HIV infections acquired through heterosexual intercourse in the United Kingdom: findings from national surveillance

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The trends underlying the rapid and substantial increases in HIV diagnoses among heterosexual people in the United Kingdom are complex and sometimes misunderstood. Although the number of people becoming infected with HIV through heterosexual intercourse in the United Kingdom is rising steadily, most of the overall rise in HIV diagnoses among heterosexuals is among people who originate from and were infected abroad, mainly in Africa.1 We describe HIV diagnoses where infection was probably acquired through heterosexual intercourse in the United Kingdom.

Methods, participants, and results

The Health Protection Agency Centre for Infections receives voluntary and confidential reports of HIV diagnoses in England, Wales, and Northern Ireland.2 For all reports, the centre collects the probable route of infection and the probable country of infection for patients who were infected through heterosexual intercourse. A research nurse/counsellor follows up where data are incomplete. Where more than one possible country of infection is given, the country with the highest prevalence of HIV is allocated by an epidemiologist or a research nurse/counsellor. If an individual was probably infected in the United Kingdom, further information concerning the partner’s probable route and country of infection are recorded. If it is uncertain but possible that the partner was infected in the United Kingdom, the partner’s country of infection will be assigned to “unspecified European countries.” Individuals infected through heterosexual intercourse in the United Kingdom by a “high risk” partner (for example, an injecting drug user) are excluded.

Reports indicate that 21,115 adults (aged 15 or older) diagnosed with HIV in England, Wales, and Northern Ireland between 1985 and 2003 were infected through heterosexual intercourse (figure). Of these, 1901 (9.0%) were probably infected in the United Kingdom: in 1999, 144 such diagnoses were made, rising to 315 in 2003. Of the 1901, the median age at diagnosis was 30 years for women and 36 years for men. Sixty two per cent (1179) were probably infected by a heterosexual partner infected outside Europe, 30% (569) by a partner infected in Europe (including the United Kingdom), and for 8% (153), the partner’s country of infection was not established.

Of the 1179 individuals infected in the United Kingdom by a partner infected outside Europe, 75% (882) were women, and, of the 1006 for whom this information was reported, 44% (446) were white and 34% (341) black African. Of partners, 77% (912) were probably infected in Africa, 16% (194) in Latin America and the Caribbean, and 6% (73) elsewhere.

Of the 569 individuals whose partner had been infected in Europe, 47% (269) were women, and, of the 486 individuals for whom this information was reported, 81% (393) were white. Forty per cent (250) of partners were probably infected in the United Kingdom, 6% (34) in other identified European countries, and 54% (305) in unspecified European countries.

New diagnoses of HIV infection acquired through sex between men and women in the United Kingdom (excludes individuals infected through sex between men and women in the United Kingdom by a “high risk” partner (partner infected through injecting drug use, sex between men, blood transfusion, or blood products)), by year of diagnosis and sexual partner’s probable region of infection. Reports received by end of June 2004, diagnoses in adults (aged 15 or older) reported in England, Wales, and Northern Ireland. Scottish data are not included as the reporting system run by the Scottish Centre for Infections and Environmental Health (SCIEH) differs in respect to follow up of infections acquired through heterosexual intercourse. (United Kingdom is used throughout to refer to country of infection, as the surveillance system records the information at this level)

Comment

Numbers of HIV infections acquired through heterosexual intercourse in the United Kingdom have risen in recent years but continue to represent a small proportion (<1%) of all HIV infections diagnosed in heterossexuals in England, Wales, and Northern Ireland each year. Homosexual men remain at greatest risk of acquiring HIV in the United Kingdom, accounting for an estimated 80% of newly diagnosed infections that were probably acquired in the United Kingdom.1,3 Of those infected through heterosexual intercourse in the United Kingdom, 62% (1179) had a sexual partner who was infected outside Europe, and nearly a third in Europe, including the United Kingdom.
Voluntary surveillance systems are subject to under-reporting. Figures may underestimate true numbers. Misclassification of probable country of infection by presuming the country with the highest prevalence as the likely country of infection will underestimate the number of infections acquired in the United Kingdom, particularly among people originating from countries with high prevalence. New HIV diagnoses do not represent new HIV infections, as diagnosis can occur at any point between infection and death, which in the natural course of infection (without treatment) is typically 10-12 years. Furthermore, surveillance reports do not distinguish between partners infected in high prevalence countries while visiting and partners infected before migrating from those countries.

The number of people becoming infected with HIV through heterosexual intercourse in the United Kingdom is rising steadily. As the number of heterosexuals living with HIV (diagnosed and undiagnosed) in the United Kingdom grows, the likelihood of heterosexual transmission within the country will increase, particularly among ethnic minorities.

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Ethical approval: No patients' names are collected; instead surname Surname Index codes are used and strict confidentiality of the data is maintained. The voluntary reporting system has approval under the section 60 regulations of the Health and Social Care Act (Statutory Instrument 1438—June 2002).


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