



PREDIKTOR KEMATIAN NEONATUS DENGAN PENYAKIT JANTUNG BAWAAN

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INTISARI

Latar belakang: Penyakit jantung bawaan (PJB) merupakan masalah kesehatan global. Hampir seperlima kematian neonatus disebabkan oleh kelainan kongenital termasuk PJB. Identifikasi prediktor kematian neonatus dengan PJB dapat memandu kita menetapkan strategi preventif untuk memperbaiki luaran.

Tujuan: mengetahui prediktor kematian neonatus dengan penyakit jantung bawaan.

Metode: Studi kasus kontrol dilakukan dengan data sekunder dari rekam medis pasien instalasi perinatal RSUP Dr.Sardjito Yogyakarta, Indonesia. Neonatus yang didiagnosis dengan penyakit jantung bawaan dari hasil ekokardiografi yang masuk rumah sakit antara Januari 2015 – Juni 2017 dimasukkan dalam studi. Neonatus yang menolak perawatan/pulang atas permintaan sendiri dieksklusi. Faktor klinis neonatus, terapi saat dirawat, dan faktor maternal dianalisis sebagai prediktor kematian, dianalisis dan dipresentasikan sebagai rasio odd (OR) dan *confidence interval* 95% (CI 95%).

Hasil: Kami merekrut 196 subyek, sebanyak 32,7% (64) meninggal dan 67,3% (132) hidup. Hasil analisis multivariat menunjukkan bahwa jenis PJB sianotik (OR 6,6; CI95% 2,17-22,05), adanya kelainan kongenital lain (OR 3,3; CI 95% 1,39-7,37), dan pemakaian oksigen secara invasif/intubasi (OR 12,8; CI 95% 5,64-29,7) terbukti bermakna secara statistik sebagai prediktor kematian neonatus dengan PJB. Jenis kelamin, usia kehamilan, tempat lahir, kondisi sepsis, pneumonia, pemberian oksigen non-invasif, dan tidak dilakukannya operasi jantung tidak terbukti secara bermakna sebagai prediktor kematian.

Kesimpulan: Prediktor kematian neonatus dengan PJB adalah jenis PJB sianotik, adanya kelainan kongenital lain, dan penggunaan oksigen invasif/intubasi.

Kata kunci: penyakit jantung bawaan, kematian, prediktor, neonatus, Indonesia



PREDICTOR OF MORTALITY IN NEONATES WITH CONGENITAL HEART DISEASE

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ABSTRACT

Background: Congenital heart disease (CHD) is a major global health problem. One fifth of neonatal death are caused by congenital anomalies including heart defect. We need to identify predictors of mortality in neonates with congenital heart disease to guide a preventative strategy in improving the outcome.

Objective: To understand the predictor factors of mortality of neonates with congenital heart disease

Method: A case control study was conducted using secondary data from medical records in the neonatology ward at the Dr Sardjito hospital, Yogyakarta, Indonesia. Neonates diagnosed with CHD from echocardiography admitted between January 2015- June 2017 were included. We excluded neonates who discharged against medical advise. Clinical and maternal factors of the neonates were analyzed as the predictors of neonatal mortality, and those were assessed and presented in odd ratio (OR) and its confidence interval of 95% (CI 95%).

Result: We recruited 196 neonates, of which 32.7% (64) died and 67,3% (132) alive. Multivariate analysis showed that cyanotic CHD (OR 6.6; CI95% 2.17-22.05), presence of other congenital anomaly (OR 3.3; CI 95% 1.39-7.37), and use of invasive oxygenation/intubation (OR 12.8; CI 95% 5.64-29.7) were statistically significant as the independent predictors of mortality in neonates with CHD. Sex, gestatioal age, place of birth, birth weight, sepsis, pneumonia, the use of non-invasive oxygenation, and not taking heart surgery were not significantly associated with mortality.

Conclusion: Predictors of mortality in neonates with CHD were cyanotic CHD, presence of other congenital anomaly, and the use of invasive oxygenation/intubation.

Keywords: congenital heart disease, mortality, predictor, neonates, Indonesia