STIs – Presentation & Management in Primary Care

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Objectives

• Know when and how to assess for STI risks sensitively
• Know when to offer STI and HIV tests
• Recognise when STIs and HIV can be part of differential diagnosis
• Manage some common STIs
Why is it important?

• It’s stigmatising & embarrassing!
• Morbidity and complications
  • PID and sub-fertility
  • Epididymo-orchitis
  • Neonatal infections/ congenital syphilis
  • Reiter’s (uveitis + arthritis + urethritis)
  • Dementia
  • Psychological and relationship difficulties
• Mortality
  • HIV
• Communicable disease
  • Horizontal and vertical transmission
Why are STIs so successful?

- Poor survival in vitro
- Inefficient transmission
- Requires close and sustained contact

- Latency
- Resistance
- Human sexual behaviour – NATSAL
  [www.natsal.ac.uk](http://www.natsal.ac.uk)
The British sex survey Prime Minister Margaret Thatcher tried to ban
Who is doing it?

People are having sex regardless of health status (% reporting sexual activity past 4w)
Who are they doing it with?

Average (mean) number of opposite-sex partners, lifetime (people aged 16–44)

  - Male: 8.6
  - Female: 3.7

  - Male: 12.6
  - Female: 6.5

- Natsal–3: 2010-2012
  - Male: 11.7
  - Female: 7.7
Who are they doing it with?

Percentage of the population who have ever had same-sex experience (people aged 16–44)

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Male</td>
<td>6%</td>
<td>8%</td>
<td>7%</td>
</tr>
<tr>
<td></td>
<td>4%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Female</td>
<td>4%</td>
<td>2%</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>2%</td>
<td>5%</td>
<td>8%</td>
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Key

- 100% of population
- Any same-sex experience
- Same-sex experience with genital contact
What are they doing?

### Vaginal sex

<table>
<thead>
<tr>
<th>Age at interview</th>
<th>Men</th>
<th>Women</th>
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<tbody>
<tr>
<td>16–24</td>
<td>74%</td>
<td>75%</td>
</tr>
<tr>
<td>25–34</td>
<td>89%</td>
<td>91%</td>
</tr>
<tr>
<td>35–44</td>
<td>91%</td>
<td>89%</td>
</tr>
<tr>
<td>45–54</td>
<td>85%</td>
<td>81%</td>
</tr>
<tr>
<td>55–64</td>
<td>75%</td>
<td>59%</td>
</tr>
<tr>
<td>65–74</td>
<td>57%</td>
<td>37%</td>
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</tbody>
</table>

### Given/received oral sex

<table>
<thead>
<tr>
<th>Age at interview</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>16–24</td>
<td>71%</td>
<td>71%</td>
</tr>
<tr>
<td>25–34</td>
<td>80%</td>
<td>80%</td>
</tr>
<tr>
<td>35–44</td>
<td>80%</td>
<td>75%</td>
</tr>
<tr>
<td>45–54</td>
<td>71%</td>
<td>63%</td>
</tr>
<tr>
<td>55–64</td>
<td>52%</td>
<td>35%</td>
</tr>
<tr>
<td>65–74</td>
<td>30%</td>
<td>19%</td>
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</table>
What are they doing?

**Anal sex**

<table>
<thead>
<tr>
<th>Age at interview</th>
<th>Male (%)</th>
<th>Female (%)</th>
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<tbody>
<tr>
<td>16–24</td>
<td>19%</td>
<td>17%</td>
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<tr>
<td>25–34</td>
<td>17%</td>
<td>16%</td>
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<tr>
<td>35–44</td>
<td>15%</td>
<td>13%</td>
</tr>
<tr>
<td>45–54</td>
<td>14%</td>
<td>8%</td>
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<tr>
<td>55–64</td>
<td>8%</td>
<td>4%</td>
</tr>
<tr>
<td>65–74</td>
<td>3%</td>
<td>4%</td>
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</table>

**Other genital contact**

<table>
<thead>
<tr>
<th>Age at interview</th>
<th>Male (%)</th>
<th>Female (%)</th>
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</thead>
<tbody>
<tr>
<td>16–24</td>
<td>71%</td>
<td>73%</td>
</tr>
<tr>
<td>25–34</td>
<td>76%</td>
<td>77%</td>
</tr>
<tr>
<td>35–44</td>
<td>74%</td>
<td>73%</td>
</tr>
<tr>
<td>45–54</td>
<td>66%</td>
<td>62%</td>
</tr>
<tr>
<td>55–64</td>
<td>56%</td>
<td>41%</td>
</tr>
<tr>
<td>65–74</td>
<td>37%</td>
<td>28%</td>
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CASE STUDIES
Bob

50 years old, married
Frequency
Discomfort passing urine
Going to Marbella

No urethral discharge, nocturia, urgency, dribbling, loin pain, frank haematuria

Other questions?

Next step T or F
A. Urinalysis
B. PSA
C. IPSS
D. MSU
E. PR examination
F. STI tests (urine/swabs?)
G. Treat for chlamydia
Alicia

27 years old “Lumps in vagina”
Married 6 months
2 other long term partners
No STI checks

Differentials?
A. Folliculitis
B. Bartholin’s cyst
C. Molluscum
D. Genital warts

What do you do next?
Ebrahim

23 year old PhD student
Returned from South Africa
Temp 38.3, rash, sore throat
Jaundiced

What do you consider?
1. Viral URTI
2. Glandular Fever
3. Malaria
4. URTI
5. Hepatitis A
6. Hepatitis B
7. HIV

A. He has returned from a country where HIV is prevalent
B. His symptoms might be explained by HIV infection
C. He may have had sexual risks during this stay there
D. If he has a regular sexual partner, they may be at risk too
E. HIV testing is inappropriate because he needs urgent assessment for malaria
Sorting out STIs

Sexually transmitted infections

- Bacterial
  - Chlamydia
  - Gonorrhoea
  - Syphilis

- Protozoal
  - Trichomonas

- Infestations
  - Scabies
  - Pubic Lice

- Viral
  - Molluscum
  - Herpes
  - Genital warts
  - Hepatitis B
  - HIV
Chlamydia

- *Chlamydia trachomatis*
- Intracellular bacteria
- Asymptomatic in 80% ♀ & 50% ♂
- Urethral discharge
- Abnormal vaginal bleeding or discharge
- Testicular pain
- Urethritis, dysuria, “cystitis”

- Men – First Catch Urine (FCU) 65-100%
- Women – vulvovaginal swab 90-95%
- Throat swab/rectal swabs – check with laboratory

- Doxycycline 100BD 7/7
- Azithromycin 1g stat
- Erythromycin 500BD 10-14/7
- Ofloxacin 200mg BD or 400mg OD 7 days
- Partner notification
Gonorrhoea

- *Neisseria gonorrhoea*
- Urethral/ vaginal discharge, dysuria

- Test – NAAT as for chlamydia
- Rectal & pharyngeal infections can be asymptomatic

- Ceftriaxone 500mg IM + Azithromycin 1g stat
- Cefixime 400mg po stat
Genital Warts

CLINICAL DIAGNOSIS
• HPV types 6 & 11
• Genital warts do not cause cervical cancer (types 16 & 18)
• Perianal lesions common both sexes
• Pearly penile papules DO NOT TREAT

Treatment
• Cryotherapy (clearance/recur 44-75%/ 21-42%)
• Podophyllotoxin cream (43-70%/ 6-55%)
• Imiquimod cream (35-68%/ 6-26%)
• Scissors excision (89-100%/ 19-29%)
Molluscum

Clinical diagnosis

- Pox virus
- Usually STI in adults
- Central umbilication
- Care if appears on face in adults (immunocompromised)

- Expectant treatment
- Cryotherapy
- Podophyllotoxin / imiquimod creams
HIV Testing

• How would you approach HIV testing?
• What could be the barriers?
• What phrases would you use?

• What will you include in your discussion?
HIV Testing

- HIV screening cost-effective where diagnosed prevalence is >2/1000 adults

- 4th generation serology /point of care detect HIV 4 weeks after exposure

- NICE Guidance Black Africans and Men who have sex with men (MSM)

- Some patients may not disclose that they have put themselves at risk of HIV infection in the past
Number of people newly diagnosed with HIV and AIDS, and all-cause deaths among people with HIV in the ART era: United Kingdom, 1997 - 2016

- HIV diagnoses
- AIDS at HIV diagnoses
- Deaths

AIDS at HIV diagnoses is within 3 months of HIV diagnoses.
HIV in MSM


- London
- North of England
- Wales
- Scotland
- Midlands and East of England
- South of England
- Northern Ireland

2007 - 2016
The UNAIDS 90:90:90 vision is to eliminate the AIDS epidemic by 2030.

This calls for, by 2020:

- 90% of people living with HIV to be diagnosed
- 90% of those diagnosed to receive treatment
- 90% of those treated to be virally suppressed
- 87% of those living with HIV are diagnosed
- 96% of those diagnosed receiving antiretroviral treatment
- 94% of those treated virally suppressed

Ref: www.unaids.org
HIV testing

• You might be describing a common illness caused by viruses such as glandular fever or influenza. However, some rare but important viruses may also be a cause and this includes HIV. I do not want to miss this. I am not sure if you might be at risk of HIV?

• I am not sure if you might be at risk of HIV but this is one infection that can affect your immune system and give you these symptoms. May I ask you some questions to check if you could be at risk?

• You have travelled to/come from/grew up in a county where HIV is quite common. Do you know anyone who has been affected by HIV? Do you know if you have been at risk? Have you ever had an HIV test?
Two slightly different views ...

Four ethical issues to consider before offering HIV tests to your patients

12 December 2016

Dr Pallavi Bradshaw advises

Few could criticise the intention behind England’s proposal to offer HIV testing in prevalence areas. The plan to put this offer by a GP during a routine appointment in advance.

1. Broaching the issue of a test will need to be handled sensitively

Any GP will be acutely aware of the consultation, in which time the patient feels reassured that they have come to seek advice.

How GPs should approach HIV testing

22 December 2016

Letter from Dr Richard Ma, north London

Pulse recently published an article written by a medicolegal advisor to warn GPs to consider some ethical issues before offering HIV tests to patients. While the article might be well-intentioned, framing HIV testing in this way might discourage some primary care professionals from offering HIV testing in some clinically appropriate situations which might, ironically, result in patients being harmed from missed opportunities or late diagnosis of HIV.

Here are my thoughts on how GPs should approach HIV testing:

1. It is possible to offer testing sensitively. The offer of a test might affect patients’ requests if it is seen as part of a broader agenda of testing in a population.
What will you discuss?

• Benefits of HIV testing
• What is “positive” or “negative”?
  • For people whose first language is not English, a “positive” test result might be interpreted as “good news”
  • say “your test result is HIV-positive, this means you have HIV”
• If negative, what they can continue to take steps to avoid HIV
• HIV treatment is effective and will stop them from getting ill
• Prevent onward transmission with effective treatment
• People with HIV can have healthy children if their HIV status is known early on in pregnancy
• They will have more control over who and when to disclose their status, than if they find out while very ill with HIV infection
Treatment as Prevention (TasP)

It’s a fact

U = U

Undetectable equals untransmittable

The British HIV Association is proud to support the #UequalsU consensus statement of the Prevention Access Campaign

The PARTNER study (2016)

1,000 mixed status couples

All HIV+ partners virally suppressed and on effective treatment

58,000 sex acts without a condom

0 transmissions of HIV

Viral suppression from ART prevents HIV transmission

AVERT.org  Source: The PARTNER study (2016)
There are **MANY WAYS** to **PREVENT**

![Icons](image)

**Do it your way at** [doitlondon.org](http://doitlondon.org)

**London HIV Prevention Programme: Proudly Supported by London Boroughs**

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**PRE-EXPOSURE PROPHYLAXIS (PrEP)**

HIV prevention among gay men, other men who have sex with men and trans-women in the UK

Data published from the PROUD study shows that the anti-retroviral drug Truvada (containing emtricitabine and tenofovir disoproxil fumarate), used as PrEP reduces the risk of acquiring HIV.

- 1 in 17 MSM aged 15 - 59 in the UK living with HIV
- 2800 MSM in UK newly infected with HIV in 2013

Protection offered against HIV by PrEP 86%

No significant difference in STIs among MSM on PrEP and those not
Seroconversion Rates in Clinical Studies of FTC/TDF for PrEP

- In the active treatment arms of clinical studies, seroconversion rates varied from 0.5 to 4.7/ per 100 person-years of FTC/TDF exposure.

<table>
<thead>
<tr>
<th></th>
<th>MSM</th>
<th>MSM, TGW</th>
<th>MSM, TGW</th>
<th>Serodiscord Coup.</th>
<th>Hetero Men &amp; Women</th>
<th>Women</th>
<th>Women</th>
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<tbody>
<tr>
<td></td>
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<td>UK</td>
<td>S. America</td>
<td>Africa</td>
<td>USA</td>
<td>Africa</td>
<td>Botswana</td>
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**NHS told to give out £5,000-a-year lifestyle drug to prevent HIV — as vital cataract surgery is rationed**

**WHAT A SKEWED SENSE OF VALUES**

By Sophie Berland and Ben Spencer

THE NHS has been told to prescribe a drug to prevent HIV despite concerns it is expensive and could encourage sexual risk taking.

A High Court judge yesterday refused to allow the drugs Preex and Preex to be prescribed on the NHS.

The drug would save as much as £15,000 per patient per year, he said, but the cost was far too high.

He ruled that to allow the drug would encourage sexual risk taking.

The NHS has been told to give up £5,000-a-year lifestyle drug to prevent HIV — as vital cataract surgery is rationed.

Loner who murdered doctor’s daughter obsessed by model lookalike

THE MODEL

THE VICTIM

Loner who murdered doctor’s daughter obsessed by model lookalike
Resources

Sexually Transmitted Infections in Primary Care

RCGP Sex, Drugs, HIV and Viral Hepatitis Group
British Association for Sexual Health and HIV (BASHH)
Second Edition 2013

HIV in Primary Care

THIRD EDITION

An essential guide for GPs, practice nurses and other members of the primary healthcare team

by Dr Philippa Matthews, Dr Sara Madge, Dr Surinder Singh and Dr Nick Theobald
Management of SRH Issues

Management Vaginal Discharge Non Genitourinary Medicine Settings

FSRH Clinical Guidance: Management of Vaginal Discharge in Non-Genitourinary Medicine Settings - February 2012

Please note, this guidance document has lapsed. Up to date guidance on this topic can be found at:

Please read this guidance document in conjunction with any relevant clinical statements for this topic.
These can be found by visiting the Clinical Statements section.

Problematic Bleeding

FSRH Clinical Guidance: Problematic Bleeding with Hormonal Contraception (July 2015)

This guidance provides evidence-based recommendations and good practice points for health professionals on the
contraception currently available in the UK. It is
Guideline debrief: sexually transmitted infections

Module summary
This interactive, case-based learning module uses five primary care case histories to update you on the key points of the 2013 RCGP/BASHH guidance on STIs.

Learning objectives
To improve your understanding of the 2013 edition of Sexually Transmitted Infections in Primary Care, jointly published by Royal College of General Practitioners (RCGP) and the British Association for Sexual Health and HIV (BASHH). The module will cover:

- Knowing when and how to assess for STI risks
- Key differential diagnoses in common STIs
- Recognising when STIs and HIV can be part of differential diagnosis
- Managing some of the most common STIs in primary care

In this interactive module, you will learn as you work through real-life case scenarios.