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Pre-exposure prophylaxis awareness in individuals accessing a non-occupational post-exposure prophylaxis (NPEP) program

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Introduction: Biomedical prevention strategies are an important aspect of combination prevention interventions for HIV infection. Programmes targeting populations at highest HIV risk are likely to be cost-effective. Individuals who require post-exposure prophylaxis (PrEP) have been shown to be at high risk for subsequent HIV seroconversion, yet their knowledge of alternate prevention strategies is unclear. We undertook to assess overall awareness of PrEP amongst individuals accessing an NPEP program in Vancouver, Canada.

Methods: Individuals accessing an NPEP pilot program offered at five sites (four community-based and via an emergency department of a tertiary care hospital) were sequentially recruited to complete a self-administered HIV knowledge questionnaire between July 2012 and March 2014. Awareness of PrEP was initially dichotomized as a yes/no response, and for individuals reporting PrEP awareness, level of self-reported knowledge was further categorized using a four-point Likert scale. Factors associated with PrEP awareness were determined using Fisher's exact test for categorical values and Wilcoxon rank sum for continuous variables ($p < 0.05$ considered significant).

Results: Overall 134 individuals were included, 95% male, 70% white, with median age of 36 years (interquartile range [IQR] 28–42). Baseline exposure for NPEP included condomless anal sex (CAS) in 84% of individuals (81% MSM) and IDU in 4% of individuals. Overall $n = 75$ (56%) individuals reported being aware of PrEP, with 47 (63%) reporting moderate/high levels of knowledge, and 51 (68%) were willing to use PrEP. PrEP awareness was positively associated with reporting MSM partners (89% vs. 72%, $p = 0.018$), being non-IDU (100% vs. 84%, $p = 0.004$) and reporting high levels of knowledge regarding role of HIV viral load in transmission (29% vs. 8%, $p < 0.001$). In a multivariate logistic model, high levels of knowledge regarding HIV viral load in transmission remained the only factor significantly associated with awareness of PrEP (aOR 3.34, 95% CI 1.12–9.90, $p = 0.042$).

Conclusions: MSM individuals accessing NPEP services report both high levels of HIV risk and PrEP awareness. Combination NPEP/PrEP programs should be considered for at-risk individuals.

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PrEP use in Lisbon while waiting for a policy

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Introduction: Pre-exposure prophylaxis (PrEP) with tenofovir/emtricitabine (TDF/FTC) has shown to be effective in preventing HIV among high-risk HIV-negative men who have sex with men (MSM). These overwhelming results of the trials put pressure on countries to make PrEP available. Few are already dispensing TDF/FTC as PrEP, Portugal is not one of those, although we remain one of the most affected populations in Western Europe. However, some individuals report the use of PrEP. We aimed to assess the frequency of PrEP use and the characteristics of users in an HIV-negative MSM cohort [1].

Materials and methods: Using data from the Lisbon Cohort of MSM, an open prospective cohort of 4243 adult HIV-negative MSM, we performed a case-cohort analysis; 28 (0.7%) reported to have used PrEP, and we randomly selected 112 controls. Proportions were compared using the chi-square or Fisher's exact test and medians using the Mann-Whitney.

Results: PrEP users had a significantly higher median number of visits in the cohort (3 vs. 1, $p < 0.001$), were more frequently born in countries other than Portugal (39.1% vs. 17.0%, $p = 0.025$), reported more frequently to know and to have used post-exposure prophylaxis (PEP) at baseline (34.6% vs. 52.3% did not know about PEP and 11.5% vs. 0.9% used PEP, $p = 0.014$). Always using condom with an occasional partner were more frequently reported among PrEP users (68% vs. 48%, $p = 0.091$). Groups were similar in terms of age, education and condom use with an HIV-positive steady partner and a STI diagnosis in the previous 12 months to baseline.

Conclusions: In the absence of an official policy some MSM are already using TDF/FTC in Portugal, particularly those born abroad and are concerned with their protection.

Reference

1. Meireles P, Lucas R, Carvalho C, Fuertes R, Brito J, Campos MJ, et al. Incident risk factors as predictors of HIV seroconversion in the Lisbon cohort of men who have sex with men: first results, 2011–2014. Euro Surveill. 2015;20:21091. doi: http://dx.doi.org/10.2807/1560-7917.ES2015.20.14.21091

ARV-BASED PREVENTION: TREATMENT AS PREVENTION (TASP)

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Increasing ART coverage and viral suppression are associated with a substantial decline in new HIV infections in the Austrian Tyrol

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Introduction: UNAIDS has set the goal that 90% of people living with HIV (PLHIV) are diagnosed, that 90% of all people diagnosed receive ART and 90% of all people receiving ART have viral suppression. Apart from being a challenging goal, there is controversy whether the 90–90–90 UNAIDS targets suffice to curb the HIV epidemic.

Methods: Patients from the University Hospital Innsbruck (UHI; covers $\geq$99% patients with ART) who had their last residency in the Austrian Tyrol. PLHIV estimates were obtained using back-calculation models [1] to estimate HIV incidence and the undiagnosed fraction from the patients referred to UHI. The proportion ever diagnosed and still living in Tyrol who ever initiated ART and the proportion of them who were virally suppressed ($\leq$200 copies/mL) were assessed for the years 2001 to 2015. Missing HIV RNA was considered as unsuppressed.

Results: PLHIV were estimated to be 271 in 2001 and 501 in 2015. The fraction undiagnosed decreased from 18% (95% CI 12–24%) in