

# Research news in clinical context

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## REGULAR USE OF AN ANTIBACTERIAL MOUTHWASH DOES NOT PREVENT OROPHARYNGEAL GONOCOCCAL INFECTION

The double-blind Oral Mouthwash use to Eradicate Gonorrhoea (OMEGA) trial randomised men who have sex with men to rinse and gargle at least once daily for 60s with either an antibacterial mouthwash (Listerine; n=219) or a mouth lubricant as control (Biotène; n=227) for a total of 12 weeks.<sup>1,2</sup> Oropharyngeal swabs were collected 6-weekly and saliva 3-weekly. The number of incident cases of oropharyngeal gonorrhoea was 15 (7%) in the Listerine group and 10 (4%) in the Biotène group. At week 12, the adjusted risk difference in the cumulative incidence of oropharyngeal gonorrhoea between the two groups was 3.1% (95% CI -1.4 to 7.7). While the large CI indicates the need for further data, these initial findings do not support a protective effect of Listerine against oropharyngeal gonorrhoea.

## TRANSIENT IMPACT OF COVID-19 ON HIV CARE IN FOUR AFRICAN COUNTRIES

Investigators analysed data from the African Cohort Study, which prospectively collects information from 12 clinics across 5 HIV care programmes in Tanzania, Uganda, Kenya and Nigeria.<sup>3</sup> Parameters including HIV clinic visit adherence, virological suppression and food security were compared between the periods January 2019–March 2020 (prepandemic phase) and May 2020–February 2021 (pandemic phase). After adjusting for age, sex and HIV care programme, both attendance of scheduled clinic visits and food security were significantly reduced in the early pandemic phase, but not after 7 September 2020. There were no

detrimental effects on treatment adherence and virological suppression rates. The findings provide reassurance, although they are not fully representative of the general HIV population across Africa. There remains a need to investigate the impact of the COVID-19 pandemic on HIV care globally.

## EXPEDITED PARTNER THERAPY DOES NOT IMPROVE ERADICATION OF CHLAMYDIA TRACHOMATIS BEFORE DELIVERY

Expedited partner therapy (EPT) enables providers to prescribe treatment for partners of patients diagnosed with an STI, without the partner having to establish direct care.<sup>4</sup> This cohort study evaluated a prenatal EPT programme in Dallas, Texas, a high *Chlamydia trachomatis* (CT) prevalence area. Investigators evaluated the effect of EPT on rates of CT infection before delivery compared with the traditional partner referral, testing and treatment approach used the year before. The rate of infection was 15% (61 of 419) with EPT vs 13% (60 of 471) with the standard approach (OR 0.86; 95% CI 0.58 to 1.26). EPT on its own is unlikely to be enough to successfully eradicate CT before delivery.

## HOMELESSNESS AND HOUSING INSTABILITY INCREASE THE RISK OF HIV AND HEPATITIS C VIRUS INFECTION AMONG PEOPLE WHO INJECT DRUGS

People who inject drugs (PWID) are at increased risk of HIV and hepatitis C virus (HCV) infection and have high levels of homelessness and unstable housing.<sup>5</sup> This systematic review and meta-analysis included studies published between 2017 and 2020 that estimated HIV or HCV incidence, or both, among community-recruited PWID. In the pooled estimates, recent homelessness or unstable housing (current or within 1 year) increased the risk of acquiring HIV and HCV compared with stable housing, with an adjusted relative risk of 1.39 (95% CI 1.06 to 1.84; p=0.019) for HIV and 1.64 (95% CI 1.43 to 1.89; p<0.0001) for HCV. Risk reduction for PWID

must include interventions to support housing stability.

## UNRECOGNISED ORAL AND ANAL SHEDDING OF *TREPONEMA PALLIDUM* IN MSM WITH EARLY SYPHILIS

Mouth, anus, urethra and semen samples were systematically collected in 200 men who have sex with men (MSM) (31% living with HIV) to investigate *Treponema pallidum* shedding from asymptomatic sites relative to lesion sites.<sup>6</sup> Across all stages of early syphilis, comprising primary, secondary and early latent, 91%, 74% and 8%, respectively, had *T. pallidum* at any site, and 20%, 26% and 0% had detection at two or more sites, with the highest detection in the mouth (24%) and anus (23%). Oral and anal shedding of *T. pallidum* was most frequent during secondary syphilis and often occurred in the absence of overt syphilis lesions, independently of HIV status. Studies are needed to demonstrate bacteria viability from asymptomatic shedding sites and whether its detection might improve syphilis control.

## PUBLISHED IN SEXUALLY TRANSMITTED INFECTIONS - THE EDITOR'S CHOICE: THE COMBINATION OF DOLUTEGRAVIR/RILPIVIRINE USED IN HIV AND NEUROPSYCHIATRIC ADVERSE EFFECTS

Pooling data from 20 randomised trials with a minimum duration of 48 weeks, this meta-analysis investigated the risk of neurotoxicity (defined as the occurrence of depression, anxiety, insomnia, dizziness or suicidal behaviour) in adults treated with rilpivirine, dolutegravir or the combination dolutegravir/rilpivirine versus comparator regimens.<sup>7</sup> Twelve trials were in treatment-naïve and eight in treatment-experienced participants, totalling 10 998 individuals. Depression was the most common neuropsychiatric event, whereas suicidal behaviour was the least common. The relative risk (RR) of depression was not different with dolutegravir or rilpivirine versus comparator. In contrast, dolutegravir/rilpivirine showed a synergistic effect on depression, with an RR of 2.82 (95% CI 1.12 to 7.10; p=0.03), although no study directly compared dolutegravir/rilpivirine with efavirenz. While further studies are needed, the occurrence of depression should be monitored during dolutegravir/rilpivirine therapy.

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