

Factors contributing to pneumococcal, COVID-19 and influenza vaccine uptake among people living with HIV in Belgium

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Background

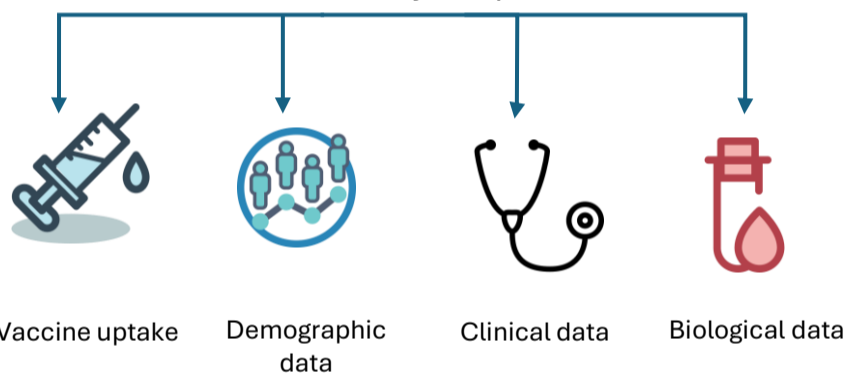
People living with HIV remain at risk of complications from vaccine-preventable diseases despite antiretroviral therapy. This study aims to investigate pneumococcal, COVID-19, and influenza vaccine coverage in people living with HIV in Belgium and identify factors associated with vaccine uptake.

Methods

Single center retrospective study



791 PWH with at least 2 years of follow up between 2017 and 2022 at Liège University Hospital



Vaccines that were studied :

- Pneumococcal conjugate vaccines (PCV13, PCV20)
- Pneumococcal polysaccharide vaccine (PPV23)
- Influenza vaccines
- COVID-19 Vaccines

Conclusion

While COVID-19 vaccine uptake is high, vaccination coverage for influenza and pneumococcal disease remains insufficient. Vaccine uptake was primarily associated with age, nadir CD4, and number of consultations. Vaccine adherence was particularly low among intravenous drug users. Those findings are consistent with other existing studies about vaccine coverage among PWH^{1,2}. Addressing the financial barriers to vaccination and implementing targeted educational campaigns and reminder systems could enhance vaccine uptake.

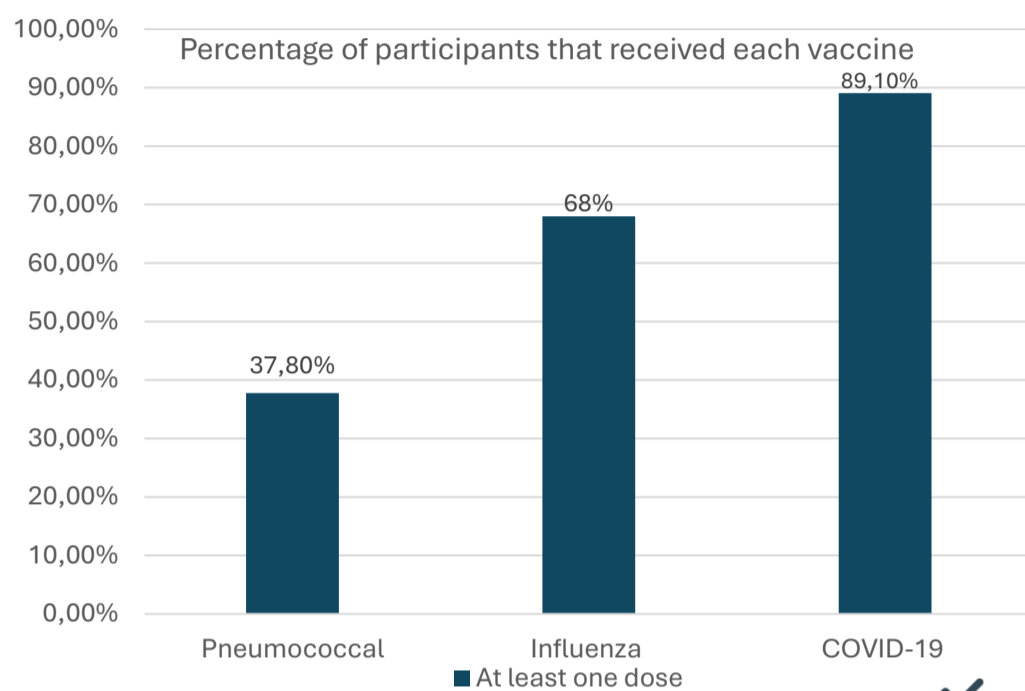
References

1, Tsachouridou O, Georgiou A, Naooum S, Vasdeki D, Papagianni M, Kotoreni G, et al. Factors associated with poor adherence to vaccination against hepatitis viruses, streptococcus pneumoniae and seasonal influenza in HIV-infected adults. Hum Vaccines Immunother. 1 févr 2019;15(2):295-304.
 2, Birk NK, Monday L, Singh T, Cherabuddi M, Hojeij M, Ho B, et al. Vaccine coverage and factors associated with vaccine adherence in persons with HIV at an urban infectious disease clinic. Hum Vaccines Immunother. 2 janv 2023;19(1):2204785.

ADDITIONAL KEY INFORMATION

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Results



Factors associated with higher vaccine uptake



Age (>50)
 OR 2,66 (1.2 - 6.4)
 p = 0,027

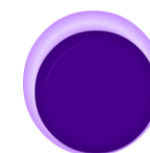


Number of consultations
 OR 1,2 (1.1 - 1.4)
 p = 0,0004

Factor associated with lower vaccine uptake



IV drug use
 OR 0,12 (0.028 - 0.59)
 p = 0,004



Nadir CD4
 OR 0,99 (0.998, 0.9999)
 p = 0,037

Factors that had no significant impact on vaccine uptake



BMI
 OR 1,0 (0,96 - 1,1)
 p = 0,46



Smoking status
 OR 1,19 (0,54 - 3,01)
 p = 0,682



Gender
 OR 1,1 (0,53 - 2,1)
 p = 0,88