Prevalence of HIV/AIDS Immunological Failure among Sex Workers in Yayasan Kerthi Praja, Bali

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Background/Objective

Human Immunodeficiency Virus and Acquired Immunodeficiency Syndrome (HIV/AIDS) has caught global attention since it was first reported. With advancing technology, study of HIV/AIDS and it's associated risk factor has progressed significantly. However, until currently, very limited study has been conducted to investigate HIV/AIDS immunological prevalence among sex workers. Immunological assessment through CD4 count baseline is used to assess response to anti-retroviral therapy (ART). In this study, we aim to investigate prevalence of HIV/AIDS immunological failure (IF) among sex workers in Yayasan Kerthi Praja (YKP), Bali.

Method

A cross-sectional retrospective study was conducted among all care support and treatment (CST) clients on ART from 2002 to 2013 in YKP. A total of 549 clients were on ART during the study period, but only 205 clients were eligible for analysis. Data were collected by extracting medical record and were analyzed using computer software program to determine the prevalence of IF among sex workers in YKP.

Result

A total of 205 clients was analyzed. In this study, 39% of clients were females with the average age of 30.84±7.99. Clients occupation was divided between sex worker (15.10%) and non-sex worker (84.90%). From data analysis, it was found that IF prevalence was higher among sex workers (16.10%) compared to non-sex workers (13.20%) and opportunistic infection prevalence before ART among sex workers was 16.10% (p=0.14). IF prevalence was higher among sex workers with CD4 count baseline ≤100 cell/mm3 (20.00%) compared to sex workers with CD4 count baseline >100 cell/mm3 (14.30%).

Conclusion

IF occurrence among clients who works as sex worker is higher compared to clients who does not work as sex worker. High IF prevalence among sex worker with CD4 count baseline ≤100 cell/mm3 indicates the importance of early detection of HIV and ART adherence education among sex worker prior to ART initiation.