

# Routine HIV and sexually transmitted infection testing in an abortion service: 6 years' experience

Rachel Challenor,<sup>1</sup> Sarah Challenor,<sup>2</sup> Hannah Gregson,<sup>3</sup> Sue Pinsent<sup>4,5</sup>

<sup>1</sup>Consultant, Genitourinary Medicine (GUM) Department, Derriford Hospital, Plymouth, UK

<sup>2</sup>Medical Senior House Officer, GUM Department, Derriford Hospital, Plymouth, UK

<sup>3</sup>Medical Student, Swansea University Medical School, Swansea, UK

<sup>4</sup>Associate Specialist, GUM Department, Derriford Hospital, Plymouth, UK

<sup>5</sup>Associate Specialist, Pregnancy Advisory Service, Derriford Hospital, Plymouth, UK

## Correspondence to

Dr Rachel Challenor, Genitourinary Medicine Department, Derriford Hospital, Plymouth PL6 8DH, UK; rachel@challenor.biz

Received 11 September 2015

Revised 4 February 2016

Accepted 25 February 2016

## WHY IS THERE A NEED FOR ROUTINE HIV AND STI TESTING IN ABORTION SERVICES?

We describe our experience of embedding routine comprehensive HIV and sexually transmitted infection (STI) screening in an abortion service. The British HIV Association (BHIVA) recommended that HIV testing should be offered to all women attending abortion services in the *UK National Guidelines for HIV Testing 2008*.<sup>1</sup> Reducing undiagnosed HIV infection is a public health priority.<sup>2</sup> HIV is a treatable medical condition; an individual diagnosed with HIV now should remain fit and well on treatment with a normal/near normal life expectancy.<sup>2</sup> Despite this, 24% of the estimated 107 800 people living with HIV in the UK are undiagnosed.<sup>2</sup> Whilst unaware of their diagnosis, HIV-positive people are unable to access care to prevent morbidity, mortality and onward transmission of infection. In 2013, 42% of HIV infections were diagnosed late, and this is the greatest cause of mortality in HIV-positive patients nationally.<sup>2</sup>

The Royal College of Obstetricians and Gynaecologists (RCOG) Guideline, November 2011, on the *Care of Women Requesting Induced Abortion*<sup>3</sup> states that “all women should be screened for *Chlamydia trachomatis* and undergo a risk assessment for other STIs (e.g. HIV, gonorrhoea, syphilis), and be screened for them if appropriate”. However, universal opt-out HIV testing compared with targeted testing according to risk assessment takes less time per patient,<sup>4</sup> results in better uptake of testing<sup>5</sup> and is less stigmatising. Opportunities for HIV testing and early diagnosis are currently being missed in women attending abortion services in England<sup>6</sup> and will continue to be missed until services offer routine HIV testing instead of targeted HIV testing according to risk assessment.

The impact of STIs remains greatest in young heterosexuals aged <25 years and chlamydia is the most commonly diagnosed STI.<sup>7</sup> Other STIs (gonorrhoea and syphilis) are subject to wide geographical variation. However, diagnosing and treating gonorrhoea appropriately is becoming increasingly important with the emergence of resistant strains. An outbreak of high-level azithromycin-resistant gonorrhoea was reported in the North of England recently.<sup>8</sup>

All women attending abortion services should be being screened for chlamydia as advised by the RCOG. It is a simple matter to screen for gonorrhoea using the same sample as part of dual (chlamydia and gonorrhoea) nucleic acid amplification tests (NAATs). Consequently gonorrhoea will not be missed or treated inappropriately via routine prophylactic antibiotics given to women undergoing abortion, which should mean less chance of the emergence of high-level resistant strains of gonorrhoea.

## HOW DID WE INTRODUCE ROUTINE HIV AND STI SCREENING?

We are an abortion service provider in a large secondary care National Health Service trust located in the South West Public Health England (PHE) Centre of the UK. Benchmarking the South West's Sexual and Reproductive Health Profiles<sup>9</sup> with England, most parameters are similar or better. The HIV diagnosed prevalence is low at 0.99 per 1000 individuals aged 15–59 years.

The UK National Guidelines for HIV Testing were produced in 2008.<sup>1</sup> At that time we had a local issue with late HIV diagnosis and rising STIs, especially in young heterosexual patients. From 1 January 2009, we have operated an opt-out testing policy for HIV and STIs

**To cite:** Challenor R, Challenor S, Gregson H, et al. *J Fam Plann Reprod Health Care* Published Online First: [please include Day Month Year] doi:10.1136/jfprhc-2015-101345

(chlamydia, gonorrhoea and syphilis) for all women attending our service.

Our abortion service is co-located with the genitourinary medicine (GUM) service. This meant there were no major training issues as some staff work in both services and they are accustomed to undertaking routine HIV and STI screening in all patients. Screening for gonorrhoea is undertaken on the same sample as the chlamydia sample as part of the dual NAATs by either a physician-taken vulvo-vaginal swab (without speculum) or a patient self-taken vulvo-vaginal swab. Screening for syphilis is undertaken on the same blood sample as the HIV test. Women with STI-related symptoms are offered examination with diagnosis/treatment and a follow up is arranged at the GUM service.

We say to women: “As part of your routine tests you will be screened for STIs, including HIV – is that alright?”. No particular pre-test counselling is given, although we have an HIV pre-test information leaflet available and any questions are answered on a case-by-case basis as they arise. Women are advised that they will receive a telephone call if there is an issue with the tests and will receive a text if all the results are negative. All women are treated with antibiotic prophylaxis in line with RCOG recommendations, namely doxycycline 100 mg orally twice daily for 7 days to commence on the day of the procedure (plus metronidazole 1 g rectally for all surgical abortions).<sup>3</sup> Patients with positive results are contacted by our health advisers, who ensure that the correct treatment has been/is given and partner notification is completed. The care pathways are in place to ensure rapid access to trained staff if a positive or equivocal result is obtained.

**WHAT TRAINING NEEDS WERE IDENTIFIED?**

It has been shown that resistance to increased HIV testing may be related more to healthcare workers rather than to patients.<sup>10</sup> Perceived barriers include concerns about raising the issue of HIV, misconceptions that HIV testing is complicated, and doubts about how to deal with a positive result.

All healthcare professionals should be able to obtain informed consent for an HIV test in the same way that they currently do for any other medical investigation.<sup>1</sup> The significant issues are that women should consent to an HIV test being taken and know how they will receive their results. The result of a positive HIV test should be given directly to the patient by the testing clinician or team.<sup>1</sup> Care pathways should be in place to ensure rapid access to trained staff if a positive or equivocal result is obtained. Local GUM services should be able to see any woman with an initial positive HIV result that same day or the next working day.

We had no major training issues as our abortion service is co-located with GUM and some staff work

in both areas. Initially all women underwent a risk assessment before HIV testing, but now we undertake the HIV test after gaining consent without necessarily recording a risk assessment. It is more important that the HIV test is undertaken.

**HOW DID WE ENSURE SAFE GOVERNANCE AND TRANSFER TO CARE?**

Because our abortion service is co-located with GUM and some staff work in both areas there were already good working relationships between the abortion service staff and the GUM health advisers. Therefore abortion service staff knew whom to communicate with in the event of a positive or equivocal result. All women with positive results are contacted by our health advisers, who ensure that the correct treatment has been/is given and partner notification is completed.

If other abortion services are considering introducing routine HIV and STI screening it is essential that there are systems in place to identify all positive results to ensure none are missed. Also care pathways should be pre-defined for prompt onward referral to GUM staff for appropriate treatment and partner notification.

**WHAT QUALITY INDICATORS HAVE WE USED TO TRACK PROGRESS?**

Quality indicators used to track progress are the uptake of HIV testing and numbers of new HIV and STI diagnoses.

**What are the outcomes and how have they changed over 6 years?**

Between 1 January 2009 and 31 December 2014 a total of 7026 women attended the abortion service. The mean age was 26 (range 13–49) years.

**Table 1** Uptake of HIV testing in the women attending the abortion service compared with genitourinary medicine (GUM) clinic attenders in Plymouth, UK (all attenders and heterosexual women attenders)

Year	Abortion service uptake of HIV testing		GUM uptake of HIV testing*	
	All (%)	Heterosexual women (%)	All (%)	Heterosexual women (%)
2009	54	61	61	64
2010	53	59	59	63
2011	53	61	61	65
2012	67	67	67	72
2013	64	74	74	78
2014	73	77	77	77
Mean	61	67	67	70

\*Figures taken from the local Genitourinary Medicine Clinical Activity Dataset (GUMCAD).

**Table 2** Number and prevalence of all new sexually transmitted infections diagnosed with 95% confidence intervals

Infection	Tests/patients (n)	Number (n)	Prevalence (%)	95% CI
Chlamydia	6950	282	4.1	3.6–4.5
Gonorrhoea	6944	6	0.09	0.0–0.2
Syphilis	4185	1	0.02	0.0–0.1
Herpes	7026	7	0.10	0.0–0.2
Warts	7026	11	0.16	0.1–0.2
Non-specific cervicitis	6950	2	0.03	0.0–0.1
HIV	4179	4	0.10	0.0–0.2
Total	7026	313	4.5	4.0–4.9

CI, confidence interval.

HIV testing was offered to all women attending from 1 January 2009. Table 1 shows the uptake of HIV testing in the women attending the abortion service compared with Genitourinary Medicine Clinical Activity Dataset (GUMCAD) reporting for all Plymouth GUM clinic attenders and heterosexual women attenders. Uptake of HIV testing has improved over the 6 years, reaching 73% in 2014. For the first 6 months of 2015 uptake of HIV testing in the abortion service was 77% and is now approaching similar levels to that which we achieve in the GUM service.

During the 6 years there were four new HIV infections diagnosed from 4179 tests. Two women were aged <25 years and two were 25+ years of age. Two women came from countries of high HIV prevalence; of the other two women, one had a risk identified in the pre-test HIV risk assessment, whereas the other woman had no such risk identified. Not only did these four women benefit from earlier diagnosis, but also some onward transmissions may have been avoided. In addition, three women, who had previously been diagnosed as HIV-positive, confirmed their positive status to the healthcare practitioner during the consultation. The total observed HIV prevalence was 7/7026 [0.1%, 95% confidence interval (95% CI) 0.0–0.2], which is comparable with the South West PHE diagnosed prevalence of 0.99/1000 individuals aged 15–59 years.<sup>9</sup>

Table 2 shows the number and prevalence of all new STIs diagnosed at the consultation by examination or by screening. A total of 313 new STIs were diagnosed in 304 women, giving an overall STI prevalence of 4.5% (95% CI 4.0–4.9). There were 282 cases of chlamydia, six cases of gonorrhoea and one new case of syphilis. All new STIs were treated in line

with national guidance and partner notification was undertaken. Women aged <25 years were more likely ( $p < 0.00001$ ) to have an STI (228/3657, 6.2%, 95% CI 5.5–7.0) compared with those aged 25+ years (85/3369, 2.5%, 95% CI 2.0–3.1). In both age groups the most commonly diagnosed infection was chlamydia.

## CONCLUSION

Routine screening for HIV and STIs in abortion services is feasible. Routine testing takes less time than targeted testing, is less stigmatising, results in higher uptake of testing and offers a higher-quality service provision.

**Competing interests** None declared.

**Provenance and peer review** Not commissioned; externally peer reviewed.

## REFERENCES

- 1 British HIV Association, British Association of Sexual Health and HIV, British Infection Society. *UK National Guidelines for HIV Testing 2008*. 2008. <http://www.bhiva.org/documents/Guidelines/Testing/GlinesHIVTest08.pdf> [accessed 27 September 2015].
- 2 Public Health England. *HIV in the United Kingdom: 2014 Report*. 2014. [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/401662/2014\\_PHE\\_HIV\\_annual\\_report\\_draft\\_Final\\_07-01-2015.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/401662/2014_PHE_HIV_annual_report_draft_Final_07-01-2015.pdf) [accessed 27 September 2015].
- 3 Royal College of Obstetricians and Gynaecologists. *The Care of Women Requesting Induced Abortion*. (Evidence-based Clinical Guideline Number 7). November 2011. [https://www.rcog.org.uk/globalassets/documents/guidelines/abortion-guideline\\_web\\_1.pdf](https://www.rcog.org.uk/globalassets/documents/guidelines/abortion-guideline_web_1.pdf) [accessed 31 August 2015].
- 4 Hamill M, Burgoine K, Farrell M, *et al*. Time to move towards opt-out testing for HIV in the UK. *BMJ* 2007;334:1352.
- 5 <http://www.cdc.gov/hiv/group/gender/pregnantwomen/opt-out.html> [accessed 27 September 2015].
- 6 Omakalwala M, Logan L, Musoro L, *et al*. Gaps in HIV testing: results from an audit of abortion services in England. *J Fam Plann Reprod Health Care* 2014;40:315–316.
- 7 Public Health England. *Health Protection Report*. Infection Report, Volume 9 Number 22. HIV-STIs. [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/437433/hpr2215\\_STI\\_NCSP\\_v6.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/437433/hpr2215_STI_NCSP_v6.pdf) [accessed 27 September 2015].
- 8 [http://www.bashh.org/BASHH/News/News\\_Items/High\\_level\\_azithromycin\\_resistant\\_gonorrhoea\\_in\\_the\\_north\\_of\\_England.aspx](http://www.bashh.org/BASHH/News/News_Items/High_level_azithromycin_resistant_gonorrhoea_in_the_north_of_England.aspx) [accessed 27 September 2015].
- 9 <http://fingertips.phe.org.uk/profile/sexualhealth/data#gid/8000057/pat/42/ati/104/page/0/nm/par/R4/are/E45000020> [accessed 27 September 2015].
- 10 Drayton R, Keane F, Prentice E. Patients' attitudes towards increasing the offer of HIV testing in primary and secondary care. *Int J STD AIDS* 2010;21:563–566.