MORTALITY TRENDS IN PEOPLE WHO INJECT DRUGS AND OTHER PEOPLE LIVING WITH HIV AND HCV IN THE DAA-ERA: AN INTERNATIONAL COMPARISON (Inchehc, 2010-2019).

Authors:

Requena MB¹, Protopopescu C², Sacks-Davis R³,4, van Santen DK³,5, Stewart A³,4, van der Valk M⁶,7, Rauch A², Berenguer J³,10, Wittkop L¹¹, Klein M¹², Hellard M³,4,13, Carrieri P², Lacombe K¹,14, InCHEHC Study Group

¹Sorbonne Université, INSERM, Pierre Louis Institute of Epidemiology and Public Health, iPLESP, Paris, France, ²Aix Marseille Univ, INSERM, IRD, SESSTIM, Sciences Economiques & Sociales de la Santé & Traitement de l'Information Médicale, ISSPAM, Marseille, France, ³Burnet Institute, Disease Elimination, Melbourne, Australia, ⁴Monash University, School of Public Health and Preventive Medicine, Melbourne, Australia⁵Public Health Service of Amsterdam, Amsterdam, The Netherlands, ⁶Amsterdam University Medical Centers, Amsterdam, The Netherlands, ⁷Stichting HIV Monitoring, Amsterdam, The Netherlands, ⁸University Hospital Bern, Bern, Switzerland, ⁹Centro de Investigación Biomédica en Red de Enfermedades Infecciosas, CIBERINFEC, Madrid, Spain, ¹⁰Infectious Diseases. Hospital General Universitario Gregorio Marañón, IsSGM, Madrid, Spain, ¹¹University of Bordeaux, Bordeaux, France, ¹²McGill University Health Center, Montreal, Canada, ¹³Alfred Hospital and Monash University, Department of Infectious Diseases, Melbourne, Australia, ¹⁴AP-HP, Department of Infectious Diseases, Saint-Antoine Hospital, Paris, France

Background:

Historically, among people living with HIV and hepatitis C virus (HCV), people who inject drugs have experienced higher mortality rates, often due to delayed screening and/or access to care. The introduction of direct-acting antivirals (DAA) in 2014 has improved morbidity, but mortality rates in the post-DAA era remain largely unknown. Using the International Collaboration on Hepatitis C Elimination in HIV Cohorts (InCHEHC), we aimed to compare pre-and post-DAA all-cause mortality trends in key populations living with HIV/HCV.

Methods:

We included participants living with HIV/HCV followed-up between 2010-2019 in Canada, France, the Netherlands, Spain, and Switzerland. We used proportional hazards Cox regression models to compare all-cause death risk in men who have sex with men (MSM), people who inject drugs, and other people, adjusting for sex, age, and DAA-era (before/after 2015).

Results:

Among 10 998 participants living with HIV/HCV, 76% were male, and 46% were people who inject drugs. At first visit, median age was 46 years (interquartile range [IQR]=40;51), and median CD4 T-cell count was 490 cells/mm3 (IQR=327;689). Between 2010-2019, 1322 participants died, median follow-up was 7.2 years (IQR=3.7;10.0), and mortality rate was 1.81/100 person-years [95%CI=1.72;1.91]. Compared to MSM, men and women who inject drugs had a similarly higher death risk across all countries (Hazard-ratio(HR)=1.60 [95%CI=1.03-2.50] to HR=5.58 [95%CI=3.78-8.25]). Follow-up in the DAA era was associated with a decrease in mortality in MSM in all countries except Canada and Switzerland, higher death risk in people who inject drugs in Canada (HR=1.39 [95%CI=0.95-2.04]), and no change in death risk among people who inject drugs in other countries.

Conclusion:

Despite DAA availability and high uptake of DAA in all countries, all-cause mortality has not declined in people who inject drugs in post-DAA era, with similar trends in men and women. Substance use care and HCV treatment services need to be integrated to improve these trends.

Disclosure of Interest Statement:

KL reports support for boards, educational activities, and travel grants from Gilead, MSD, Janssen, Abbvie, and ViiV Healthcare outside the submitted work.