

RESTARTING PRE-EXPOSURE PROPHYLAXIS (PrEP) FOR HIV: A SYSTEMATIC REVIEW AND META-ANALYSIS

Authors:

Soh QR^{1,3*}, Kiggundu R^{1,2*}, Tieosapjaroen W^{1,2}, Fairley CK^{1,2}, Tucker JD^{4,5}, Tang W⁵, Zhang L^{1,2,6†}, Ong JJ^{1,2,3,4†}

¹Melbourne Sexual Health Centre, Alfred Health, Melbourne, Australia, ²School of Translational Medicine, Faculty of Medicine, Nursing and Health Sciences, Monash University, Melbourne, Australia, ³University of Melbourne, Melbourne, Victoria, Australia, ⁴Faculty of Infectious and Tropical Diseases, London School of Hygiene and Tropical Medicine, London, United Kingdom, ⁵Institute for Global Health and Infectious Diseases, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA, ⁶Clinical Medical Research Center, Children's Hospital of Nanjing Medical University, Nanjing, Jiangsu Province, China

* Equal first co-authors

† Contribute to supervision equally

Background:

High coverage of pre-exposure prophylaxis (PrEP) will reduce HIV transmission and help end the HIV/AIDS pandemic. However, PrEP users face challenges, including long-term adherence.

Methods:

We systematically searched CINAHL, Embase, Emcare, Global Health, Medline, Scopus, and PsychINFO for peer-reviewed studies, with no date restrictions. We extracted data on the proportion of people who stopped and then restarted PrEP, reasons for restarting and strategies to support people restarting PrEP. We used a random-effects meta-analysis to pool estimates of restarting.

Results:

Of 988 publications, 30 unique publications were included: 27 reported the proportion restarting PrEP, and of these, 7 also reported reasons for restarting PrEP, while 3 publications reported only on the reasons for restarting PrEP. For the meta-analysis, most studies were from high-income countries (17/27, 63%) or the United States of America (USA) (15/27, 56%). Overall, 23.8% (95% CI: 15.9-32.7, $I^2=99.8\%$, $N=85,683$) of people who stopped PrEP restarted PrEP. There was a lower proportion of restarting in studies from middle-income countries compared to high-income countries (adjusted odds ratio (AOR) 0.6, 95% CI: 0.50 - 0.73, P -value <0.001). There was higher restarting in studies from Africa compared to the USA (AOR 1.55, 95% CI: 1.30 – 1.86), heterosexual populations compared to men who have sex with men or transgender women (AOR 1.50, 95% CI: 1.25 – 1.81, P -value <0.001), and in studies defining restarting as those who had stopped PrEP for >1 month compared to those who stopped <1 month (AOR 1.20, 95% CI: 1.06 – 1.36, P -value <0.001). Reasons for restarting PrEP included perceived higher risk for HIV acquisition and removal of barriers to access PrEP.

Conclusion:

The proportion of people restarting PrEP is generally low, with substantial variation across countries and populations. We need to understand the motivations and contextual factors influencing restarting PrEP and the support systems to enable restarting PrEP.

Disclosure of Interest Statement:

None