

Healthcare providers' knowledge of, attitudes to, and practice of pre-exposure prophylaxis for HIV

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Background

- In 2012, the US Food and Drugs Administration approved the use of daily Truvada as pre-exposure prophylaxis (PrEP) based on its proven biological efficacy to reduce the sexual acquisition of HIV
- In the UK, PrEP is only widely available to MSM through the PROUD pilot study
- There is a need for new prevention options for gay and other men who have sex with men (MSM) in the UK- incidence continues to rise among this group who bear a disproportionate burden of HIV infection with 3250 new infections reported in 2012²
- In 2012, there were 110,000 MSM attendances (>18 years age) at a sexual health clinic; these clinics would be a suitable setting for delivery of PrEP
- Healthcare providers' knowledge of and attitudes to PrEP will be key to successful implementation of PrEP
- Few studies have examined healthcare providers' knowledge of and attitudes to PrEP³⁻⁶; none have been carried out in the UK
- We conducted a cross-sectional survey to explore the knowledge of, attitudes to, and practice of PrEP among healthcare providers in the UK

Methods

Design: Anonymous cross-sectional survey

Topics: Knowledge and practice of PrEP, attitudes to evidence base, prescribing and clinical management, patient safety, prioritization and commissioning and provision of PrEP, practice and attitudes to post-exposure prophylaxis (PEP)

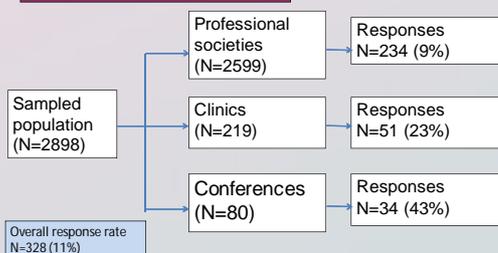
Participant recruitment: Between Sept-Nov 2013, healthcare providers currently working in the UK were recruited via email from the membership of professional societies (British HIV Association, British Association for Sexual Health and HIV, Society of Sexual Health Advisers), conferences and social media (SSHA Twitter). Sexual health nurses were recruited through their clinical lead at a sentinel network of sexual health clinics (GUMNet).

Data analysis: Univariate analysis using Chi squared test of proportions or two-tailed Fisher's exact test. Multi-item scales were checked for internal consistency using Cronbach's alpha, and each statement was tested for discriminatory power using Pearson's correlation coefficient.

Sample size: We estimated that 265 participants were required for the survey, assuming that 70% of participants would believe that PrEP should be available in the UK outside of a clinical trial allowing for a 10% level of precision, 5% level of significance and assuming a 30% response rate.

Results

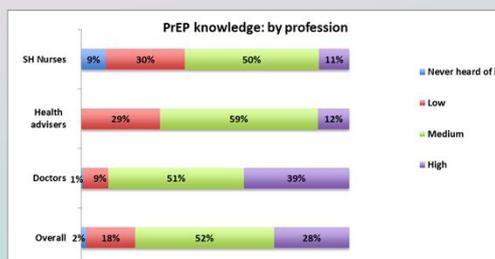
Response rate



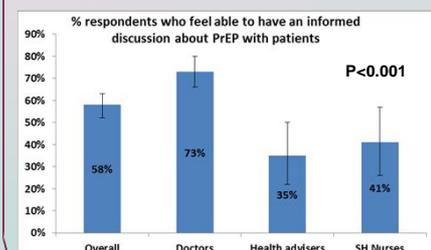
Respondent characteristics

| | Number (N=328) |
|--|----------------|
| Gender | |
| Male | 97 (36%) |
| Female | 175 (64%) |
| Missing | 56 |
| Age | |
| <39 | 94 (35%) |
| 40-49 | 94 (35%) |
| >50 | 84 (31%) |
| Missing | 56 |
| Profession | |
| Doctor | 160 (59%) |
| Health adviser | 51 (19%) |
| Nurse (Sexual Health) | 44 (16%) |
| Other | 17 (6%) |
| Missing | 56 |
| Time working in sexual health/HIV | |
| <5 year | 61 (23%) |
| 6-15 years | 123 (45%) |
| >15 years | 88 (32%) |
| Missing | 56 |
| Involved in PROUD trial | |
| Yes | 83 (27%) |
| No | 228 (73%) |
| Missing | 17 |

"How would you rate your knowledge of PrEP?"



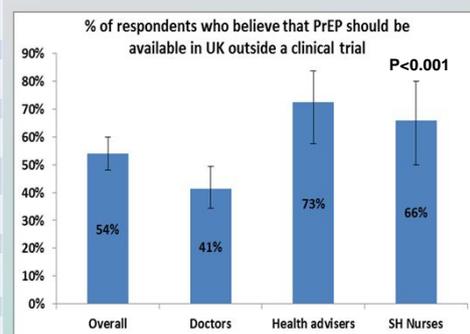
"Do you feel that you know enough about PrEP to have an informed discussion with your patients?"



Attitudes

| | Strongly agree/agree | Neither agree nor disagree | Strongly disagree/disagree |
|--|----------------------|----------------------------|----------------------------|
| EVIDENCE BASE | | | |
| "I am concerned that PrEP will not be an effective prevention tool in the real world" | 154/288 (53%) | 76/288 (26%) | 58/288 (20%) |
| PRESCRIBING & MONITORING | | | |
| "I would feel uncomfortable prescribing PrEP without UK specific guidance" | 226/283 (80%) | 26/283 (9%) | 32/283 (11%) |
| SAFETY | | | |
| "Truvada is a safe drug for use as PrEP" | 191/282 (67%) | 75/282 (27%) | 16/282 (6%) |
| "The use of PrEP will result in an increase in STIs" | 118/282 (42%) | 73/282 (26%) | 91/282 (32%) |
| "Use of Truvada as PrEP will have minimal impact on ARV drug resistance" | 67/283 (24%) | 134/283 (47%) | 82/283 (29%) |
| COMMISSIONING & FUNDING | | | |
| PrEP should be made available on the NHS to target groups at high risk of HIV" | 217/279 (78%) | 32/279 (11%) | 20/279 (7%) |
| PEP | | | |
| "PrEP would be a more effective prevention option than PEP for patients who use PEP regularly" | 152/273 (56%) | 72/273 (26%) | 49/272 (18%) |

"Based on currently available evidence, do you think that PrEP should be available in the UK outside of a clinical trial?"



Conclusion

The high level of support for PrEP availability outside a clinical trial suggests that health advisers and SH nurses see the need to add this new technology to existing risk reduction packages. However, support was lower amongst doctors who would be taking responsibility for prescribing and monitoring safety. The main concern was that PrEP would not be an effective prevention tool in a real-world setting in the UK. There were also substantial concerns about risk compensation and subsequent increase in STIs, and uncertainty about the impact of PrEP on drug resistance. These findings reinforce the value of the current pilot study PROUD, comparing PrEP to no-PrEP, in order to provide UK specific data on real-world effect and cost-effectiveness.

Acknowledgements

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References: 1. FDA 2012. FDA approves first drug for reducing the risk of sexually acquired HIV infection. <http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm312210.htm>. 2. Aghaizu, A. et al. HIV in the United Kingdom 2013 Report: data to end 2012. Public Health England, London. 3. Puro et al. Attitudes towards antiretroviral pre-exposure prophylaxis (PrEP) prescription among HIV specialists. BMC Infect Dis 2013; 13. 4. Tripathi A et al. Pre-exposure prophylaxis for HIV infection: healthcare providers' knowledge, perception and willingness to adopt future implementation in the southern US. South Med J 2012; 105(4): 199-206. 5. Mimiaga MJ et al. Suboptimal awareness and comprehension of published pre-exposure prophylaxis efficacy results among physicians in Massachusetts. AIDS Care 2013. 6. Tellalian D et al. Pre-exposure prophylaxis (PrEP) for HIV infection: Results of a survey of HIV healthcare providers evaluating their knowledge, attitudes and prescribing practices. AIDS Patient Care STDs 2013; 27(10): 553-9

Practice

"Have you been asked by any of your patients about PrEP in the past year?"

