## Predictors of Unprotected Sexual Contacts in HIV-Infected Persons in Switzerland

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Predictors of sexual risk behavior with regular and casual partners among HIV-infected heterosexual and gay persons were addressed. Sociodemographic data as well as self- and interviewer-reported data on sexual behavior were obtained from 117 asymptomatic HIV-infected persons enrolled in the Zurich part of the Swiss HIV Cohort Study (SHCS). Participants who reported sexual intercourse at least once (vaginal andlor anal) without condom use in the 6 months prior to interview were considered to have risk behavior. Sexual risk behavior was analyzed separately in contacts with regular and casual partners. In the 6-month preinterview period, 92% (108 of 117) of the HIV-infected study population reported sexual contacts, and 30/117 (26%) had at least one unprotected vaginal and/or anal contact. Among 93 persons using condoms, 25% of the heterosexual and 10% of the homosexual participants reported breakage of the condom. The main predictor for unprotected sexual behavior with regular partners was an elevated number of contacts. Predictors for sexual risk behavior with casual partners were the combination of alcohol and sexual encounters and the change of sexual behavior since the epidemic of AIDS. These findings did not differ between persons with hetero- and homosexual behavior. Considering that these contacts may have passed the virus on to the seronegative population, that the probability of unsafe sex increased with the growing number of contacts, and that the number of condom breakages was remarkable, it is imperative that this group be educated and motivated to take the active role in insisting on safer sex practices in each encounter.

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## INTRODUCTION

Switzerland is among the European countries with the highest prevalence of HIV infection and AIDS: 19,814 persons had tested HIV-positive (corresponding to 0.3% of the population in Switzerland) and 4,014 had Aids by December 31, 1994 (Anonymous, 1994). Prevalence of HIV testing appears to be much higher in Switzerland than in other European countries or the United States (Jeannin et al., 1994). As the annual number of new sexually acquired HIV infections appears to have stabilized over the last few years, from the biological point of view, the HIV epidemic may be fueled by a relatively small number of seropositive persons (men or women) who engage in unprotected sexual activities. To understand the sexual mode of transmission, we have to consider the psychosocial perspective which includes information about the HIV status and the "negotiated" (Kippax et al., 1993) sexual behavior between two persons independent of their serostatus (Dawson et al., 1994; Doll et al., 1990; Marks et al., 1994).

A large number of seropositive persons, especially men having anal intercourse, engage in unprotected sexual behavior with other seropositive persons (Marks et al., 1994). Although the general knowledge of how to avoid HIV infection is established, changes in sexual behavior have been limited (Connell et al., 1990; Diaz et al., 1994), condoms are used more often (van den Hoeck et al., 1990; Casadonte et al., 1990; Vanichseni et al., 1993; Watkins et al., 1993), but they are not used consistently by HIV infected as well as uninfected persons (Friedman et al., 1994).

Questions about the attitude towards condoms, the responsibility towards one's health, self-esteem, and social competence have not been addressed in the context of sexual risk behavior in HIV-infected persons. This study was conducted to obtain information about these issues in HIV-infected persons with hetero- and homosexual high-risk behavior with regular and casual sexual partners. Understanding the different circumstances of sexual encounters that trigger high-risk behavior should help to develop specific prevention strategies.

## **METHOD**

Subjects were 117 asymptomatic HIV-infected patients who were recruited in 1989 at the outpatient clinic of the Division of Infectious Diseases