automated features. Both online diary and smartphone application will be demonstrated.

Conclusion Web-based tools to monitor adherence to PrEP within trials are a novel and promising approach, with both advantages (eg. provides a large amount of data) and disadvantages (eg. limited validity). User-participation is an important pre-requisite to tailor such tools to target their needs.

P4.92 START OF A SYNDEMIC BASED INTERVENTION TO FACILITATE CARE FOR MEN WHO HAVE SEX WITH MEN WITH HIGH RISK BEHAVIOUR: THE SYN.BAS.IN RANDOMISED CONTROLLED TRIAL

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Introduction Men who have sex with men (MSM) constitute a risk group for sexual transmitted infections (STIs), including HIV. Despite counselling interventions, risk behaviour remains high. Syndemic theory holds that psychosocial problems often co-occur, interact and mutually reinforce each other, thereby increasing high risk behaviours and co-occurring diseases. Therefore, if co-occurring psychosocial problems were assessed and treated simultaneously, this might decrease high risk behaviour and disease.

Method An open label randomised controlled trial will be conducted among 150 MSM with high risk behaviour recruited from the STI clinic of Amsterdam. Inclusion criteria are: HIV negative MSM with two STI or PEP treatment in the last 24 months or HIV positive MSM with one STI in the last 24 months. All participants get questionnaires on the following syndemic domains: ADHD (ASRS), depression (HADS), anxiety disorder(HADS), alexithymia (TAS) and sex(SCS, Kalichman) and drug addiction(DUDIT and AUDIT). Participants in the control group receive standard care for one year: STI screenings every three months and motivational interviewing based counselling. Participants in the experimental group receive standard care plus additional questionnaires depending on baseline questionnaire scores followed by feedback and referral to a co-located mental health or addiction service in case of a positive indication according to the additional questionnaires. The primary outcome is help seeking behaviour for mental health problems and/or drug use problems. The secondary outcomes are STI incidence and changes in sexual risk behaviour (i.e. condom use, number of anal sex partners, drug use during sex).

Conclusion This study will provide information on syndemic domains among MSM who show high risk behaviour and on the effect of screening and referral on help seeking behaviour and health (behaviour) outcomes. Inclusion started in September 2016, on 1 December more than 60 MSM were included with this pace baseline data will be available in July 2017.

P4.93 ARE RECTAL DOUCHING AND SHARING DOUCHING EQUIPMENT ASSOCIATED WITH ANORECTAL CHLAMYDIA AND GONORRHOEA? A CROSS-SECTIONAL STUDY AMONG MEN WHO HAVE SEX WITH MEN

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Introduction Men who have sex with men (MSM) are at high risk for anorectal chlamydia and gonorrhoea infections. Many MSM use rectal douches in preparation for sex, which might break down the mucosal barrier function and facilitate the acquisition of sexually transmitted infections (STI). We determined whether rectal douching or sharing douching equipment was associated with anorectal chlamydia and gonorrhoea.

Methods In a cross-sectional study among 994 MSM attending the STI outpatient clinic of Amsterdam between February and April 2011, data was collected on rectal douching, sexual behaviour, and STI. We used multivariable logistic regression analysis to determine the association between rectal douching, including sharing of douching equipment, and anorectal chlamydia and gonorrhoea for those at risk. We adjusted for other risk behaviour, i.e., condom use, number of partners, and HIV status.

Results Of 994 MSM, 46% (n=460) practised rectal douching, of whom 25% (n=117) shared douching equipment. Median age was 39 years [interquartile range (IQR), 30–47], median number of sex partners in the six months prior to consult was five [IQR 3–10] and 289 (29.0%) participants were HIV-positive. The prevalence of anorectal chlamydia and/or gonorrhoea for those at risk was 9.6% (n=96). In multivariable analysis, HIV positivity (aOR=2.2, 95%CI=1.3–3.6), younger age (aOR=2.5, CI=1.4–4.5 for those <35 years compared to ≥45 years), and more sexual partners (aOR=1.2; 95% CI=1.0–1.5 for 1 log increase) were significantly associated with anorectal STI. However, rectal douching or sharing douching equipment were not significantly associated with anorectal chlamydia and/or gonorrhoea (p=0.726).

Conclusion Almost half of MSM used rectal douching and a quarter of these shared douching equipment. Though using douching equipment does not appear to contribute to anorectal chlamydia and gonorrhoea, STI prevalence remains high and prevention strategies like early testing and treatment remain of utmost importance.

P4.94 STI RATES AMONG HOMELESS PERSONS IN THE U.S

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Introduction Homelessness is a societal problem with public health implications. The U.S rate of homelessness is 17.7/10,000. Nightly, 5 50 000 persons experience homelessness, 6.5% under the age of 18 years. Homelessness is associated with greater engagement in high-risk sexual behaviour. Less is known about sexually transmitted infections (STI) among the homeless.