Background MSM account for an increasing number of new HIV diagnoses in the UK, with 23% having recently acquired infections. This is largely due to high risk sexual behaviour and lower risk perception. To explore this, we evaluated the sexual behaviour of our MSM cohort and correlated this to their perceived risk of HIV acquisition.

Methods HIV negative MSM attending a large sexual health centre were invited to complete an anonymous questionnaire. Information regarding demographics, sexual behaviour in terms of partner number, condom use, type of sexual activity, awareness of partner’s HIV status etc. was collected. A risk score was calculated and then correlated with their perceived risk of HIV.

Results We present preliminary data on 64 MSM. 78% of respondents were White British, 63% aged between 16 and 35 years. 52% of MSM had 2–5 partners, 19% 5–10 and 8% over 10 partners. Only 42% of MSM report consistent use of condoms for receptive anal sex. A large proportion reported using alcohol before sex; only 11% reported drug use. 65% reported unprotected anal sex with 0–1 partner and 32% with between 2–5 partners. Only 15% always discussed HIV status before sex, but more (38%) discussed condom use. Perceived risk of HIV: 34% thought it was low, 59% moderate and only 7% perceived themselves at high risk. Actual risk of HIV: According to the weighted scores 56% had low risk, 42% moderate and 2% high risk of HIV acquisition. Correlation: There is concordance between actual and perceived risk in 55% of respondents. Majority who had low risk perceived themselves as having moderate or high risk of acquisition.

Conclusion Evaluating MSM at high risk of HIV acquisition will help identify who would benefit most from behavioural intervention. Full report and statistics will be provided for the conference.

DOXYCYCLINE PROPHYLAXIS FOR SYPHILIS IN A PERSISTENTLY HIGH RISK HIV INFECTED POPULATION

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Background Syphilis infections increase spread of HIV. This pilot study investigated the feasibility of conducting a large, randomised trial to determine whether prophylactic doxycycline can reduce incident syphilis among HIV+ men who have sex with men having two or more syphilis infections since HIV diagnosis.

Methods Thirty subjects from the L.A. Gay & Lesbian Center were randomised to doxycycline 100 mg daily (Doxy) or Continency Management (CM). Behavioral and biomedical measurements were taken at baseline, 12, 24, 36 and 48 weeks. Binomial Random Effects Logistic Regression Models assessed changes in behavioural measurements and analysed STI contraction at follow-up visits. Fisher Exact Tests compared dropout rates. Given small sample size, an alpha level of 0.1 was chosen.

Results Study retention did not differ significantly between groups: 12 and 11 subjects in the Doxy and CM groups, respectively, completed the 48 week study (Fisher Exact p-value = 1.0). On intent-to-treat basis 12 (80%), 11 (73.3%) and 11 (73.3%) subjects had detectable doxycycline levels at 12, 24, and 36 weeks, respectively. New STIs for Doxy vs. CM groups during 9 month on-drug study portion were: syphilis 2 vs. 6, Neisseria gonorrhoea 1 vs. 2, Chlamydia trachomatis 1 vs.3. CM subjects reported more condom use than Doxy subjects (p = 0.09), however CM group subjects had 3.47 greater odds (p-value = 0.037; CI: 1.09 – 11.03) for a new STI compared to Doxy group subjects. Behavioral outcomes for drug use (p = 0.91), anonymous partners (p = 0.45), and number of regular partners (p = 0.14) were not significantly different.

Conclusion No safety concerns were associated with daily administration of doxycycline. High retention and drug adherence rates suggest this high risk population will participate in an effectiveness study using doxycycline to reduce syphilis incidence. Efficacy of doxycycline in decreasing incidence of STIs in this pilot study further justifies a definitive study.