

中文題目：分析母親敗血症對懷孕結果的影響

英文題目：Analysis of the impact of maternal sepsis on pregnancy outcomes

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Background: Sepsis consists of a dysregulated inflammation accompanied by life-threatening organ dysfunction and may have prolonged impacts. However, whether maternal sepsis could affect birth outcomes and adverse perinatal events remains unclear. We aimed to address the association between maternal sepsis and poor pregnancy outcome and to identify risk factors for poor birth outcomes and adverse perinatal events.

Methods: This population-based case-control study linked the Taiwan Birth Cohort Study (TBCS) database and the Taiwanese National Health Insurance Database (NHID). We enrolled pregnant women who met the criteria for sepsis-3 between 2005-2017 as the maternal sepsis cases and selected pregnant women without infection as the non-sepsis comparison cohort. Sepsis during pregnancy and fulfilled sepsis-3 definition. The outcome of interest in this study consisted of birth outcomes and perinatal adverse events. The birth outcome included low birth weight (LBW, <2500 g) and preterm birth (<34 weeks or <37 weeks).

Results: We enrolled 2,732 women who met the criteria for sepsis-3 during pregnancy and 196,333 non-sepsis controls. We found that maternal sepsis was highly associated with unfavourable pregnancy outcomes, including LBW (adjOR 9.51, 95% CI 8.73–10.36), preterm birth <34 weeks (adjOR 11.69, 95%CI 10.64–12.84), preterm birth <37 weeks (adjOR 8.81, 95% CI 8.14–9.54), and the adverse perinatal outcome (adjOR 3.09, 95% CI 2.83–3.36). We also identified that a low urbanisation level and income were slightly associated with an increased risk for low birth weight and preterm birth.

Conclusions: We found that maternal sepsis was highly associated with LBW, preterm birth and adverse perinatal events. Our findings highlight the prolonged impact of maternal sepsis on pregnancy outcomes and indicate the need for vigilance among pregnant women with sepsis.