



# Factors Associated with Birth Asphyxia at Pattani Hospital

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### **Abstract**

The purpose of this study was to investigate the pregnancy factors, delivery factors and infant factors associated with birth asphyxia (Apgar score of 7 or less at 1 minute) at Pattani Hospital, and to develop model to predict the risk of birth asphyxia (low Apgar score). This study design was cross-sectional using retrospective data.

The data were collected from labour chart records of 2,894 infants delivered in Pattani Hospital between 1 January 2001 and 31 December 2001 inclusive. In preliminary analysis, the correlation between each determinant and outcome was examined by using Pearson's chi-square test, crude odds ratios, and multiple logistic regression analysis. We found that the overall percentages of Apgar scores at 1 minute among newborns were 2.2% in the mortality category (having score 0), 5% in the morbidity category (scoring 1-7), with the remaining 92.8% scoring 8-10. The incidence rate of birth asphyxia was 73.5 per 1,000 live births. Ten determinants were associated with birth asphyxia (p-values less than 0.05).

These risk factors included pregnancy factors: education, maternal age, religion, prenatal care visit, place of prenatal care, gestational age at birth, HIV condition and complications, and delivery factors: induction of labour and delivery type.

The early detection of risk factors and appropriate management in both mothers and newborn infant will effectively decrease the incidence of asphyxia, morbidity and mortality in newborn infants.