

Identifying a sub-set of Gay men who are at low risk for HIV infection

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Introduction

Safer sex behaviors, monogamy and sexual abstinence have been stressed by the government and private agencies as strategies to reduce the incidence of HIV infection. This study looks at seventy-two (72) self-identified Gay and bisexual men who claim to be acting consistently within the boundaries suggested by these agencies. None tested positive on the HIV antibody test.

Location

Data was collected between June 1994 and June 2001 at Rainbow Flag Health Services, a fertility service and California licensed sperm bank, whose primary clients are Lesbians and Gay men. Rainbow Flag Health Services is located in Oakland, California in the San Francisco Bay Area. It is important to note that this area has one of the highest concentration of HIV infection amongst Gay men.

Participants

Seventy-two (72) subjects presented to Rainbow Flag Health Services because they wished to be sperm donors. Sixty-nine (69) were Gay identified and three (3) bisexually identified.

Thirty-six (36) wished to be designated (directed) donors (i.e. they knew the recipients to whom their sperm would go).

Thirty-six (36) were identity release donors (i.e. their identity would be released to the recipients when the child was three months old). This group was recruited through advertisements in local newspapers and the internet. In addition to sexual history they were screened for personal and family history of disease. Less than one third of all who inquired about becoming donors passed these screening tools. Of those, only 10-20% who underwent semen analysis were accepted as donors pending medical examination and testing for sexually transmitted diseases which included HIV 1 and HIV 2.

Participants ranged in age from 25 to 60, with a median age of 37 and a mean of 38. 42% (30) lived in the City of San Francisco with an additional 36% (26) living in the eight other counties of the San Francisco Bay Area.

The sexual history screening tool for potential donors

1. Have you tested negative for HIV?

“No” ended the interview. They did not pass.

2. Have you ever had a sexually transmitted disease?

If yes, the respondent was asked which disease? Syphilis ended the interview. They did not pass. (California law prohibits donors who test positive on the syphilis screening test. Almost all with a history of syphilis remain positive on the screening test.) Diseases less than 5 years ago ended the interview. They did not pass.

3. Are your sexual partners men, women or both?

4. Are you single or in a relationship?

5. If single: How many men/women have you had sex with in the last year?

If they had been celibate for more than one year they passed the interview.

6. If in a relationship: Do you live together? For how long? Are you mutually monogamous?

If the respondent was in a mutually monogamous, co-habiting relationship for greater than one year and their partner was HIV negative they passed the interview.

If their partner was HIV positive or they were single and had not been celibate for the past year they were asked the remaining questions.

7. Do you engage in rectal sex, either your partner’s rectum or your rectum?

a) If “yes” they were asked: Do you use condoms?

Any answer but “yes” ended the interview. They did not pass.

b) Every single time without exception?

Any answer but "yes" ended the interview. They did not pass.

c) Has a condom broken within the last year?

Any answer but "no" ended the interview. They did not pass.

8. Do you engage in oral sex?

a) If yes: Do you use condoms for oral sex?

If no, they were excluded as directed donors for use in fresh insemination.

b) If no: When was the last time anyone ejaculated in your mouth?

Less than 5 years ended the interview. They did not pass.

Donor criteria

Identity released donors whose sperm was frozen and quarantined for six months and then retested for HIV met the following criteria:

1. had previously tested negative for HIV 1 and

2. had not had a sexually transmitted disease during the last 5 year and never had syphilis and were

3. celibate or

4. in long-term mutually monogamous relationships with a co-habiting HIV negative partner or

5. were single and did not engage in rectal sex or

6. engaged in rectal sex but always used condoms without breakage

7. and did not engage in oral sex or

8. engaged in oral sex without ejaculation in the mouth.

Designated (directed) donor whose sperm was to be used for fresh insemination had to qualify as above with the exception of number 8. These donors could not have engaged in any unprotected oral sex in the previous six months.

All seventy-two (72) passed the above criteria.

Testing

Potential donors were screened for both HIV 1 and HIV 2. Identity released donors were tested by Rainbow Flag Health Services sending blood samples to a government approved laboratory.

Directed donors could also supply documentation of testing from their physicians. However, donors had to supply copies of laboratory reports with the donor's name on it from government approved laboratories.

Results

All seventy-two (72) tested negative to both HIV 1 or HIV 2.

Thirty-six (36) were designated (directed) donors.

Thirty-six (36) were identity release donors.

As of this date (July, 2001), twenty-four (24) of the identity released donors have made it through the sperm donation program.

Of the remaining twelve (12), three (3) are still in quarantine.

Nine (9) did not finish for various reasons:

five (5) changed their minds and decided they did not wish to be donors;

one (1) had consistently poor sperm quality subsequent to his initial semen analysis and was excluded;

one (1) had significantly increased liver function tests and was excluded;

one (1) had very high cholesterol and was excluded;

one (1) tested positive for chlamydia and was excluded. Sperm was not stored from those who were excluded.

Consistent with the proposal of the California Department of Health, six months after their last donation the twenty-four(24) were again tested for:

1. HIV 1
2. HIV 2

3. hepatitis B surface antigen
4. hepatitis C antibody
5. syphilis

and all were negative on all tests. At that time they were also screened for HIV p24 antigen and all were found to be negative.

Conclusion

This study demonstrates that using the appropriate screening tool along with testing, a sub-set of Gay men who are at low risk for HIV infection can be readily identified and would be appropriate sperm donors.