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- *Focus on Tuberculosis*, annual surveillance report 2006

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**HIV/STIa:**

- Trends in anogenital warts and anogenital herpes simplex virus infection in the United Kingdom: 1996 to 2005

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World AIDS day 2006: Stop AIDS – keep the promise

World AIDS day is commemorated annually on 1 December around the world. This years theme is ‘Accountability’ with the slogan Stop AIDS – keep the promise.

Globally, the epidemic continues to grow with some countries experiencing resurgence in incidence where numbers had previously stabilised or declined. Although increases in infection rates have been seen in many countries, some countries have, however, been successful in reducing transmission.

According to the UNAIDS/WHO AIDS Epidemic Update: December 2006 [1], there are presently 39.5 million people living with HIV across the globe, with 4.3 million new infections occurring in 2006. The majority (65%) of infections are still in sub-Saharan Africa, with 2.8 million new infections in 2006, although substantial increases are also being seen in Eastern Europe and Central Asia.

Highlighted within the report is the ongoing importance of expanding HIV prevention programmes and targeting groups at high risk of infection such as sex workers, gay and bisexual men, women and girls, young people, injecting drug users and ethnic and cultural minorities.

Within the United Kingdom (UK), recent annual figures suggest that numbers of new diagnoses may be stabilising, with a total of 7450 new diagnoses of HIV in 2005 reported so far. Overall within the UK an estimated 63,500 adults aged between 15 and 59 years were living with HIV at the end of 2005, of whom 20,100 (32%) were unaware of their infection. Numbers of individuals newly diagnosed with HIV who acquired their infection through heterosexual sex in Africa, have declined slightly, with 3554 seen in 2003, 3374 in 2004, and 2760 in 2005. In contrast, the total of 2356 new diagnoses in men who have sex with men diagnosed in 2005 was the highest ever, due to increased testing and continued transmission.

A Complex Picture [2] is a report on HIV and STIs in the UK and was published by the Health Protection Agency and collaborators in time for World AIDS Day. To see a full copy of the report, see <http://www.hpa.org.uk/publications/2006/hiv_sti_2006/default.htm>.

References


Focus on Tuberculosis, annual surveillance report 2006

The Health Protection Agency has published its annual surveillance report on tuberculosis in England, Wales, and Northern Ireland [1]. Focus on Tuberculosis is the first report that brings together surveillance information on tuberculosis from multiple sources. It provides a comprehensive overview of current trends in the numbers of tuberculosis cases, drug susceptibility, treatment outcome, and outbreak surveillance. It provides a baseline for the assessment of the effectiveness of the measures being implemented to strengthen control of tuberculosis in this country.

Key findings of the report include:
Tuberculosis continues to increase in England, Wales, and Northern Ireland. A total of 8113 tuberculosis cases were reported in 2005, a rate of 14.7 per 100,000 population. The number of cases increased by 11% in comparison with 2004. As in previous years, this increase continues to be predominantly among individuals born outside the United Kingdom (UK), the majority of these cases occurring among people who have been in the country for two years or longer. The large increase in the number of cases reported in 2005 is likely to be a continuation of recent trends, but may also include year to year variation. In addition, the contribution of other factors such as increasing awareness among the public and professionals can not be excluded. The continuing increase reinforces and highlights the importance of working towards the goals outlined in the Chief Medical Officer’s (CMO) Tuberculosis Action Plan [2].

Drug resistant tuberculosis is more difficult and expensive to treat. The proportion of cases with tuberculosis resistant to isoniazid remained within the target of 7% set in the CMO’s Action Plan. The proportion of cases in 2005 with multi-drug resistant disease was 0.9%.

Treatment completion for all cases who had an outcome reported has remained stable since 2001 at around 78 to 79%, but remains below the 85% target set out in the CMO’s Action Plan. Although the target of 85% has not been achieved, current levels of treatment completion are comparable to other countries with a similar occurrence of tuberculosis. The high mortality rates observed among the elderly who may die with, rather than of, tuberculosis, make the achievement of the target challenging in many parts of the UK.

Despite the increase in tuberculosis in cattle (bovine tuberculosis), relatively few human cases of Mycobacterium bovis disease are reported. Continued vigilance and collection of risk factor information on all these cases should, nevertheless, continue to allow the investigation of future changes in the epidemiology of tuberculosis caused by M. bovis.

The timeliness of national tuberculosis surveillance data has recently improved. This should allow surveillance data to contribute to the prevention and control of the disease providing the information required at local, regional and national level to identify outbreaks, monitor trends, inform policy, and monitor the success of the tuberculosis programme.

References

Trends in genital warts and genital herpes simplex virus infection in the United Kingdom: 1996 to 2005

This review summarises the epidemiology of anogenital warts and anogenital herpes simplex virus infection in the United Kingdom (UK) from 1996 to 2005, based on all diagnoses of anogenital warts (first attack) and anogenital herpes simplex (first attack) infection made in genitourinary (GUM) clinics and reported on the statutory quarterly KC60 and STIIS/ISD(D)5 returns.

Anogenital warts

Anogenital warts are the most common viral sexually transmitted infection (STI) in the UK. The number of diagnoses of anogenital warts made in GUM clinics has gradually increased over the last ten years. The infection is caused by a human papillomavirus (HPV). More than 40 genotypes of HPV infect the epithelial lining of anogenital tract [1] with types 6 and 11 being responsible for the majority of the anogenital warts and low risk genital lesions [2,3]. Genital warts are most common among young and sexually active individuals [4] and frequently associated with co-existing STIs [5]. Diagnoses seen in GUM clinics represent a small proportion of the total number of HPV infection within the population as many genital warts are asymptomatic and unrecognised. Over 20 types of HPV are associated with cervical cancer [6]. High risk types 16 and 18 are associated with the majority of cervical cancer cases in women [7] and penile and anogenital cancer in men [8]. Recent studies found HPV type 16 to be the most prevalent HPV type worldwide [9].

In 2005, there were 81,137 diagnoses of anogenital warts (first attack) made in GUM clinics throughout the UK, of which 53% were in males and 47% in females (figure 1). There has been a 1.4% increase since 2004, and a 26% increase since 1996 in the total number of diagnoses. Diagnoses in males increased by 34% and in females by 18% in the last ten years. In 2005, 6% (2595/42,924) of male cases were in men who have sex with men (MSM) compared to 4.6% (1471/31,934) in 1996. The absolute number of anogenital warts cases in MSM increased by 76% (from 1471 to 2595) between 1996 and 2005.

The highest rates of anogenital warts were seen in males aged 20 to 24 years (774 per 100,000) and females aged 16 to 19, and 20 to 24 years (730 and 676/100,000 respectively) in 2005 (figure 2). Over the past decade, however, the greatest increase (66%, from 167 to 277/100,000) in the incidence of anogenital warts has been observed in males in the 16 to 19 years age group. Incident rates decreased in the under...
Trends in anogenital warts and anogenital herpes simplex virus infection in the United Kingdom: 1996 to 2005

16 years age group for both males and females during this period.

All regions across the UK recorded increases in the rates of anogenital warts in both males and females from 1996 to 2005. The highest rates of anogenital warts diagnoses in both males and females were observed in London (188/100,000 and 150/100,000 respectively) (figure 3). The rate of increase in London was the lowest in the UK (8% for males and 2% for females between 1996 and 2005). Outside London, the highest rates for both males and females were observed in the North West region (173 and 143/100,000 respectively). North West region and Northern Ireland also saw the largest increase in incidence in the last ten years (by 47% and 42% for males and of 28% and 38% for females respectively). The lowest rates in both males and females were recorded in the West Midlands (118 and 103/100,000 respectively) and East Midlands (126 and 110/100,000 respectively) regions (table 1).

Anogenital herpes simplex virus (HSV)

Genital herpes is the most common ulcerative STI diagnosed in the UK [8]. Generally HSV-1 is associated with oro-labial herpes and HSV-2 – with genital herpes. Recent studies, however, have demonstrated that HSV type 1 is becoming more common as a cause of primary genital herpes in developed countries [10-12]. Risk factors for genital herpes are the number of sexual partners, female gender, male homosexuality, previous STIs [13] and for HSV-1 genital infections – oral sex [14, 15]. Studies have reported that anogenital HSV may facilitate HIV transmission [16] and cause severe systemic disease in immunocompromised people and neonates [17]. Most people with genital herpes are asymptomatic, and undiagnosed infections play an important role in the transmission of infection [18].

In 2005, 19,837 diagnoses of anogenital herpes simplex infection (first attack) were made in GUM clinics in the UK, of which 38% were among men and 62% among women (male to female diagnostic ratio 1:1.6) (figure 4). This represents an 18% increase in total cases since 1996 and a 4% increase from 2004 with a similar pattern of increase in both genders. Between 2004 and 2005, the number of diagnoses increased by 4.9% and 3.5% in males and females respectively. The number of first attack cases in MSM in 2005 was 624 (8.2% of all male diagnoses)

Table 1: Region-specific diagnostic rates* (per 100,000) of anogenital warts (first attack) and anogenital herpes (first attack) by gender: 1996 and 2005 comparison

<table>
<thead>
<tr>
<th>Region/Country</th>
<th>Rate of Anogenital warts</th>
<th>Rate of Anogenital herpes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males 1996</td>
<td>% Change</td>
</tr>
<tr>
<td>North East</td>
<td>119 163</td>
<td>37</td>
</tr>
<tr>
<td>North West</td>
<td>118 173</td>
<td>47</td>
</tr>
<tr>
<td>Yorkshire &amp; the Humber</td>
<td>118 145</td>
<td>23</td>
</tr>
<tr>
<td>East Midlands</td>
<td>99 126</td>
<td>28</td>
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<tr>
<td>West Midlands</td>
<td>93 118</td>
<td>27</td>
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<tr>
<td>East of England</td>
<td>94 128</td>
<td>36</td>
</tr>
<tr>
<td>London</td>
<td>174 188</td>
<td>8</td>
</tr>
<tr>
<td>South East</td>
<td>105 130</td>
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<tr>
<td>Northern Ireland</td>
<td>101 143</td>
<td>42</td>
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<tr>
<td>Scotland</td>
<td>103 141</td>
<td>37</td>
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</tbody>
</table>

*Rates are presented as rounded figures, but percentage changes are calculated using actual values.
cases) compared to 422 in 1996 (6.6% of all male cases). This represents a 19% increase since 2004 and a 48% increase since 1996 in absolute numbers of anogenital HSV cases in MSM.

In 2005, diagnostic rates were higher among females, in the 20 to 24 and 16 to 19 age groups (188 and 156/100,000 respectively) compared to all male age groups. In 2005, the highest rate in males was in the 20 to 24 years age group (92/100,000) (figure 5). Overall, rates continue to be higher for females than males in all ages under 44 years with similar rates observed in both genders in the over 44 years age groups. In females, increases in HSV rates ranged from 13% to 19% over the ten year period in all age groups (except in the over 44 years age group which had a 52% rise). In males, however, the anogenital HSV rate in the 16 to 19 years age group increased by 63% in the last decade; this was disproportionately higher compared to all other age groups.

In 2005, region-specific anogenital herpes rates ranged from the lowest in Northern Ireland (8/100,000 in males and 20/100,000 in females) to the highest in London (54/100,000 in males and 75/100,000 in females) (figure 6). The magnitude
of increase over the ten year period was the greatest in both genders in northern areas of the UK (North East, North West, and Scotland). Rates in Northern Ireland among females increased substantially, while rates in males remained stable from 1996 to 2005. In the South East and East Midland regions declines in the incidence of anogenital HSV in both genders were recorded in the last ten years (ranging from 3% to 8%), while rates in London remained broadly similar (table 1).

Conclusions
Over the last ten years there has been a continuing upward trend in the numbers of anogenital warts (first attack) and anogenital herpes (first attack) diagnoses in the UK. The majority of cases of genital herpes occur in women, while anogenital warts are now more common in men. Incidence rates of these infections are largest in young people of both genders, with males in the 16 to 19 years age group and men who have sex with men showing substantial rates of recent increases of these infections.

Although the rates of anogenital warts and anogenital herpes infections remain highest in London, the levels continued to be broadly the same over the last decade. The infection rates are, however, rising more markedly in the North West of England, and Northern Ireland for anogenital warts, and the North West, North East, and Scotland for anogenital herpes.

Increasing rates of these viral STIs highlight the need for the greater public health interventions. For example, this may take the form of public health campaigns encouraging condom use. The newly available vaccine against HPV may also help to reduce HPV-related morbidity through prevention of primary infections.

References