descriptive analyses of sent messages, delivered messages and estimation of adherence based on messages.

**Results** We enrolled 25 women. In total, 4963 messages were sent of which 40 failed to be delivered (1%). 1664 SMS were sent with a question if medication was taken, which received an answer 1580 times (91%). The answer was ’Yes’ in 1137 cases (65%), ’No’ in 10 cases (0.6%) and indefinable in 433 cases (26%). The median adherence based on ’Yes’-answers was 74% [range 24–99]. If also counting the indefinable answers, the mean adherence was 100% [range 95–100].

**Conclusion** Despite a few technical issues, we believe using SMS has potential to improve adherence and should be further investigated in clinical trials to determine the effect on adherence to treatment.

**PO 8481** HIGH HEPATITIS B VIRUS INCIDENCE AMONG HIV-1-INFECTED TREATMENT-NAIVE ADULTS IN BOTSWANA

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Background Hepatitis B virus (HBV) is one of the leading causes of death worldwide despite a moderately potent vaccine. HBV prevalence has been shown to be higher in patients infected with the human immunodeficiency virus (HIV), hence increased liver-related morbidity and mortality, as well as general poor health outcomes in HIV-HBV co-infection. We estimated the HBV incidence among HIV-1-infected treatment-naïve adults in a longitudinal cohort in Botswana.

**Methods** Plasma samples from 200 HIV-1-infected treatment-naïve participants from a completed longitudinal cohort from 2004 to 2007 were screened for HBV surface antigen (HBsAg). HBsAg was assessed using Murex version 3 enzyme-linked immunosorbent assay as per manufacturer’s instructions at 4 timepoints, 12 months apart. We estimated HBV incidence with 95% confidence interval (CI). Cox proportional regression method was used to estimate hazard ratios [gender, age (≤35 or>35) years, CD4+ T cell count (≤450 or>450) cells/μL and HIV viral load suppression (≤400 or>400) copies/mL].

**Results** The median age of screened individuals was 32 years [Q1, Q3: 28, 40] and 83.5% [167/200] were female. Baseline median CD4+ T cell count was 466.35 cells/μL [Q1, Q3: 380.43, 605.75] and median HIV viral load was 13 450 copies/mL [Q1, Q3: 2365, 37 400]. The HBV incidence was 3.6/100 person-years [95% CI: 2.2–5.6]. There were no significant differences by gender, age, HIV viral load suppression and CD4+ T cell count.

**Conclusion** We report for the first time a high HBV incidence among HIV-infected adults in Botswana. HBV incidence was high in this population despite generally high CD4+ T cell counts and lower HIV viral loads. Early screening of HBV in HIV-infected individuals is vital and should be included in the national HIV treatment guidelines.

**PO 8483** ASSOCIATIONS BETWEEN HIV AND OTHER STIS AMONG GAY, BISEXUAL MEN AND TRANSGENDER WOMEN IN NAIROBI, KENYA

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**Background** Men who have sex with men (MSM) are a key target population for HIV prevention and control in Kenya. Although male sex workers remain the focus of research in Nairobi, HIV/STI prevalence has not been assessed among the wider MSM population since 2010. This study set out to reassess prevalence and associations of HIV and other STIs.

**Methods** Respondent-driven sampling recruited 618 MSM. Eligibility criteria were age 18+, male (birth or currently), Nairobi residence and consensual oral or anal intercourse with a man in the last year. Consenting participants completed an online survey including current experience of STI symptoms. Participants tested for HIV [Determine, First Response [2nd gen] and GeneXpert HIV-Form [4th gen]], syphilis [RPR/TPHA], hepatitis B and C [HBsAg and HCV ELISA], urine and rectal chlamydia and gonorrhoea [GeneXpert CTNG]. Associations with prevalent HIV were assessed using multivariate logistic regression.

**Results** HIV prevalence was 26.4% [22.6–30.6] including 0.5% [0.2–1.5] detected solely on 4th gen testing. Prevalent HIV was independently associated with age, lower education, Kenyan birth, transgender identity and exclusive sex with men in the past 3 months but dependently associated with STI symptoms. Prevalence of syphilis was 0.8% [0.3–1.9]; hepatitis B 4.4% [3.4–6.9]; hepatitis C 0.5% [0.2–1.5]. Current symptoms consistent with urethritis were reported by 6.4% [4.5–9.0] of participants. Prevalence of urethral GC and CT were 4.4% [2.9–6.7] and 7.3% [5.2–10.3] respectively. Symptoms consistent with proctitis were reported by 8.6% [6.3–11.6] of participants. The prevalence of rectal GC and CT were 13.3% [10.4–16.8] and 8.7% [6.7–11.2] respectively. Overall, 17.7% [9.2–31.2] of participants with urethral CT/NG and 17.8% [10.7–28.0] rectal CT/NG were symptomatic.

**Conclusion** The burden of HIV among gay, bisexual and other MSM (GBMSM) remains considerably higher than other men in Nairobi, whilst the prevalence of syphilis and hepatitis C are relatively low. Chlamydia and gonorrhoea infections, particularly rectal, are common and frequently asymptomatic. Capacity of GBMSM-friendly and community-based providers to offer CT/NG screening should be prioritised.

**PO 8485** INTERFERON GAMMA RESPONSE KINETICS IN TUBERCULOSIS PATIENTS AND HOUSEHOLD CONTACTS IN THE GAMBIA

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**Background** Methods which use Mycobacterium tuberculosis (MtB)-specific antigens to measure IFN-γ responses (IFN-γ