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Session: **EPH4**: Sunday May 3 – 11:00:12:30 – HIV PrEP

Track: Epidemiology and Public Health
Subject: HIV in Priority Populations and Global Health Issues: Epidemiology and Public Health Aspects
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Abstract

**Background:** Reducing HIV transmission using pre-exposure prophylaxis (PrEP) requires targeting individuals at high acquisition risk. This group includes men who have sex with men (MSM) with a history of non-occupational post-exposure prophylaxis (PEP). This study aims to characterize longitudinal trends in uptake and determinants of PrEP use among PEP users in Montréal.

**Methods:** Eligible attendees at Clinique médicale l’Actuel were recruited prospectively starting in October 2000 for PEP and 2013 for PrEP. Linking these cohorts, we characterized the PEP-to-PrEP cascade. Determinants of PrEP uptake after PEP use were examined using Cox proportional-hazard models. Kaplan-Meier curves were used to assess whether PrEP persistence differed by PEP use history.

**Results:** Of 2,845 MSM participants who initially consulted for PEP at l’Actuel from 2013 to August 2019, 30% (N=866) had two or more PEP consultations during follow-up. Consultations for PrEP subsequently occurred among 36% (N=1,027) of PEP users, of which 98% were prescribed PrEP, and 14% sought PEP again afterwards. Among the 2,718 participants who consulted for PrEP during the same period, 46% reported previous PEP use. Among PEP users, those who returned for their follow-up consultation (HR=1.6, 95% confidence interval (CI): 1.3-2.0), those aged 25 years or more (HR=1.4; CI: 1.1-1.6), had been prescribed PEP ≥2 times (HR=1.8; CI: 1.5-2.1), and reported lifetime STI history (HR=1.2; CI: 1.0-1.4) were more likely to consult for PrEP. There was no difference in PrEP persistence between PEP-to-PrEP and PrEP only participants.

**Conclusion:** Understanding PEP-to-PrEP linkages could help optimize PrEP delivery. Among PEP users, those with greater risk profiles were more likely to subsequently seek PrEP. However, a notable proportion of PEP-to-PrEP users sought PEP again after PrEP discontinuation. Interventions that improve PrEP persistence should be prioritized among MSM with a PEP history.