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EHPSA EVIDENCE BRIEF
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The Anza Mapema study

Sexual health of men who have sex with men in Kisumu, Kenya

INTRODUCTION

The Anza Mapema ("start early") study followed a group of men who have sex with men (MSM) in Kisumu, Kenya over a period of 12 months. It aimed to generate evidence to guide the expansion of safe, effective services for HIV and STI prevention and care, targeted at MSM. In particular, the study set out to determine the prevalence, incidence and correlates of hepatitis B and C and herpes (HSV-2), syphilis, gonorrhoea, and chlamydia.

The study was led by researchers from the Nyanza Reproductive Health Society in partnership with University of Illinois, Chicago and University of Washington, Seattle. It was nested in a larger Anza Mapema study which is looking at the broader issues of testing, initiation and retention in care. issues for MSM.

APPROACH

The study enrolled 712 MSM in 2015 and has followed them quarterly over a 12-month period. At enrolment, participants were screened for STIs, tested for HIV and received full medical examinations. They also completed questionnaires in the form of confidential audio computer-assisted self-interviews. HIV-positive men were linked to care.

During the quarterly follow-up visits the men were tested for HIV and STIs, and received risk-reduction counselling. Anza Mapema also offered a safe social space for MSM and provided daily opportunities for social activities and support.

An additional component of the programme offering pre-exposure prophylaxis (PrEP), was launched in 2017. It enrolled 167 eligible MSM and monitored their adherence to the PrEP regimen over six months.

WHY THIS STUDY IS IMPORTANT

There is increasing evidence that MSM contribute significantly to the HIV epidemic in eastern and southern Africa. For example, in Kenya, 15% of all new HIV infections are attributable to male-male sex. On the other hand, MSM in the region have less access to appropriate HIV and sexual health services and frequently experience stigma and discrimination in health facilities.

Kenya is at the forefront in recognising the importance of the MSM HIV epidemic in sub-Saharan Africa. However, to reach the 90-90-90 UNAIDS targets, there is a need to develop and implement comprehensive programmes that assist MSM to know their HIV status and become engaged in HIV and STI care.

The Anza Mapema study represents one of the largest cohorts of MSM recruited in sub-Saharan Africa and provides valuable evidence that will contribute to policy and programming for MSM.

KEY FINDINGS

1. Retention

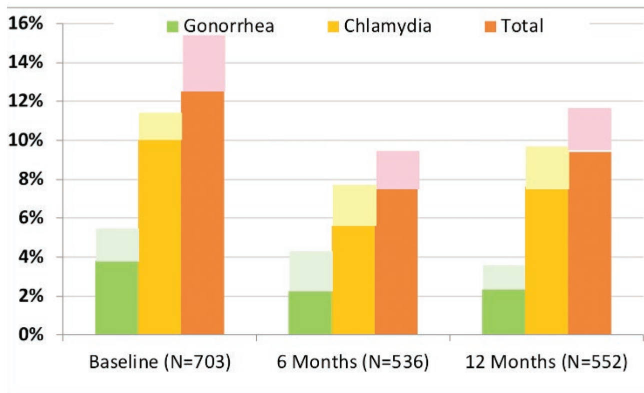
The rate of retention in the study was high, with an average of 80%.

Strategies to ensure retention included extensive consultation with MSM and other stakeholders and the use of social media. Social activities were also established to encourage participants to attend the clinic. These included film showings and other cultural events, counselling services and faith-based activities.

2. STI prevalence and incidence

Levels of STIs among study participants were high. At the baseline, the combined prevalence of *Chlamydia trachomatis* (CT) and *Neisseria gonorrhea* (NG) was 12.4%. At month six it was 7.1% and at month 12 it was 9.4%.

Figure 1: STI prevalence over 6 months



Key factors affecting STI risk included:

- Sexual positioning: Participants who practised versatile or receptive positioning were more likely to have STIs than those who practised insertive positioning.
- Condom use: Participants whose partners used condoms were less likely to have STIs than others.
- Age: Older participants were less likely to have STIs than younger men.

3. Hepatitis prevalence and incidence

At baseline, the prevalence of hepatitis B and C was 8% and 4% respectively. At month six, prevalence of hepatitis B infection was more than double the baseline prevalence. This was attributed mostly to the low uptake of vaccination. Following an intensified vaccination campaign, at month 12, prevalence was drastically reduced to around 2%.

4. HIV incidence

Thirteen out of 635 HIV-negative participants enrolled in the study became infected with HIV. This means an estimated HIV incidence of 2.3 per 100 person years. Key factors increasing HIV risk included:

- Younger age;
- Single status;
- Financial insecurity;
- Practicing transactional sex;
- Practicing receptive or versatile positioning; and
- Practicing unprotected receptive anal intercourse.

5. PrEP sub-study

Participants at high HIV risk were enrolled in the PrEP sub-study. Eligibility criteria include unprotected anal intercourse with an HIV-positive man or man of unknown HIV status, exchanging money for sex, having an STI, having three or more sexual partners and injecting drugs. Retention rates of the 167 participants enrolled in the study were high, at 96% for week two, 96% for month one, 95% for both months two and three, and 97% for month six.

CONCLUSIONS

The study found a high prevalence and incidence of STIs and hepatitis, despite offering treatment for these infections.

HIV incidence was associated with condomless receptive anal intercourse and receptive or versatile positioning, thus these should be included in screening for PrEP to further reduce incidence.

The Anza Mapema study recorded very high retention rates, particularly for the PrEP sub-study, and therefore provides valuable lessons for the provision of HIV and STI services for MSM.

REFERENCES

Publications

Kunzweiler C, Bailey R, Okall D et al. (2017) Factors associated with prevalent HIV infection among Kenyan MSM: The Anza Mapema study. *J Acquir Immune Defic Syndr* 2017; 76 (241-249)

Otieno F, Okal D, Obondi et al. (2017) Prevalence and risk factors of Hepatitis B and C among men who have sex with men in the Anza Mapema study in Kisumu, Kenya. (Poster presented at SA AIDS Conference, Durban, 2017)

Abstracts

Graham, S, Okall D, Kunzweiler C (2017) HIV incidence among men who have sex with men in Kisumu, Kenya: relevance for the PrEP rollout. Presented at U Nairobi collaborative conference, January 2018.

Mehta S, Otieno F, Okal D et al (2017) Incidence and predictors of urogenital C. trachomatis and N. Gonorrhoeae among men who have sex with men in Kisumu, Kenya. Presented at U Nairobi collaborative conference, January 2018.

Otieno F, Okal D, Graham S, et al (2017) Baseline characteristics and eligibility of participants starting PrEP in the Anza Mapema study. Presented at U Nairobi collaborative conference, January 2018.

Reports

NHRS EHPSA Final Report, January 2018.

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