

# SEXUAL RISK PROFILES, AND STI TESTING BEHAVIOUR AMONGST USERS OF A POSTAL HOME SAMPLING STI TESTING SERVICE (PHSSTS)

Chirwa, M; Ume, U; Hardie, J; Nulty, K; Jensen, S; Doku, E; Jean-Francois, A; Pickard, G; Day, S

## INTRODUCTION

London has the highest prevalence of sexually transmitted infections (STIs) including HIV in the UK. Increasing prevalence of STIs such as gonorrhoea and syphilis, and their impact on higher risk groups such as under 25 year olds and men who have sex with men make the demand for sexual health services an important public health issue.

The London Sexual Health Transformation Programme promises an online pan-London Postal Home Sampling STI Testing Service (PHSSTS) for service users who are asymptomatic. PHSSTS are popular, and improve access to STI testing; however there is a paucity of research about the service user.

Our aims were to pilot a PHSSTS, amongst online visitors to our GUM service and determine the STI prevalence, sexual risk profiles and STI testing behaviours of those opting to test via post.

## METHODS

From November 2015 to October 2016, we advertised a PHSSTS on the appointment booking page of our GUM clinic website. Users aged over 18 years without symptoms visiting the website had to complete an online sexual health questionnaire to order a home sampling kit (HSK). Users were also asked to provide feedback on the HSK and ease of use.

The tests offered in the HSK include Gonorrhoea and Chlamydia Nucleic Acid Amplification Tests from a first pass urine, vulvo-vaginal, pharyngeal and/or rectal swabs, and serological Syphilis and HIV fourth generation tests using a finger-prick blood sample.

HSKs were returned by post to the laboratory and results were sent via SMS within 7 days with additional sexual health recommendations dependent on risk factors identified by the questionnaire (such as needing Hepatitis B vaccination or contraception). Service users testing positive for any STI were recalled to our clinic for treatment, management and partner notification.

## RESULTS

- 946 home sampling kits were ordered by 871 users
- 8% (50) of users ordered more than one HSK
- 650 (69%) samples were returned
- Median return time for samples was 6 days (including weekends)

### User Demographics

- **Age:** Mean age of 30 years (range 17-69)  
Under 25s accounted for 31% (202) of users
- **Gender:** 58% (380) female, 41% (265) male, 1% (5) unknown
- **Ethnicity:** 83% (537) white British/Irish/other, 9% (57) black and minority ethnic groups, 5% (32) mixed or white with black African/ black Caribbean/ Asian, 2% (14) not stated, 2% (10) any other ethnic group
- **Location:** 81% (527) HSK packs were posted to addresses in Greater London and 11% (72) to South East England

### Sexuality

- 73%(475) heterosexual (52%(341) female, 21%(134) male), 18%(115) MSM, 7%(44) bisexual (30 female, 14 male), 1.5% (11) did not disclose/unknown, 0.5% (5) WSW

### Sexual History

- Median number of partners within last 3 months was 2 (range 1-19)
- 43% (280) of all users reported condomless sex in last 2 weeks
- 62% (71) MSM users reported condomless sex in last 3 months

### Contraception

- 29% of female users were not using contraception at all or correctly
- Users with emergency or general contraceptive needs were signposted to our contraceptive service / local pharmacy

### STI History

- 77%(500) had previously undertaken a STI screen with 26% (130) reporting having had a prior STI
- 23% (150) of HSK users had never had a HIV test before

### Blood Borne Virus Risk Assessment

- 25% (163) of users were eligible for Hepatitis B and 3% (20) for Hepatitis C testing
- 3% (20) of users required Hepatitis B vaccination (users who reported no previous vaccination and had acquisition risk factors of condomless MSM sex, IDVU or were HIV positive)
- 11% (72) of users reported significant risk factors for HIV transmission (condomless MSM sex, IDVU, HIV positive partner)

### STI Prevalence

- The prevalence of positive STI test results in the HSKs received was 3% (20/650): Chlamydia 14, Syphilis 5, and 1 Gonorrhoea
- In comparison, prevalence of new STIs diagnosed within asymptomatic GUM clinic attendees was 2% (91/4561: Chlamydia 73, Gonorrhoea 12, HIV 3, Syphilis 3)

### Follow Up

- All users with positive results were recalled for treatment
- Users recalled and treated within our service also accessed Partner notification(8) Hepatitis B vaccination(2) contraception(1)
- 14% (87/632) of users with negative results, or incompletely returned HSKs attended our clinic within the study period and subsequent 6 months
- 59 requestors did not return their HSK but attended a sexual health clinic within our directorate within the study period and subsequent 6 months

### User Feedback Evaluation

SAMPLE SIZE (487)	RESPONSE COUNT	
	Yes	No
Acceptability	97% (473)	3% (14)
Future use	97% (473)	3% (14)
Recommend use	98% (476)	2% (11)
Ease of use	96% (467)	4% (19)
Satisfaction with tests	98% (479)	2% (6)
Time Used (YES ≤ 30 min. NO > 30min.)	95% (462)	5% (23)
Problems encountered e.g. difficulty with blood sampling	30% (145)	70% (341)

## CONCLUSIONS

Users were of high risk for STI acquisition (high partner change, <25s, MSM and 43% reporting recent condomless sex). Almost 25% of users had never tested for STI/HIV before. These findings suggest PHSSTS are testing at risk individuals, and individuals that do not attend mainstream services. PHSSTS determined an STI prevalence of 3% which is broadly similar to the rate seen amongst our asymptomatic GUM clinic attendees (2%). PHSSTS users had additional sexual health needs (e.g. contraception, Hepatitis vaccination) which were not met directly by the PHSSTS, supporting the need for collaborative work with GUM clinics to fully meet the needs of the service users. PHSSTS proved an acceptable and preferred method of STI testing amongst asymptomatic persons.

