Apgar score <7. Premature Relationship with Apgar Value score <7 newborns have a score p-value = 0.000. It means there is a relationship meaning between Premature and Apgar score <7. Relationship between maternal hypertension history and Apgar score <7 newborns has a p-value = 0.000. The meaning there is a meaningful relationship between History of maternal hypertension with Apgar value score <7.

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