

P029 MULTI-TARGET PCRS – THE NEW MULTI-TOOL OF STI DIAGNOSTICS

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Background An efficient and reliable detection of sexual transmitted infection (STI) is a basic requirement for successful therapies and important for an evaluation of epidemiological processes. Improved analytical methods could facilitate the interpretation of transmission and clinical progress of STIs. We implemented a new multi-target PCR (Allplex[®]) using an automated routine diagnostic setting for evaluation.

Methods Clinical samples were obtained from STI routine diagnostic. Urine specimens and genital swabs collected from different patient cohorts were processed using the automated Microlab Nimbus[®] instrument followed by an automated multiplex-PCR setup. The amplification and detection was conducted using the CFX96 system (BioRad, USA) using the Allplex[®] STI/GU kit. A simultaneous detection of *Chlamydia trachomatis* (CT), *Neisseria gonorrhoeae* (NG), *Mycoplasma genitalium* (MG), *Mycoplasma hominis* (MH), *Trichomonas vaginalis* (TV), *Ureaplasma urealyticum* (UU), *Ureaplasma parvum* (UP), *Treponema pallidum* (TP), *Haemophilus ducreyi* (HD), HSV-1 and -2, VZV and CMV and Lymphogranuloma venereum (LGV) was possible.

Results A total of 500 samples were included for evaluation. The number of positive samples was 242, the overall number of detected pathogens was 320 (CT:31; NG:8; MG:12; TV:2; MH:26; UP:166; UU:51; others:24). Mixed infections could be observed in 61 samples (double: 47; triple: 12; more: 2). Amplification of internal controls revealed a valid processing of all negative samples. The results indicated also a different distribution between age groups, risk behavior, gender and collection site.

Conclusion These results demonstrate the benefit of multi-target PCR tools for the diagnosis of STI. The evaluated assay delivered a valid and reproducible performance. A further advantage of the workflow consists in the parallel or pooled processing of samples. Frequent detection of mixed infections face us with new challenges in the interpretation of medical findings. In current and future studies it has to be evaluated how multiplex results have to be interpreted individually and epidemiologically.

Disclosure No significant relationships.

P030 PILOT IMPLEMENTATION OF A HOME-CARE PROGRAM FOR CHLAMYDIA, GONORRHOEA AND SYPHILIS TESTING IN HIV POSITIVE MSM

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Background Not all men who have sex with men (MSM) are reached with current STI-care. We developed a home-care

program to increase coverage of high-quality HIV/STI-care for MSM. The program combines home-based self-sampling testing for HIV, syphilis, chlamydia and gonorrhoea (anorectal, genital and oropharyngeal) with counselling, treatment and sexual health care after positive diagnosis. The aim of this pilot was to implement this program in the hospital setting to reveal barriers and facilitators for successful implementation.

Methods Healthcare providers from HIV hospital clinic Maastricht offered free test-kits (including STI self-sampling tests and online questionnaire) to their HIV+ MSM patients. Logistics and patient care were managed by the public health service South Limburg. Quantitative (process, questionnaire, diagnostic-tests) and qualitative (evaluation meetings, care-provider-interviews) data were collected. Primary outcomes were adoption (distribution of test-kits), reach (percentage participation), process barriers and facilitators.

Results Of 129 MSM patients, 110(85.3%-adoption) were offered a test-kit; 64(58.2%-participation) accepted; 28(43.8%) returned the samples for testing. 23(82.1%) were not recently <3 months tested. Five MSM (17.9%) were diagnosed with one or more STI. MSM reported easy and convenient test-kit usage; 67% would use it again. Hospital and public health providers found the program acceptable but identified logistical challenges. Initial missing questionnaires (29.6%) led to logistical difficulties(time-consuming). Because a large proportion of MSM had previous syphilis (18/28), sufficient serum was not always(8/18) available for full syphilis diagnostics. In case we only did syphilis screening test, 82.1% (23/28) had sufficient serum for syphilis screening test (and HIV testing).

Conclusion The home-care program with self-sampling test was acceptable for hospital, public health-care providers and MSM. MSM participation could be improved as return rate of test-kits was low. Tested MSM did have STI and were not recently tested. Although in this HIV+ population syphilis diagnoses was often hampered, we expect screening in a lower prevalent syphilis MSM group to be more successful.

Disclosure No significant relationships.

P031 USING INTERVENTION MAPPING TO DEVELOP A HOME-CARE PROGRAM FOR MEN WHO HAVE SEX WITH MEN TO GET THEMSELVES TESTED FOR HIV/STI

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Background Despite public-health efforts, men who have sex with men (MSM) are still not sufficiently reached with current HIV/STI care. We developed a regional MSM home-care program, used by public-health STI care, hospital HIV care, and general practitioners. The program combines home-based self-sampling testing for HIV, syphilis, chlamydia and gonorrhoea (anorectal, genital and oropharyngeal) with counselling,