

Intisari

Latar Belakang Sejalan dengan peningkatan akses terhadap terapi *Antiretroviral* (ARV) pada pasien anak yang terinfeksi Human Immunodeficiency Virus (HIV), terdapat masalah kegagalan terapi yang mulai meningkat. *World Health Organization* (WHO) merekomendasikan pemeriksaan *Viral Load* (VL) menggunakan *cut-off point* 1000 *copies*RNA/ml untuk evaluasi keberhasilan terapi. Angka gagal terapi virologi di Yogyakarta belum diketahui termasuk faktor prognostik gagal terapi virologi.

Tujuan Untuk mengetahui apakah usia, kadar CD4⁺ awal terapi, stadium HIV, regimen nevirapin, saat awal terapi dan *adherence* merupakan faktor prognostik gagal terapi virologi dan proporsi gagal terapi di Yogyakarta.

Metode Studi *cross sectional* dilakukan dari Maret sampai November 2017 di rumah sakit yang memberikan layanan HIV. Anak yang terinfeksi HIV usia < 18 tahun, telah mendapat terapi ARV lini pertama selama minimal 6 bulan dan telah menandatangani *informed consent* diikutkan dalam penelitian ini. Data usia, jenis kelamin, alamat, status gizi, lama subyek menggunakan ARV, stadium klinis WHO, kondisi imunodefisiensi berdasarkan nilai CD4⁺, dan regimen obat diperoleh dari rekam medis. Data *adherence* dan luaran gagal terapi virologi didapatkan saat subyek kunjungan poliklinik. Data karakteristik dan faktor prognostik dianalisis dengan menggunakan SPSS versi 22.0, lisensi online UGM.

Hasil Tiga puluh empat subyek diikutsertakan dalam penelitian ini. Sebelas subyek (32,4%) mengalami gagal terapi virologi dengan *adherence* (>95%) 94,1%. Tidak terdapat hubungan yang signifikan antara usia, nilai CD4⁺, stadium klinis WHO, imunodefisiensi, regimen nevirapin, saat mendapat terapi ARV dan *adherence*.

Kesimpulan Proporsi gagal terapi virologi di Yogyakarta 32,4%. Usia, nilai CD4⁺, stadium klinis WHO, imunodefisiensi, regimen nevirapin, saat mendapat terapi ARV dan *adherence* bukan faktor prognostik gagal terapi virologi pada pasien HIV anak di Yogyakarta. Evaluasi VL rutin perlu rutin dilakukan disertai pengukuran *adherence* dengan metode yang adekuat.

Kata kunci : *Viral Load*, HIV, anak, terapi antiretroviral

Abstract

Background In line increasing access to *Antiretroviral Therapy* (ART) in children with Human Immunodeficiency Virus (HIV) infection, treatment failure become a new problem.. *World Health Organization* (WHO) recommended *Viral Load* (VL) examination threshold 1000 *copies*RNA/ml to evaluate ART treatment . Proportion of treatment failure in Yogyakarta no determined include prognostic factors of treatment failure.

Objective To know whether age, baseline CD4+, WHO stadium, nevirapin regimen, when initiate ART and adherence are prognostic factors of treatment failure and proportion of treatment failure in Yogyakarta.

Method Cross sectional study was conducted in March to November 2017 in hospital that initiate ART. HIV infected children age less than 18 years, already treated with ART for minimum 6 months, and signed informed consent were included in this study. Age, sex, resident, nutritional status, time of ART prior to enrollment, WHO stadium, immunodeficiency status based on CD4⁺ threshold, and ART regimen obtained from medical record. Adherence and outcome treatment failure obtained when clinic visited. Characteristic data dan prognostic factor analysed using SPSS 22.0 version online UGM licence.

Result Thirty four subjects included in this study. Eleven subjects (32,4%) experienced with treatment failure with adherence (>95%) 94,1%. No significant relationship between age, baseline CD4⁺, WHO stadium, immunodeficiency status, nevirapin regimen when ART initiated and adherence.

Conclusion Proportion of treatment failure in Yogyakarta 32,4%. Age, baseline CD4+, WHO stadium, immunodeficiency status, nevirapin regimen, when ART initiated and adherence not as prognostic factors of HIV children in Yogyakarta. VL evaluation and adherence measured with adequate method should routinely done.

Keywords : *Viral Load*, HIV, children, antiretroviral therapy