

# Physical sexual ill health

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### **Key points**

Sexual ill health is not equally distributed across the male population.

Sexually transmitted infections have continued to increase since 2000, but they are easily treatable in most men.

Incidence of prostate cancer has been increasing across all male groups, but this may not be a true increase. However, the disease has always been more common in black African-Caribbean men.

Whilst it is specifically a male-only cancer, it is important to remember that testicular cancer is rare.

## **INTRODUCTION**

This chapter provides an overview of some of the major challenges to men's physical sexual health in the twenty-first century. This is an important aspect of understanding the sexual health of men, as the physical aspects of men's sexuality and sexual behaviour are often placed at the centre of their sexual identity. There are many ways of defining physical sexual health; most of the available definitions focus solely on the reproductive functioning of the male boy or the sexual response mechanism. The importance of understanding the psychosocial contexts in which men live their sexual lives is at the centre of this book. To this end the definition of physical sexual health that will be applied in this chapter takes into account more than body processes and incorporates a degree of responsibility for both the self and others. Hendriks'<sup>1</sup> definition of sexual health includes aspects of this approach

when he states that physical sexual health also incorporates the fulfilment of individual sexuality, enabling a person to share this with consenting others without jeopardising the health and well-being of other persons. This is the view of physical sexual health which underpins the issues discussed in this chapter.

Chapter 3 identified how the emergence of HIV/AIDS as a challenge to the health of people worldwide had a very positive impact in bringing the discussion of sexually transmitted infections (STIs) and sexual ill health in general into the public arena. Much has been written on the social, cultural, personal and even economic impact of HIV/AIDS, and there are many insightful articles and books on the subject.<sup>2-4</sup> However, the medical, social and historical legacy left by HIV activities in the years following the outbreak have also served in some degree to silence other aspects of sexual health. HIV/AIDS as a life-limiting, if not life-threatening, condition has a different contextual foundation than many other STIs and sexual health issues. This underpins the decision taken in this chapter to focus predominantly on 'non-HIV' aspects of sexual ill health, namely prostate and testicular cancer and common STIs.

## **PROSTATE CANCER**

### **The incidence of prostate cancer**

Worldwide prostate cancer is one of the most common cancers affecting males. In developed countries, it affects one in six men.<sup>5</sup> In the UK, it is the most common cancer in men, accounting for one in four of all new male cancers diagnosed, with a lifetime risk of being diagnosed as one in 13.<sup>6,7</sup>

Prostate cancer is an age-related disease and is uncommon in men under 50 years of age. After this the incidence and mortality rates increase exponentially.<sup>5</sup> There have been huge increases in the incidence of prostate cancer in the last 20 years. This is believed to be mainly due to the increased use of transurethral resections of the prostate for benign prostatic hyperplasia in the 1980s, where prostate cancer becomes an incidental finding in the tissue removed in around 10% of men, and the increased use of prostate-specific antigen (PSA) testing in the 1990s.<sup>7</sup> There are differences in incidence among different populations. Studies from the USA have shown as much as a 90-fold variation, with the highest reported rates among black African-Americans and the lowest rates among Chinese men.<sup>8,9</sup> In the UK it has been reported that men from the African-Caribbean community are three times more likely to have prostate cancer than Caucasian men.<sup>10</sup> However, there is some debate as to the cause of these findings. It is unclear whether this is cultural, genetic or familial. Where studies have been undertaken, it has shown that black men tend to present at a younger age than Caucasian men and that they present with higher-stage tumours, poorer performance status and a worse prognosis.<sup>9</sup>

However, it is important to remember that prostate cancer has a relatively long natural history and for this reason the majority of men are likely to die with

prostate cancer than from it.<sup>11,12</sup> It accounts for 13% of male deaths in the UK, making it the second most common cause of cancer death in men after lung cancer.<sup>7</sup> Treatments have had a positive affect on the five-year survival rate, which has increased by 30%.<sup>6,7</sup>

### Presenting with prostate cancer

It is not uncommon for men to present with advanced disease due to the late presentation of symptoms. This may be dependent on the stage of their cancer. Prostate cancer has four basic stages:

- Stage 1: The cancer is small and completely inside the prostate gland, which feels normal when a rectal examination is performed.
- Stage 2: The cancer is still inside the prostate gland, but is larger and a lump or hard area can be felt when a rectal examination is performed.
- Stage 3: The cancer has broken through the covering of the prostate and may have grown into the neck of the bladder or the seminal vesicle.
- Stage 4: The cancer has spread to another part of the body. In prostate cancer the spread tends to be to bones rather than any other organ.<sup>13</sup>

Lower urinary-tract symptoms such as poor urine stream, hesitancy, terminal dribbling, frequency and retention<sup>14</sup> are unlikely to be present in localised prostate cancer as they are more commonly associated with benign prostatic hyperplasia.<sup>15</sup>

There are three ways of detecting prostate cancer: PSA testing, digital rectal examination (DRE) and/or transrectal ultrasound-guided prostate biopsy.<sup>15</sup> There has been much discussion about the use of these methods and their appropriateness as screening tools. DRE has been commented on by some men as being an emasculating experience<sup>16,17</sup> which has prevented some coming forward for screening.<sup>8</sup> Transrectal ultrasound-guided prostate biopsy may also have similar connotations. This could never be used as a screening method alone as more men would have to be biopsied to detect just one with cancer.<sup>18</sup> However, the method that raises the most discussion is PSA screening. The aim of prostate cancer screening is to increase the chances of successful treatment by detecting cancer at an early, presymptomatic stage.<sup>16</sup>

### PSA screening

Within the UK, PSA screening is not performed routinely. The main argument for this is that this type of screening does not meet the 10 principles which govern a national screening programme, as developed by Wilson and Jungner for the World Health Organization in 1968<sup>19</sup> (see Table 4.1).

PSA is found in blood and it exists in either complexed or free forms. Complexed PSA is bound to other proteins, whereas free PSA exists on its own. It is believed that men with prostate cancer will have a smaller proportion of free PSA and more

**Table 4.1:** Ten principles governing a national screening programme

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1. The condition is an important health problem
  2. Its natural history is well understood
  3. It is recognisable at an early stage
  4. Treatment is better at an early stage
  5. A suitable test exists
  6. An acceptable test exists
  7. Adequate facilities exist to cope with abnormalities detected
  8. Screening is done at repeated intervals when the onset is insidious
  9. The chance of harm is less than the chance of benefit
  10. The cost is balanced against benefit
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complexed PSA than men with other benign prostatic disease. However, most PSA tests measure total PSA and free or complexed PSA testing is undertaken if the total PSA test is marginally raised, and not in cases where the total PSA test result is very high – suggestive of advanced prostate cancer.<sup>19</sup> This can lead to confusing results. PSA is found in men without prostate cancer and its value also rises with age in most men. A London study in 2005 detected cancer solely on the basis of a low free/total PSA value and found that using total PSA test results alone would have meant that most of the participants with cancer would have been missed by simply lowering the age-adjusted threshold for total PSA.<sup>18</sup> Up to 20% of all men with clinically significant prostate cancer will have a normal PSA result and therefore would not be identified through this test alone.<sup>15</sup>

However, what of the men themselves? How do they view PSA screening? An Australian study which utilised focus groups with 67 men – 34 who had been diagnosed with cancer and 33 who had not been screened – found that the men were unanimously in favour of prostate cancer screening. They believed that screening as a preventative measure was a procedure that every man was entitled to receive. Some of the participants likened it to cervical and breast cancer screening for women and felt that healthcare professionals have a responsibility to address screening with them.<sup>16</sup> In the UK, the Department of Health commissioned an information strategy for primary care for men asking for PSA testing. This includes an information booklet for practitioners, a factsheet on the PSA test for patients and a factsheet for staff.<sup>15</sup> As well as providing information on the test and interpreting the results, the booklet and factsheets also acknowledge that in order to have the test the man needs to be free from infection, have not ejaculated in the previous 48 hours and had no vigorous exercise during that time too.

Even though the UK does not have a screening programme for PSA testing, it does not mean that testing is not undertaken. The Second Survey of Prostate-Specific Antigen Services in England in January 2005 reported results from 118 laboratories, showing an increase in PSA tests of 39% in three years between 2000

and 2001 and 2003 and 2004.<sup>19</sup> PSA testing can be useful in monitoring the progression of cancer and the effectiveness of treatments. In an audit exploring whether DRE was essential for follow-up of prostate cancer patients, it was found that PSA was more reliable than DRE in influencing change in the management of these patients.<sup>20</sup>

### **Treating prostate cancer in the UK**

Treatment options for prostate cancer depend on the stage of the cancer. In localised prostate cancer, the choices for treatment include active monitoring, surgery, hormonal therapies and radiotherapy; whereas treatment for more advanced disease concentrates on the latter three.<sup>21</sup> Active monitoring is a contentious issue for men, and it can seem strange that healthcare professionals are offering a period of monitoring without intervention. But men appear to fall into two camps on receiving a diagnosis of prostate cancer: those who wish to seek active treatment and those who wish to wait until further problems arise.<sup>17</sup> The benefit of active monitoring means that men are not having to cope with the potential effects of more aggressive treatments. Other factors that may influence men in their decision-making at this stage are age and general health. There is a general agreement that men with a less than 10-year life expectancy are unlikely to benefit from early detection because of the long natural history of untreated, localised prostate cancer and competing causes of death.<sup>5</sup>

Hormonal therapy can have a serious impact on the masculinity of the patient. The removal of a testis (orchidectomy) can influence a man's self-image and this may make him feel less manly than his counterparts. It is important that practitioners are able to recognise this and that support is offered. For some men, hormone therapy involves treatment with an anti-androgen or luteinising hormone-releasing hormone. Whilst these may appear more attractive to men, it is important that they understand the effects of these drugs. Some of the common side-effects of these treatments are hot flushes, increased body weight and risk of developing breasts,<sup>14</sup> all of which are attributed to being female. In addition, men may experience loss of libido and erectile dysfunction.<sup>21</sup>

Surgery for prostate cancer carries the same risks associated with any surgical procedure. However, the issue surrounding prostate surgery is that, though it may remove the cancer, it carries with it risk of incontinence and erectile dysfunction, which may not have been present at diagnosis. A study of 1,291 men revealed that only 32% of men had total urinary control and 44% were impotent two years after radical prostatectomy.<sup>21</sup> This needs to be explained to men to allow them to make informed judgements on their treatment options.<sup>14</sup>

### **Supporting men with prostate cancer**

Providing support for men with prostate cancer can be challenging. Men appear to act in a variety of ways to gather their health information. The Internet can be

useful, but men question the reliability of the information that they receive.<sup>12,16</sup> Family can provide an important role in assisting men with their decision-making around treatment options,<sup>14</sup> and some men will require information from professionals.<sup>11,12</sup> What appears to be necessary is that whoever is providing the support to men needs to listen to what the men really want from their support. Help is also available from charitable organisations. For example, Macmillan Cancer Relief has assisted professionals to establish a successful prostate cancer support group for men and their families in Chesterfield,<sup>11</sup> and The Prostate Cancer Charity has engaged with African-Caribbean communities to educate men on the function of the prostate, prostate cancer and PSA screening.<sup>10</sup>

## TESTICULAR CANCER

### The incidence of testicular cancer

Whilst prostate cancer is one of the most common cancers affecting all males, testicular cancer is the most common cancer experienced by men in the 20- to 44-year-old age group.<sup>22</sup> However, with only 2,000 cases diagnosed each year within the UK, testicular cancer is not a very common cancer. The incidence of testicular cancer has been increasing throughout the world. Within Europe, there is a clear north/south divide, with rates in Denmark being five times greater than those for Spain. The UK has rates that are above the average for the European Union. However, within the UK higher rates than average are reported in the southern regions;<sup>23</sup> but early diagnosis and improved treatments have contributed to a decrease in mortality and an increase in five-year survival rate.<sup>22</sup>

The reasons for an increasing incidence are unknown, but it is affected by risk factors associated with the disease. As well as age, cryptorchidism (undescended testis) is significant and increases the risk by 5–10 times.<sup>22</sup> A family history of testicular cancer, including previous treatment for testicular cancer, has been found to be significant, as well as the presence of HIV and having Klinefelter's syndrome, a sex chromosome disorder characterised by small testes and low levels of male hormone. Race and ethnicity are also important factors to be considered as the disease is most common in affluent Caucasians and rare in non-Caucasian populations, with the exception of New Zealand Maoris.<sup>23</sup>

### Presenting with testicular cancer

The majority of testicular cancers are germ-cell tumours, which can be divided into seminomas and teratomas. Teratomas tend to occur earlier than seminomas, being more common in 20- to 35-year-olds, whereas seminomas are more common in 30- to 45-year-olds. Either type of tumour usually produces the same signs: a hard lump, swelling or enlargement, increased firmness, or pain and discomfort, either in the testis or the lower abdomen.

As with prostate cancer, a numbered staging system can be applied to identify the progress of the disease:

- Stage 1: The cancer is only in the testicle.
- Stage 2: Cancer cells have spread to the lymph nodes in the abdomen or pelvis. This stage can be further subdivided depending on the size of lymph nodes.
- Stage 3: Cancer cells have spread to the lymph nodes in the chest or above the collarbone.
- Stage 4: Cancer cells have spread to another body organ; for example, the lungs.<sup>24</sup>

The cure rates for testicular cancer are extremely good, with 98% being achieved in early-stage disease and 85% with more advanced disease, even to Stage 4.<sup>25</sup> The important issue appears to be the identification of testicular cancer as early as possible.

Nine out of 10 cancers are first found by the patient themselves,<sup>22</sup> as a routine screening programme is not recommended because of the comparative rarity of the disease and the high cure rates.<sup>25</sup> Self-examination of the testes for lumps and changes is recommended and should commence from puberty onwards, being undertaken on a monthly basis. However, most studies exploring self-examination of the testes show that it is poorly performed. In one London study, 49% of the participants had carried out self-examination in the past year, but of these only 22% had done so according to the recommendations of once per month.<sup>26</sup> The main arguments for poor adherence to self-examination recommendations may not necessarily be due to a lack of interest on the part of men. It appears that the lower prevalence of self-examination may reflect a more general deficit in health knowledge and perceived susceptibility.<sup>27</sup> Men report receiving written information on how to undertake self-examination, but they also report lack of knowledge and lack of confidence in performing the examination correctly.<sup>22</sup> This may explain why older men are more likely to undertake self-examination than their younger counterparts.<sup>26</sup>

Once a lump or symptom is identified, there can still be a delay in men seeking assistance. Over the last few years more has been understood about men and their health-seeking behaviours. However, relatively little is known about the illness behaviour of men with testicular cancer or their perceptions of why delays occur once they present with symptoms.<sup>28</sup> Where evidence has been collected, there are similarities in their findings. Men tend to fall into two camps: those who seek help quickly, within three months; and those who delay seeking help, three months and above.<sup>28,29</sup> Those men who seek help quickly tend to do so because they have a better knowledge of cancer in general, a better knowledge of testicular cancer in

particular, a suspicion of a cancer diagnosis, or have seen media coverage of the issue in recent times.

However, the barriers to accessing help are many and reiterate the complexity of health and illness behaviours expressed by men. The impact of masculine self-image should not be underestimated. In a UK study, men reported fear of appearing weak, fear of loss of masculinity and fear of being seen as a hypochondriac as reasons for delaying seeking help. Also there was a concern about size of penis and having to show their penis to another man.<sup>28</sup> This was corroborated by an earlier Swedish study, which found that because of the site of the cancer some men felt unable to discuss their symptoms with anyone. However, this usually changed once a diagnosis was made and the men chose close family members for support. Even after diagnosis, a few men still felt unable to discuss their illness with anyone.<sup>29</sup>

Misinterpretation of symptoms has been identified as a barrier to seeking help for testicular changes. Pain appears to play a significant role in men seeking help. But it is not pain per se; the pain has to be at a level where it begins to disrupt day-to-day living.<sup>29</sup> Even when pain is present, some men will attempt to provide another reason for it; for example, a recent sporting injury or trauma to the groin, including recent surgery. Where pain is not present and the man feels fit in themselves, lumps are usually dismissed for the same reasons. Other barriers include fear of the examination being painful and how this may be seen in terms of their identity, and the suspected consequences of the treatment; in particular, sexual dysfunction.<sup>28</sup>

### **Treating testicular cancer in the UK**

Treatment for testicular cancer will depend on the type of cancer identified. An orchidectomy (removal of testis) is usually undertaken, alongside radiotherapy and/or chemotherapy and surveillance. Seminomas are extremely sensitive to radiotherapy<sup>25</sup> and this may be all that is required for those men without metastatic disease.<sup>23</sup> For men with teratomas in the absence of metastatic disease, orchidectomy and surveillance may be enough. Men with metastatic testicular cancer should normally receive chemotherapy. Currently two or three cycles of bleomycin/etoposide/cisplatin (BEP) is recommended.<sup>21</sup>

Testicular cancer occurs when men are in their most sexually active phase of their lives. For many they have still to experience fatherhood. Treatment can affect sexual desire and function, although the problem appears to be more psychological than physical.<sup>30</sup> Therefore, prior to radiotherapy and chemotherapy, all men should be offered the option of sperm storage so that they may be given the chance of fatherhood at a later time.<sup>21,31</sup>

Another consideration in the treatment of men with testicular cancer is whether a prosthetic testis should be provided. It is recommended that this should be discussed with all men prior to their surgery.<sup>21</sup> However, in a large London study examining patient satisfaction following orchidectomy, only a third of participants had received a prosthesis, another third had declined, but the remaining third had

not been offered the choice in the first instance.<sup>32</sup> Despite the fact that a third declined a prosthesis, 91% of the participants felt that it was extremely important to be offered the choice. Having the appearance of two testes was important to some of the men as this gave them the appearance of a 'normal' scrotum. In particular, 96% of those who were not offered prostheses identified this as being significant to them.<sup>32</sup> This is supported by a Dutch study where men without testicular prosthesis reported concerns about undressing in the presence of other males due to their scrotum appearing different.<sup>30</sup> However, it is also essential to acknowledge those men who declined a prosthesis when offered. The majority of these men were already in stable relationships and therefore it was not considered necessary by them and their partners to have a prosthesis implanted.<sup>32</sup> There is limited evidence that examines patient satisfaction following testicular implant after orchidectomy and this is an area where further research may assist men, and those supporting them professionally and personally, to make informed decisions.

### **Support and follow-up for men with testicular cancer**

As the survival rate for testicular cancer is so good, surveillance for the future is required.<sup>21</sup> Survivors of testicular cancer have reported physical and psychological sequelae for many years after their treatment. In particular, the long-term effects of chemotherapy should be acknowledged. Physically these may include: vascular complications – for example, Raynaud phenomena being the most commonly reported;<sup>31</sup> nephrotoxicity, though findings are not clear; tinnitus and high-frequency hearing loss; and peripheral neuropathy.<sup>33</sup> Healthcare professionals who are aware of these issues can support the individual by monitoring modifiable risk factors such as tobacco use, hypertension, hyperlipidaemia and noise exposure.

Psychological sequelae are dependent on physical presentations. There is a wide discrepancy in reported problems, with some evidence suggesting less than 10% of testicular cancer survivors reporting psychosocial consequences<sup>33</sup> and other evidence reporting variations of between 25% and 75%.<sup>31</sup> However, this is not an area that has been studied well and this may account for the discrepancies, along with men's confidence in reporting psychosocial issues. Sexual function and fertility concerns are the most important predictors.<sup>30,33</sup> Therefore, it is not surprising to note that the most favourable outcomes of treatment include living with a partner, being fertile and feeling as attractive as before treatment commenced.<sup>31</sup>

## **SEXUALLY TRANSMITTED INFECTIONS**

### **The incidence of STIs**

STIs incorporate a wide range of conditions, including bacterial and viral infections which often present with few, if any, noticeable symptoms. STIs are possibly the most 'well known' and often misunderstood aspects of physical sexual health by the

general population. Myths and legends associated with their mode of transmission, pattern of treatment and long-term consequences continue to affect people's willingness to seek help where an infection may be suspected. Psychosocial and historical issues concerning the stigma associated with HIV/AIDS transmission have added to the already complicated arena in which STI detection, monitoring and treatment takes place.

The 2005 surveillance report from the Health Protection Agency (HPA) gives a detailed overview of the current trends in STI infection in the UK.<sup>34</sup> The actual incidence and prevalence rates for the individual conditions shows some variation; however, the general picture in the UK is one in which there is a continued rise in the levels of newly diagnosed STIs and HIV infection across the population. This pattern is not unique to the UK, but repeated worldwide.<sup>35</sup> The key issue which unites the data from across the globe is the fact that sexual ill health, as illustrated through the incidence rates for STIs and HIV, are not equally distributed between males (or females) within any given population.

The general trend appears to be that of the burden of ill health being unequally borne by marginalised or socially excluded sections of the male population, including men who have sex with men (MSM), men from minority ethnic (predominantly black) communities and young men.<sup>35</sup> For example, in the UK young people are disproportionately likely to be diagnosed with chlamydia, gonorrhoea and genital warts. Men aged between 20 and 24 years accounted for the highest rates (56%) of the diagnosed cases of chlamydia in 2004.<sup>34</sup> In relation to HIV infection, transmission among MSM and heterosexual-acquired infection, particularly including individuals from sub-Saharan Africa, remain the dominant cause of new cases of male infection.<sup>35</sup>

The main message from the available data is that incidence rates of STIs and newly diagnosed HIV have increased over the past few years; however, in general STIs are easily treatable in most men. In addition, the wider availability and introduction of effective therapies for managing HIV have reduced the rate of AIDS diagnoses and deaths since the 1990s.<sup>3</sup>

STIs are usually transmitted as a result of unprotected vaginal, oral or anal sex or genital contact with an infected partner. Most testing for STIs in the UK occurs in genito-urinary medicine (GUM) clinics. These clinics have specialist facilities for testing and well-developed systems for offering the wider range of support services for coping with the psychosocial and personal aspects of being diagnosed with an STI, including contacting, testing and treating sexual partners. Contact details for GUM clinics can be found in the telephone book. Many GUM clinics are attached to main hospitals in major cities; however, contact details can also be obtained from local hospitals and community-based clinics. In the UK there is additional information available from the STI clinic directory on the website of the British Association for Sexual Health and HIV (<http://www.bashh.org>). An important aspect of GUM clinics is the confidential nature of their work. They will not inform

general practitioners (GPs) of any results from tests or treatments, unless specifically requested to do so. This is an important issue for individuals who are concerned about the social stigma associated with a positive test result. Clients may attend one of these clinics at any age and be assured of confidential treatment (even if they are under the age of consent to sex, which is 16 in the UK).

As detailed in the introduction to this chapter, there are many publications detailing the treatment and management issues concerning people living with HIV. The historical and social contexts in which HIV/AIDS are experienced in society have a great impact on the management of the condition for individuals. This chapter aims to concentrate mainly on the most commonly treated STIs in the public health arena. Therefore, in considering the presentation, treatment and follow-up of common STIs in men, this section will focus on genital chlamydia, gonorrhoea, syphilis and genital warts.

### **Genital chlamydia**

Genital chlamydia is a common bacterial infection caused by *Chlamydia trachomatis*. In 2004 it was the most common STI diagnosed at GUM clinics in the UK.<sup>34</sup> Genital chlamydia is asymptomatic in about 50% of men, which means that without a systematic screening programme a significant pool of untreated infection is likely to remain in any community.

### **Presenting with genital chlamydia**

Due to the high rates of asymptomatic presentation in males, many men become aware of their possible infection risk through contact tracing of sexual partners. This is particularly true for heterosexual men, where routine screening for chlamydial infection alongside regular smear tests and other routine gynaecological examinations in women has been introduced in many areas over the last few years as part of the National Chlamydia Screening Programme.<sup>36</sup> Where men experience symptoms of genital chlamydia they often start between one and three weeks after becoming infected. Symptoms may include discharge from the penis, burning and itching in the genital area, and pain when passing urine. In some cases these symptoms are persistently present, but in others they may only last for a few days then disappear. Men with untreated chlamydial infection over a period of time may suffer from urethritis, epididymitis (pain and swelling around the testicles) or Reiter's syndrome, which is a type of arthritis associated with chlamydial infection.<sup>37</sup>

Testing for chlamydia used to rely on collection of swab samples from the individual. However, new laboratory tests have been introduced to diagnose genital chlamydial infections which are able to use noninvasive samples. In males this may be as simple as a urine sample. This has had a very positive impact on the uptake of screening, as well as working to dispel some of the fears around attending for screening and the possible procedures that an individual may need to undergo. The

knock-on effects of these noninvasive procedures is that screening for chlamydia is now able to be offered in community-based or non-clinical settings. As a result, testing for STIs, including chlamydia, is now offered by some mobile health units, GPs, contraception clinics and young people's sexual health clinics.

It is recommended that where chlamydial infection is confirmed, the individual should also be offered screening for other STIs, which may be present without symptoms.<sup>34</sup>

### ***Treating genital chlamydia***

The main problems in chlamydial infection are detection and diagnosis due to the lack of observable symptoms in a high proportion of cases. Once diagnosed, chlamydial infection is relatively easy to treat and cure. Antibiotic therapy is the treatment of choice for chlamydial infection. A single dose of azithromycin or a seven-day course of doxycycline (twice daily) are currently the most commonly prescribed treatments used in the UK. As with many STIs, recurrence cannot be assured unless the sexual partner of the infected person also receives treatment. In addition, halting the spread of chlamydial infection in a population requires that all recent sexual partners (within three months preceding diagnosis) of an infected person should be tested and treated to prevent re-infection and further spread of disease. It is recommended that sexual partners of an infected person need to be tested whether or not they show symptoms of infection, and they may be offered treatment whether or not a positive diagnosis is made.

Systematic screening for chlamydia is a major requirement for controlling the spread of the disease. A plan to begin implementing a national screening programme for chlamydia was included in the Department of Health's National Strategy for Sexual Health and HIV in 2001.<sup>38</sup> The overall programme aim is to implement and monitor opportunistic screening for genital *Chlamydia trachomatis* infection for young women and men in selected programmes in England. Ten opportunistic screening programmes were implemented in 2002, with a further 16 programmes announced in January 2004. The aim is to have a full screening programme by 2007.<sup>34</sup>

### **Gonorrhoea**

Gonorrhoea is the second most common bacterial STI in the UK. It is caused by the *Neisseria gonorrhoeae* bacteria. Recent trends show a decrease in the infection rates for gonorrhoea across the UK population as a whole since 2002. Infection rates for heterosexual men fell by 12% between 2003 and 2004, while a smaller decrease of 2.5% was seen among MSM.<sup>34</sup>

### ***Presenting with gonorrhoea***

Men are more likely to show signs of gonorrhoeal infection than women, who are often asymptomatic. In men, symptoms may include urethral discharge, or in the

case of rectal infections they may experience discharge from the anus, anal discomfort and pain on anal intercourse. Gonorrhoea can usually be diagnosed by a swab taken from the penis. As with chlamydia, while most testing occurs in GUM clinics, some GPs, family planning clinics and young people's clinics now also offer testing.

Monitoring reports and public health research show that the rates of gonorrhoeal infection tend to be higher in inner-city, deprived areas and among many marginalised or socially excluded males such as MSM and some black and minority ethnic communities.<sup>39,40</sup> The population profile of urban and inner-city areas largely reflect the residential profile of these groups of males. Amongst these male social groups there is less likely to be easy access or effective uptake of care services, compounded by other determinants of ill health such as poverty, isolation and economic deprivation. It is therefore perhaps not surprising to find a higher incidence of STIs in these groups of males.

### **Treating gonorrhoea**

The treatment of gonorrhoea is relatively simple in that, as a bacterial infection, it can usually be treated with an antibiotic (Ciprofloxin), often given as a single dose. However, in practice the effective treatment of this infection may be complicated by the fact that there are many strains of *Neisseria gonorrhoea* and some have developed a resistance to antimicrobial agents. This increases the risk of continued transmission of the disease and the chance of individuals developing adverse symptoms of continuous infection. This makes it important for anyone with suspected gonorrhoea to be properly investigated. As with chlamydia, all current and recent sexual partners of a person with gonorrhoea should be tested and treated to prevent re-infection and the further spread of disease. It is recommended that treatment should be offered whether or not they show any signs of infection.

### **Syphilis**

Syphilis is an STI caused by a bacteria-like spirochete, *Treponema pallidum*. It is usually transmitted between partners during sexual intercourse. Until recently, syphilis was a relatively uncommon STI in the UK. A major decline in diagnoses of syphilis in males occurred in the early to mid-1980s alongside a similar fall in the cases of HIV transmission among MSM. This could possibly be viewed as a consequence of the emerging awareness of HIV and adoption of safer sex practices.<sup>34</sup> Diagnoses of syphilis in England in particular have increased substantially since 1997, driven in part by localised outbreaks in some cities such as Manchester, Nottingham and London. Records show that between 1998 and 2004 rates of diagnoses of infectious syphilis (primary and secondary) in males increased by 20%.<sup>41</sup> The pattern of spread of syphilis is unlike that of other bacterial STIs in that the largest pool of infection is not among teenagers; the highest rates are seen in older age groups, with the highest rates in males occurring in men aged 25–34 years, with a significant increase among MSM.<sup>42</sup>

Concern about the potential spread of syphilis amongst gay men and heterosexual men (and women) led to the development of new surveillance initiatives by the Centre for Disease Surveillance and Control (CDSC) in the UK. The new national surveillance system was established to improve insight into the geographic, demographic and risk-factor distribution of infectious syphilis.<sup>43</sup> The aim was to gather information to: (1) inform sexual health promotion interventions; (2) identify groups with significant levels of infection; and (3) provide data to inform understanding of the burden of syphilis infection.

### ***Presenting with syphilis***

One of the main problems with accurate diagnosis of syphilis is that the symptoms are not specific. At the outset the first signs of a primary infection may be the appearance of one or more painless but highly infectious sores appearing anywhere on the body (but usually at the site of infection). However, this is not always the case and the sores clear up on their own in 2–6 weeks. For this reason, many men may fail to attend for STI screening at an early stage as they may presume the ‘problem’ has been resolved with the disappearance of the sores. Left untreated, secondary symptoms may develop six weeks to six months after the onset of primary sores. These later symptoms are highly variable and may include the appearance of a rash on the palms of the hand or soles of the feet. Once again, the delay in development of these symptoms, the fact they may be located away from the penis or anal area and their non-specific nature, increases the likelihood of the individual failing to make the connection to an STI. Late syphilis occurs four or more years after an untreated primary infection. The latent (hidden) stage of syphilis begins when secondary symptoms disappear. Without treatment, the infected person will continue to have syphilis even though there are no signs or symptoms; infection remains in the body. Complications arising at this stage are much more systemic in nature, including damage to the brain, nerves, eyes, heart, blood vessels, liver, bones and joints. This internal damage may show up many years later. The signs and symptoms associated with the late stages of the disease include difficulty coordinating muscle movements, paralysis, numbness, gradual blindness and dementia.<sup>42</sup>

Syphilis is diagnosed either by detection of the organism in the ulcer when viewed under the microscope or alternatively the antibodies to syphilis can be detected in the blood. Once again, good practice recommends that a person with suspected syphilis should also be tested for other STIs which may be present without symptoms.

### ***Treatment of syphilis***

Syphilis is easy to cure in its early stages and a single injection of penicillin is usually sufficient to treat a person who has had syphilis for less than a year. However, all stages of syphilis can be treated with antibiotics, but additional doses are needed

to treat someone who has had syphilis for more than a year. Alternative antibiotic therapy may be used for people who are allergic to penicillin. This treatment destroys the syphilis bacterium and prevents further damage, but it will not repair any damage to the body already caused by the presence of the infection.<sup>44</sup> It is therefore important that detection and treatment of the infection occurs as soon as possible after initial exposure.

Once syphilis infection is detected and treatment has commenced, it is recommended that the person must abstain from sexual contact with new partners until the syphilis sores are completely healed. The current and recent sexual partners of the persons with syphilis must be notified in order that they can also be tested and receive treatment if necessary. Treatment should ideally be offered whether or not they show any signs of infection.

### **Genital warts**

Genital warts are caused by a virus, the human papillomavirus (HPV). More than 90 HPV types have been identified, around a third of which are sexually acquired and live predominantly in genital tissues. Genital warts are the most common viral STI diagnosed in GUM clinics in the UK.<sup>34</sup> This pattern is repeated elsewhere in the world; for example, the Centers for Disease Control and Prevention (CDC) in the USA report that more than half of sexually active men in the USA will have HPV at some time in their lives and about 1% of sexually active men in the USA have genital warts at any one time.<sup>45</sup>

#### ***Presenting with genital warts***

Diagnosis is usually made by recognising the warts by their appearance or by looking for other evidence of HPV infection. Genital warts may not be easy to recognise as they could easily be mistaken for skin tags or normal skin; therefore, the person making the diagnosis should be experienced.

The majority of men who are infected with genital HPV do not have any symptoms. However, some types of HPV can cause genital warts which appear as single or multiple growths. They may be raised, flat, or cauliflower shaped. In men, genital warts may also appear around the anus or on the penis, scrotum (testicles), groin or thighs. Even men who have never had anal sex can get warts around the anus.<sup>44</sup> Warts may appear within weeks or months after sexual contact with an infected person or not at all. It is possible to have the type of HPV that causes genital warts, but never develop any warts. Certain types of HPV have been linked to cancer of the anus and penis in men.<sup>24</sup> However, as discussed earlier in this chapter, these particular cancers themselves are rare – especially in men with healthy immune systems. In addition it must be noted that the types of HPV that can cause genital warts are not the same as the types that can cause penile or anal cancer.

***Treating genital warts***

If left untreated the warts usually disappear, but this can take months or even years. Genital warts usually are treated according to their size and location. The most common treatment is based on the application to the wart of caustic agents or freezing with liquid nitrogen. A series of applications over a course of treatment is usually required to ensure the warts are completely removed. There is no immediate cure and this is often problematic for men who may find it difficult to continually return to the GUM clinic for treatment. The emotional burden of having an STI is compounded in the case of genital warts as even after treatment is completed warts often recur.

While most genital warts are treated in GUM clinics, some GPs, family planning clinics and young people's clinics now also offer treatment. This may help to reduce the personal and possibly economic problems associated with repeated return visits to the GUM clinic, which may be some distance from the client's home. Antibiotics cannot help as genital warts are caused by a virus.

Avoiding direct contact with the virus is the only way to prevent transmission and infection with the HPV causing genital warts. Sexually active men reduce their risk of infection by using condoms correctly and consistently during sexual intercourse. Condoms are the only form of contraceptive that offer some protection against sexually transmitted genital warts, but even then the protection is incomplete; therefore, reduction in the number of sexual partners may be advisable.

**CONCLUSION**

This chapter has outlined some of the diseases and conditions which impinge on men's physical sexual health. It has identified the importance of understanding men's physical health within the contexts of their lives. In discussing the incidence, presentation and treatment processes for male cancers and STIs, it reminds us to take into account other factors which may affect a man's ability to follow treatment recommendations or reduce their risk of contracting a disease. One of the important aspects of this chapter is that it has introduced the reader to the inequality inherent in the physical aspects of sexual health. It highlights that, even in relation to the small number of conditions discussed here, MSM, black and minority ethnic men, and men from other socially excluded groups bear the burden of sexual ill health. In order to fully understand and address the physical sexual health of men, we therefore require a broader understanding and appreciation of other aspects of men's lives in society. These issues and others are taken up elsewhere in this book, including psychosocial issues (Chapter 5) and the experiences of black and minority ethnic men (Chapter 7).

## REFERENCES

- 1 Hendriks A. The political and legislative framework in which sexual health takes place. In: Curtis H, editor. *Promoting sexual health*. London: BMA Foundation for AIDS; 1992. pp. 155–166.
- 2 Holtzman D, Bland S, Lansky A and Mack K. HIV-related behaviours and perceptions among adults in 25 States: 1997 behavioural risk factor surveillance system. *Am J Public Health* 2001; **91**: 1882–1888.
- 3 Department of Health. *Effective commissioning of sexual health and HIV services*. London: DoH; 2003.
- 4 Pan American Health Organisation. *Understanding and responding to HIV/AIDS-related stigma and discrimination in the health sector*. Washington, USA: Pan American Health Organisation; 2003.
- 5 Remzi M, Waldert M and Djavan B. Prostate cancer in the ageing male. *J Men's Health Gender* 2004; **1**(1): 47–54.
- 6 Gavin A, McCarron P, Middleton R, Savage G, Catney D, O'Reilly D, *et al*. Evidence of prostate cancer screening in a UK region. *BJU Int* 2004; **93**: 730–734.
- 7 Cancer Research UK 2006. Prostate cancer. Retrieved 04/08/07 from <http://info.cancerresearchuk.org/cancerstats/types/prostate>
- 8 Bonhomme JJE. The health status of African-American men: improving our understanding of men's health challenges. *J Men's Health Gend* 2004; **1**(2–3): 142–146.
- 9 Heyns C, Lecuona A and Trollip G. Prostate cancer: prevalence and treatment in African Men. *J Mens Health Gend* 2005; **2**(4): 400–405.
- 10 Eaton L. Exploiting the domino effect. *MHF* 2006; **9**: 10–11.
- 11 James N, McPhail G, Eastwood J and James M. Establishing a prostate cancer support group. *Cancer Nurs Pract* 2005; **4**(1): 33–38.
- 12 Kelsey S. Dealing with uncertainty: caring for newly diagnosed prostate cancer patients. *Cancer Nurs Pract* 2003; **2**(10): 27–30.
- 13 Cancer Research UK 2005. Prostate cancer. Retrieved 17/07/07 from <http://info.cancerresearchuk.org/cancerstats/types/prostate>
- 14 Chapple A and Ziebland S. Prostate cancer: embodied experience and perceptions of masculinity. *Sociol Health Illn* 2002; **24**(6): 820–841.
- 15 Watson E, Jenkins L, Bukach C and Austoker J. *The PSA test and prostate cancer: information for primary care*. Sheffield: NHS Cancer Screening Programmes; 2002.
- 16 Ilic D, Risbridger G and Green S. The informed man: attitudes and information needs on prostate cancer screening. *J Mens Health Gend* 2005; **2**(4): 414–420.
- 17 Chapple A, Ziebland S, Herxheimer A, McPherson A, Shepperd S and Miller R. Is 'watchful waiting' a real choice for men with prostate cancer? A qualitative study. *BJU Int* 2002; **90**: 257–264.
- 18 Rowe E, Laniado M, Walker M and Patel A. Prostate cancer detection in men with a 'normal' total prostate specific antigen (PSA) level using percentage free PSA: a prospective screening study. *BJU Int* 2005; **95**: 1249–1252.
- 19 Department of Health 2005. National cancer screening programmes. Prostate cancer. Retrieved 11/07/07 from [http://www.dh.gov.uk/en/policyandguidance/healthandsocialcaretopics/cancer/dh\\_4001754](http://www.dh.gov.uk/en/policyandguidance/healthandsocialcaretopics/cancer/dh_4001754)

- 20 Ragavan N, Sangar V, Gupta S, Herdmann J, Matanhelia S, Watson M, *et al.* Is DRE essential for the follow up of prostate cancer patients? A prospective audit of 194 patients. *BMC Urol* 2005; 5: 1.
- 21 National Institute for Clinical Excellence. *Guidance on cancer services: improving outcomes in urological cancers – the manual*. London: National Institute for Clinical Excellence; 2002.
- 22 Rew L, McDougall G, Riesch L and Parker C. Development of the self-efficacy for testicular self-examination scale. *J Mens Health Gen* 2005; 2(1): 59–63.
- 23 Cancer Research UK 2006. Testicular cancer. Retrieved 04/08/07 from <http://info.cancerresearchuk.org/cancerstats/types/prostate>
- 24 Cancer Research UK 2007. Testicular cancer. Retrieved 17/07/07 from <http://info.cancerresearchuk.org/cancerstats/types/prostate>
- 25 Grey A. Meeting the diverse needs of urological cancer patients. *Cancer Nurs Pract* 2004; 3(1): 19–26.
- 26 Khadra A and Oakeshott P. Pilot study of testicular cancer awareness and testicular self-examination in men attending South London general practices. *Fam Pract* 2002; 19(3): 294–296.
- 27 Evans R, Brotherstone H, Miles A and Wardle J. Gender differences in early detection of cancer. *J Mens Health Gen* 2005; 2(2): 209–217.
- 28 Chapple A, Ziebland S and McPherson A. Qualitative study of men’s perceptions of why treatment delays occur in the UK for those with testicular cancer. *Br J Gen Pract* 2004; 54: 25–32.
- 29 Sandén I, Larsson U and Eriksson C. An interview study of men discovering testicular cancer. *Cancer Nurs* 2000; 23(4): 304–309.
- 30 Incrocci L. Changes in sexual function after treatment of male cancer. *J Mens Health Gen* 2005; 2(2): 236–243.
- 31 Rudberg L, Carlsson M, Nilsson S and Wikblad K. Self-perceived physical, psychologic, and general symptoms in survivors of testicular cancer 3 to 13 years after treatment. *Cancer Nurs* 2002; 25(3): 187–195.
- 32 Adshead J, Khoubehi B, Wood J and Rustin G. Testicular implants and patient satisfaction: a questionnaire-based study of men after orchidectomy for testicular cancer. *BJU Int* 2001; 88: 559–562.
- 33 Vaughn D, Gignac G and Meadows A. Long-term medical care of testicular cancer survivors. *Ann Internal Med* 2002; 136(6): 463–470.
- 34 Health Protection Agency. *HIV and other sexually transmitted infections in the UK*. London: Health Protection Agency; 2005.
- 35 World Health Organization 2003. Sexual health. Retrieved 04/12/03 from <http://www.who.int/reproductive-health/gender/sexualhealth.html>
- 36 Adams E, LaMontagne D, Johnstone A, Pimenta J, Fenton K and Edmunda W. Modelling the healthcare costs of an opportunistic chlamydia screening programme. *Sex Transm Infect* 2004; 80: 363–370.
- 37 Stamm W. *Chlamydia trachomatis* infections of the adult. In: Holmes KK, Mardh PA, *et al.*, editors. *Sexually transmitted diseases*. 3rd edition. New York: McGraw-Hill Health Professions Division; 1999. pp. 407–422.
- 38 Department of Health. *The national strategy for sexual health and HIV*. London: Department of Health; 2001.

- 39 Hughes G, Brady A, Catchpole M, Fenton K, Rogers P, Kinghorn G, *et al.* Characteristics of those who repeatedly acquire sexually transmitted infections: a retrospective cohort study of attendees at three urban sexually transmitted disease clinics in England. *Sex Transm Dis* 2001; 28(7): 379–386.
- 40 Fenton K, Korovessis C, Johnson A, McCadden A, McManus S, Wellings K, *et al.* Sexual behaviour in Britain: Reported sexually transmitted infections and prevalent genital *Chlamydia trachomatis* infection. *Lancet* 2001; 358(Dec): 1851–1854.
- 41 Simms I, Fenton K, Ashton M, Turner K, Crawley-Boevey E, Gorton RT, *et al.* The re-emergence of syphilis in the United Kingdom: the new epidemic phases. *Sex Transm Dis* 2005; 32(4): 220–226.
- 42 Centres for Disease Control and Prevention. Increased transmission of syphilis in men who have sex with men reported from Brighton and Hove. *CDR Wkly* 2000; 10: 177–180.
- 43 Fenton K, Nicoll A and Kinghorn G. Resurgence of syphilis in England: time for more radical and nationally coordinated approaches. *Sex Transm Infect* 2001; 77: 309–310.
- 44 Holmes K, Sparling P, Mardh P, Lemon S, Stamm W, Piot P and Wasserheit J. *Sexually transmitted diseases*. 3rd edition. New York: McGraw-Hill; 1999.
- 45 Centers for Disease Control and Prevention. *Sexually transmitted diseases treatment guidelines 2002*. Atlanta, GA: CDCP; 2002. Report No. RR-6.

