Changes in regular condom use among immigrant transsexuals attending a counselling and testing reference site in central Rome: a 12 year study

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Objective: To analyse data from male to female transsexuals attending between 1992 and 2003 an outpatient clinic considered the main HIV counselling and testing site in Rome for foreign people.

Methods: Data collected between 1992 and 2003, from a routine anti-HIV testing and counselling activity, were analysed. A brief standard interview was performed at each test. A cross sectional analysis to assess the association of regular condom use with demographic and behavioural variables using multiple logistic regression was performed. A follow up analysis to define the effect of single factors on the occurrence of new anti-HIV seroconversions was also performed. The incidence of anti-HIV seroconversion was calculated in person years of observation.

Results: Overall, 473 transsexuals sex workers were tested. Most of them (99%) were from South America (mainly Columbia and Brazil). Anti-HIV prevalence was 32%, but a progressive decrease over time was observed (from 57% in 1993 to 12% in 2003). The proportion of patients reporting regular condom use at enrolment was 75%. A progressive increase in regular condom use was reported over time (from 43% in 1992–3 to 79% in 2002–3). 15 new HIV infections were observed during follow up (incidence 2.1 per 100 person years). Though the proportion of patients reporting regular condom use increased over time, 10 out of the 15 new infections occurred in patients reporting unprotected sex during follow up (rate 8.4 per 100 person years).

Conclusions: Our data suggest that counselling may lead to an increase in safe sex practices among immigrant transsexuals. However, the incidence of new HIV infections is still high and mainly related to non-regular condom use, which still remains the primary objective of prevention.

METHODS

Patients included and routine programme

From the beginning of 1990s all foreign people contacted by the outreach programmes sponsored by the municipality of Rome and asking for HIV test were sent to the centre. The other main way of attending the centre is to pass information from person to person. All patients in touch with the AIDS unit are enrolled in a routine programme, free of charge, consisting in medical examination and blood tests, including an anti-HIV antibody (anti-HIV) test. Hepatitis B and C, as well as other STD serostatus, are also routinely checked.
Counselling session
Pretest and post-test counselling is offered at each HIV test by trained psychologists.

The pretest counselling session includes collection of information about sexual history and drug use and assessment of likely risks for acquiring HIV infection; information on significance of the anti-HIV test and possible consequences of a positive result; information and advice regarding safer behaviour.

The post-test counselling includes discussion and advice regarding the anti-HIV test results; airing of problems and emotions; counselling on safer sex, infection control, and health improvement; lifeline and problem solving.13

The Spanish language is used during counselling session with patients from Latin America.

The sponsorship also provides leaflets in Italian and foreign languages—English, French, Spanish, German, Portuguese, Arab languages—which are used in the counselling sessions, and free condoms. Leaflets and condoms are also available at the outreach unit. Leaflets are provided by the AIDS prevention campaign of the Italian Ministry of Health and other organisations involved in HIV prevention abroad. Moreover, leaflets are also prepared by a working group including operators of the centre, organisations involved in the outreach programme, and HIV experts.

Data collection
The routine data collection for all foreign patients seeking HIV test started in 1993.

Patients are interviewed using a standard questionnaire, administered by a psychologist. The interview aims to collect the following information:

- demographic data;
- anti-HIV serostatus, if known, and date of the last anti-HIV test, if already performed;
- data regarding sexual behaviour, number of partners in the previous 6 months, anti-HIV serostatus, and drug use of partners, if known, and information about prostitution and frequency of condom use;
- type of drug used and means of administration.

All transsexuals reported they practise both oral and anal sex. Although patients reported that some clients asked only for oral intercourse, which should be considered a lower risk—but definitely a risk—than anal intercourse, the number of partners reported was generally high and we found difficulty in defining the number and types of intercourse they had, especially among those involved in prostitution. Thus, in the data analysis, we considered the overall number of reported partners both for oral and anal intercourse.

Moreover, for the purpose of the data analysis, we considered the category “regular condom use” when a patient reported to always use a condom with a casual partner or clients, though one fifth of transsexuals reported having a steady partner and most of them reported often using condoms with them.

Ethical approval
The whole programme, including HIV testing and data collection, starts after the individuals signed an informed consent. The study was approved by the ethics committee of the National Health Institute, which provided a grant for the first 3 years of activity. The data collection was also approved by the municipality of Rome, which included the centre in a network for HIV prevention among marginalised populations, together with outreach programmes performed by non-governmental organisations.

Table 1
Main demographic and behavioural characteristics of immigrant transsexuals at the first contact with the centre

<table>
<thead>
<tr>
<th>No (%)</th>
<th>Median age (IQR range)</th>
<th>Geographic area of origin</th>
<th>Sex with HIV partner in the past 6 months</th>
<th>Condom use in the past 6 months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>29 (25–33)</td>
<td>South America: 468 (98.9)</td>
<td>Overall: 473 (100.0)</td>
<td>455 (94.2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Columbia: 289 (61.1)</td>
<td>In the past 6 months: 465 (94.2)</td>
<td>455 (94.2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Brazil: 142 (30.0)</td>
<td>History of prison: 71 (15.0)</td>
<td>71 (15.0)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Africa: 3 (0.6)</td>
<td>Sex with HIV partner in the past 6 months: 28 (5.9)</td>
<td>28 (5.9)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Europe: 2 (0.4)</td>
<td>Always: 353 (74.6)</td>
<td>353 (74.6)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Median months of residence in Italy: 25 (6–58.5)</td>
<td>Sometimes: 107 (22.6)</td>
<td>107 (22.6)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Interquartile range)</td>
<td>Never: 13 (2.7)</td>
<td>13 (2.7)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reported prostitution</td>
<td>Drug use reported</td>
<td>Drug use reported</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Overall: 473 (100.0)</td>
<td>Injected: 36 (7.6)</td>
<td>Injected: 36 (7.6)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In the past 6 months: 465 (94.2)</td>
<td>Non-injected: 40 (8.5)</td>
<td>Non-injected: 40 (8.5)</td>
</tr>
</tbody>
</table>

Follow up
Anti-HIV negative patients are invited to return to the centre to recheck their anti-HIV status every 3–4 months. The interview is repeated at each follow up anti-HIV test, to evaluate possible behavioural changes. In the analysis the behavioural patterns reported at the last follow up were considered.

The patients who were found to be anti-HIV positive entered a clinical follow up including CD4 lymphocyte count and HIV-RNA assessment, generally repeated every 2 or 3 months. According to the latest international HIV infection treatment guidelines, patients can start antiretroviral treatment if needed.

Data analysis
The data collected from the questionnaires together with laboratory and clinical data are input in a database at the centre and analysed with SPSS software. The cross sectional analysis aimed at evaluating the association of regular condom use with demographic and behavioural variables: the statistical significance was assessed with multiple logistic regression analysis.

Figure 1
Anti-HIV prevalence and proportion of transsexuals reporting regular condom use over time.
A follow up analysis to define the independent effect of each variable on the occurrence of anti-HIV seroconversion was also performed. Transsexuals, who were anti-HIV negative at the enrolment and underwent at least one subsequent HIV test, were included in the follow up analysis. The variables considered for follow up analysis were collected at the interview performed at the last follow up visit. The incidence of anti-HIV seroconversion was calculated with person years of observation as a denominator.

RESULTS

From an overall number of 2278 foreign patients, who underwent HIV testing at the centre between September 1992 and December 2003, 473 transsexuals were selected. Among them, 241 (51.0%) were initially contacted through outreach programs.

The general characteristics of the patients are given in table 1. Most of the patients were from South America: over 90% of transsexuals were from Columbia or Brazil, with Colombians being the majority. Almost all patients reported being previously engaged in prostitution and only 3.8% interrupted the prostitution within the last 6 months, reporting they had a steady partner.

An important proportion of patients reported that they have been in prison because of prostitution. Regular condom use was reported by three out of four transsexuals at the first contact with the centre. About 15% of the patients reported injecting (mainly heroin) or non-injecting drug use (almost all reported cocaine use).

The overall anti-HIV prevalence was 31.5% (149/473). The prevalence of hepatitis B, assessed using anti-core antibodies (HBcAb), hepatitis C and syphilis, with prevalence of hepatitis B, assessed using anti-core antibodies (HBcAb), hepatitis C and syphilis, with prevalence of hepatitis B, assessed using anti-core antibodies (HBcAb), hepatitis C and syphilis, with prevalence of hepatitis B, assessed using anti-core antibodies (HBcAb), hepatitis C and syphilis, with prevalence of hepatitis B, assessed using anti-core antibodies (HBcAb), hepatitis C and syphilis, with.
In the DISCUSSION section, the authors discuss their findings and the implications of their research.

**Key messages**

- There is a high prevalence of HIV infection and other STDs among men who have sex with men and transsexuals from poor resource countries.
- There has been a decrease in condom use with casual partners or clients observed in recent years, and the incidence of new infections among men who have sex with men and transsexuals, particularly with high risk behaviour.
- Promoting condom use and safe sex is still a priority among marginalised populations involved in high risk sexual activity.
- Counselling and targeted interventions appear effective in increasing safe sex.
CONTRIBUTORS
MZ, study design, follow up of patients, data analysis, writing the paper; LS, study design, patient counselling, review of paper; SV, patient counselling; AA, follow up of patients, review of paper; PG, study design, patient counselling and follow up, review of paper.

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