Results of a Follow Up Survey on HIV Risk Reduction & Risk-Taking Among Men Who Have Sex with Men in Germany

Axel J. Schmidt, Stefanie Grote, Michael Bochow
Social Science Research Center Berlin, Public Health Unit

Background:
Recent increases in HIV diagnoses among men who have sex with men (MSM) have been documented in many post-industrialized countries, including Germany. However, a study from the UK suggests that the rise in newly diagnosed HIV infections may reflect an increased uptake in HIV testing rather than a rise in HIV incidence [1]. In Germany, empirical data on performed antibody negative HIV tests among MSM is lacking. The results of surveys on MSM have shown changes in sexual behaviour: While the repertoire of other risk reduction strategies than condom use has been expanding, it is frequently stated that since the introduction of antiretroviral therapy (ART), traditional protective strategies – reducing the number of sexual partners, avoiding anal intercourse (AI), or regularly using condoms in AI – have continued to decline. On behalf of the Federal Centre for Health Education (BZgA), follow up surveys on knowledge, attitudes and behaviour among MSM in Germany have been conducted since 1991, providing an empirical basis for trend analyses. The aim of this presentation is to estimate trends in risk-taking, risk reduction, and risk-avoiding strategies among MSM.

Methods:
In 2007, the questionnaire was distributed via ten magazines and six internet sites for gay men. Main topics of the survey were sources of information about HIV/AIDS, lifestyle (e.g. partnership, coming-out, drug use), sexual lifestyle (e.g. number of sexual partners, frequency of protected and unprotected anal intercourse (AI), ingestion of seminal fluid), HIV testing behaviour and serostatus, post exposure prophylaxis, or the subjective impact of antiretroviral therapy on sexual lifestyle. 8,750 datasets were analysed. For the first time in the history of these follow up surveys, the majority of the questionnaires (76%) were completed online.

The use of cross-sectional data for trend analyses is limited: a representative census of MSM is impossible, as random samples of this "hidden" population cannot be drawn. In addition, the sampling strategy for this survey was altered in 2003, when online questionnaires were introduced. Compared with recruitment through the "gay press" (or "gay venues" or clinics for sexually transmitted infections), the spectrum of MSM who can be reached through the internet is much broader. Although a "middle class bias" is still existent, online participants are much more likely to be younger, to belong to lower social classes, to live in non-metropolitan areas, to be disconnected from the "gay scene", or to self-identify as MSM but not as "gay".

To increase the validity of the trajectories, we restricted our analyses to MSM who are older than 24 years, and who live in cities with more than 500,000 inhabitants. Otherwise, our results from 2003 and 2007, and therefore the whole trajectory, would have been substantially confounded.

Results and Discussion:
Figure 1 shows the proportion of MSM engaging in potential sexual risk behaviour for HIV transmission over the last seventeen years: For those who did not report AI without condoms (with partners of unknown or discordant HIV serostatus = "anal risk") in the twelve months preceding the respective survey, risk assessment was based on reported oral contact with seminal fluid ("oral risk only"). The proportion of MSM with no relevant sexual risk for HIV transmission has been relatively stable at about 70% since 1993: An erosion of Safer Sex practices over the last seventeen – and the last nine – years is not supported by our data. Between 2003 and 2007, the proportion of risk takers has slightly declined. In 2007, the comparatively low risk of HIV transmission due to oral contact with seminal fluid is taken more frequently than in earlier surveys. Among MSM from cities with more than 500,000 inhabitants, who are younger than 24 years, this proportion reaches 8% (data not shown).

The number of sexual partners among homo- and bisexual men in Germany has been rather constant during the last seventeen years (figure 2). Especially the proportion of participants with more than 50 different sexual partners per year, who are highly relevant for epidemiological dynamics of sexually transmitted infections, has been declining over the last nine years. This indicates that the increase in newly diagnosed HIV infections cannot be attributed to increasing numbers of sexual partners.

Within primary partnerships of MSM, the proportion of those who do not engage in any anal intercourse (AI), has been stable at about 20% since 1991 (data not shown). In the years of the "AIDS shock", AI has often been completely avoided or restricted to the primary partnership. Since 1996, the proportions of MSM without any AI within or outside of the primary partnership has been converging, until being identical since 2003. Since 1996, half of the participants report receptive ("bottom") and insertive ("top") AI with non-primary sexual partners (figure 3). About a quarter of men in every respective survey report to exclusively taking the insertive role; only half as many prefer exclusively the receptive position.

In the course of the follow up surveys the proportion of participants who never had an HIV test, has declined from 16% (1991) to 9% (since 1999). Accordingly, the proportion of MSM who tested for HIV more than twice has been continuously increasing from 25% in 1991 to 50% in 2007 (figure 4). Despite excluding MSM who are younger than 25 years or live in smaller cities, the 2007 study population includes more MSM who are not or very loosely connected to the "gay scene". Therefore, the observed trend is unlikely to be overestimated. With the broad introduction of ART, HIV disease has been transformed into a chronic illness, and hence HIV testing has been increasingly promoted by German AIDS organizations as an instrument of secondary prevention. We think that it is highly plausible that MSM more and more use regular HIV testing as an integral part of their risk management strategy.

Conclusions: With the “normalization” of AIDS, restriction of anal intercourse to primary partnerships as a risk avoiding strategy seems to have become irrelevant. Apart from that, traditional risk reduction strategies among MSM in Germany show a high degree of time stability: Condom use in anal intercourse can be shown to have been relatively stable over the last seventeen years. Furthermore, numbers of sexual partners have been rather constant.

This applies particularly to MSM from German cities with more than 500,000 inhabitants who are older than 24 years. Of those, in all follow up surveys since 1991, less than a third reports unprotected anal intercourse with partners of unknown or discordant HIV serostatus.

Accordingly, since 1991, about 70% of participating MSM have been reporting Safer Sex. The proportion of MSM from major German cities, who have frequently been tested for HIV antibodies, has been continuously increasing. There are many indications that these are true findings not only attributable to changing sampling strategies. The time trend analysis of these large national behavioral surveys suggests that the rise of new HIV diagnoses in MSM in Germany may partially reflect an increased uptake of HIV testing, rather than new infections due to the erosion of condom use or increased numbers of sexual partners.

References:
1. EACS 2007 P 16.2 / 02