Exploring the Relationship Between Comprehensive Sexual Health Prevention Measures and the Intention to Use Long-Acting PrEP among MSM

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INTRODUCTION

Men who have sex with men (MSM) have been encouraged to engage in health behaviours to prevent sexually transmitted infections (STIs) and adapt to evolving pathogens. Long-Acting Pre-Exposure Prophylaxis (LA-PrEP) is emerging as a promising solution to unmet HIV prevention needs among MSM.

Who are comprehensive protectors (CP)?
CP are men who have sex with men (MSM) actively implicated in sexual health prevention. They are vaccinated against HPV, M-pox, Hep-A, Hep-B, COVID-19 and Meningitis.

Goal of the study
This research aims to identify CPs among the MSM EU population, explore their composition and inspect if CP predicts the intention to take LA-PrEP via logistic regression.

SAMPLE'S DESCRIPTION

- **Data Source:** 14,321 MSM not living with HIV from the PROTECT survey.

- **Countries:** Pan-European sample (20 countries).

- **Variables:** sociodemographic, behavioural and psychosocial.

- **Analysis:**

  - Descriptive analysis comparing CP with other MSM

  - Univariable logistic regression using the intention to take LA-PrEP as an endpoint to assess if CP can predict the intention towards LA-PrEP.

  - Multivariable logistic regression using CP as an endpoint to assess which variables can predict the CP status.

DESCRIPTIVE RESULTS

The first part of the analysis describes the CP and non-CP groups according to 38 sociodemographic, behavioural and psychosocial variables included in the PROTECT survey.

The CP group is composed of 726 individuals and the non-CP group of 13,595. Several variables were found to be significantly different between those two groups highlighting their differences regarding sexual health prevention measures.

According to the descriptive statistical analysis, CPs tend to be highly educated, have a larger number of sexual partners, have more open relationships, test more for STIs/HIV, live in bigger cities and use Oral PrEP more frequently.
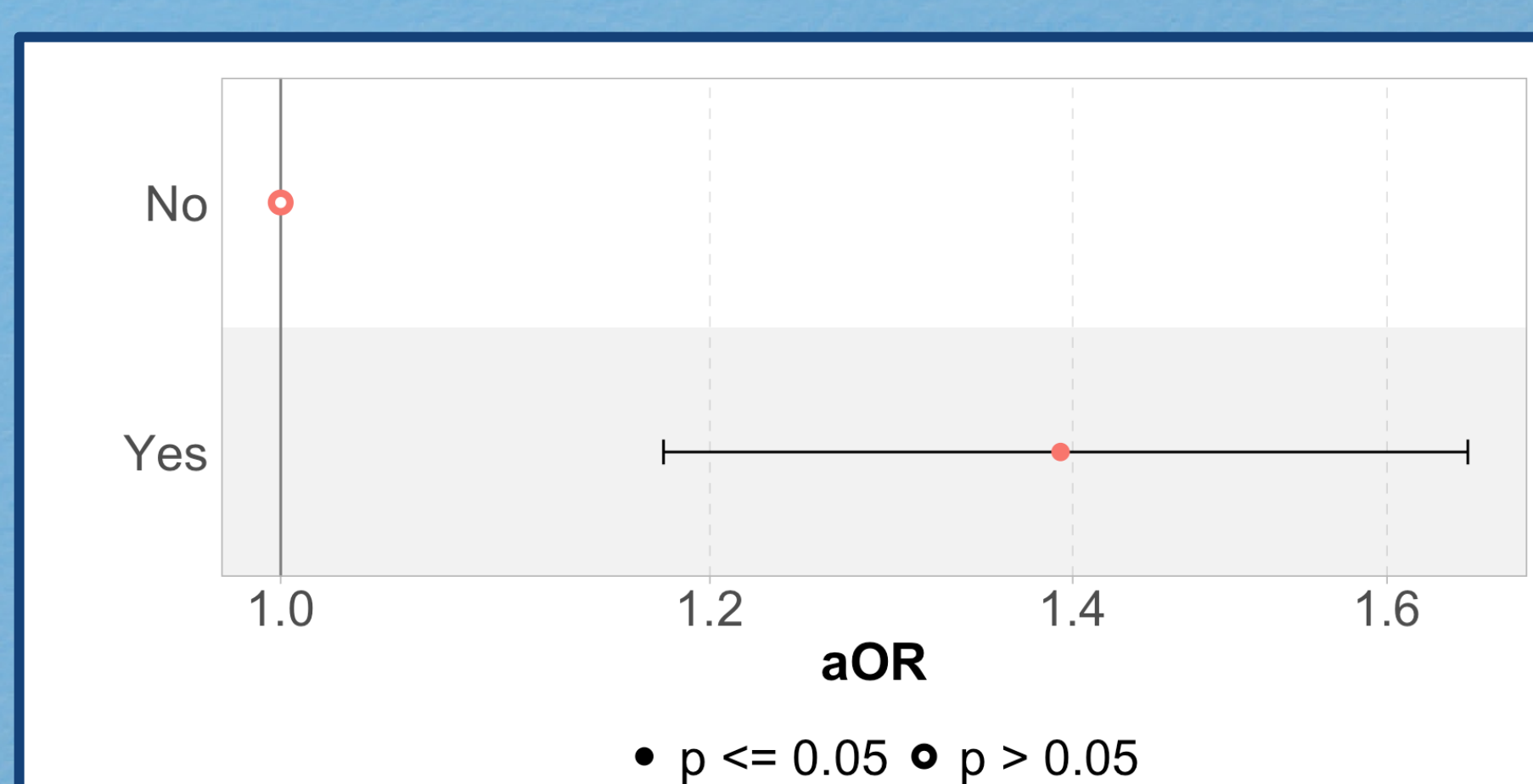
It's worth highlighting that CPs have a higher intention to take LA-PrEP, 74.5% versus 67.7% in non-CP (p-value > 0.05).

SCAN ME

For more information about the descriptive analysis, scan the QR code!

CAN CP PREDICT LA-PREP INTEREST?

In order to investigate if the CP status can be used as a positive related to the intention to take LA-PrEP a univariable logistic regression analysis was performed.

The results highlight CP as being a predictor of the intention to take Long-acting PrEP with an adjusted odds ratio of 1.39 and p-value > 0.05.
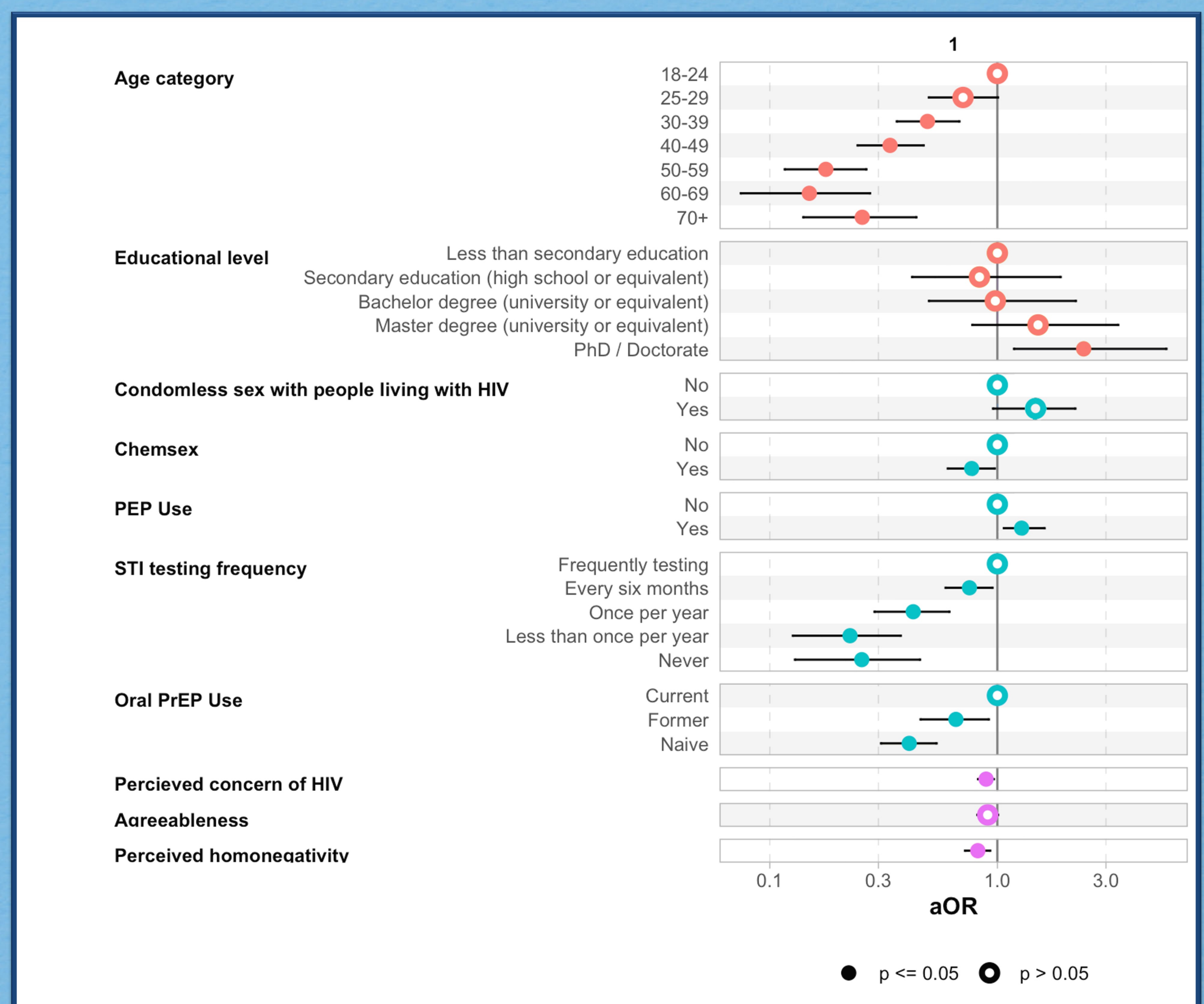

WHICH VARIABLES PREDICT THE CP STATUS?

This part of the study investigates the predictors of CP status through a multivariable logistic regression analysis of various sociodemographic (red dots), behavioural (blue), and psychosocial (pink) variables.

The forest plot presented here illustrates the adjusted odds ratios (aOR) for each category within the variables studied, highlighting significant predictors.

Key findings indicate that older age groups (30-70+), not testing frequently for STIs, perceived homonegativity and not being a current oral PrEP user are negative significant predictors of CP status.

Additionally, having a PhD and having used PEP in the past are positively related to the CP status.

CONCLUSIONS

Comprehensive protectors are typically well-educated, often reside in larger cities, tend to have more sexual partners and open relationships, frequently test for STIs/HIV, and use oral PrEP more regularly. They also exhibit lower levels of homonegativity, are generally younger, often retired, and worry more about HIV. Logistic regression analysis indicates that being a comprehensive protector significantly increases the likelihood of intent to use long-acting PrEP (LA-PrEP).

These findings highlight the proactive stance of comprehensive protectors on preventive health, evidenced by higher vaccination rates, frequent STI testing, and ultimately their higher interest in LA-PrEP. Comprehensive protectors could be a key target for LA-PrEP uptake when fully available in Europe.