receiving long term haemodialysis.[3] In the present trial we showed that though a magnesium free dialysis fluid corrected the hypermagnesaemia, it failed to show a related improvement in the renal itch. In addition, the fall in the serum magnesium concentration was associated with an increased concentration of parathyroid hormone, as has been previously noted,[5] with the potential of producing renal osteodystrophy in the long term.

The lack of response might have been due to the brevity of the magnesium free dialysis. A longer treatment period was avoided as we thought that the patients' reliability in completing the visual analogue charts was likely to deteriorate, and the hypermagnesaemia was corrected within a week. Alternatively, the serum magnesium concentrations may, like phosphate,[3] be acting as a marker for the adequacy of dialysis, and this is being investigated.

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Prostitute women and public health

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Prostitute women have been allotted a key role in models of heterosexual transmission of human immunodeficiency virus (HIV). Prostitutes are assumed to be especially exposed to infection with HIV because they have a greater than average number of sexual partners, and infected prostitutes may then play an important part in spreading the virus. Debates on public health initiatives reflect this concern with recommendations for registering and screening prostitutes.[1]

Though some findings from Africa confirm the importance of prostitutes in the heterosexual transmission of HIV, as in Nairobi,[2] sexual activity alone has not been described as the principal risk elsewhere in the world. The most important risk factor for prostitutes in the West is sharing needles and syringes for drugs.[3] We studied a cohort of prostitute women in London to assess their risks of infection with HIV.

Patients and results

Ninety one women were followed up for a median of seven months at the Praed Street Clinic over 17 months to December 1987. Questions about use of condoms showed that the women practised safer sex with clients than with private sexual partners (boyfriends) at their first visit and that this pattern was maintained over time (table). Four of 34 women attending the clinic in the last three months of 1987 reported inconsistent use of condoms with clients. This partly depended on the type of client: one sexual encounter with a new client was unprotected compared with 28 encounters with regular clients, who pay the same woman repeatedly for sex.

Changes in use of condoms in 91 women attending the Praed Street Clinic to December 1987

Type of sexual intercourse	No reporting this type	No always using condoms: At first visit to clinic	No always using condoms: At last visit to clinic
Vaginal with clients	91	54	68*
Oral with clients	57†	22	28*
Anal with clients	3‡	2	1
Vaginal with boyfriends	71	4	8

*p<0·05.
†10 Women stopped selling oral sex during follow up.
‡One woman stopped selling anal sex during follow up.

A total of 187 prostitutes were tested with their consent for HIV-1. Three (1·6%) were positive for antibodies to HIV; two had shared needles in the past, and one had probably been infected by her boyfriend, who was positive for the virus. Infection in this woman, who did not use needles, may have been due to the general practice of unsafe sex at home. Information obtained from prostitutes in the cohort during interviews suggested that half of their boyfriends had other sexual partners, but possible risks associated with these men were unclear.

Comment

We did not find any evidence that prostitutes' fairly high rates of change of client were placing them at special risk of infection with HIV. Their safety at work depends partly on the extent to which condoms protect against infection with HIV[4] and also on the prevalence of HIV in the population of clients. Women in the cohort who used condoms all the time had notably fewer infections with common genital pathogens than inconsistent users (H Ward, unpublished observations). No client of a prostitute in London has been found to be positive for antibodies to HIV at the clinic (data not shown).

The current pattern of infection with HIV and the use of condoms in our cohort carry an important methodological implication. Risks of infection in prostitute women are not associated only with a high rate of change of clients. Risks associated with shared injecting equipment are well established,[3] and risks associated with private sexual relationships are becoming evident.[5] Though public health measures designed to increase use of condoms among clients and prostitutes may yield good results, introducing the use of condoms into all sexual relationships is more difficult. Regular clients and boyfriends, who have qualitatively different relationships with the women, are often unwilling to use condoms.

Enumerating stigmatised populations such as prostitutes is not possible, and therefore findings from our study can be generalised only with caution. A trend towards universal use of condoms with new clients and increasing use with regular clients and boyfriends is, however, encouraging.

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