

## The health of children and young people

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### Chapter 6

## Adolescent sexual health

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## Introduction

This chapter presents the most recently available data on adolescent sexual health in the UK, including rates of conception and sexually transmitted infections (STIs). The data cover the period from 1990 to 2001 and were collated from the following sources:

1. Conception rates in the UK are compiled by the Office for National Statistics (ONS).
2. International data on teenage births in industrialised countries are compiled by the United Nations International Children's Emergency Fund (UNICEF).
3. Surveillance data on diagnoses of STIs in England, Wales and Northern Ireland are collected on the KC60 statistical return. The KC60 is a statutory requirement of genitourinary medicine (GUM) clinics in England and Wales, and data are collated by the Communicable Disease Surveillance Centre (part of the Health Protection Agency).
4. In Northern Ireland, data are collated by the Department of Health, Social Services and Public Safety (DHSS&PS), on behalf of national and local government.
5. In Scotland data come from all GUM clinics on the ISD (D) 5 statistical return, and are collated by the Information and Statistics Division of the National Health Service in Scotland and the Scottish Centre for Infection and Environmental Health.
6. Current Human Immunodeficiency Virus (HIV) data for the UK are derived from undiagnosed and diagnosed HIV prevalence. The former come from the Unlinked Anonymous HIV seroprevalence surveys (UA surveys) and the latter from the Survey of Prevalent diagnosed HIV infections (SOPHID). SOPHID monitors individuals with diagnosed HIV who attend for HIV-related treatment or care in England, Wales and Northern Ireland.

Behavioural surveys, government strategies and other relevant literature have been used to interpret the data presented. Data on sexual behaviour in the UK were available from the population-based National Survey of Sexual Attitudes and Lifestyles (NATSAL 2000), the General Household Survey (GHS 1991, 1993, 1995) and the Contraception and Sexual Health Surveys (1997 to 2001/2002). NATSAL is a population-based study first carried out in 1990.<sup>1</sup> A follow up study was administered a decade later in 2000.<sup>2-4</sup> ONS conducted both the GHS<sup>5</sup> and the Contraception and Sexual Health Study.<sup>6</sup> The GHS has been running since 1971 and the Sexual Health Study was conducted as an omnibus survey: a monthly, multi-purpose household survey to which particular research topics could be appended.

## Sexually transmitted infections (STIs)

Sexually transmitted infections are associated with considerable sexual ill health. The initial symptoms may be painful and those infected may feel reluctant to seek treatment due to the nature of acquisition. If left untreated, many STIs are associated with serious sequelae such as cervical cancer, pelvic inflammatory disease (PID), ectopic pregnancy, infertility and congenital complications.<sup>7</sup> The World Health Organisation (1998) estimated that reproductive ill health accounts for between five and 15 per cent of the global burden of disease.<sup>8</sup>

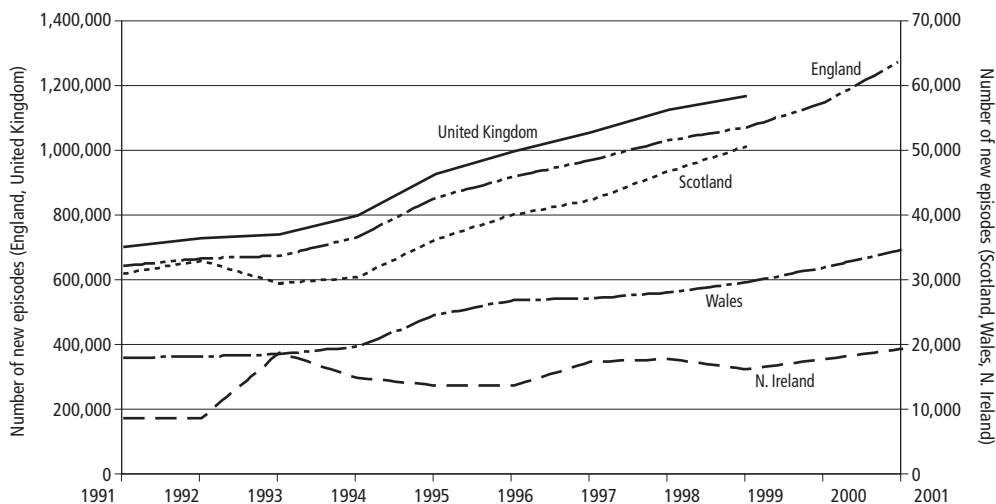
From 1991 to 2001 the number of new episodes of STIs seen in GUM clinics in England, Wales and Northern Ireland doubled (Figure 6.1). Besides an increase in infection rates due



to changes in sexual behaviour, the rise is likely to reflect a combination of factors including greater public and professional awareness of some infections and improved diagnostic sensitivity.<sup>9</sup> GUM data show that young people, particularly females under 20 years of age, bear the burden of sexually transmitted infections.<sup>10</sup>

**Figure 6.1**

**New episodes of diagnoses and workload at GUM clinics, by country<sup>1</sup>**



Source: PHLS

Note:

1. Data are currently unavailable for 2000 and 2001 from Scotland.

### Genital chlamydial infection

Genital infection with *Chlamydia trachomatis* if untreated, is associated with considerable reproductive morbidity in women including pelvic inflammatory disease (PID) and infertility.<sup>11</sup> A literature search examining the causes of PID suggested that 39 per cent of cases might be attributable to prior infection with *Chlamydia trachomatis*.<sup>7</sup>

The CDSC data showed that between 1991 and 1999, the rates of diagnoses of genital chlamydia infection among female adolescents attending GUM clinics in the UK had more than doubled (Table 6.1). The rates of diagnoses of genital chlamydia among female adolescents attending GUM clinics in England, Wales and Northern Ireland also increased between 2000 and 2001. In 2001, 36 per cent of all females with genital chlamydial infection in England, Wales and Northern Ireland were under 20 years of age: the total number of females with genital chlamydial infection in 2001 was 40,362. The highest diagnostic rates were in females aged 16 to 19 years, with 1,035 per 100,000 females aged 16 to 19 years attending GUM clinics in England, Wales and Northern Ireland, diagnosed with chlamydia in 2001. This is equivalent to one per cent of the female population in this age group.

These data underestimate the true prevalence of chlamydial infection, which is asymptomatic in up to 90 per cent of positive females.<sup>13</sup> Contrary to earlier studies<sup>14,15</sup> a similar percentage of asymptomatic infections (88 per cent) have been found in a sample of male military recruits in Scotland.<sup>16</sup> Asymptomatic infections also have implications for treatment and further transmission, as it is likely that many of these cases will remain undiagnosed.



The increase in diagnoses of chlamydial infection may be associated with increased transmission as a result of risky sexual behaviour, but also improved public and professional awareness of the infection. Increasingly sensitive diagnostic tests have been introduced and awareness of the asymptomatic nature of the infection among clinicians means that more cases are detected. However, Sweden a country with historically low rates of STIs, has had a recent rise in chlamydia diagnoses that is not believed to be the result of increased testing or improved test sensitivity, but of sexual behaviour change.<sup>12</sup>

In a pilot study of sexually active women under 25 years of age in Portsmouth and Wirral, opportunistic chlamydial screening was used to determine prevalence rates. Screening was offered at general practice, family planning, genitourinary medicine, adolescent sexual health, termination of pregnancy clinics and women's services in hospitals. Prevalence ranged from nine per cent in general practice to 16 per cent in GUM clinics, and was also found to decrease rapidly with increasing age. Prevalence in those screened outside GU clinics was lower, but still significant, and with service utilisation highest in general practice settings, these sites may have greater potential for population coverage.<sup>17</sup>

In the NATSAL study in 2000, half of all study respondents provided a urine sample of which three per cent of women aged 18 to 24 years and men aged 25 to 34 years were infected with chlamydia.<sup>4</sup> With high rates of often-asymptomatic infection, effective screening programmes are essential for detecting and treating undiagnosed chlamydial infection.

### Gonorrhoea

Gonorrhoea is a bacterial STI caused by *Neisseria gonorrhoeae*, which, like chlamydia, can lead to PID, ectopic pregnancy and infertility if untreated.<sup>18</sup> Between 1991 and 1994 numbers and rates of new diagnoses of uncomplicated gonococcal infection among females declined consistently. From 1995 onwards this declining trend among females was reversed. Between 1994 and 1999 the diagnostic rate had doubled among females under 16 years of age in the UK, and increased by 71 per cent among females aged 16 to 19 years (Table 6.2). In 2001, 42 per cent of females in England, Wales and Northern Ireland that were diagnosed with gonorrhoea were under 20 years of age (diagnostic rate of 27 per 100,000 females aged under 16 and 198 per 100,000 females aged 16 to 19 years).

Between 1991 and 1993 there was a 74 per cent decrease in the rate of new diagnoses of uncomplicated gonorrhoea among males under 16 years of age in the UK. The rate of new diagnoses among males in this age group doubled between 1993 and 1994. In 2001, the diagnostic rate was five per 100,000 males aged under 16 in England, Wales and Northern Ireland. For both sexes, the incidence of gonorrhoea infection was considerably higher among the 16 to 19 age group than the under-16s. Between 1991 and 1999 there was a 16 per cent increase in the diagnostic rate in males aged 16 to 19 years in the UK. In 2001, the diagnostic rate was 146 per 100,000 males aged 16 to 19 years in England, Wales and Northern Ireland.

Gonococcal infection tends to be concentrated in particular geographical areas and risk groups.<sup>19</sup> Gonococcal rates in London residents represent over 40 per cent of all diagnoses in the UK and rates are over 10 times higher in black ethnic minorities compared with other ethnic groups living in London.<sup>10</sup>



Data from the Gonococcal Resistance to Antimicrobials Surveillance Programme (GRASP) found that in 2001, 87 per cent of gonorrhoea infections seen in men were symptomatic, compared with only 58 per cent of those among females.<sup>20</sup> This has implications for treatment-seeking behaviour. For this reason, rates of gonorrhoea in males are likely to approach the true incidence of infection and consequently are often used as an indirect and timely measure of levels of risky sexual behaviour.<sup>21,22</sup> The increase in diagnosed rates of gonorrhoea and other STIs suggests that high-risk sexual behaviours in the UK are increasing, particularly in young people. Data collected as part of the NATSAL surveys carried out in Britain in 1990 and 2000 supports this view.<sup>2</sup>

### **Genital herpes simplex virus infection**

The incidence of new diagnoses of genital herpes simplex virus (HSV) infection throughout the last 10 years has remained fairly constant in males, but rose by 54 per cent in females. In 2001, female diagnosis rates were highest among 20- to 24-year-olds, followed closely by 16- to 19-year-olds (193 per 100,000 females and 167 per 100,000 females, respectively). An increasing proportion of genital infections, particularly among adolescents, are caused by HSV type 1 which has more typically been associated with oral infections.<sup>23</sup> This change may be related to reduced exposure to HSV-1 during childhood, in part due to improved socio-economic standards. It is thought this results in an increased risk of exposure through oro-genital sexual contact in later years.<sup>24-26</sup>

### **Genital warts**

Genital warts are the most commonly diagnosed viral STI and are the clinically visible manifestation of infection with human papillomavirus (HPV), predominantly types 6 and 11.<sup>27</sup> More than 20 HPV types have been linked to the development of cervical cancer,<sup>28</sup> although these types are less frequently associated with the manifestation of genital warts.<sup>29</sup> In 2001, 29 per cent of females diagnosed with genital warts were less than 20 years of age, compared with only 10 per cent of males. Rates of diagnosis among 16- to 19-year-old females rose by 15 per cent over the recent decade and reached 680 per 100,000 females in 2001. The reasons for this increase remain unclear but may be associated with increasing unsafe sexual behaviour in this young age group.

### **Syphilis**

Rates of syphilis diagnoses are considerably lower than for other STIs, although there has been a considerable resurgence of this infection over recent years. Between 2000 and 2001, diagnoses of infectious syphilis increased by 119 per cent (from 327 to 715 cases). The rise is attributable to localised outbreaks in London, Manchester and Brighton, which have predominantly affected men who have sex with men across all age groups. However, overall rates of syphilis in young people remain low, at 0.7 per 100,000 for both males and females aged 16 to 19 years.

### **HIV**

Information on HIV in children can be found in Chapter 5: Infectious diseases.

Prevalence of HIV is an increasing global problem. While the UK is a comparatively low endemic region, prevalence has increased considerably in recent years. By the end of 2001 about 41,200 individuals were estimated to be living with HIV infection, about a third of whom (12,900) had not had their infection diagnosed.<sup>30</sup>



In 2001, there were 25,203 people living with diagnosed HIV infection in the UK, compared with 21,717 in 2000. Risk of acquisition is greatest for men who have sex with men (MSMs) and those from areas of high prevalence such as sub-Saharan Africa. Fifty-seven per cent of diagnoses in MSMs were made in London in 2001.<sup>30</sup>

Of the total new diagnoses of HIV/AIDS made in 2001, less than two per cent were among those aged 16 to 19 years, but 89 per cent of these had contracted the infection sexually. Sixty-one per cent of these infections were in females. However, rates of HIV transmission were almost five times higher among 20- to 24-year-olds than in those aged 16 to 19 years. While current levels of infection in adolescents are low, the high rates of other STIs and evidence of increasing unsafe sexual behaviour in this group means they may be increasingly vulnerable to HIV infection.<sup>31</sup>

## Pregnancy

Pregnancy during adolescence can have profound consequences on those affected. Unwanted pregnancy may result in termination, which can have important psychological implications and may also influence health and future fertility in young women.<sup>32</sup> The consequences of teenage motherhood can be equally difficult and include economic disadvantage, withdrawal from education and the widening of any existing social inequalities.<sup>33</sup> Young women from lower socio-economic groups are disproportionately represented in teenage pregnancy rates.<sup>34</sup>

## International comparisons

A recent UNICEF report on teenage pregnancy in industrialised countries listed the United Kingdom as having the highest teenage pregnancy rate in Europe and the second highest rate of all the industrialised countries in the world after the USA.<sup>34</sup> Teenage pregnancy rates ranged from three per 100,000 in Korea to over 50 per 100,000 in the USA. In the UK, pregnancy rates were 31 per 100,000 females aged 15 to 19 years. The cause of high rates of teenage pregnancy in many westernised countries is not completely understood.

The NATSAL (2000) study found that in the 16 to 19 age group, 30 per cent of males and 26 per cent of females had intercourse before 16 years of age. However, the proportion of females reporting first intercourse before 16 has stabilised since the mid-1990s<sup>3</sup>. For a European comparison, eight out of 12 OECD nations for which data were available found at least half of young people had sexual intercourse before 18 years of age. Of this European cohort, only Iceland and Denmark exceed the UK rates for sex under 18 years of age. In Sweden over the past 30 years, teenage birth rates have decreased by three-quarters and are currently almost five times smaller than those in the UK. Interestingly, the rates of 15- to 19-year-olds out of full-time education in Sweden is less than half that in the UK.<sup>34</sup>

## Conceptions

Conception in teenagers under 16 years of age is more likely to be unintended and to end in termination than in older age groups.<sup>35,36</sup> Between 1990 and 1994, there was a downward trend in conception rates among adolescents in the under 20 and under 18-year-old age groups, which was interrupted by a slight rise in 1995 and 1996 (Table 6.3). The conception rates then fluctuated slightly during the period from 1997 to 2000. Between 1990 and 2000, the rate of conceptions among females under 16 years of age remained relatively constant at around eight to 10 per 1,000 females aged 13 to 15 years.



## Fertility

The rate of live births for females under the age of 20 years decreased from 33 per 1,000 females aged 15 to 19 years in 1990 to 29 per 1,000 females in 1995 (Table 6.4). Between 1996 and 1999, the rate of live births rose slightly and then from 2000 onwards the rates continued to fall, resulting in a rate of 28 per 1,000 females aged 15 to 19 years in 2001.

Generally, the total fertility rate has decreased marginally among all females in England and Wales since 1990, from 1.84 to 1.64 in 2001. In contrast, the total fertility rates in the under 20 age group have remained largely constant since 1991, at around 0.15.<sup>37</sup>

Since the 1970s the average age of first-time mothers in many European countries has increased.<sup>34</sup> In England and Wales, the average age of motherhood was 30 years in 2000 compared with 24 years in 1971.<sup>38</sup> However, it should be noted that these data represent births within marriage exclusively. Similarly, when examining trends among young people it must be noted that not all those included in the denominator were sexually active. As a result, many of those included were not 'at risk' adolescents and this would cause rates to appear artificially low.

Deferring childbirth may result from improved economic conditions and the availability of contraception, allowing pregnancy to be delayed or avoided.<sup>34</sup> For the general population parenthood has largely become a matter of choice as opposed to chance. On the whole, childlessness in the UK is substantially increasing. Meanwhile fertility rates in females aged between 15 to 19 years have not declined as rapidly, particularly when compared with other countries such as France, Spain and Finland.<sup>39</sup>

## Termination of pregnancy

In 2000, 23 per cent of all conceptions were terminated and 21 per cent of all terminations were in females under 20 years old. There was a slight increase in the proportion of all conceptions resulting in a termination among teenagers in 2000 compared with 1990. The proportion of all conceptions terminated by abortion among under 20-year-olds was 36 per cent in 1990 and 39 per cent in 2000 (Table 6.5). Over half (51 per cent) of all conceptions among under 16-year-olds resulted in termination in 1990 and 54 per cent in 2000.

In London, legal abortion rates among the 16 to 19 age group were 43 per 1,000 females in 2000 and 46 per 1,000 females in 2001,<sup>35,36</sup> almost twice that of many other regions. The West Midlands had the next highest rates with 28 per 1,000 females in 2000 and 27 per 1,000 females in 2001. Although not all teenage pregnancies are unwanted the high termination rates indicate that many were unplanned.

## Sexual behaviour

Risky sexual behaviour places individuals at increased risk of STIs and unwanted pregnancy. It includes behaviours such as having unprotected sexual intercourse, high rates of sexual partner change and/or concurrent sexual partnerships.<sup>2</sup> These behaviours typically occur together and may also be associated with other factors, such as young age of first intercourse.<sup>40</sup> Certain population groups are more likely to partake in risky sexual behaviour including young people, particularly teenagers and men who have sex with men.<sup>41</sup>



Changes in sexual behaviour are often inferred from data on STIs and pregnancy rates. Intermittent behavioural studies are therefore necessary to provide explicit, quantitative data on specific sexual behaviours. Findings from such studies may corroborate inferences made from indirect measures of change.

### Contraception

Avoidance of contraception is likely to be associated with poor sexual health outcomes. In 1997, only 38 per cent of 16- to 17-year-olds reported using at least one form of non-surgical contraception compared with 61 per cent in 2001/2002 (Table 6.6). This can partly be explained by the declining trend since 1997 in the proportion of 16- to 17-year-olds who were not sexually active (60 per cent in 1997; 39 per cent in 2001/2002). It also represents a true rise in the use of contraception. Contraception usage has increased among 18- to 19-year-olds with 56 per cent of adolescents in this age group reporting use of at least one form of contraception in 1997 compared with 69 per cent in 2001/2002. In 2000, about 80 per cent of men and women aged 16 to 19 years old reported condom use at first intercourse.<sup>3</sup> However, condoms are often used inconsistently by young teenagers.<sup>42</sup>

In 1999, a third of 18- to 19-year-olds had used emergency contraception at least once during the previous two years (Table 6.7). By 2001/2002, 21 per cent of 18- to 19-year-olds had used emergency contraception at least once during the previous year. However, 16- to 17-year-olds were the least likely to have heard of either hormonal or emergency contraception. In 1999, use of emergency contraception at least once in the previous two years in this age group was eight per cent but by 2001/2002 the proportion in this age group that had used it at least once in the previous year had almost tripled (20 per cent). Emergency contraception could potentially assist in reducing teenage pregnancy but only if young people are aware of it and know how to obtain it.<sup>43</sup>

### Age at first intercourse

Over the last 10 years, age at first sexual intercourse has dropped from 17 to 16 years in the UK. In 2000, over a quarter (26 per cent) of 16- to 19-year-old females were under 16 years of age at first sexual intercourse.<sup>3</sup> A measure of sexual competency at time of first intercourse was devised using (a) reasons for sexual intercourse and (b) use of a reliable method of contraception. Less than half of those having first intercourse under the age of 16 were retrospectively defined as competent. Early age at first intercourse is significantly associated with pregnancy under 18 years of age.<sup>3</sup>

### Number of sexual partners

Overall, males aged 16 to 19 years were more likely than females in the same age group, not to have had a sexual relationship in the previous year (Table 6.8). Between 1997 and 2001/2002, females in this age group were consistently more likely than males to have had one sexual partner in the previous year (40 per cent of females and 31 per cent of males in 1997; 46 per cent of females and 26 per cent of males in 2001/2002). However, males in this age group were more likely than females to have had multiple sexual partners in the previous year (28 per cent of males and 20 per cent of females in 1997; 39 per cent of males and 27 per cent of females in 2001/2002).

The 1990 and 2000 NATSAL studies showed that between 1990 and 2000 there was a significant rise in the percentage of the population reporting unsafe sex. Unsafe sex was



defined as having two or more sexual partners in the last year together with inconsistent condom use in the last four weeks.<sup>2</sup> Men and women aged 16 to 24 years reported much higher numbers of sexual partners than older age groups: in 2000, 72 per cent of men and 57 per cent of women aged 16 to 24 reported two or more partners in the previous five years. Nearly 20 per cent of men and 15 per cent of women aged 16 to 24 years reported 10 or more partners throughout their lifetime.<sup>2</sup>

### Concurrent sexual partnerships

Those who have concurrent sexual partnerships increase their risk of contracting STIs.<sup>44</sup> As with other high-risk sexual behaviours, the frequency of concurrent partnerships has an inverse relationship to age. Among 16- to 24-year-olds, 21 per cent of men and 15 per cent of women reported concurrent partnerships in the previous year.<sup>2</sup> In particular, partner concurrency has been found to be a strong risk factor for *C trachomatis* infection, even when the number of partners is controlled for.<sup>4,45</sup>

## Conclusions

The sexual health of young people in the UK, particularly those under 16 years of age, is poor. It is likely that young people are particularly vulnerable to poor sexual health outcomes, such as STIs and unwanted pregnancy, because they partake in high-risk sexual behaviour, including high rates of sexual partner change and poor levels of condom use. When compared with mothers from older age groups, teenage mothers are more likely to be from lower socio-economic backgrounds, have a lower level of education and have parents who were also teenagers at the time of conception.<sup>31</sup> Adolescent females may also lack the skills required to negotiate safer sex particularly with older male partners.<sup>46,47</sup> Consequently, the risk of repeat infection is much higher in adolescent females than in older women.<sup>41,48</sup>

Currently, there is increased pressure on GUM clinics as attendances continue to rise. Between 1991 and 2001, the number of new episodes rose by 143 per cent and reached 1.3 million in 2001. In some clinics, patients had to wait for up to 28 days for a routine appointment, and in five per cent of clinics there was a delay of up to a week for urgent appointments.<sup>49</sup> This increase in workload and waiting times has implications for the treatment of all populations using these clinics, but particularly for a sub-population such as adolescents, where embarrassment and stigma along with poor communication skills and poor treatment-seeking behaviour may already be barriers to seeking advice.<sup>50,51</sup> In Sweden, awareness of sexual health among 16- to 23-year-olds was found to be highest among those who had contact with the healthcare system.<sup>52</sup>

Various government strategies have been introduced to address the sexual health of young people: The Teenage Pregnancy Strategy (1999)<sup>40</sup> and The Sexual Health and HIV Strategy (2001).<sup>53</sup> Both highlight young people as a target group for specific health information and prevention. The aim of the former is to:

- halve the rate of conceptions among those under 18;
- reduce conception rates in those under 16; and
- have 60 per cent of teenage mothers learning or in employment by 2010.



The sexual health and HIV strategy seeks to reduce the transmission of STIs and HIV, as well as reducing the prevalence of undiagnosed infections and unintended pregnancy rates. Specifically, the initial roll-out of the chlamydia screening programme to 10 sites in England is to target selected groups of women under 25, such as those attending GUM clinics, women seeking terminations and those having their first cervical smear.

## References

1. Johnson A M, Wadsworth J, Wellings K and Field J (1994) *Sexual attitudes and lifestyles*, Blackwell Scientific Press: Oxford.
2. Johnson A M, Mercer C H, Erens B, Copas, A J *et al* (2001) Sexual behaviour in Britain: partnerships, practices, and HIV risk behaviours. *Lancet* **358**, 1835–1842.
3. Wellings K, Nanchahal K, Macdowall W, McManus S *et al* (2001) Sexual behaviour in Britain: early heterosexual experience. *Lancet* **358**, 1843–1850.
4. Fenton K A, Korovessis C, Johnson A M, McCadden A *et al* (2001) Sexual behaviour in Britain: reported STIs and prevalent genital *chlamydia trachomatis* infection. *Lancet* **358**, 1851–1854.
5. Office for National Statistics (1991,1993,1995) *Living in Britain: General Household Survey*, HMSO: London.
6. ONS (2003) *Contraception and sexual health: Omnibus Survey*, TSO: London.
7. Simms I and Stephenson J M (2000) Pelvic inflammatory disease epidemiology: what do we know and what do we need to know? *Sex Transm Infect.* **76**, 80–87.
8. Abouzahr C and Vaughan J P (2000) Assessing the burden of sexually and reproductive ill health: questions regarding the use of disability-adjusted life years. *Bull World Health Organ* **78**(5).
9. Pimenta J M, Catchpole M, Rogers P A, Perkins E *et al* (2003) Opportunistic screening for genital Chlamydia infection. I. Acceptability of urine testing in primary and secondary healthcare settings. *Sex Transm Infect.* **79**, 16–21.
10. PHLS (England, Wales, N. Ireland, DHSS, PS Northern Ireland, the Scottish ISD D 5 Collaborative Group ISD SCIEH and MSSVD) (2001) Sexually transmitted infections in the UK: New episodes seen at genitourinary medicine clinics, 1991–2001, 1–74, PHLS: United Kingdom.
11. Cates W and Wassweheit J N (1991). Genital chlamydia infections: epidemiology and reproductive sequelae. *Am J Obstet Gynecol.* **164**, 1771–1781.
12. Edgardh K (2002) Adolescent sexual health in Sweden. *Sex Transm Infect.* **78**, 352–356.
13. Stamm W E (1999) *Chlamydia trachomatis* infections of the adult, in Holmes K, (ed), *Sexually Transmitted Diseases*, 3<sup>rd</sup> ed., McGraw Hill, Health Professionals Division: New York.
14. Chief Medical Officer's Expert Advisory Group (1998) *Main report of the CMO's Expert Advisory Group on Chlamydia trachomatis*, Department of Health: London.
15. Pierpoint T, Thomas B, Judd A, Brughra R, Taylor-Robinson D and Renton A (2000) Prevalence of *Chlamydia trachomatis* in young men in north west London. *Sex Transm Infect* **76**, 273-276.
16. McKay L, Clery H, Carrick-Anderson K, Hollis S and Scott G (2003) Genital *Chlamydia trachomatis* infection in a subgroup of young men in the UK. *Lancet* **361**, 1792.
17. Pimenta J M, Catchpole M, Rogers P A, Hopwood J *et al* (2003) Opportunistic screening for genital chlamydia infection II: Prevalence among healthcare attenders, outcome, and evaluation of positive cases. *Sex Transm Infect.* **79**, 22–27.



18. Eng T R and Butler W T (eds) (1997) *The hidden epidemic confronting sexually transmitted diseases*, National Academy Press: Washington DC.
19. Hughes G, Andrews N, Catchpole M *et al* (2000) Investigation of the increased incidence of gonorrhoea diagnosed in genitourinary medicine clinics in England, 1994-6. *Sex Transm Inf.* **76**, 18-24.
20. GRASP Year 2001 Report (2002) Public Health Laboratory Service: London.
21. Carne C A, Weller I V D, Johnson A M *et al* (1987) Prevalence of antibodies to human immunodeficiency virus, gonorrhoea rates and changed sexual behaviour in homosexual men in London. *Lancet*, 656-658.
22. Department of Health (1992) *Health of the Nation: a strategy for health in England and Wales*, HMSO: London.
23. Brugha R, Keersmaekers K, Renton A and Meheus A (1997) Genital herpes infection: a review. *Int J Epidemiol.* **26**, 698-709.
24. Cowan F M, Copas A, Johnson A M, Ashley R *et al* (2002) Herpes simplex virus type 1 infection: a sexually transmitted infection of adolescence? *Sex Transm Inf.* **78**, 346-348.
25. Nahmias A J, Lee F K and Beckman-Nahmias (1990) Sero-epidemiological and sociological patterns of herpes simplex virus infection in the world. *Scand J Infect Dis.* **69**, 19-36.
26. Vyse A J, Gay N J, Slomka M J, Gopal R *et al* (2000) The burden of infection with HSV-1 and HSV-2 in England and Wales: implications for the changing epidemiology of genital herpes. *Sex Transm Inf.* **76**, 183-187.
27. Handsfield H H (1997) Clinical presentation and natural course of anogenital warts, *Am J Med.* **102**, 16-20.
28. Bosch F X, Manos M M, Munoz N, Sherman M *et al* (1995) Prevalence of human papillomavirus in cervical cancer: a worldwide perspective. *JNCI.* **87**, 796-802.
29. External consultants meeting (1999) *Summary of recommendations for public health*, CDC mmwr guidelines.
30. Unlinked Anonymous Surveys Steering Group (2002) *Prevalence of HIV and hepatitis infections in the United Kingdom 2001*, Department of Health: London.
31. Pozniak A (2003) Editorial review: What happened to sexually transmitted disease prevention? *Curr Opin Infect Dis.* **16**, 33-35.
32. Fullerton D, Dickson R, Eastwood A J and Sheldon T A (1997) Preventing unintended teenage pregnancies and reducing their adverse effects, *Qual Health Care.* **6**, 102-108.
33. Cowan F M (2002) Adolescent reproductive health interventions. *STI.* **78**, 314-315.
34. UNICEF (2001) A league table of teenage births in rich nations, *Innocenti Report Card*, July 2001. **3**.
35. Office for National Statistics (2000) *Abortion statistics*, Series AB No. 27, TSO: London.
36. Office for National Statistics (2001) *Abortion statistics*, Series AB No.28, TSO: London.
37. Office for National Statistics (2002) *Birth statistics*, Series FM1 No.30 (Revised), TSO: London.
38. Office for National Statistics (2003) *Social Trends 33*, TSO: London.
39. Pearce D, Cantisani G and Laihonon A (1999) Changes in fertility and family sizes in Europe. *Population Trends* **95**.
40. Social Exclusion Unit (1999) *Teenage Pregnancy*, TSO: London.
41. Hughes G, Brady A R, Catchpole M A, Fenton K A *et al* (2001) Characteristics of those who repeatedly acquire sexually transmitted infections: a retrospective cohort study of attendees at 3 urban sexually transmitted disease clinics in England. *STD.* **28**, 379-386.
42. Fortenberry J D, Tu W, Harezlak J, Katz B P and Oll D P (2002) Condom use as a



function of time in new and established adolescent sexual relationships. *Am J Public Health.* 92, 211–213.

43. Graham A, Green L and Glasier A F (1996) Teenager's knowledge of emergency contraception: questionnaire survey in South east Scotland. *BMJ.* 312, 1567–1569.
44. Rosenberg M D, Gurvey J E, Adler N, Dunlop M B and Ellen J (1999) Concurrent sex partners and risk for sexually transmitted diseases among adolescents. *STD.* 26, 208–212.
45. Potterat J J, Zimmerman-Rogers H, Muth S Q, Rothenberg R B *et al* (1999) Chlamydia transmission: concurrency, reproduction number and the epidemic trajectory. *Am J Epidemiol.* 150, 1331–1339.
46. Hillier L, Harrison L and Warr D (1998) When you carry condoms all the boys think you want it: negotiating competing discourses about safe sex. *J Adolesc.* 21, 15–29.
47. O'leary A, Jemmott L S, Goodhart F and Gebelt J (1996) Effects of an institutional AIDS prevention intervention: moderation by gender. *AIDS Educ Prev.* 8, 516–528.
48. Hillis S D, Nakashima A, Marchbanks P A, Addis D G and Davis J P (1994) Risk factors for recurrent *Chlamydia trachomatis* infection in women. *Am J Obstet Gynecol.* 170, 801–806.
49. Djuretic T, Catchpole M, Bingham J S, Robinson A *et al* (2001) Genitourinary medicine services in the United Kingdom are failing to meet current demand. *Int J STD AIDS.* 12, 571–572.
50. Cunningham S D, Tschann J, Gurvey J E, Fortenberry J D and Ellen J M (2002) Attitudes about sexual disclosure and perceptions of stigma and shame. *STI.* 78, 334–338.
51. Cowan F M and Mindel A (1993) Sexually transmitted infections in children: adolescents. *Genitourin Med.* 69, 141–147.
52. Andersson-Ellstrom A and Milsom I (2002) Knowledge about the prevention of sexually transmitted disease: a longitudinal study of young women from 16-23 years of age. *STI.* 78, 339–341.
53. Department of Health (2001) *The national strategy for sexual health and HIV*, 1–53.

**Table 6.1** Rates of diagnoses of uncomplicated genital chlamydia infection in females made in GUM clinics by age group,<sup>1</sup> 1991–2001

| United Kingdom |                                                                  | Numbers and rate per 100,000 population |                                          |             |  |
|----------------|------------------------------------------------------------------|-----------------------------------------|------------------------------------------|-------------|--|
|                | Number of diagnoses of uncomplicated genital chlamydia infection |                                         | Rate of diagnosis per 100,000 population |             |  |
|                | Less than 16 years                                               | 16–19 years                             | Less than 16 years                       | 16–19 years |  |
| <b>Females</b> |                                                                  |                                         |                                          |             |  |
| 1991           | 311                                                              | 5,197                                   | 32.2                                     | 350.0       |  |
| 1992           | 287                                                              | 4,630                                   | 29.2                                     | 328.0       |  |
| 1993           | 248                                                              | 4,455                                   | 24.1                                     | 330.7       |  |
| 1994           | 317                                                              | 4,623                                   | 29.7                                     | 351.8       |  |
| 1995           | 414                                                              | 5,196                                   | 38.5                                     | 393.6       |  |
| 1996           | 478                                                              | 6,144                                   | 44.7                                     | 454.2       |  |
| 1997           | 550                                                              | 7,953                                   | 51.8                                     | 569.0       |  |
| 1998           | 601                                                              | 9,149                                   | 55.9                                     | 639.5       |  |
| 1999           | 746                                                              | 10,919                                  | 68.3                                     | 759.3       |  |
| 2000           | 808                                                              | 12,189                                  | 79.6                                     | 941.1       |  |
| 2001           | 956                                                              | 13,405                                  | 94.1                                     | 1,035.0     |  |

Source: PHLS

Note:

1. 2000 and 2001 does not include data from Scotland as data are currently unavailable for 2000, 2001 from Scotland.

**Table 6.2** Rates of diagnoses of uncomplicated gonorrhoea made in GUM clinics by age group,<sup>1</sup> 1991–2001

| United Kingdom                                         |  | Numbers and rate per 100,000 population |       |       |       |       |       |       |       |       |       |       |
|--------------------------------------------------------|--|-----------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                                                        |  | 1991                                    | 1992  | 1993  | 1994  | 1995  | 1996  | 1997  | 1998  | 1999  | 2000  | 2001  |
| <b>Numbers diagnosed with uncomplicated gonorrhoea</b> |  |                                         |       |       |       |       |       |       |       |       |       |       |
| <b>Males</b>                                           |  |                                         |       |       |       |       |       |       |       |       |       |       |
| Less than 16 years                                     |  | 68                                      | 43    | 19    | 38    | 42    | 35    | 48    | 37    | 45    | 60    | 51    |
| 16–19 years                                            |  | 1,275                                   | 891   | 881   | 679   | 712   | 930   | 1,089 | 1,050 | 1,420 | 1,903 | 2,013 |
| <b>Females</b>                                         |  |                                         |       |       |       |       |       |       |       |       |       |       |
| Less than 16 years                                     |  | 138                                     | 118   | 96    | 83    | 131   | 134   | 143   | 157   | 172   | 218   | 276   |
| 16–19 years                                            |  | 1,982                                   | 1,455 | 1,148 | 1,020 | 1,056 | 1,436 | 1,465 | 1,547 | 1,905 | 2,380 | 2,564 |
| <b>Rate of diagnosis per 100,000 population</b>        |  |                                         |       |       |       |       |       |       |       |       |       |       |
| <b>Males</b>                                           |  |                                         |       |       |       |       |       |       |       |       |       |       |
| Less than 16 years                                     |  | 6.6                                     | 4.1   | 1.7   | 3.4   | 3.7   | 3.1   | 4.3   | 3.3   | 3.9   | 5.6   | 4.8   |
| 16–19 years                                            |  | 80.9                                    | 59.6  | 61.7  | 48.8  | 50.9  | 65.0  | 73.9  | 69.6  | 93.6  | 138.3 | 146.3 |
| <b>Females</b>                                         |  |                                         |       |       |       |       |       |       |       |       |       |       |
| Less than 16 years                                     |  | 14.3                                    | 12.0  | 9.3   | 7.8   | 12.2  | 12.5  | 13.5  | 14.6  | 15.8  | 21.5  | 27.2  |
| 16–19 years                                            |  | 133.5                                   | 103.1 | 85.2  | 77.6  | 80.0  | 106.1 | 104.8 | 108.1 | 132.5 | 183.8 | 198.0 |

Source: PHLS

Notes:

1. 2000 and 2001 does not include data from Scotland as data are currently unavailable for 2000, 2001 from Scotland.

**Table 6.3** Conceptions for female adolescents aged under 16, under 18 and under 20 years within/outside marriage, 1990–2000

|                | England and Wales                 |          |          |                                                 |          |          |
|----------------|-----------------------------------|----------|----------|-------------------------------------------------|----------|----------|
|                | Number of conceptions (thousands) |          |          | Conception rates per 1,000 females in age group |          |          |
|                | Under 16                          | Under 18 | Under 20 | Under 16                                        | Under 18 | Under 20 |
| <b>Females</b> |                                   |          |          |                                                 |          |          |
| 1990           | 8.1                               | 44.8     | 113.3    | 9.5                                             | 47.7     | 68.0     |
| 1991           | 7.5                               | 40.1     | 101.6    | 8.9                                             | 44.6     | 64.1     |
| 1992           | 7.2                               | 37.6     | 93.4     | 8.4                                             | 43.6     | 61.9     |
| 1993           | 7.3                               | 35.8     | 87.2     | 8.1                                             | 42.3     | 59.7     |
| 1994           | 7.8                               | 36.1     | 85.4     | 8.3                                             | 41.8     | 58.7     |
| 1995           | 8.1                               | 37.9     | 86.6     | 8.6                                             | 42.0     | 58.8     |
| 1996           | 8.9                               | 43.5     | 94.9     | 9.6                                             | 46.4     | 63.1     |
| 1997           | 8.3                               | 43.4     | 96.0     | 9.0                                             | 46.3     | 62.8     |
| 1998           | 8.5                               | 44.1     | 101.6    | 9.0                                             | 47.6     | 65.8     |
| 1999           | 7.9                               | 42.0     | 98.8     | 8.3                                             | 45.8     | 63.4     |
| 2000           | 8.1                               | 41.3     | 97.7     | 8.3                                             | 44.1     | 62.8     |

Source: *Birth Statistics 2002*

Notes:

Conceptions are estimates derived from birth registrations and abortion notifications.

Rates for females of ages, under 16, under 18 and under 20 are based on the population of women aged 13–15, 15–17 and 15–19 respectively.

**Table 6.4** Fertility rates for female adolescents under 20 years of age within/outside marriage, 1990–2001

|      | England and Wales     |                                        |
|------|-----------------------|----------------------------------------|
|      | Number of live births | Live births per 1,000 females under 20 |
| 1990 | 55,541                | 33.3                                   |
| 1991 | 52,396                | 33.0                                   |
| 1992 | 47,861                | 31.7                                   |
| 1993 | 45,121                | 30.9                                   |
| 1994 | 42,026                | 28.9                                   |
| 1995 | 41,938                | 28.5                                   |
| 1996 | 44,667                | 29.7                                   |
| 1997 | 46,372                | 30.3                                   |
| 1998 | 48,285                | 31.2                                   |
| 1999 | 48,375                | 31.1                                   |
| 2000 | 45,846                | 29.5                                   |
| 2001 | 44,189                | 28.0                                   |

Sources: *Birth Statistics 2001, 2002*

Note:

The rates for females under 20 are based upon the population of females aged 15–19 years.

**Table 6.5** Conceptions leading to maternities or terminations for female adolescents aged under 16, under 18 and under 20 years within/outside marriage, 1990–2000

England and Wales

Numbers (thousands) and rates per 1,000 females in age group

|      | Under 16                                     | Under 18 | Under 20 | Under 16                                     | Under 18 | Under 20 |
|------|----------------------------------------------|----------|----------|----------------------------------------------|----------|----------|
|      | Number of conceptions leading to maternities |          |          | Number of conceptions terminated by abortion |          |          |
| 1990 | 4.0                                          | 26.4     | 72.8     | 4.1                                          | 18.4     | 40.5     |
| 1991 | 3.7                                          | 24.1     | 66.6     | 3.8                                          | 16.0     | 35.0     |
| 1992 | 3.7                                          | 22.9     | 61.8     | 3.5                                          | 14.7     | 31.6     |
| 1993 | 3.6                                          | 21.8     | 57.3     | 3.6                                          | 14.0     | 29.9     |
| 1994 | 3.9                                          | 21.7     | 55.7     | 3.9                                          | 14.3     | 29.6     |
| 1995 | 4.2                                          | 23.2     | 56.6     | 3.8                                          | 14.7     | 29.9     |
| 1996 | 4.5                                          | 26.1     | 60.5     | 4.4                                          | 17.4     | 34.4     |
| 1997 | 4.2                                          | 25.8     | 60.7     | 4.1                                          | 17.6     | 35.3     |
| 1998 | 4.0                                          | 25.6     | 63.2     | 4.4                                          | 18.5     | 38.4     |
| 1999 | 3.8                                          | 23.9     | 60.7     | 4.2                                          | 18.1     | 38.1     |
| 2000 | 3.7                                          | 23.1     | 59.2     | 4.4                                          | 18.3     | 38.4     |

|      | Conception rates per 1,000 females in age group, leading to maternities |          |          | Conception rates per 1,000 females in age group, terminated by abortion |          |          |
|------|-------------------------------------------------------------------------|----------|----------|-------------------------------------------------------------------------|----------|----------|
|      | Under 16                                                                | Under 18 | Under 20 | Under 16                                                                | Under 18 | Under 20 |
| 1990 | 4.7                                                                     | 28.1     | 43.7     | 4.8                                                                     | 19.6     | 24.3     |
| 1991 | 4.3                                                                     | 26.8     | 42.0     | 4.6                                                                     | 17.8     | 22.1     |
| 1992 | 4.3                                                                     | 26.5     | 40.9     | 4.1                                                                     | 17.0     | 21.0     |
| 1993 | 4.1                                                                     | 25.8     | 39.3     | 4.0                                                                     | 16.6     | 20.5     |
| 1994 | 4.1                                                                     | 25.2     | 38.3     | 4.2                                                                     | 16.6     | 20.4     |
| 1995 | 4.5                                                                     | 25.7     | 38.4     | 4.1                                                                     | 16.3     | 20.3     |
| 1996 | 4.9                                                                     | 27.8     | 40.2     | 4.7                                                                     | 18.6     | 22.9     |
| 1997 | 4.5                                                                     | 27.5     | 39.7     | 4.5                                                                     | 18.8     | 23.1     |
| 1998 | 4.3                                                                     | 27.6     | 40.9     | 4.7                                                                     | 20.0     | 24.9     |
| 1999 | 3.9                                                                     | 26.1     | 39.0     | 4.4                                                                     | 19.7     | 24.5     |
| 2000 | 3.8                                                                     | 24.6     | 38.1     | 4.5                                                                     | 19.5     | 24.7     |

Source: *Birth Statistics 2002*

Notes:

Conceptions are estimates derived from birth registrations and abortion notifications.

Rates for females of ages, under 16, under 18 and under 20 are based on the population of women aged 13–15, 15–17 and 15–19 respectively.

**Table 6.6** Proportion of contraception usage by age, 1997–2001/2002

| Great Britain |                                         | Percentages |                                            |       |  |
|---------------|-----------------------------------------|-------------|--------------------------------------------|-------|--|
|               | 16–17                                   | 18–19       | 16–17                                      | 18–19 |  |
|               | At least one method used (non-surgical) |             | At least one method used (surgical)        |       |  |
| 1997          | 38                                      | 56          | 1                                          | 0     |  |
| 1998          | 51                                      | 54          | 0                                          | 0     |  |
| 1999          | 35                                      | 69          | 1                                          | 2     |  |
| 2000          | 39                                      | 68          | 4                                          | 0     |  |
| 2001/2002     | 61                                      | 69          | 0                                          | 0     |  |
|               | No method used as not sexually active   |             | Total not using contraception <sup>1</sup> |       |  |
| 1997          | 60                                      | 23          | 61                                         | 44    |  |
| 1998          | 44                                      | 41          | 49                                         | 46    |  |
| 1999          | 60                                      | 25          | 64                                         | 29    |  |
| 2000          | 53                                      | 29          | 57                                         | 32    |  |
| 2001/2002     | 39                                      | 25          | 39                                         | 31    |  |

Sources: *Contraception and Sexual Health Surveys 1997–2001*

Note:

1. Includes percentage not sexually active.

**Table 6.7** Proportion using hormonal emergency contraception (Morning after pill) during the two years<sup>1</sup> prior to interview, by age, 1997–2001/2002

| Great Britain |                      | Percentages |            |       |  |
|---------------|----------------------|-------------|------------|-------|--|
|               | 16–17                | 18–19       | 16–17      | 18–19 |  |
|               | Used once            |             | Used twice |       |  |
| 1997          | 11                   | 10          | 2          | 6     |  |
| 1998          | 11                   | 14          | 10         | 4     |  |
| 1999          | 4                    | 24          | 1          | 7     |  |
| 2000          | 14                   | 7           | 3          | 2     |  |
| 2001/2002     | 17                   | 17          | 3          | 4     |  |
|               | Used more than twice |             | Not used   |       |  |
| 1997          | 2                    | 6           | 86         | 78    |  |
| 1998          | 7                    | 3           | 72         | 80    |  |
| 1999          | 3                    | 2           | 93         | 67    |  |
| 2000          | 2                    | 1           | 81         | 90    |  |
| 2001/2002     | 0                    | 0           | 80         | 79    |  |

Sources: *Contraception and Sexual Health Surveys 1997–2000, 2003*

Note:

1. For the 2000 and 2003 surveys the data referred to emergency contraception usage during the year prior to interview.

**Table 6.8** Number of sexual partners in the previous year among 16- to 19-year-olds by sex, 1997–2001/2002

| Great Britain                    |  | Percentages |      |      |      |           |
|----------------------------------|--|-------------|------|------|------|-----------|
|                                  |  | 1997        | 1998 | 1999 | 2000 | 2001/2002 |
| <b>Number of sexual partners</b> |  |             |      |      |      |           |
| <b>Males</b>                     |  |             |      |      |      |           |
| 0                                |  | 41          | 50   | 43   | 31   | 34        |
| 1                                |  | 31          | 25   | 29   | 38   | 26        |
| 2 or 3                           |  | 19          | 19   | 22   | 22   | 25        |
| 4 and over                       |  | 9           | 6    | 6    | 9    | 14        |
| <b>Females</b>                   |  |             |      |      |      |           |
| 0                                |  | 39          | 32   | 39   | 33   | 27        |
| 1                                |  | 40          | 38   | 42   | 44   | 46        |
| 2 or 3                           |  | 15          | 23   | 12   | 20   | 23        |
| 4 and over                       |  | 5           | 8    | 8    | 4    | 4         |

Sources: *Contraception and Sexual Health Surveys 1997-2000, 2003*