# SEX AND PARTNER STATUS AS PREDICTORS OF LOSS TO FOLLOW UP AMONG HIV/AIDS PATIENTS ON ARV TREATMENT IN BADUNG DISTRICT HOSPITAL, BALI 2006-2014 

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## Background

Cumulative rates of loss to follow up (LTFU) among HIV positive patients receiving antiretroviral therapy (ART) in Bali are reported to be $18 \%$. Predictors of LTFU have been examined among patients attending private clinics in Bali but not among patients attending public hospitals.


#### Abstract

\section*{Method}

This was a longitudinal retrospective analysis of secondary data extracted from medical records of HIV patients at Badung Hospital, Bali, between 2006 and 2014 Loss to follow up defined as missing a scheduled clinic visit by more than 3 months. Patients were included in the analysis if they had at least two recorded visits. Cox proportional hazard model was used to examine potential predictors of LTFU including gender, education, marital status, having supervisors to observe taking of medication and range of factors measured at the time of starting ART including weight, hemoglobin, opportunistic infections, and TB (tuberculosis) status.


## Result

Eighty eight ( $15.3 \%$ ) of the 575 patients started on ART were lost to follow up during the 8 year observation period; an incidence rate of 11.6 per 100 person years. Half of the 88 patients were lost to follow up in the first three months of treatment; In multivariate analysis, women were found to be more likely to be lost to follow-up than men ( $p$ 0.016); those without a partner had a 3.04 times greater risk of loss to follow-up ( $\mathrm{p}=0.001$ ) than those who did.

Table 1 Baseline Characteristics and Multivariate Analysis of PLWH

| Characteristic | n (\%) | $\begin{aligned} & \text { Adjusted HR } \\ & \text { (95\% CI) } \end{aligned}$ | $p$ value |
| :---: | :---: | :---: | :---: |
| Age (Median ; IQR) | 31(26-38) | - | - |
| Gender ( $\mathrm{n}=575$ ) |  |  |  |
| Women | 110 (19.1) | 1.95 (1.13-3.36) | 0.016 |
| Man | 465 (80.9) | 1.00 (ref) |  |
| Education ( $\mathrm{n}=575$ ) |  |  |  |
| High education | 490 (85.2) | - | - |
| Low education | 85 (14.8) | - | - |
| Employment ( $\mathrm{n}=575$ ) |  |  |  |
| No have | 155 (27) | - | - |
| Have | 420 (73) | - | - |
| Marital status ( $\mathrm{n}=507$ ) |  |  |  |
| Married | 165 (28.7) | 1.00(ref) |  |
| Single | 342 (59.5) | 3.04 (1.69-5.47) | 0.001 |
| ARV buddy support ( $\mathrm{n}=575$ ) |  |  |  |
| Yes | 241 (42) | - | - |
| No | 334(58) | - | - |
| Type of care ( $\mathrm{n}=575$ ) |  |  |  |
| BMC | 234 (40.7) | - | - |
| Badung hospital | 341 (59.3) | - | - |
| Weight (Median ; IQR) | 55 (47-61) | - | - |
| Infection opportunistic |  |  |  |
| No | 309(53.7) | - | - |
| Yes | 266(46.3) | - | - |
| Hb (Median ; IQR) | 13,7(12-15.1) | - | - |
| CD4 (Median ; IQR) | 128(26-296.5) | - |  |
| Cinical stage ( $\mathrm{n}=575$ ) |  |  |  |
| Stage 1\&2 | 307 (53.4) | - | - |
| Stage 1\&2 | 268 (46.6) | - | - |
| TB Status ( $\mathrm{n}=575$ ) |  |  |  |
| TB Positive | 39 (6.8) | - | - |
| Suspect TB, no have TB | 536 (93.2) | - | - |



Our findings suggest that women and those without a partner may be at greater risk of loss to follow up and may benefit from attention to maintain retention in treatment, particularly during the first three months of ART. Further research to develop effective strategies to improve retention among these groups in Indonesia would be of value.

## Acknowledgment

Thank you for Badung Hospital and Bali Medica Clinic staff, John Kaldor and Joanne Micallef from the Kirby Institute, University of New South Wales, Sydney, Australia who have support this study. This research project has been funded under the Australian Aid, Regional HIV Capacity Building Program. The views expressed in this publication do not necessarily represent the position of the Australian Government.

