P196

DEVELOPMENT OF TAQMAN BASED MULTIPLEX QPCR ASSAY FOR SIMULTANEOUS DETECTION OF N. GONORRHOEAE, C. TRACHOMATIS AND T. VAGINALIS IN THE ENDOCERVICAL/VAGINAL SAMPLES

G Arora*, D Saluja. University of Delhi, Delhi, India

10.1136/sextrans-2021-sti.287

Background *Neisseria gonorrhoeae* (NG), *Chlamydia trachomatis* (CT) and *Trichomonas vaginalis* (TV) are among the major causative agents of sexually transmitted infections (STIs). Huge fraction of patients with NG, CT and TV infections are asymptomatic making syndromic case management (SCM) becomes unreliable. Taqman based triplex qPCR assay for simultaneous detection of NG, CT and TV, besides being dependable diagnostic tool, can effectively differentiate between mono-infections and co-infections of these pathogens.

Methods Endo-cervical dry swabs were procured from non-pregnant females visiting Department of Obstetrics & Gynaecology, VMMC and Safdarjung Hospital, Delhi, India as per ICMR ethical guidelines. DNA was isolated from the samples and presence of the causative agent, if any, was determined using in-house developed Multiplex qPCR assay by employing specific primer-probe sets targeting each pathogen. Analytical sensitivities and specificities were determined for each uniplex assay. In-house developed assay was clinically validated in comparison to published NAAT based assays.

Results A 108 bp region of orf-1 gene of NG, 133 bp region of pld gene of CT and 147 bp region of pfo-B gene of TV genomic DNA were utilized for identification. Analytical sensitivity of NG uniplex assay was determined to be 10ag of recombinant DNA (3–4 DNA equivalents) and for both CT and TV, it was determined to be 100ag of DNA (30 DNA equivalents). 85 clinical samples have been examined so far and the assay detects NG and CT DNA with 83% and 60% sensitivities, 99% and 100% specificities, 83% and 100% PPV and, 99% and 98% NPV respectively. Two clinical samples among them were co-infected with NG and CT.

Conclusion In-house developed multiplex qPCR assay provides an opportunity for diagnosis of three highly prevalent and curable STIs in only one assay. The results following validation are motivating enough to project it as a potentially reliable diagnostic tool for their detection.

P197

THE IMPACT OF AN HIV CURE FOR PEOPLE LIVING WITH HIV AND AFFECTED POPULATIONS IN THE NETHERLANDS: A QUALITATIVE STUDY

¹K Romijnders*, ²S Vervoort, ¹M Basten, ³B van Welzen, ^{4,5}S Verboeket, ⁶U Davidovich, ^{4,5,7}P Reiss, ⁸G Rozhnova. ¹Julius Center for Health Sciences and Primary Care, University Medical Center Utrecht, Utrecht, The Netherlands, Utrecht, The Netherlands; ²Department of Innovations in Care, Division Imaging and Oncology, University Medical Center Utrecht, Utrecht, The Netherlands; ³Department of Internal Medicine and Infectious Diseases, University Medical Center Utrecht, Utrecht, The Netherlands; ⁴Department of Internal Medicine, Amsterdam UMC, University of Amsterdam, Amsterdam Infection and Immunity Institute and Amsterdam Public Health Research Institute, Amsterdam, The Netherlands; ⁵Amsterdam Institute for Global Health and Development, Amsterdam, The Netherlands; ⁶Department of Infectious Diseases, Research and Prevention, Public Health Service of Amsterdam, Amsterdam, The Netherlands; ⁷Stichting hiv monitoring, Amsterdam, Amsterdam, The Netherlands; ⁸BioISI – Biosystems and Integrative Sciences Institute, Faculdade de Ciências, Universidade de Lisboa, Lisboa, Portugal

10.1136/sextrans-2021-sti.288

Background When an HIV cure becomes available, it will have consequences for people living with HIV (PLHIV) and affected populations. The aim of this study was to explore the perceived impact of an HIV cure on the expected quality of life (QoL) among PLHIV and affected populations in the Netherlands.

Methods We conducted in-depth interviews with 28 PLHIV and 12 people of affected populations (i.e., people who inject drugs and men who have sex with men (MSM) living without HIV) in the Netherlands. We explored experienced QoL related to HIV; perceptions towards two potential cure scenarios (i.e., achieving post-treatment control in which HIV is suppressed without medication or complete elimination of HIV from the body), and how these two scenarios may change their QoL. Data were thematically analyzed to identify perceptions related to the impact of an HIV cure.

Results Interviewees described that their current QoL was, or would be, negatively influenced by HIV due to daily use of medication, fear of obtaining or transmitting HIV, and stigma. Participants perceived the elimination of HIV as a cure and achieving post-treatment control as a next step in the treatment of HIV. PLHIV and affected populations expressed that the elimination of HIV would improve QoL beyond reducing physical discomfort. Noteworthy, PLHIV believed that the fear of obtaining HIV would be reduced due to a cure, and that this may lead to an increase in sexual risk behaviors.

Conclusion Our study demonstrates the importance of HIV cure research by highlighting the expected positive impact of a cure beyond reducing physical discomfort of living with HIV, in particular among PLHIV. In addition, our results help current cure researchers anticipate the need to align language about an HIV cure with the desires about an HIV cure of PLHIV and affected populations.

P199

REACHING OUT: EVALUATION OF COMMUNITY-BASED HIV TESTING PILOT IN A HIGH PREVALENT MULTICULTURAL AREA IN ROTTERDAM, THE NETHERLANDS

^{1,2,3}D Twisk*, ^{1,3}A Watzeels, ^{1,2,4}H Götz. ¹Department of Infectious Disease Control, Municipal Public Health Service Rotterdam-Rijnmond, Rotterdam, The Netherlands; ²Department of Public Health, Erasmus MC, University Medical Center Rotterdam, Rotterdam, The Netherlands; ³Department Research and Business Intelligence, Municipality of Rotterdam, Rotterdam, The Netherlands; ⁴Centre for Infectious Disease Control, National Institute for Public Health and the Environment (RIVM), Bilthoven, The Netherlands

10.1136/sextrans-2021-sti.289

Background We performed a community-based HIV testing (CBHT) pilot in a multicultural area with high HIV prevalence. Here we evaluate our goals of reaching the population, finding HIV-infections and whether this approach helps to normalize HIV testing, decrease HIV-related stigma, and increase knowledge and open conversation about HIV.

Methods Interviewing 37 residents and 6 key figures of community/health organizations outlined our CBHT strategy main conditions: low-threshold, free-of-charge and a general health check (HIV test included). Based on these conditions, and in consultation with community organizations, test actions were developed offering HIV and other health checks. Demographics, HIV testing history, risk perception and openness concerning HIV was obtained via questionnaires. We piloted seven 4-hours test actions at three community organizations (October 2019–February 2020), who also recruited

participants. HIV education was offered by health educators, peers and using a game. Each test action was evaluated among participants, the organization and test team members.

Results In total, all 140 participants were tested for HIV (74% women, 85% non-western, median age 49yr). For 127 participants HIV testing history was collected; 59% never tested before and 20% tested >1yr ago. With one positive HIV test, the detection rate was 0.7%. 90% of participants perceived no HIV risk. Several participants indicated the test action positively altered their attitude and knowledge about HIV/PLWH. The CBHT was positively evaluated by all parties. The major concerns by test team members were time, language problems and privacy. Participants hardly indicated these concerns.

Conclusion This CBHT approach (1) is feasible and well-suited for testing not (recently) tested groups and detect new cases, especially in high prevalent neighborhoods with hard-to-reach populations like non-western migrants, (2) positively seems to contribute to attitudes and knowledge about HIV/PLWH. Nevertheless, it is questionable whether this laborious approach, outweighs finding the last fraction of new HIV cases.

P200 HIGH RISK HPV GENOTYPES IN EXTERNAL ANOGENITAL WARTS – SHOULD GENOTYPING BE DONE ROUTINELY?

N Chauhan*, N Khunger, A Bhargava. Vardhman Mahavir Medical College and Safdarjung Hospital, Delhi, India

10.1136/sextrans-2021-sti.290

Background Anogenital warts (AGW) is one of the most common sexually transmitted disease with incidence of 2–25% in India. It is caused by human papillomavirus (HPV), of which low-risk genotypes (6 and 11) are implicated in most cases. In contrast, HPV high-risk genotypes are strongly associated with anogenital malignancies. This study aims to identify the presence of various HPV genotypes, in external anogenital warts and correlate the presence of high-risk genotypes with patient's profile.

Materials and Method After ethical clearance an observational cross-sectional study was conducted with consecutive 73 patients having clinical diagnosis of external anogenital warts attending the STD Clinic at a tertiary reference centre. After informed consent, patient's demographic and clinical data was recorded on a preformed performa. During the routine treatment, tissue from the anogenital wart was collected in normal saline, by radiofrequency ablation. Genotyping was performed by real-time PCR test for 2 high risk and 14 low-risk genotypes as per standard protocols. Data analysis was done using (SPSS) version 21.0.

Results Out of 73 patients, 55 tissue samples were positive for HPV. A total of 16 HPV genotypes were identified (6,11,16,18,31,33,35,39,45,51,52,56,58,59,66,68), of which the most prevalent genotypes were HPV-11(61.81%), HPV-6 (47.27%), HPV-16(16.36%), HPV-59(12.7%) and HPV-51 (9.09%). Upon analysis, 1, 2–5 and >5 genotypes were identified in 35(63.6%), 17(30.9%) and 3(5.45%) patients respectively. Appreciable greater number of low-risk genotypes were identified as compared to high-risk genotypes ($p=0.0421$). Patients with size of largest wart >2cm were significantly associated with high-risk genotypes ($p=0.0076$).

Conclusion High risk genotypes were isolated in routine patients in the STD Clinic. These patients should be screened for cervical/penile/anal carriage and malignancies on follow-up. HPV-51 and HPV-59 which were commonly isolated, are currently not a part of HPV vaccines. Routine HPV screening of AGW would help in prevention and early detection of malignancies and also in designing appropriate vaccines.

P201 REACHING MALE SEX WORKERS WHO HAVE SEX WITH MEN (M\$M) WITH PREVENTIVE SEXUAL HEALTHCARE SERVICES IN THE NETHERLANDS

^{1,2}C Peters*, ^{1,3}N Dukers-Muijers, ^{1,2}Y Evers, ^{1,2}C Hoebe. ¹Department of Social Medicine, Care and Public Health Research Institute (CAPHRI), Maastricht University/Maastricht UMC+, Maastricht, The Netherlands; ²Department of Sexual Health, Infectious Diseases and Environmental Health, South Limburg Public Health Service (GGD Zuid Limburg), Heerlen, The Netherlands; ³Department of Health Promotion, Care and Public Health Research Institute (CAPHRI), Maastricht University/Maastricht UMC+, Maastricht, The Netherlands

10.1136/sextrans-2021-sti.291

Background Male sex workers who have sex with men (M\$M) are a hidden high-risk group for sexually transmitted infections (STI) including human immunodeficiency virus (HIV). They are neglected in current care-strategies and hard to reach by regional public health service (GGD), who offer free and anonymous preventive sexual healthcare services e.g. STI testing and hepatitis B (HBV) vaccinations. The aim of this study was to assess M\$M's perceived barriers and facilitators to engage in preventive sexual healthcare services provided by the GGD.

Methods For this qualitative study semi-structured individual in-depth interviews were conducted with 20 M\$M who worked home-based in the Dutch province of Limburg. Respondents were recruited by convenience sampling until saturation was reached via 1) five websites and smartphone applications commonly used by M\$M 2) GGD's STI clinic 3) two gay saunas. An interview guide was developed including themes such as sexuality, sex work, the GGD's care services, communication and reachability. The interviews' recordings were transcribed verbatim and inductively coded with Atlas.ti 8.

Results The interviewed M\$M were diverse in age (range: 18 – 66; median: 39.5) and mostly western European (85%). Several barriers and facilitating factors were identified for M\$M to engage in the GGD's preventive sexual healthcare services.

The lack of self-identification as homosexual and as sex worker, self-stigma, the lack of awareness of the GGD's services and a low STI risk perception are identified as barriers.

Online outreach work on websites and smartphone applications commonly used by M\$M, promotion of the GGD's care services and its anonymity, confidentiality and non-judgemental environment and direct online communication between a GGD nurse and M\$M are identified as facilitating factors.

Conclusion The M\$M population's diversity and identified barriers and facilitating factors should be taken into account in care-strategies in order to optimize future preventive sexual healthcare services for M\$M.