

Risk Factors for Primary Postpartum Haemorrhage-related Maternal Deaths: Evidence from Maternal Verbal Autopsy in Jember District, Indonesia

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ABSTRACT

Objective: This study aims to identify risk factors associated with maternal mortality from primary postpartum haemorrhage in Jember district Indonesia.

Methods: 40 primary postpartum haemorrhage maternal deaths (cases) and 80 primary postpartum haemorrhage cases (controls) were collected from maternal verbal autopsy forms. The sample included mothers who suffered from primary postpartum haemorrhage in Jember district from January 2017 to December 2019. Logistic regression analysis was administered to determine risk factors for maternal deaths from primary postpartum haemorrhage.

Results: One factor significantly associated with maternal mortality was transfer time to the referral hospital (OR 0.286, 95% CI 0.112-0.746, $p=0.010$). Other factors, including age (OR 0.813, 95% CI 0.358-1.838, $p=0.618$), parity (OR 0.644, 95% CI 0.264-1.570, $p=0.333$), place of birth (OR 0.883, 95% CI 0.511-1.525, $p=0.654$), birth attendant (OR 1.808, 95% CI 0.791-4.135, $p=0.160$) and travel time to primary healthcare facilities (OR 1.416, 95% CI 0.615-3.257, $p=0.413$), were not significantly associated with primary postpartum haemorrhage-related maternal deaths.

Conclusions: Access to referral hospitals must be considered in reducing maternal mortality from primary postpartum haemorrhage. Ensuring mothers with primary postpartum haemorrhage reach referral hospitals immediately may facilitate prompt and advanced obstetric care.

Keywords: Maternal mortality, postpartum haemorrhage, risk factor, case-control study, lower-middle income country

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