

FAKTOR PREDIKTOR INFEKSI HIV PADA ANAK DARI IBU DENGAN STATUS HIV POSITIF

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INTISARI

Latar belakang: Penularan infeksi HIV pada anak mayoritas diakibatkan transmisi vertikal. Beberapa faktor prediktor infeksi HIV pada anak telah diteliti sebelumnya, namun menunjukkan hasil inkonsisten, dan beberapa faktor belum pernah diteliti pada pasien anak.

Tujuan: Menentukan nilai maternal CD4, kadar *viral load* maternal, maternal anemia, rasio neutrofil limfosit (RNL) tinggi pada ibu, stadium klinis AIDS ibu, durasi terapi ARV ibu, metode persalinan, ketuban pecah dini, usia kehamilan ibu, berat badan lahir bayi, pemberian *intake* nutrisi bayi, durasi ARV profilaksis bayi sebagai faktor prediktor infeksi HIV pada anak dari ibu dengan status HIV positif di RSUP Dr. Sardjito Yogyakarta.

Metode: Dilakukan studi kohort retrospektif dengan subjek bayi/anak yang lahir dari ibu dengan infeksi HIV periode Desember 2016-Desember 2021 yang memenuhi kriteria inklusi dan eksklusi. Sampel diambil secara *total sampling*. Analisis bivariat untuk menghitung nilai p serta analisis multivariat dengan regresi logistik. Hubungan antar variabel dinyatakan dengan *relative risk* (RR) dan interval kepercayaan 95% dengan tingkat kemaknaan statistik $p < 0,05$.

Hasil: Prevalensi HIV positif sebesar 6,1% dari 120 subjek anak lahir dari ibu terinfeksi HIV. Pada analisis multivariat didapatkan bahwa, durasi pemberian ARV ibu ≤ 3 bulan (aOR 26,03; IK95% 2,17-311,24; $p=0,01$), stadium klinis ibu 3-4 (aOR 9,54; IK95% 1,31-69,22; $p=0,026$), pemberian intake nutrisi secara *mixed feeding* (aOR 59,90; IK95% 2,79-1284,3; $p=0,009$) merupakan faktor prediktor independen terhadap status HIV anak.

Kesimpulan: Durasi terapi ARV ibu ≤ 3 bulan, stadium lanjut klinis HIV/AIDS, pemberian intake secara *mixed feeding*, merupakan faktor prediktor independen terhadap status HIV anak.

Kata kunci: Transmisi vertikal HIV, faktor prediktor.

PREDICTIVE FACTORS OF HIV SEROPOSITIVE IN CHILDREN FROM MOTHER WITH HIV INFECTION

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ABSTRACT

Background: Vertical transmission is the dominant mode of acquisition of infection for HIV infection in children. Several predictors of infection have been investigated previously but showed inconsistent results, and few predictors have not been studied in the pediatric population yet.

Objective: To determine the maternal CD4 value, maternal viral load, maternal anemia, high neutrophil-lymphocyte ratio (NRL) in the mother, maternal AIDS clinical-stage, duration of maternal ARV therapy, method of delivery, premature rupture of membranes, maternal gestational age, infant birth weight, the provision of infant nutrition intake, duration of infant prophylactic ARV as a predictor of HIV infection in children of mothers with HIV positive status at Dr. Sardjito Yogyakarta.

Methods: This was a retrospective cohort study of infants/children born to mothers with HIV infection for the period December 2016-December 2021 who met the inclusion and exclusion criteria. Samples were taken with the total sampling method. Bivariate analysis using chi-square test to calculate p-value and multivariate analysis with logistic regression was conducted. The relationship between variables was presented as relative risk (RR), 95% confidence intervals (95% CI), and statistical significance levels $p < 0.05$.

Results: The prevalence of HIV positive was 6.1% of the 120 children born to HIV-infected mothers. In multivariate analysis showed that, the duration of maternal ARV administration ≤ 3 bulan months (aOR 26,03; 95%CI 2,17-311,24; $p=0,01$), maternal clinical stage of HIV/AIDS 3-4 (aOR 9,54; 95%CI 1,31-69,22; $p=0,026$), mixed feeding nutrition intake (aOR 59,90; 95%CI 2,79-1284,3; $p=0,009$) was an independent predictor of children's HIV status.

Conclusions: The duration of maternal ARV therapy ≤ 3 months, advanced clinical stage of HIV/AIDS, mixed feeding intake, were independent predictors of children's HIV status.

Keywords: Vertikal transmission HIV, Predictor factors.