

HIV risk behaviour of older persons

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Background: This study investigated social and psychological determinants of preventive behaviour in HIV-relevant situations. **Methods:** Using computer-assisted telephone survey methodology, 2275 male and female were interviewed about their sexual habits. **Results:** For the first time in Switzerland, data concerning HIV-relevant protection as well as their determinants were systematically collected also from persons older than 45. This age group (n=834) showed an increased risk with regard to HIV-relevant sexual contacts. **Conclusions:** The present findings call for more adequate monitoring of sexual behaviour of people older than 40 and suggest the development and implementation of respective age-specific prevention measures.

Keywords: HIV risk behaviour, prevention of STD, psychosocial determinants

In Switzerland, 18% of all reported HIV-positive cases occur in people over the age of 40 years (Swiss Federal Office of Public Health: Persons with positive HIV tests according to age group and year of test; reports through October 31 2000; unpublished). Similar figures are reported from other countries as well.^{1,2} In the USA, for example, 10% to 15%^{3–5} of persons with AIDS are older than 49. Despite its considerable relevance, there is still very little solid knowledge regarding the HIV-relevant sexual behaviour of people of middle and advanced age. The lack of scientific studies dealing with sexuality in the second half of life indicates that taboos continue to exist regarding the subject, and asexuality in old age is apparently considered an undisputed norm.⁶ The latest UNAIDS 'AIDS epidemic update', for example, is restricted to the ages of 15 to 49 years.⁷

METHODS

The present study assessed HIV-relevant sexual behaviour in people aged 19 to 65 years. The study is based on the concept of health-related lifestyles⁸ and investigates social and psychological determinants of preventive behaviour in the context of HIV-relevant initial and occasional sexual contacts.⁹ For the study, 'initial contacts' were defined as first sexual contacts that later led to the establishment of a steady relationship. 'Occasional contacts' were defined as sexual contacts that did not lead to a steady relationship. Both these forms of sexual contact are highly relevant with regard to sexually transmitted diseases, and particularly to HIV. The health status of the new sexual partner is rarely known under such circumstances, and in view of the serological window, sexual intercourse without protection should

take place only after a risk-free three-month period and a subsequent HIV test.

The sample is based on a double-randomized selection. First, 7000 addresses were drawn randomly from the telephone register in German-speaking Swiss municipalities. Second, members of a household were selected at random by the Last-Birthday Method¹⁰ in order to prevent overrepresentation of persons who are often at home or who often answer the family's telephone. Overall 2275 sexually active males and females between the ages of 19 and 65 years were questioned using a computer-assisted telephone survey. The completion rate of the net sample was 46%; 12% of the sample could not be reached; 42% declined to participate. Nonetheless the survey was demographically representative of the German-speaking population of Switzerland between 19 and 65 years of age. Persons with a low level of education as well as foreigners were underrepresented. For the first time in Switzerland, data concerning HIV-relevant protection and risk behaviours as well as their determinants were systematically collected from persons older than 45 years.

With regard to sexuality, survey respondents were asked how many HIV tests they had had in the past two years, as well as how many HIV-relevant initial or occasional sexual contacts they had had in the previous two years (number of contacts and number of partners). Data concerning the latest sexual contact were collected, including gender of partner, sexual practices and use of condoms. In order to measure a specific HIV-relevant orientation of the interviewees, their attitude towards condoms was asked. An index was constructed based on four questions concerning annoyance, awkwardness, reliability as well as general availability of condoms, with a range of possible answers from 'totally disagree' to 'fully agree'. Also respondents were asked about the general importance of sexuality in their life, with possible answers ranging from 'very important' to 'very unimportant'. To determine HIV-related knowledge respondents were asked to approximate the infectious window-period of HIV-tests, with the answer to be given in number of

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weeks. In addition, they were asked to estimate HIV prevalence in Switzerland as compared to its worldwide dimensions.

Among the situational conditions of interest were, whether a steady relationship existed in parallel with the latest reported sexual contact ('promiscuity'). With regard to interpersonal interaction, data were collected about communication on the occasion of the latest sexual contact (topics included former partnerships, fidelity, pregnancy and HIV protection) as well as about various aspects of the power balance between the partners.

RESULTS

As *table 1* shows, 527 test persons (23% of all interviewees) reported either an initial sexual contact resulting in a steady partnership or casual sex within the past two years.

As expected, men had significantly more initial and occasional contacts than women, as well as more contacts per person in both cases. Also as expected, higher rates of initial and occasional contacts were reported among younger persons.

Unexpected and epidemiologically important results are seen in the highest age group.

However, it should be mentioned here that only close to 12% of the persons belonging to the highest age group reported having had initial or occasional sexual contact during the past two years, compared with close to 20% of those in the middle age group and 51% in the lowest age group (*table 1*). It is nonetheless noteworthy that the highest age group showed the highest number of occasional contacts per person (*table 1*). With respect to attitudes, the members of this age group placed greater importance on sexuality than is generally assumed for the older population: two-thirds of women and three-quarters of men older than 45 years described the role of sexuality in their lives as 'rather' to 'very important' (figures not shown). Also, the highest age group showed the least favourable attitudes towards the use of condoms as indicated by annoyance, awkwardness, reliability as well as general availability of condoms (figures not shown).

Table 2 provides further evidence on age effects. According to their reported number of initial or occasional contacts, persons older than 45 years were at greatest risk of HIV infection: 52.6% of this age group had used no condom on the occasion of the reported contact, compared to 25.1% of the middle group and 26.9% of the youngest age group.

Table 1 Sexual behaviour according to gender and age

| | Men | | Women | | Age (years) | | | | | |
|--|--------|------|-------|------|-------------|------|-------|------|-------|------|
| | n | % | n | % | 19–30 | | 31–45 | | 46–65 | |
| Persons surveyed | 1018** | | 1237 | | 479*** | | 942 | | 834 | |
| Persons with at least one sexual contact within the last 24 months | 289** | 28.4 | 238 | 19.2 | 245** | 51.1 | 185 | 19.6 | 97 | 11.6 |
| Initial contacts ^a | 218** | 21.4 | 209 | 16.9 | 217*** | 45.3 | 149 | 15.8 | 61 | 7.3 |
| Number of initial contacts/person ^a | 1.66** | | 1.64 | | 1.64*** | | 1.78 | | 1.36 | |
| Occasional contacts ^a | 155*** | 15.3 | 101 | 8.2 | 116*** | 24.3 | 93 | 9.9 | 47 | 5.7 |
| Number of occasional contacts/person ^a | 7.5*** | | 4.1 | | 4.6*** | | 6.7 | | 8.8 | |

a: Within the last 24 months

χ^2 -test; * $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$

Mann-Whitney- resp. Kruskal-Wallis test; + $p \leq 0.05$; ++ $p \leq 0.01$; +++ $p \leq 0.001$

Table 2 Selected results regarding the dimensions behaviour, orientation, resources, situation, and relationship on the occasion of the reported sexual contact

| | Men | | Women | | Age (years) | | | | | |
|---|---------|---------|-------|------|-------------|---------|-------|------|-------|------|
| | n | % | n | % | 19–30 | | 31–45 | | 46–65 | |
| No condom use ^a | 91 | 31.5 | 72 | 30.5 | 66 | 26.9*** | 46 | 25.1 | 51 | 52.6 |
| Attitude toward condoms (mean between 0 and 16) | 10.8*** | | 11.21 | | 11.1*** | | 11.2 | | 10.7 | |
| Deficient knowledge of HIV testing (serological window) | 644 | 68.6*** | 669 | 60.0 | 266 | 57.6*** | 556 | 62.4 | 491 | 70 |
| Promiscuity ^a | 55 | 19.1** | 23 | 9.8 | 24 | 9.8** | 31 | 17.0 | 23 | 23.7 |
| Communication ^a (mean between 0 and 8) | 4.2*** | | 5.2 | | 5.2*** | | 4.4 | | 3.4 | |

a: On the occasion of the reported contact

χ^2 -test; * $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$

Mann-Whitney- resp. Kruskal-Wallis test; + $p \leq 0.05$; ++ $p \leq 0.01$; +++ $p \leq 0.001$

Further, respondents 46-and-older scored lowest on knowledge of the HIV test, with 70% answering incorrectly (compared with 62.4% of middle age group and 57.6% of the youngest age group). Within the highest age group as well, initial or occasional contacts were most likely to occur parallel to another steady partnership ('promiscuity'): 23.7% (middle age group: 17.0%; youngest age group: 9.8%). Finally, communication about risk and protection on the occasion of intercourse was least frequent in the highest age group, with a mean of 3.4 on a scale between 0 and 8 (middle age group: 4.4; youngest age group: 5.2).

DISCUSSION AND CONCLUSIONS

This study took as its starting point current incidence rates of HIV and AIDS among people in their second half of life and studied, for the first time in Switzerland, lifestyle-related HIV risk in the age group of over 45 years. HIV incidence rates in this group probably include an unknown number of contractions at an earlier age. Still, the results presented here draw attention to particular social and psychological factors that can contribute to an increase of risk in this age group. Moreover the results provide the first indication of an age-specific pattern of HIV-relevant behaviours, attitudes and knowledge that might render people in middle and older age at a specific risk of HIV contraction. It seems possible that there would be a cohort effect in the patterning of risk, which as such, would warrant further study. The present findings indicate, however, a need to broaden the scope of research and preventive interventions including the monitoring of HIV-related sexual behaviour among people above 40 years of age.

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