

**Luaran Bayi pada Ibu Hamil dengan Penyakit Jantung
di RSUP Dr. Sardjito Yogyakarta: Analisis berdasarkan WHO Risk
Classification dan Metode Persalinan**

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INTISARI

Latar Belakang: Pada ibu hamil dengan penyakit jantung metode persalinan yang dianjurkan adalah persalinan vaginal. Persalinan seksio sesarea dilakukan jika ada indikasi obstetri.

Tujuan: Untuk mengetahui luaran bayi pada ibu dengan penyakit jantung WHO risk class II dan III di RSUP Dr. Sardjito berdasarkan metode persalinannya.

Metode: Jenis penelitian ini adalah *cohort retrospektif*. Subyek penelitian adalah ibu hamil dengan penyakit jantung WHO risk class II dan III yang melahirkan di RSUP Dr. Sardjito mulai 1 Januari 2012-31 Desember 2018. Kriteria inklusi: usia kehamilan ≥ 34 minggu, kehamilan tunggal dan rekam medis lengkap. Kriteria eksklusi: bayi lahir mati, terjadi *fetal distress/fetal compromised* dan bayi dengan kelainan kongenital. Data dianalisis dengan uji *Chi Square/Fisher Exact* dilanjutkan uji regresi logistik.

Hasil: Penelitian ini melibatkan 80 subyek, dengan seksio sesarea sebanyak 30 (37,5%) dan persalinan vaginal sebanyak 50 (62,5%). Kejadian nilai Apgar menit 1 < 7 sebesar 22,5% dan perawatan NICU bayi 10%. Tidak ada perbedaan bermakna terhadap luaran bayi berupa nilai Apgar menit 1 dan perawatan NICU berdasarkan metode persalinannya. Seksio sesarea berhubungan dengan peningkatan risiko nilai Apgar < 7 pada menit 1 sebesar 2,28 kali dan risiko perawatan NICU bayi sebesar 1,60 kali namun keduanya tidak bermakna secara statistik ($p > 0,05$). Berat bayi kecil masa kehamilan (KMK) berhubungan secara signifikan terhadap peningkatan risiko nilai Apgar < 7 pada menit 1 (RR 2,75; CI 95% 1,25-6,07; $p=0,012$). Dari hasil analisis stratifikasi, metode persalinan pada bayi KMK tidak berpengaruh terhadap nilai Apgar (RR 1,67; 95% CI 0,65-4,29, $p=0,608$). Namun pada bayi tidak KMK, seksio sesarea berhubungan secara signifikan terhadap peningkatan risiko kejadian nilai Apgar < 7 pada menit 1 (RR 3,89; 95% CI 1,11-13,63; $p=0,032$).

Kesimpulan: Tidak ada perbedaan bermakna terhadap luaran bayi berupa nilai Apgar menit 1 dan perawatan NICU pada ibu hamil dengan penyakit jantung WHO risk class II dan III berdasarkan metode persalinannya. Berat bayi kecil masa kehamilan pada ibu hamil dengan penyakit jantung WHO risk class II dan III berhubungan secara signifikan terhadap peningkatan risiko kejadian nilai Apgar < 7 pada menit 1.

Kata kunci: kehamilan dengan penyakit jantung, metode persalinan, nilai Apgar < 7 , perawatan NICU.

**Neonatal Outcome among Pregnant Women with Heart Disease in Dr.
Sardjito Hospital Yogyakarta: Analysis based on WHO Risk Classification
and Mode of Delivery**

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ABSTRACT

Background: In pregnant women with heart disease the recommended mode of delivery is vaginal delivery. Caesarean section delivery is performed if there are obstetric indications.

Objective: To investigate neonatal outcome among pregnant women with heart disease WHO risk class II and III at Dr.Sardjito Hospital based on mode of delivery.

Research Mode: This was retrospective cohort study. The subjects of this study were pregnant women with heart disease WHO risk class II and III who gave birth at Dr. Sardjito Hospital from 1 January 2012 to 31 December 2018. Inclusion criteria: ≥ 34 weeks gestation, single pregnancy and complete medical record. Exclusion criteria: stillbirths, fetal compromised/distress and infants with congenital abnormalities. Data were analyzed by Chi Square/Fisher Exact followed by logistic regression test.

Result: This study involved 80 subjects, with 30 subjects (37.5%) performed caesarean section and 50 subjects (62.5%) performed vaginal delivery. The 1st minute Apgar score < 7 was 22.5% and NICU treatment was 10%. There was no significant difference in neonatal outcome include 1st minute Apgar score and NICU treatment in pregnant women with heart disease WHO risk class II and III based on mode of delivery. Caesarean section was associated with an increased risk of 1st minute Apgar score of < 7 was 2.28 times and risk of NICU treatment was 1.60 times compared to vaginal delivery but both were not statistically significance ($p > 0.05$). SGA (Small Gestational Age) significantly associated with increased risk of 1st minute Apgar score < 7 (RR 2.75; CI 95% 1.25-6.07; p 0.012). From stratification analysis, mode of delivery in SGA did not affect the Apgar score (RR 1.67; 95% CI 0.65-4.29, p 0.608). However, in non-SGA infant, caesarean section was significantly associated with an increased risk of 1st minute Apgar score < 7 (RR 3.89; 95% CI 1.11-13.63; p 0.032).

Conclusion: Mode of delivery did not affect the 1st minute Apgar score and NICU treatment of infant from pregnant women with heart disease WHO risk class II and III. SGA infant from pregnant women with heart disease is significantly associated with an increased risk of 1st minute Apgar score < 7 . Caesarean section in non-SGA infants, was significantly associated with an increased risk of 1st minute Apgar score < 7 .

Keywords: pregnancy with heart disease, mode of delivery, Apgar score < 7 , NICU treatment.