



**ABSTRACT**  
UNIVERSITAS  
GADJAH MADA

**Background:** Low birth weight (LBW) is a widely used and much studied marker of infant health. It is well measured, reliably recorded, and readily available from vital statistics files and many other data sets. The aim of present study is to determine risk factor associated with LBW in Purworejo District, Central Java, Indonesia.

**METHOD**

A nested cohort study was conducted in Purworejo district, Central Java, using secondary data from 1<sup>st</sup> October 1994 until 31<sup>st</sup> July 1998.

**RESULT**

A total 2098 pregnant mother's data had been analyzed using SPSS package found that incidence for LBW baby was 9,8%. Gestational age had been found as primary risk of LBW incidence ( $p= 0,000$ ). Mother's age had a statistically significant correlation with LBW baby incidence with  $p$  value = 0.016 with RR 0,037 95%CI 0,028-0,049. Other risk factors were not statistically significant; mother's education level ( $p=0,273$  with  $RR=0,879$ ), parity ( $p=0,055$  with  $RR=0,747$ ), anemic status of the mother ( $p=0,189$  and  $RR=1,473$ ), nutritional status ( $p=0,054$  with  $RR=0,768$ ), occupation ( $p=0,174$  and  $RR 1,165$ ), and socioeconomic status of the mother ( $p=0,293$  with  $RR=0,885$ )

**CONCLUSION**

The main determinant of LBW baby incidence was gestational age while mother's age also contributes to increase incidence of LBW baby. Other risk factor such as low socioeconomic status, low maternal education level, high parity status, positive anemic status, poor nutritional status and high workload maternal occupation did not give statistically significant ( $p>0,05$ ) correlation against LBW baby.

**KEYWORDS**

Low birth weight baby, incidence and risk factor, nested cohort study.



**ABSTRACT**

UNIVERSITAS  
GADJAH MADA

**Background:** Low birth weight (LBW) is a widely used and much studied marker of infant health. It is well measured, reliably recorded, and readily available from vital statistics files and many other data sets. The aim of present study is to determine risk factor associated with LBW in Purworejo District, Central Java, Indonesia.

**METHOD**

A nested cohort study was conducted in Purworejo district, Central Java, using secondary data from 1<sup>st</sup> October 1994 until 31<sup>st</sup> July 1998.

**RESULT**

A total 2098 pregnant mother's data had been analyzed using SPSS package found that incidence for LBW baby was 9,8%. Gestational age had been found as primary risk of LBW incidence ( $p=0,000$ ). Mother's age had a statistically significant correlation with LBW baby incidence with  $p$  value = 0.016 with RR 0,037 95%CI 0,028-0,049. Other risk factors were not statistically significant; mother's education level ( $p=0,273$  with RR=0,879), parity ( $p=0,055$  with RR=0,747), anemic status of the mother ( $p=0,189$  and RR=1,473), nutritional status ( $p=0,054$  with RR=0,768), occupation ( $p=0,174$  and RR 1,165), and socioeconomic status of the mother ( $p=0,293$  with RR=0,885)

**CONCLUSION**

The main determinant of LBW baby incidence was gestational age while mother's age also contributes to increase incidence of LBW baby. Other risk factor such as low socioeconomic status, low maternal education level, high parity status, positive anemic status, poor nutritional status and high workload maternal occupation did not give statistically significant ( $p>0,05$ ) correlation against LBW baby.

**KEYWORDS**

Low birth weight baby, incidence and risk factor, nested cohort study.