

DISEASE AND TREATMENT OUTCOMES AMONG HIV-POSITIVE PEOPLE WHO INJECT DRUGS IN THE AUSTRALIAN HIV OBSERVATIONAL DATABASE

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Background: We investigated disease and treatment outcomes of people who inject drugs (PWID) within the Australian HIV Observational Database (AHOD), an observational cohort study of people living with HIV which has been ongoing since 1999.

Methods: Mode of HIV-exposure was categorised as: injecting drug use only (IDU), IDU + men who have sex with men (IDU+MSM), and “other”. Cox regression methods were used to assess time to all-cause mortality, first cART regimen switch, first viral suppression (VS) and virological failure (VF) after suppression adjusted for demographics, behavioural, immunological and virological factors.

Results: Of 2,728 eligible participants (IDU: 71, IDU+MSM: 82, “other”: 2575), the majority initiated cART before 2007 (IDU: 66%, IDU+MSM: 68% and “other”: 58%). In multivariable analyses, mode of HIV exposure was significantly associated with both rate of VS (p-overall=0.042), and VF after suppression (p-overall=0.023). Compared to “other”, IDU+MSM was significantly associated with a slower rate of VS (aHR 0.74, 95% CI 0.56-0.99, p=0.039). The IDU category also demonstrated a slower, albeit non-significant, rate of VS (aHR 0.77, 95% CI 0.56-1.05, p=0.101). Compared with the “other” category, IDU+MSM was significantly associated with increased risk of VF after achieving suppression (aHR 1.54, 95% CI 1.04-2.29, p=0.033), while IDU was non-significantly associated with VF (aHR 1.51, 95% CI 0.97-2.34, p=0.067). No significant association with mode of HIV-exposure were observed for time to all-cause mortality and cART regimen switch.

Conclusion: IDU+MSM required a longer time to achieve virological suppression and had a higher risk of virological failure compared to “other” non-IDU exposure categories. The IDU only group showed similar, but non-significant trends. Strategies should be developed to improve clinical outcomes among HIV-positive PWID.

Disclosure of Interest Statement: The Australian HIV Observational Database is funded as part of the Asia Pacific HIV Observational Database, a program of amfAR, The Foundation for AIDS Research; and is supported in part by grant no. U01AI069907 from the U.S. National Institutes of Health's National Institute of Allergy and Infectious Diseases, the Eunice Kennedy Shriver National Institute of Child Health and Human Development, the National Cancer Institute, the National Institute of Mental Health, and the National Institute on Drug Abuse, and by unconditional grants from Merck Sharp & Dohme; Gilead Sciences; Bristol-Myers Squibb; Boehringer Ingelheim; Janssen-Cilag; ViiV Healthcare.

The Kirby Institute is funded by the Australian Government Department of Health, and is affiliated with the Faculty of Medicine, UNSW Sydney. The content is solely the responsibility of the authors and the views expressed in this publication do not necessarily represent the position of the Australian Government or the official views of the U.S. National Institutes of Health or other funders.

Lisa Maher is supported by the award of a National Health and Medical Research (NHMRC) Council Research Fellowship.