

Epidemiology (article analyses)

[Health & Medicine](#)



Impact of Non-HIV and HIV Risk Factors on Survival in HIV-Infected Patients on HAART: A Population-Based Nationwide Cohort Study Summary This is a nationwide study that was carried out among HIV patients on HAART in Denmark to determine the effect of three risk factors on mortality among the patients. A cohort study design was used. The researchers identified a comparison cohort from the general population with which to compare the treatment group. The three risk factors identified were as follows; HIV-related risk factors, comorbidities, and drug and alcohol abuse. HIV risk factors were defined by viral load, CD4 cell count and/or AIDS related infections while comorbidity was defined based on the Charlson comorbidity index. The aims of the study were to estimate the impact of these risk factors among HIV-infected population as compared to the general population and to determine the relative risk death among successfully treated HIV-infected patients without such risk factors (Obe et al, 2011). The sampling frame was based on all Danish HIV-infected patients who started HAART in the period 1 January 1998–1 July 2009 while the comparison cohort consisted of individuals matched on date of birth and gender. Only patients who had been on HAART for a period of one year were included in the study.

A major finding of the study was that probability of survival from age 25 to age 65 was substantially lower in HIV patients confidence interval compared to the comparison cohort. There was a significant increase in mortality among HIV-infected patients aged 25-65 as compared to the comparison cohort. However, among patients not exposed to the three risk factors under consideration, mortality was almost equal to that of the general population comparison cohort for the age group 45–65 but doubled for the age group <https://assignbuster.com/epidemiology-article-analyses/>

25–45. The probability of survival at 65 years of age was 0.48 among HIV-infected patients and 0.88 in HIV-free group. However, for HIV patients with no risk factors, the probability of survival at age 65 was 0.86. Generally, it was observed that risk-taking behavior does not automatically result in increased mortality among HIV-patients without other risk factors.

The study improves onto the general thought that proper management of HIV can substantively reduce mortality rates among HIV-infected persons. However, comorbidity as well as other risk factors as well as alcohol/drug abuse can increase mortality in HIV-infected patients on HAART. In conclusion, although HIV-infected patients on HAART still have higher mortality rates, the presence of other risk-factors, which can be identified early, further inflate this risk. Consequently, management of HIV among infected individuals should focus on early diagnosis, timely and effective HAART, and treatment of comorbidity and alcohol/drug abuse.

Reference

Obel N, Omland LH, Kronborg G, Larsen CS, Pedersen C, et al. (2011). Impact of Non-HIV and HIV Risk Factors on Survival in HIV-Infected Patients on HAART: A Population-Based Nationwide Cohort Study. PLoS ONE 6(7)