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HUBUNGAN INDEKS MASSA TUBUH TERHADAP MARKER CLUSTER OF DIFFERENTIATION 4 PADA FASE PENGOBATAN PASIEN HUMAN IMMUNODEFICIENCY VIRUS DI RSUD DR. CHASBULLAH ABDULMADJID KOTA BEKASI

RINCIAN HALAMAN (xvii+76 halaman, 9 tabel, 2 gambar, 6 lampiran)

ABSTRAK

Pendahuluan

HIV masih menjadi masalah kesehatan global dengan angka morbiditas yang tinggi. Virus ini menyerang limfosit T CD4 yang berperan sentral dalam sistem imun, sehingga kadar CD4 digunakan sebagai penanda kondisi imunologis dan keberhasilan terapi antiretroviral (ARV). IMT diduga berhubungan dengan pemulihan kadar CD4 selama terapi ARV, di mana pasien dengan IMT rendah cenderung memiliki kondisi imun yang lebih buruk.

Tujuan

Menganalisis hubungan IMT terhadap kadar CD4 pada pasien HIV yang menjalani terapi ARV di RSUD dr. Chasbullah Abdulmadjid Kota Bekasi.

Metode

Studi observasional analitik dengan desain potong lintang berbasis data sekunder rekam medis periode 2025-2026. Sebanyak 55 pasien HIV yang menjalani ARV minimal 6 bulan diikutsertakan menggunakan total sampling. Uji normalitas dilakukan dengan uji Kolmogorov-Smirnov dan analisis hubungan menggunakan uji korelasi Pearson ($\alpha = 0,05$).

Hasil

Dari 55 subjek, 92,7% berjenis kelamin laki-laki, dengan distribusi usia dewasa muda (49,1%) dan dewasa madya (50,9%). Sebagian besar berada pada fase pemeliharaan ARV lebih dari 12 bulan (81,8%). Rerata IMT adalah 22,98 ± 4,37 kg/m² (mendekati batas atas kategori normal) dan rerata CD4 adalah 352,62 ± 165,09 sel/mm³. Kedua variabel terdistribusi normal (IMT: $p = 0,050$; CD4: $p = 0,200$). Uji korelasi Pearson menunjukkan $r = 0,275$ dengan $p = 0,042$, menandakan hubungan positif bermakna dengan kekuatan korelasi lemah.

Kesimpulan

Terdapat hubungan bermakna antara IMT dan kadar CD4 pada pasien HIV yang menjalani ARV di RSUD dr. Chasbullah Abdulmadjid Kota Bekasi ($r = 0,275$; $p = 0,042$), bersifat positif dengan kekuatan lemah.

Daftar Pustaka: 53 (2016-2026)

Kata Kunci *CD4, Human Immunodeficiency Virus, Indeks Massa Tubuh, Status Imunologis, Terapi Antiretroviral*

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Undergraduate Thesis, June 2026

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ASSOCIATION BETWEEN BODY MASS INDEX AND *CLUSTER OF DIFFERENTIATION 4* MARKER IN THE TREATMENT PHASE OF *HUMAN IMMUNODEFICIENCY VIRUS* PATIENTS AT DR. CHASBULLAH ABDULMADJID REGIONAL GENERAL HOSPITAL, BEKASI CITY

PAGE DETAIL (xvii+76 pages, 9 tables, 2 figures, 6 appendices)

ABSTRACT

Background
HIV remains a global health concern with high morbidity. The virus targets CD4 T lymphocytes, central to the immune system; thus, CD4 count serves as a marker of immunological status and antiretroviral therapy (ART) outcomes. BMI is presumed to be associated with CD4 recovery during ART, with low BMI patients tending to have poorer immune conditions.

Objective
To analyze the association between BMI and CD4 count in HIV patients undergoing ART at Dr. Chasbullah Abdulmadjid Regional General Hospital, Bekasi City.

Methods
An analytic observational cross-sectional study was conducted using secondary medical record data from 2025-2026. A total of 55 HIV patients on ART for at least 6 months were enrolled by total sampling. Normality was assessed by Kolmogorov-Smirnov test and correlation by Pearson's test ($\alpha = 0.05$).

Results
Of 55 subjects, 92.7% were male, with nearly equal proportions of young adults (49.1%) and middle-aged adults (50.9%). Most were in the ART maintenance phase beyond 12 months (81.8%). Mean BMI was 22.98 ± 4.37 kg/m² (approaching the upper limit of the normal category) and mean CD4 was 352.62 ± 165.09 cells/mm³. Both variables were normally distributed (BMI: $p = 0.050$; CD4: $p = 0.200$). Pearson's test revealed $r = 0.275$ with $p = 0.042$, indicating a significant positive association with weak correlation strength.

Conclusion
There is a statistically significant positive association between BMI and CD4 count in HIV patients undergoing ART at Dr. Chasbullah Abdulmadjid Regional General Hospital, Bekasi City ($r = 0.275$; $p = 0.042$), with weak correlation strength.

References: 53 (2016-2026)
Keywords *Antiretroviral Therapy, Body Mass Index, CD4, Human Immunodeficiency Virus, Immunological Status.*