only provider-reports was 7.4 cases/100,000 live births; ELR-only was 12.8; combined provider and ELR reports was 17.3; and Chapman's estimator was 32.7.

Conclusion The incidence of nHSV measured using current provider- and ELR-reporting may substantially underestimate the disease burden in Florida. Expanding the number of healthcare facilities and laboratories electronically reporting nHSV infections and encouraging providers to report nHSV cases could help address the gap in reporting.

Disclosure No significant relationships.

P092

HERPES SIMPLEX VIRUS TYPE 1 EPIDEMIOLOGY IN LATIN AMERICA AND THE CARIBBEAN: SYSTEMATIC REVIEW AND META-ANALYTICS

¹Layan Sukik, ¹Mariam Alyafei, ²Manale Harfouche*, ³Laith Abu-Raddad. ¹*Qatar University, Department of Health Sciences, Doha, Qatar;* ²*Weill Cornell Medicine-Qatar, Infectious Disease Epidemiology Group, Doha, Qatar;* ³*Weill Cornell Medicine-Qatar, Doha, Qatar*

10.1136/sextrans-2019-sti.287

Background We aim to investigate the epidemiology of herpes simplex virus type 1 (HSV-1) in Latin America and the Caribbean.

Methods Systematic review and meta-analytics guided by the Cochrane Collaboration Handbook and reported following the PRISMA guidelines.

Results Thirty-one relevant reports were identified including 35 overall (and 95 stratified) seroprevalence measures, and five and seven proportions of virus isolation in genital ulcer disease (GUD) and in genital herpes, respectively. Pooled mean seroprevalence was 57.2% (95% CI: 49.7–64.6%) among children and 88.4% (95% CI: 85.2–91.2%) among adults. Pooled mean seroprevalence was lowest at 49.7% (95% CI: 42.8–56.6%) in those aged ≤10, followed by 77.8% (95% CI: 67.9–84.8%) in those aged 10–20, 82.8% (95% CI: 73.1–90.8%) in those aged 20–30, 92.5% (95% CI: 89.4–95.1%) in those aged 30–40, and 94.2% (95% CI: 92.7–95.5%) in those aged ≥40. Age was the strongest source of heterogeneity in seroprevalence, explaining 54% of variation. Evidence was found for seroprevalence decline over time. Pooled mean proportion of HSV-1 isolation was 0.9% (95% CI: 0.0–3.6%) in GUD and 11.1% (95% CI: 3.1–22.3%) in genital herpes.

Conclusion HSV-1 is a widely prevalent infection in this region, but its epidemiology appears to be slowly transitioning, with still limited contribution for HSV-1 in genital herpes.

Disclosure No significant relationships.

P093

PERFORMANCE OF FOUR DIAGNOSTIC ASSAYS FOR DETECTING HERPES SIMPLEX VIRUS TYPE 2 ANTIBODIES IN MIDDLE EAST AND NORTH AFRICA

¹Soha Dargham*, ²Gheyath Nasrallah, ²Affah Sahara, ²Malaz Elsidqi, ¹Laith Abu-Raddad. ¹*Weill Cornell Medicine-Qatar, Doha, Qatar;* ²*Qatar University, Doha, Qatar*

10.1136/sextrans-2019-sti.288

Background Assessments of commercial assays in detecting herpes simplex virus type 2 (HSV-2) antibodies have shown variable sensitivity and specificity, and variation in performance by global population. We aimed to evaluate performance of four assays in detecting HSV-2 antibodies in a composite Middle Eastern and North African (MENA) population. The assays are two ELISA kits: HerpeSelect® 2 ELISA IgG and

Euroimmun Anti-HSV-2 (gG2) ELISA (IgG), and two immunoblot (IB)/Western blot (WB) assays: HerpeSelect® 1 and 2 Immunoblot IgG and Euroimmun Anti-HSV-1/HSV-2 gG2 Euroline-WB (IgG/IgM).

Methods Blood specimens were drawn from blood donors between 2013–2016 in Doha, Qatar. Twenty specimens from ten nationalities (Egypt, Iran, Jordan, Lebanon, Pakistan, Palestine, Qatar, Sudan, Syria, and Yemen; total=200) were randomly selected and tested for HSV-2 antibodies.

Results In the six possible assay comparisons, Cohen's kappa statistics indicated fair to good agreement, ranging between 0.57 (95% CI 0.28–0.86) and 0.69 (95% CI 0.44–0.95). Meanwhile, positive percent agreement ranged between 50.0 (95% CI 18.7–81.3%) and 63.6% (95% CI 30.8–89.1%); negative percent agreement ranged between 97.8% (95% CI 94.4–99.4%) and 99.5% (95% CI 97.0–100.0%); and overall percent agreement ranged between 95.8% (95% CI 91.9–97.9%) and 97.5% (95% CI 94.2–98.9%). The two ELISA kits demonstrated comparable sensitivities and specificities ≥50% and >98%, respectively, with respect to the IB/WB assays.

Conclusion The study provided, for the first time, primary data on performance of these assays in diagnosing HSV-2 infection in MENA populations. Findings support comparable performance and utility of these assays, and demonstrate challenges in establishing seropositivity (versus seronegativity).

Disclosure No significant relationships.

P094

AN ASSESSMENT OF RISK FACTORS FOR HSV-2 INFECTION IN MALAWIAN WOMEN USING TWO CLASSIFICATIONS FOR THE HERPESELECT 2 TEST

¹Payal Chakraborty, ¹Alison Norris, ²Sarah Huber-Krum, ³Sarah Garver, ¹Robert Hood, ⁴Venson Banda, ⁵Abigail Norris Turner. ¹*The Ohio State University, College of Public Health, Division of Epidemiology, Columbus, USA;* ²*Harvard T.H. Chan School of Public Health, Department of Global Health and Population, Boston, USA;* ³*University of Chicago, Department of Sociology, Chicago, USA;* ⁴*Child Legacy International, Lilongwe, Malawi;* ⁵*Ohio State University, Internal Medicine, Infectious Diseases, Columbus, USA*

10.1136/sextrans-2019-sti.289

Background The Focus HerpeSelect 2 ELISA IgG Test, used to diagnose herpes simplex virus type 2 (HSV-2) infection, is inexpensive, convenient, and widely used. However, past studies document poor specificity of this test in African populations. Increasing the index value cutpoint for a positive result improves specificity, but no studies to our knowledge have examined whether the correlates of HSV-2 infection change when the cutpoint for positivity changes. We investigated whether associations between select demographic and sexual risk factors and HSV-2 serostatus varied when the cutpoint for positivity was increased.

Methods We sampled women (n=218) from the *Umoyo wa Thanzi* project, an ongoing community-based cohort study in rural Malawi. Using multinomial logistic regression and accounting for village-level clustering, we examined unadjusted and adjusted associations between select risk factors and HSV-2 serostatus. HSV-2 serostatus was coded in two ways: the manufacturer's recommended cutpoints (<0.9=negative, 0.9–1.1=indeterminate, >1.1=positive), and modified cutpoints (<0.9=negative, 0.9–3.5=indeterminate, >3.5=positive).

Results We assessed associations between HSV-2 serostatus and age, bacterial vaginosis (BV), and partner concurrency under