A Graham

Sexual health

Anna Graham

Summary

In 2001 the government produced the first ever National strategy for sexual health and HIV. The strategy called for a broader role for general practice in the promotion of better sexual health. Surveys undertaken in the United Kingdom (UK) in recent years suggest that more people have more sexual partners than ever before. This has been associated with a rise in sexually transmitted infections (STIs). Screening and testing for Chlamydia trachomatis have become more widespread in the UK.

Risk assessment and sexual history taking are described. They need to be carried out confidentially and non-judgementally. Confidentiality training for all staff, including a requirement to sign confidentiality statements, is recommended. Partner notification can be done in a variety of different settings including general practice. A new course for those working in primary care has been devised, aiming to equip participants with the basic knowledge, skills, and attitudes for the effective management of STIs.

Introduction

Essential elements of good sexual health are defined as 'equitable relationships and sexual fulfilment with access to information and services to avoid the risk of unintended pregnancy, illness or disease' in the government's National strategy for sexual health and HIV.

The key to the provision of appropriate sexual health advice to an individual patient is assessment of risk, by taking a sexual history. In order to obtain a sexual history, confidentiality must be ensured. A summary is provided of recent advances in key areas of sexual health, including contraception, STI management, and sexual problems. In order to target sexual health advice, it is essential to take an accurate sexual history. This has been a compulsory element with a rise in sexually transmitted infections (STIs).

Risk assessment and sexual history

In order to target sexual health advice, it is essential to take an accurate sexual history. This has been a compulsory element of history taking in genitourinary medicine (GUM) clinics for a long time, but many working in general practice have shied away from the exercise. The challenge is to do so confidently and non-judgmentally. Matthews and Fletcher point out that health professionals working in primary care consult with patients from across the risk spectrum for sexual ill health, including many at no risk. Assessing risk by taking a sexual history enables the clinician to consider sexual health where appropriate and move on to other areas if not.

There are a number of types of consultation where taking a sexual history can be useful, including contraceptive counselling, targeting sexual health promotion advice; for example, when providing travel advice or doing a smear, and when deciding whether testing for a STI is appropriate. Symptoms cannot be relied upon as they may be diverse and ambiguous, and much infection is asymptomatic.

Taking a sexual history requires confidence, sensitivity, and confidentiality.

Doctors and nurses may, at first, find taking a sexual history difficult for two reasons:

- Lack of experience
- Embarrassment for the patient and the practitioner.

The principles of taking a sexual history include that, if possible, the patient should be seen alone. If a partner or relative is present some people will be reluctant to reveal personal information. Permission should be asked and an explanation given as to why you are asking these questions — in order to help you to assess their risk for STIs. Check with the patient if you are unclear what they mean, avoiding the temptation to reassure the person prematurely. Don’t make assumptions about sexual orientation, ideally use terms such as ‘partner’ and follow this with a question as to whether this is a man or a woman. Use the right terminology, avoiding terms such as ‘gay’ because men who have sex with men may not identify themselves as such. Only ask what you need to know and don’t ask unnecessary or intrusive questions.

A full sexual history could include questions about:

- Duration and severity of symptoms (Box 1).
- Most recent episode of sexual intercourse:
  - timing (in relation to symptoms),
  - type and duration of relationship (regular or casual),
  - type of sexual intercourse (possible sites of infection),
  - use of condom and contraception,
  - gender of partner (sexual orientation).
- Details of previous sexual partners (these should be obtained in relation to duration of symptoms — to find out about new partners and who needs to be contacted traced — but they are also needed to assess risk in those without symptoms, given the burden of asymptomatic infection).
- Sexual intercourse abroad or with partners from other locations.

A Graham, PhD, DFFP, MRCP, MRCGP, clinical lecturer, University of Bristol, Bristol. This text is based on a chapter in the forthcoming RCGP book due to be published in 2004; Charlton R and Lakhani M (eds). Recent advances in primary care.

Address for correspondence
Dr Anna Graham, University of Bristol, Division of Primary Care, Cotham House, Cotham Hill, Bristol, BS6 6JL. E-mail: a.graham@bristol.ac.uk

Submitted: 27 March 2003; Editor’s response: 30 March 2003; final acceptance: 1 April 2004.

countries (risk of antibiotic resistant gonorrhoea, tropical STIs or HIV risk).

- Previous STIs, tests for STIs including HIV, hepatitis B.
- Contraceptive choice and actual use (risk of unplanned pregnancy and infection).
- Menstrual, cervical cytology and obstetric history in women.
- Drug history, including allergies, self-treatment, non-prescribed drugs and injection drug use.

The patient may be at very low risk of a STI and the clinician may decide with the patient not to pursue this line. Occasionally the patient may be at very high risk, such as those who have travelled in parts of the world with a high prevalence of HIV, or work in the sex industry. In both of these examples full infection screens are to be encouraged, with the patient’s consent.

Box 1. Clinical symptoms and signs of some sexually transmitted infections (potential causes in brackets). 5

1. Urethritis in men (chlamydia, gonorrhoea, rarely trichomoniasis, genital herpes, warts)
   - Urethral discomfort or itching on micturition
   - Urethral discharge: purulent (typically gonorrhoea), mucopurulent or clear (typically non-specific urethritis including chlamydia)
2. Urethritis in women (chlamydia, gonorrhoea)
   - Urinary frequency or urethral discomfort, ‘cystitis’
3. Cervicitis (chlamydia, gonorrhoea)
   - Intermenstrual bleeding
   - Postcoital bleeding
   - Cervical mucopurulent discharge
4. Vaginitis (trichomoniasis and non-sexually transmitted candida and bacterial vaginosis)
   - Vaginal soreness or irritation (trichomoniasis or candida)
   - Vaginal discharge: lumpy (typically candida), smelly, thin and homogeneous (typically bacterial vaginosis)
5. Proctitis (gonorrhoea, chlamydia, herpes simplex, warts, rarely amoebiasis in homosexual men)
   - Rectal discomfort, discharge, lumps or ulceration
6. Conjunctivitis (chlamydia, gonorrhoea)
7. Upper genital tract infection (chlamydia, gonorrhoea, anaerobic infections)
   - Women (pelvic inflammatory disease): dyspareunia, lower abdominal pain, adnexal tenderness and/or mass, fever +/- symptoms of cervicitis
   - Men (epididymo-orchitis): testicular swelling and pain, fever
8. Genital ulceration (herpes simplex, syphilis, rarely chancroid, donovanosis, lymphogranuloma venereum)
9. Genital lumps (genital warts, molluscum contagiosum, scabies)
10. Complicated infections
    - Chlamydia: Reiter’s syndrome (urethritis, seronegative arthritis, iritis)
    - Gonorrhoea: Disseminated infection (arthritis, endocarditis, meningitis), Bartholin’s cyst
    - Primary herpes simplex: urinary retention, constipation, radiculomyelopathy, systemic viraemia

Recent advances in primary care

Confidentiality in general practice
The Royal College of General Practitioners has produced, in collaboration with others, a tool kit entitled Confidentiality and young people. The materials for a training session in the practice are provided, as well as a recommendation that all staff, reception and domestic, as well as clinical, sign confidentiality agreements. Examples of these are given. The tool kit is a valuable resource for individual practices and for sexual health promotion specialists supporting primary care.

Contraception
Patterns of use of contraception and family planning services
The majority of contraceptive advice is provided in general practice. Over the last quarter of a century, there has been an overall decrease in the use of family planning clinics, with increases in attendance at these services seen only in people aged under 20 years. Between 1975 and 1998–1999 the proportion of girls under 16 years visiting family planning clinics increased from 1–8%. For girls aged 16–19 years the proportion increased from a minimum of 12% in 1988–1989 to 22% in 1998–1999. The majority of contraceptive advice-giving to the over-20-year-olds is in general practice.

New methods of contraception
Cerazette® (Organon). This is the first third-generation progestogen only pill (POP) containing desogestrel (75 µg daily). POPs are used by only 5% of women in the UK. This new pill reliably inhibits ovulation in 97% of cycles. In a direct head-to-head comparison study Cerazette was compared to a 30 µg levonorgestrel POP. The levonorgestrel-only POP inhibited ovulation in 71% of cycles. Pregnancy rates are expressed as multiply by the Pearl Index (PI) (number of pregnancies per 100 women years): for desogestrel PI = 0.41 (95% CI [confidence interval] = 0.085 to 1.204); for levonorgestrel PI = 1.55 (95% CI = 0.422 to 3.963).

Desogestrel looks as if it prevents more pregnancies, but the confidence intervals overlap and the difference is not statistically significant. The bleeding pattern of those taking desogestrel is more variable than that for levonorgestrel users. The POP containing desogestrel costs £8.85 for a 3-month supply compared to £3.31 for the most expensive alternative POP.7,8

Yasmin® (Schering Health). This new, combined oral contraceptive does appear to have similar contraceptive efficacy to other similar pills, but is a lot more expensive (£14.70 for 3 months supply compared to, for example, £2.58 for the same quantity of Microgynon 30® [Schering Health]). Each Yasmin pill contains 30 µg ethinylestradiol plus 3 mg drospirenone (a derivative of spironolactone).

At the launch of this combined oral contraceptive, company advertising suggested that it was ‘the pill for wellbeing’, with ‘no associated weight gain’ and a ‘demonstrable positive effect’ on premenstrual symptoms and skin condition. The evidence for these claims is based on two unblinded randomised trials. The wellbeing claim is based on a survey of 237 women (a 10% sample) from one of the trials. It is
unclear how the sample was chosen and the responders were aware of which drug they were taking and so the results may be biased. The weight claim is based on women's self-reported weight, measured at home, which again could be biased. The weight change was very small (less than 1 kg).9

Cerazette and Yasmin are not recommended as first choice contraceptives. It is possible that their use in selected patients may be appropriate. It is likely that this assessment is best made by experts in the field.

Evra® (Janssen-Cilag). This is a transdermal patch delivering 150 µg norelgestromin and 20 µg ethinylestradiol daily into the systemic circulation. The patch is applied weekly for 150 µg norelgestromin and 20 µg ethinylestradiol daily.

oral contraceptive.10 The review concluded that self-reported and safety for the contraceptive patch and for the combined action and efficacy of the patch was similar to a triphasic oral

1995.12 diagnoses of chlamydia, gonorrhoea, and syphilis since cohabiting or married. This helps to explain the doubling of were seen in people aged under 25 years, and those not Box 2 have increased significantly. The largest increases were seen in people aged under 25 years, and those not

computer. The main findings are shown in Box 2.

assisted self-interview component allowed responders to key their responses to sensitive questions into a laptop computer. The main findings are shown in Box 2.

Comparing Natsal 2000 with the results of the same survey undertaken in 1990–1991, all of the risk behaviours shown in Box 2 have increased significantly. The largest increases were seen in people aged under 25 years, and those not cohabiting or married. This helps to explain the doubling of diagnoses of chlamydia, gonorrhoea, and syphilis since 1995.12

Screening for Chlamydia trachomatis infection Chlamydia is the most common bacterial STI in the UK. Eighty per cent of women and 50% of men who have this infection have no symptoms. In order for there to be a case for implementing a screening programme, results from good quality randomised trials, demonstrating a reduction in mor-

Box 2. Main findings from the second National Survey of Sexual Attitudes and Lifestyles.11

1. The Wirral and Portsmouth Department of Health pilots,
2. National survey of sexual attitudes and lifestyles 2000 (Natsal 2000), and
3. Chlamydia screening studies (ClaSS).

In the Wirral and Portsmouth pilots, the aim was to assess the feasibility and acceptability of opportunistic screening in a variety of healthcare settings. The focus was on sexually active 16–24-year-old women. From September 1999 to August 2000, urine tests for chlamydial infection were offered to women in general practice and specialist settings. A central office sent out results: in the Wirral this was a community hospital, and in Portsmouth the GUM clinic. Patients with positive results were referred to GUM clinics for partner notification and treatment, or this was undertaken by the test site, or at the central office. One-third of patients were recruited at a consultation for contraceptive advice and one-third reported symptoms at the time the test was offered. The prevalence of infection was 9.8% (95% CI = 9.3 to 10.3) in Portsmouth and 11.2% (95% CI = 10.3 to 12.1) in the Wirral.

This pilot was acceptable and feasible with a higher than expected prevalence found. It was an opportunistic screening programme with a significant minority of patients reporting symptoms at testing. This pilot included a broad range of clinical settings but did not include men in a systematic way.13

In contrast with this pilot the National Survey of Sexual Attitudes and Lifestyles 2000 was a population-based sample where half of all sexually experienced responders were invited to provide a urine sample for testing for chlamydia. 2.2% (95% CI = 1.5 to 3.2) of men and 1.5% (95% CI = 1.1 to 2.1) of women were found to have chlamydial infections. The highest prevalence was found in 18–24-year-old women (3.0%) and 25–34-year-old men (3.0%). Non-married status, age, partner concurrency, and increasing numbers of sexual partners were associated with prevalent infection. These findings are very similar to Dutch and Danish population-based screening studies.14
Recent advances in primary care

The chlamydia screening studies are based in general practices in and around Bristol and Birmingham. Men and women aged 16–39 years are invited to provide a urine sample by postal request. A randomised trial comparing partner notification, undertaken by practice nurses with health advisers in GUM clinics, is included. The results of this study will be available in 2004.

Chlamydia screening has now been rolled out by the Department of Health to a number of pilot sites in England in non-general practice settings. The reason given in the invitation to tender for not rolling it out to general practice was that there were ‘logistical issues that need to be addressed’. Other important unanswered questions include the assessment of the costs and benefits of who should be screened, whether screening should also be offered to men, and what the long-term benefits of screening might be. The natural history of untreated asymptomatic infection is unlikely to ever be known. It has been assumed that the sequelae of untreated symptomatic infection can be prevented by treatment and that this can be extrapolated to those with asymptomatic infection.

What does this mean for clinicians working in general practice now? The most sensible approach is to test for chlamydia when the symptoms reasonably suggest this could be the cause (for example, when a woman presents with intermenstrual bleeding) and to screen when a patient is at risk, as assessed by taking a sexual history.

The next issue is how best to test or screen. In men, this is a first-void urine specimen collected in a plain urine sample bottle. The test most likely to be performed on this specimen is a nucleic acid amplification test, which has high specificity and sensitivity. This may not be available to general practice-based samples in some areas — it is worth checking with the local laboratory. The government is currently making funds available to support their introduction countrywide. In many parts of the country the best sample for women remains an endocervical swab, taken with a swab specifically designed for this purpose, and ensuring that the sample taken includes endocervical cells — as C. trachomatis is an intracellular organism — by rotating the swab several times within the endocervical canal while taking the sample. It is likely that the taking of a urethral swab at the same time enhances the sensitivity of the tests. Urine samples, in both men and women, and vulvo-vaginal swabs may become the preferred specimens in years to come.

It is not necessary to perform a test of cure except when the case is a pregnant woman and/or erythromycin is used to treat.

HIV

HIV remains a rare infection in the UK. By the end of the second quarter of 2003, 57,763 HIV-infected individuals had been reported to the UK HIV dataset, which began in 1982. Thirty-four per cent of the total have been reported to have AIDS, of whom 64% have died. The total number of reports received for 2002 stands at 5542, the highest for any year since reporting began. Since 1998 there has been a fall in symptomatic HIV infection and AIDS which is likely, at least in part, to be associated with the high uptake of highly active antiretroviral treatment (HAART) among HIV-infected members of this group.

HIV infection is primarily associated with identifiable risk factors:

- men who have sex with men;
- injecting drug users;
- people who were born or who have lived in countries of high prevalence;
- people who have received medical treatment or a blood transfusion in countries of high prevalence; and
- men and women who have sex with any of the above.

Since 1999 the most frequent route of acquisition of newly reported HIV infection in the UK has been through heterosexual sex. Most homosexually acquired infections are in white men (89%), but 57% of heterosexually acquired and 60% of vertically acquired infections are in people of black African origin, mainly acquired in sub-Saharan Africa. The impact of more recent HIV epidemics in sub-Saharan Africa is now being seen, primarily in London where over 70% of black Africans in the UK live.

Impact of HIV treatments on survival. In 1996 HAART was introduced to treat HIV-positive patients. Since the introduction of these drugs the risk of progression to AIDS has fallen substantially. For this reason, patients at high risk of acquiring HIV need to be made aware of these therapeutic advances and their availability in the UK when deciding whether to be tested for HIV.

Antenatal HIV. During pregnancy, the risk of vertical transmission of HIV from mother to infant without treatment is 15–30%. This is reduced to 1–2% with the use of antiretroviral drugs, delivery by caesarean section, careful obstetric management, and avoidance of breastfeeding. It is therefore important to identify previously undiagnosed pregnant women with HIV early in pregnancy. For this reason a national policy was introduced in 1999 to offer and recommend testing to all pregnant women in England. This has been introduced inconsistently across the country.

Anonymous testing for HIV provides the most reliable surveillance data. In 2001 this was undertaken in 72% of live births. Among women giving birth in London the prevalence was 1 in 286. Elsewhere in England prevalence was low but increasing (1 in 2256 in 2001). The rate is highest in women born in Central and East Africa. Of all HIV infected women giving birth in 2001 for whom country of birth was known, 77% (239 of 309) were born in sub-Saharan Africa.

HIV pre-test discussion. Testing for HIV is now considered part of the repertoire of tasks in sexual health all general practice teams should consider doing. The pre-test discussion needs to be a non-judgmental process, enabling the patient to make a decision whether or not to test. If carrying out HIV testing, there must be arrangements for dealing with a positive diagnosis and onward referral. A sexual history needs to be taken first to assess an individual’s risk of HIV. Patients need to be informed of the availability of new treatments for HIV. The standard HIV test detects HIV antibodies, but it may take up to 3 months for antibodies to be detected.
after acquisition of HIV. This may affect when the test is done and whether it needs to be repeated.

It is essential to explain how and when it is planned to give the result to the patient, prior to taking the test. If the result is negative it is necessary to consider whether a re-test is needed. If the test is positive the patient is likely to be shocked, so information should be kept to a minimum, focusing on how they will cope over the next few days. A confirmatory HIV test is usually undertaken involving referral to the GUM clinic.  

**Partner notification**

The management of STIs includes the notification and treatment of sexual partners. Re-infection by an untreated sexual partner can lead to suppression of partially treated symptoms, delayed diagnosis of ascending infection, and continued transmission. Partner notification is a difficult issue for those working in general practice without the back-up from health advisers on site. One answer is to refer all those with a STI to the GUM clinic. However, GUM clinics are unable to cope with demand and often suffer from long waiting times. In England, in 2002, the median waiting time for a first appointment at a GUM clinic was 12 days for men and 14 days for women. The Brook Advisory Centre in London (a specialist young people’s sexual health service) showed that very few of their referrals to GUM clinics were seen there.

In some parts of the UK, health advisers based in GUM clinics undertake partner notification for patients identified in general practice settings as a matter of routine. Patients give permission to be contacted when the original test sample is taken.

Another solution is to undertake partner notification in general practice. The clinician would do so by taking a sexual history and explaining to the patient the importance of telling their contacts to seek medical help from their general practitioner or GUM clinic. It is probably reasonable to ask patients to inform all sexual partners from the previous 3 months (longer if none). This would be extended for HIV as this infection often has a long asymptomatic period.

Any patient treated for a STI must be told to have no sex, even with a condom, until they and their partner(s) are fully treated so as to avoid re-infection.

**Problems with sexual function**

A recent survey of patients attending general practices in London shows that problems with sexual function are common. According to international classification of diseases, a diagnosis was received by 97/447 (22%) men and 422/1065 (40%) women. Erectile failure and loss of sexual desire were the most common diagnoses in men, and the only independent predictor was being bisexual. Lack of sexual desire and failure of orgasmic response were the most common in women. Independent predictors of such diagnoses in women were increasing age, poorer physical health, increasing psychological distress, and sexual dissatisfaction. Up to 30% of this sample reported seeking sexual advice from their doctor. However, only 3–4% had an entry relating to sexual difficulties in their practice records. This suggests that doctors may be reluctant to record sensitive data.

As part of NatSAL 2000, persistent sexual problems — lasting for at least 6 months in the previous year — in people who had at least one heterosexual partner in the past year, were investigated and shown to be less prevalent. Problems related to sexual function were reported in 6.2% of men and in 15.6% of women.

Authors of both of these recently published papers suggest that labelling ‘lack of sexual desire’ as a disease is questionable as this is reported by such a large proportion of the populations studied.

**Policy**

There is no National Service Framework for sexual health to date, although this has been called for by a government select committee. The national strategy for sexual health and HIV, published in 2001, was the first of its kind. It called for ‘a broader role for those working in primary care settings’. The strategy outlines three different ‘levels’ of service provision (Box 3). Level one has a number of elements of sexual health care which the strategy suggests should ideally be available in all general practice settings. It is acknowledged in the strategy that, in order for these elements to be available in every general practice setting, there are training needs that have to be fulfilled.
Specialist clinical teams will deliver the more specialist aspects of care across more than one primary care trust. These elements of sexual health care are listed as level three responsibilities.

Training in sexual health

Sexual health often affords little time in the undergraduate curriculum, and is not part of core general practice training. Courses have been developed in order to give clinicians providing sexual health care, especially in general practice settings, with the skills needed to do so. The two most commonly held qualifications are the Diploma in the Faculty of Family Planning (DFFP) and the recently devised Sexually Transmitted Infection Foundation (STIF) Course. The former has been around for many years, and is run by the Faculty of Family Planning and Reproductive Health Care, part of the Royal College of Obstetricians and Gynaecologists. This qualification has recently been updated, and now includes some STI teaching. Faculty courses (both basic training and updating) are listed on the Faculty website (Box 4).

The Faculty journal includes Faculty guidance and new product reviews produced by their Clinical Effectiveness Unit initiated in 1997. This guidance is available to all on the Faculty website.

The STIF course was devised by the Medical Society for the Study of Venereal Diseases (now renamed the British Association for Sexual Health and HIV [BASHH]) in response to the national strategy for sexual health and HIV, in order to support providers of level one and two services. The aim of the course is to equip participants with the basic knowledge, skills and attitudes for the effective management of STIs. It is a workshop-based 2-day course with role-playing activities to rehearse sexual history-taking using scenarios commonly found in everyday general practice. GUM consultants in many parts of the country run the course.

BASHH has a Clinical Effectiveness Group that has, to date, produced 24 evidence-based guidelines in the area of STIs since its foundation in 1997. These and listings of local STIF courses are available from the BASHH website (Box 4). It is unfortunate that there is not a qualification in ‘sexual health’ that includes all facets of this subject. It is possible in time that this will be developed nationally, and there are some local initiatives to do so such as the Postgraduate Award for Sexual Health in Primary Care for general practitioners and practice nurses being piloted in the West Midlands.21

References


2. Royal College of General Practitioners and Brook. Confidentiality and young people. Improving teenagers’ uptake of sexual and other health advice. London: Royal College of General Practitioners and Brook, 2000. [Available from the Department of Health, E-mail: DOH@prolog.uk.com, for free code 31451.]


8. Collaborative study group on the desogestrel-containing progestogen-only pill. A double blind study comparing the contraceptive efficacy, acceptability and safety of two progestogen-only pills containing desogestrel 75 micrograms/day or levonorgestrel 30 micrograms/day. Eur J Contracept Reprod Health Care 1998; 3: 169-178.


Acknowledgements

The Bristol Teaching Primary Care Trust funds Dr Graham. Many thanks to Dr Nicola Low and the British Association for Sexual Health and HIV for permission to reproduce material and to Dr Caroline Yandell for reading an earlier draft of the manuscript.