An outbreak no longer: factors contributing to the return of syphilis in Greater Manchester

M Ashton, W Sopwith, P Clark, D McKelvey, L Lighton, D Mandal

Background: In the past few years, increased diagnoses of syphilis have been reported in cities around Britain and Europe. Enhanced surveillance of cases began in 1999 to identify the epidemiology of this increase in Greater Manchester.

Methods: Information was collected on all cases of syphilis newly diagnosed in genitourinary medicine (GUM) clinics in Greater Manchester between January 1999 and November 2002. The data collected included demographic information and information about other sexually transmitted infections, sexual behaviour, perception of risk of infection, and awareness of syphilis transmission.

Results: The majority of cases identified were white homosexual men resident in Greater Manchester. Of the 414 cases diagnosed, 74% had either a primary or secondary stage of syphilis infection and 37% of cases were HIV positive. High numbers of individuals practised unprotected oral sex despite good awareness of the risk of infection with syphilis. There is evidence that the way people are meeting sexual contacts is changing, with increasing numbers meeting most of their partners through the internet.

Conclusions: These findings have implications for targeting interventions. The provision of rapid diagnostic and treatment services is likely to be key for the control of syphilis and potentially of subsequent increases in HIV in the region.

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markedly increased, compared with the more traditional venues of pubs and clubs. In 2002, almost 30% of "high risk" cases (those reporting 10 or more partners in the past year) used the internet to locate most of their contacts.

DISCUSSION

The sustained increase in the number of cases of syphilis in Greater Manchester demanded ongoing surveillance following the initial outbreak investigation. This reveals a high proportion of those practising oral sex reporting never using a condom. Almost two thirds of these cases believed that the chance of catching syphilis from oral sex was high. Of those who believed oral sex to be risky, 70% were also aware of the syphilis outbreak before attending the clinic. These findings suggest not only an increase in high risk sexual behaviour but also an increase despite widespread awareness of the risks.

There is evidence that safer sex messages targeted at the homosexual community in Manchester since 2000 have had some impact. In August 2000, only 37% of the 27 cases interviewed considered unprotected oral sex to be a high risk activity for catching syphilis, compared with 65% shown here. Despite the increased awareness, transmission of syphilis has continued in Manchester and remains focused within the gay community.

Long waiting lists for GUM services are identified as possible factors contributing to missed cases of syphilis. Prolonged waiting times for appointments at GUM services are reported nationwide. The majority of syphilis cases reported here were identified through self referral at GUM clinics and other health services have not generally been considered by patients in the past as reliable sources of advice or care. Improvements in GUM services are urgently required, therefore, to enable effective control of syphilis in Manchester, and strengthening the role of other health services such as general practitioners should also be considered.

There is evidence that the routes by which people locate sexual contacts in Manchester are changing. Between 2001 and 2002, the greatest percentage increase was the use of the internet to locate contacts. This change in behaviour has implications for the targeting of intervention strategies.

As with other studies, a significant proportion of cases of syphilis were coinfected with HIV. Recent studies in Amsterdam and Switzerland report increasing levels of high risk sexual behaviour among individuals with HIV and there is some indication that the introduction of antiretroviral therapies has contributed to this. A twofold to fivefold increased risk of HIV infection has been reported for patients with existing sexually transmitted infections, including syphilis. It is not clear in the Manchester cohort whether the levels of concurrent infection are linked with unsafe sexual behaviour or a biological effect of concurrent infection. There is a very real risk of a significant increase in HIV infection among those infected with syphilis and this potential association should be made clear in intervention strategies. The rapid detection and treatment of syphilis may be a key factor in the successful attainment of the government’s target to reduce new cases of HIV by 25% by 2007.

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CONTRIBUTORS

MA and WS analysis and writing; PC, LL, DMcK, and DM, members of Outbreak Investigation Team.

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Figure 1 Reported cases of syphilis in Greater Manchester between January 1999 and November 2002, by month and showing 3 month rolling average.

Table 1 Frequency of condom use reported by cases of syphilis for oral and anal sex

<table>
<thead>
<tr>
<th>Condom use</th>
<th>Oral sex</th>
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<th>Anal sex</th>
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<tr>
<td></td>
<td>Cases</td>
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