

## INTISARI

**Latar belakang** : *Human Immunodeficiency Virus* (HIV) adalah virus yang menyerang sistem kekebalan tubuh manusia dengan menginfeksi limfosit CD4+. Turunnya kadar CD4+ persisten mengakibatkan pasien HIV rentan terhadap infeksi oportunistik dan turunnya fungsi kognitif. Hal tersebut menjadi faktor resiko timbulnya depresi pada ODHA (Orang Dengan HIV/AIDS). Depresi semakin meningkatkan resiko penurunan kadar CD4+ pada ODHA.

**Tujuan** : Mengetahui hubungan kadar CD4+ dengan depresi pada ODHA di Klinik Edelweis RSUP Dr. Sardjito Yogyakarta.

**Metode** : Menggunakan metode analitik observasional dengan pendekatan studi *cross-sectional*. Kadar CD4+ diperoleh dari hasil laboratorium pada rekam medis pasien dan depresi diukur menggunakan *Beck Depression Inventory* (BDI). Skor dari pengukuran antarvariabel diuji menggunakan uji komparatif *Chi square* dan uji korelatif *Spearman's Rank*,  $p$  dinyatakan bermakna jika bernilai  $<0,05$ .

**Hasil** : Terdapat hubungan bermakna antara kadar CD4+ dengan depresi ( $p=0,03$ ;  $p<0,05$ ). *Odds Ratio* (OR) sebesar 0,36 (95% CI= 0,14-0,94). Didapatkan nilai koefisien korelasi ( $\rho$ ) pada kadar CD4+ sebesar -0,19 ( $p=0,04$ ;  $p<0,05$ ).

**Kesimpulan** : Terdapat hubungan yang bermakna antara kadar CD4+ dengan depresi pada ODHA. Arah hubungan negatif yaitu semakin tinggi kadar CD4+ maka depresi cenderung menurun dan sebaliknya. ODHA dengan kadar CD4+  $<200$  sel/ $\mu$ L memiliki kecenderungan untuk depresi 2,78 kali lebih besar dibandingkan ODHA dengan kadar CD4+  $\geq 200$  sel/ $\mu$ L.

**Kata kunci** : kadar CD4+, depresi, HIV/AIDS

## **ABSTRACT**

**Background** : Human Immunodeficiency Virus (HIV) is a virus that attacks human immune system by infecting CD4+ lymphocytes. Persistent decline in CD4+ levels makes HIV patients vulnerable to opportunistic infections and decline in cognitive function. Those were risk factors in onset of depression of the PLWHA (People Living With HIV/AIDS). Depression increases the risk of decline in CD4+ levels in PLWHA

**Objective** : Determine the relationship between levels of CD4+ and depression in PLWHA in Edelweiss Clinic of Dr. Sardjito General Hospital.

**Methods** : Using the observational analytic method with cross-sectional study approach. Levels of CD4+ obtained from the laboratory test of patient's medical record and depression were measured using Beck Depression Inventory (BDI). Scores of measurements between variables were tested using Chi-square comparative test and Spearman's Rank correlative test, declared significant if the p-value <0.05.

**Results** : There was a significant relationship between levels of CD4+ and depression ( $p = 0.03$ ;  $p < 0.05$ ). Odds Ratio (OR) was 0.36 (95% CI = 0.14 to 0.94) and correlation coefficient ( $\rho$ ) on CD4+ levels was -0.19 ( $p = 0.04$ ;  $p < 0.05$ ).

**Conclusion** : There was a significant correlation between the levels of CD4+ and depression in PLWHA. The relationship has negative direction that the higher levels of CD4+ then the depression tends to decrease and vice versa. PLWHA with CD4+ levels <200 cells/mL had a tendency to depression 2.78 times more likely than PLWHA with CD4+ levels  $\geq 200$  cells/mL.

**Keywords** : levels of CD4+, depression, HIV/AIDS