


Research news in clinical context

Kristine Shields ¹, Rayner Kay Jin Tan ², Stefano Rusconi ^{3,4},
Chen Xiang-Sheng ^{5,6}

COVID-19 IMPACT ON CISGENDER GAY MEN AND OTHER MEN WHO HAVE SEX WITH MEN (MSM) ON A GLOBAL SCALE

The COVID-19 pandemic is thought to disproportionately threaten the health of underserved and underinvestigated populations. To investigate the impact of COVID-19 transmission mitigation measures on MSM, an international team did a cross-sectional study that included 2732 MSM from 103 countries who responded to a questionnaire distributed through a gay social networking app. Findings suggest that the spread of COVID-19, and the global response to contain it, has variably disrupted economic, mental health, general health and clinical services among MSM populations, with a greater impact on those living with HIV, racial/ethnic minorities, immigrants, sex workers and socioeconomically disadvantaged groups. As COVID-19 may deepen health disparities and social inequalities, continued monitoring and creative strategies are needed to mitigate reduction in access to services for MSM with intersecting vulnerabilities.

Santos GM, Ackerman B, Rao A, *et al.* Economic, mental health, HIV prevention and HIV treatment impacts of COVID-19 and the COVID-19 response on a global sample of cisgender gay men and other men who have sex with men. *AIDS Behav* 2020; 11:1–11. <https://doi.org/10.1007/s10461-020-02969-0>

INFLUENCE OF SEXUAL POSITIONING ON SYPHILIS ACQUISITION AND ITS STAGE AT DIAGNOSIS

In a retrospective study of MSM in Melbourne, Australia, researchers examined the association between sexual positioning and a diagnosis of primary

(n=338) or secondary (n=221) syphilis. Of 247 penile chancres, 244 (98.7%) occurred in MSM who reported versatile or exclusive top sexual positioning. Of 77 anal chancres, 75 (97.4%) occurred in MSM who reported versatile or exclusive bottom sexual positioning. MSM who practised receptive anal sex were more likely to present with secondary rather than primary syphilis (OR 3.90; $p < 0.001$, adjusted for age, HIV status and condom use). This suggests that because anorectal chancres are less noticeable, they are less likely to prompt evaluation. Findings highlight the need for improved screening of MSM who report receptive anal sex to ensure early syphilis detection and treatment.

Cornelisse VJ, Chow EPF, Latimer RL, *et al.* Getting to the bottom of it: sexual positioning and stage of syphilis at diagnosis, and implications for syphilis screening. *Clin Infect Dis* 2020;71(2):318–322. <https://doi.org/10.1093/cid/ciz802>

A NOVEL RAPID, POINT-OF-CARE TEST (POCT) FOR CONFIRMATORY TESTING OF ACTIVE SYPHILIS INFECTION

The re-emergence of syphilis is a global public health concern especially in resource-limited settings. Current POCTs detect *Treponema pallidum* (TP) total antibodies but do not distinguish between active and past/treated syphilis, resulting in potential overtreatment and contributing to shortages of penicillin. A new, investigational POCT based on the detection of TP-IgA was evaluated against standard laboratory-based serological tests in 458 stored plasma samples from China and 503 venous blood samples from South Africa. Sensitivity and specificity of TP-IgA POCT for identifying active syphilis were 96.1% (95% CI: 91.7% to 98.5%) and 84.7% (95% CI: 80.1% to 88.6%) in Chinese samples, and 100% (95% CI: 59% to 100%) and 99.4% (95% CI: 98.2% to 99.9%) in South African samples, respectively. These preliminary findings suggest that this TP-IgA-based POCT meets the WHO target product profile for confirmatory diagnosis of active syphilis.

Pham MD, Wise A, Garcia ML, *et al.* Improving the coverage and accuracy of syphilis testing: the development of a

novel rapid, point-of-care test for confirmatory testing of active syphilis infection and its early evaluation in China and South Africa. *EClinicalMedicine* 2020;24:100440. <https://doi.org/10.1016/j.eclinm.2020.100440>

EARLY ANTIRETROVIRAL THERAPY (ART) INITIATION AND WIDE COVERAGE REDUCES POPULATION-LEVEL HIV INFECTIONS IN FRANCE

In 2013, France implemented the early initiation of ART irrespective of CD4 counts to fast-track progress toward UNAIDS (Joint United Nations Programme on HIV/AIDS) 90-90-90 goals (90% of people with HIV diagnosed, 90% on ART, 90% virologically suppressed).¹ An analysis of 61 822 HIV-diagnosed people within the national Dat'AIDS prospective cohort study shows that 91.9% of HIV-diagnosed people were receiving ART by 2014 and 90.5% were virologically suppressed by 2013. This was accompanied by a 36% and 25% decrease in the number of primary (diagnosed with symptoms of acute HIV) and recent HIV infection (diagnosed with CD4 cell count $\geq 500/\text{mm}^3$), respectively, between 2013 and 2017. These findings on two of three goals support the effectiveness of 'Treatment as Prevention' in dramatically reducing HIV incidence at the population level.

Le Guillou A, Pugliese P, Raffi F, Cabie A, Cuzin L, Katlama C, *et al.* Reaching the second and third joint United Nations Programme on Human Immunodeficiency Virus (HIV)/AIDS 90-90-90 targets is accompanied by a dramatic reduction in primary HIV infection and in recent HIV infections in a large French nationwide HIV cohort. *Clinical Infectious Diseases* 2019;71(2):293–300. <https://doi.org/10.1093/cid/ciz800>

NO EVIDENCE OF AN ASSOCIATION BETWEEN HUMAN PAPILLOMAVIRUS (HPV) VACCINATION AND INFERTILITY

Despite well-established evidence of effectiveness and safety, HPV vaccine uptake remains below target in many countries, often due to safety concerns. To evaluate claims that HPV vaccination increases female infertility, researchers analysed 2013–2016 National Health and Nutrition Examination Survey data from 1114 US women aged 20 to 33 years—those young enough to have been offered HPV vaccines and old enough to have been asked about infertility. The 8.1% of women who self-reported infertility were neither more nor less likely to have received an HPV vaccine. Vaccinated women who had ever

¹Shields Medical Writing, Pipersville, Pennsylvania, USA

²Saw Swee Hock School of Public Health, National University of Singapore, Singapore, Singapore

³Università degli Studi di Milano, Milan, Italy

⁴Infectious Diseases Unit, DIBIC Luigi Sacco, Università degli Studi di Milano, Milan, Italy

⁵Deputy Director, National Center for STD Control, Nanjing, China

⁶Professor, Institute of Dermatology, Peking Union Medical College and Chinese Academy of Medical Sciences, Nanjing, China

Correspondence to Dr Kristine Shields, Shields Medical Writing, Pipersville, PA 18947, USA; kristine.e.shields.drph@gmail.com

been married were *less* likely to report infertility. Findings should engender confidence among healthcare providers, whose recommendation is a key factor in patients' acceptance of HPV vaccination.

Schmuhl N, Mooney KE, Zhang X, Cooney LG, Conway JH, and LoCont NK. No association between HPV vaccination and infertility in U.S. females 18–33 years old. *Vaccine* 2020;38(24):4038–4043. <https://doi.org/10.1016/j.vaccine.2020.03.035>

A PAY-IT-FORWARD APPROACH TO IMPROVE UPTAKE OF GONORRHOEA AND CHLAMYDIA TESTING

Despite WHO recommendations that MSM receive gonorrhoea and chlamydia testing, affordability remains a barrier in many countries. In a randomised trial, researchers tested three incentivising strategies, randomising 301 MSM in MSM-run community-based organisations in Guangzhou and Beijing, China. Gonorrhoea and chlamydia test uptake was 56% in the pay-it-forward arm (free testing and an invitation to donate to a future person's test), 46% in a pay-what-you-want arm and 18% in the standard-cost arm (¥150,

€1.2). The estimated difference in test uptake between pay-it-forward and standard cost was 38.4% (95% CI lower bound 28.4%). Almost 95% of MSM in the pay-it-forward arm donated to testing for future participants. The pay-it-forward strategy significantly increased gonorrhoea and chlamydia testing uptake in China and has potential to drive testing in other settings.

Yang F, Zhang TP, Tang W, Ong JJ, Alexander M, Forastiere L, Kumar N, Li KT, Zou F, Yang L, Mi G, Wang Y, Huang W, Lee A, Zhu W, Luo D, Vickerman P, Wu D, Yang B, Christakis NA, Tucker JD. Pay-it-forward gonorrhoea and chlamydia testing among men who have sex with men in China: a randomised controlled trial. *Lancet Infect Dis* 2020;20(8):976–982. [https://doi.org/10.1016/S1473-3099\(20\)30172-9](https://doi.org/10.1016/S1473-3099(20)30172-9)

Handling editor Anna Maria Geretti

Contributors The first draft came from all four authors. Each were responsible for one or more synopses. All authors read and approved the final version.

Competing interests None declared.

Provenance and peer review Commissioned; internally peer reviewed.

This article is made freely available for use in accordance with BMJ's website terms and conditions for the duration of the covid-19 pandemic or until otherwise determined by BMJ. You may use, download and print the article for any lawful, non-commercial purpose (including text and data mining) provided that all copyright notices and trade marks are retained.

© Author(s) (or their employer(s)) 2020. No commercial re-use. See rights and permissions. Published by BMJ.



To cite Shields K, Tan RKJ, Rusconi S, *et al.* *Sex Transm Infect* 2020;96:553–554.

Sex Transm Infect 2020;96:553–554. doi:10.1136/sextrans-2019-054276

ORCID iDs

Kristine Shields <http://orcid.org/0000-0001-5741-3824>
Rayner Kay Jin Tan <http://orcid.org/0000-0002-9188-3368>
Stefano Rusconi <http://orcid.org/0000-0002-0375-9990>
Chen Xiang-Sheng <http://orcid.org/0000-0003-3927-2065>

REFERENCE

- 1 Unaided 90–90–90: an ambitious treatment target to help end the AIDS epidemic, 2014. Available: http://www.unaids.org/sites/default/files/media_asset/90-90-90_en.pdf [Accessed 23 Nov 2018].