The risk of HIV following refusal of an HIV test by MSM attending sexual health services in England

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Introduction

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HIV risk following refusal of an HIV in repeat MSM attendees in SHSs in England
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- There is a lack of data in regards to clinical management of patients following a test refusal, and then subsequent risk of HIV diagnosis.
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Aim of the analysis:

→ To determine the risk of HIV following an HIV test refusal in repeat MSM attendees of sexual health services in England.
Data source

→ Data were extracted from the pseudononymised GUMCAD STI Surveillance System and restricted to:
  → repeat SHS attendees between 2009 and 2018
  → over the age of 14 years
  → MSM
Methods – inclusion criteria

Baseline HIV negative test (42 to 365 days prior offer)

Cohort entry:
HIV test offer

Person 1

Visit 1

Test accepted

Test refused

Person 2

Visit 2

Test accepted

Test refused

Person 3

Visit 3

Test accepted and +ive

Test accepted and −ive or test refused

Person 4

Visit 1

Test accepted

Test refused

Cohort exit:
365 days post HIV test offer

Cohort exit:
HIV diagnosis

Test accepted and +ive

Test accepted and −ive or test refused

Test accepted and +ive

Test accepted and −ive or test refused
Methods – statistical analysis

- A multivariable Weibull model was fitted to assess the association of HIV diagnosis in repeat attendees and HIV test refusal, after adjustment for potential socio-demographic confounders
  - Main Exposure: Prior HIV test refusal
  - Confounding variables:
    • Age
    • Ethnicity
    • Region of birth
    • Residential area level of socioeconomic deprivation (IMD)
    • Clinic size
    • Year of cohort entry
    • Anogenital bacterial STI diagnosis in the previous 365 days.
Baseline characteristics of study population

- 79,904 eligible MSM
  - 78% were of white ethnicity
  - 66% under 35 years
  - 54% from most deprived areas
  - 22% had STI previously

- 74,407 (93%) accepted testing
- 5,584 (7%) refused testing
- 75 (1%) were diagnosed with HIV
- 913 (1%) were diagnosed with HIV

‡ after previous refusal
Hazard ratios for HIV diagnosis amongst MSM in England, 2009 - 2018

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Limitations

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- We are not able to follow-up patients attending different services.
Conclusion

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- With the introduction of the new specification for GUMCAD and the collection of behavioural data, we will be able to investigate those relationships in more depth.
Acknowledgments

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Thank you!