

MIC90 of gentamicin were 2–16 µg/mL, 4 µg/mL and 8 µg/mL, respectively.

Conclusion In South Korea, the antimicrobial resistance of *N. gonorrhoeae* is very severe and most isolates are multi-drug resistant to penicillin G, tetracycline, and fluoroquinolones. PenA-10.001 and penA-34.001, which are mainly isolated in South Korea, are thought to be the pre-stage of ceftriaxone-resistant germs in Japan and Europe, and the possibility of highly resistant germs is highly increased in South Korea. Enhanced antimicrobial resistance surveillance is necessary to prevent transmission of these strains.

Disclosure No significant relationships.

P005 GONORRHEA IN THE ERA OF AMR, DIAGNOSTIC NEEDS FOR IMPROVED ANTIMICROBIAL STEWARDSHIP IN LOW AND MIDDLE INCOME COUNTRIES

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Background In 2012, the World Health Organization (WHO) estimated 78 million cases of *Neisseria gonorrhoea* (NG) worldwide and recent reports indicate an increase in NG resistance to current antibiotic therapies globally. Chlamydia trachomatis (CT) infection is more prevalent than NG and current syndromic management guidelines are designed to simultaneously treat both bacteria with a combination of antibiotics to avoid missing treatment. In resource constrained settings many patients with urethral or vaginal discharge presenting at primary healthcare settings (PHC) are over-treated due to syndromic management, which lacks appropriate diagnostic tools for CT and NG differentiation in these settings.

Methods To address this gap, the Foundation for Innovative New Diagnostics (FIND) and WHO collaborated on the development of Target Product Profiles (TPPs) to guide the development of appropriate diagnostics tools for improved clinical management of NG and CT infections. Using a Delphi-like process involving two serial surveys to solicit input from over 52 experts.

Results Two TPPs for the appropriate identification of NG (and NG/CT) and its susceptibility/resistance profile to antibiotics were developed and will be publicly available on the WHO and FIND websites. A request for proposals is in process to stimulate the development of diagnostic tools that meet the technical characteristics of these TPPs.

Conclusion TPPs for rapid identification of NG-positive patients at PHC and for identification of NG susceptibility/resistance to antibiotics are urgently needed. Technology advancements over the past years may enable development of improved tests to support uptake and wide scale use in PHC. A reflex antibiotic susceptibility test would be useful to further guide prescription of current therapies. Results of this work will guide the development of new and appropriate diagnostics in the next 3–5 years, to enable improved patient management and conservation of new antibiotics that will become available.

Disclosure No significant relationships.

P006 'FIRST TEST ALONG THEN TOGETHER' – THE PRACTICE OF COUPLE'S HIV TESTING IN ETHIOPIA

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Background Some evidence indicates that Couple HIV Testing & Counselling (CHTC) is an approach that could be used to enable more people to be reached. However, little is known about how couples may use this service and what their concerns are around the approach. This study aimed to understand how individuals who had ever been in a long-term heterosexual relationship intended to use CHTC in Ethiopia and their beliefs about its benefits and potential harms.

Methods A qualitative study was conducted in Addis Ababa, Ethiopia. We interviewed individuals who had ever been in a long-term heterosexual relationship (n=21), and key-informants (n=11) including religious leaders, health-care providers and case managers. The interview data were transcribed verbatim and thematically analysed using NVivo 11. The data were coded to look for concepts and patterns across the interviews, and relevant themes and sub-themes identified which captured key aspects related to individual's views on undertaking HIV-testing with a sexual partner.

Results Most participants regarded CHTC as an important HIV-testing approach for people who are in a long-term heterosexual relationship and expressed the view that there was 'nothing like testing together'. However, many participants said they would prefer to be tested alone to check their own HIV-status before undertaking or deciding to undertake CHTC - 'first alone then together'. This strategy was expressed as a way of managing their concerns about being HIV-positive and 'fear of the consequences' including potential accusations of infidelity, relationship break-up, and potentially exposed in the community as being HIV-positive.

Conclusion The findings of this study suggest that while CHTC has been actively promoted in Ethiopia, people may be concerned about undertaking CHTC without prior individual HIV-testing and have developed ways of making the process work for them. More work is needed to understand the approach couples considering is a more dignified, effective and cost-effective way.

Disclosure No significant relationships.

P007 UPTAKE OF COUPLES HIV TESTING AND COUNSELLING IN SUB-SAHARAN AFRICA: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Background This systematic review and meta-analysis aimed to estimate and characterise the uptake of Couples HIV Testing and Counselling (CHTC) in Sub-Saharan African countries.

Methods A comprehensive search of published studies was carried out in six electronic databases followed by a manual search of studies from references of selected papers. Data were extracted using a template. The results were synthesised, and a meta-analysis based on a random-effects model was conducted. Subgroup and sensitivity analyses were undertaken to explore sources of heterogeneity.

Results Of 30,273 citations, 14 studies with a total of 97,030 study participants were identified. The pooled CHTC uptake was 31.48% (95%CI: 23.55–40.00) with significant heterogeneity between studies ($I^2=99.98\%$, $p < 0.001$). The Egger's and Begg's tests showed there was no evidence of publication bias ($p=0.08$). However, the sensitivity analysis showed that two studies highly influenced the overall estimate. After omitting these two studies, the pooled estimate for CHTC uptake was 24.05% (95%CI: 16.65, 32.34, $I^2=99.86\%$, $p<0.001$). The sub-group analysis indicated the pooled CHTC uptake was higher among pregnant women and their partners (OR=1.66, 95%CI: 1.58, 1.84) compared with heterosexual couples in general. Similarly, the uptake was higher when one person in the dyad first tested individually without the knowledge of their partner, and then suggested to their partner that they take CHTC together, compared to an approach of undertaking CHTC together as the first testing option for both people (OR=3.16, 95%CI: 2.69, 3.72).

Conclusion The findings confirmed that more than three-quarters of study participants who were in ongoing heterosexual relationships chose not to, or were unable to, undertake CHTC. These findings suggest people are cautious of what could amount to harmful risks when couples test together, particularly if their HIV sero-status is shown to be discordant. Further studies are required to explore how couples intend to use HIV testing services including CHTC.

Disclosure No significant relationships.

P008

DIAGNOSTIC ACCURACY OF XPERT MTB/RIF IN DETECTING PULMONARY TUBERCULOSIS AMONG PEOPLE LIVING WITH HIV IN WESTERN NIGERIA

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Background Tuberculosis is a leading killer among people living with human immunodeficiency virus (HIV). HIV-infected individuals with latent TB are approximately 20–30 times more likely to develop TB disease, at a rate of 8–10% per year, with the disease estimated to cause approximately 9 million cases annually and 1.5 million deaths. Hypothesis tested was site of infection effect on tuberculosis on tuberculosis treatment outcome. This study determined the diagnostic validity and reliability of Xpert MTB/RIF in identifying the presence of Pulmonary Tuberculosis (PTB) among HIV patients in South Western Nigeria.

Methods This study was a prospective analytical study among HIV patients between ages 15 – 60 years who are infected

with HIV seen from January 2015 - June 2017. Patients with signs and symptoms of Pulmonary Tuberculosis (PTB) were enrolled and submitted sputum for Acid Fast Bacilli (AFB) smear and Xpert MTB/RIF. This was processed following protocol for pulmonary samples for Xpert MTB/Rif. All samples were processed for AFB smear and Xpert MTB/RIF as part of the procedure for PTB diagnosis.

Results A total of 300 patients were enrolled in the study. The mean age \pm SD is 37.11 ± 15.27 years. One hundred and thirty five (45.0%) of them are males while one hundred and sixty five (55.0%) are females. Xpert MTB/RIF has a sensitivity of 93.0% and specificity of 98.5%. The main factor associated with tuberculosis treatment outcome was the site of infection ($\chi^2 = 19.01$, $df = 1$, $p = 0.001$) as 233 (77.7%) of the patients were declared cured after six month treatment course.

Conclusion Use of Xpert MTB/RIF as a screening tool has a great performance for rapid diagnosis of *Mycobacterium tuberculosis* might effectively reduce the risk of multi-drug resistant tuberculosis (MDR-TB) in HIV care and treatment settings and improve the prognosis of affected patients.

Disclosure No significant relationships.

P012

A PROCESS EVALUATION OF AN INCENTIVIZED HOME-BASED INTERVENTION TO TEST AND START (HITS) IN RURAL KWAZULU-NATAL, SOUTH AFRICA

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Background Despite freely available HIV testing and treatment, many men do not access HIV treatment and care in South Africa. We conducted home-based intervention to test and start (HITS) - a factorial design randomised controlled trial (ClinicalTrials.gov #NCT03757104). HITS is designed to assess the effectiveness of two financial micro-incentives (R50 [\$3] food vouchers) for home-based HIV testing and, following a HIV-positive test, to link to HIV care; and/or a male-targeted counselling application to support home-based testing (EPIC-HIV1) and to support men linking to care (EPIC-HIV2). The research was conducted in an HIV-hyperendemic setting in rural KwaZulu-Natal.

Methods We conducted a process evaluation to understand the impact of HITS intervention on the decision of men to test for HIV and/or engage in HIV care. Thirty men (16–73 years) were purposively selected in the three intervention arms (ten per arm) and interviewed between August and December 2018. Emerging themes were thematically analysed following an interpretivist approach.