

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

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

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**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

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

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**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

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

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**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

each set of cutpoints. Measures of effect were weaker using the manufacturer's cutpoints compared to the modified cutpoints. Age was not significantly correlated with positive vs. negative serostatus using the manufacturer's cutpoint (relative risk ratio (RRR)=1.03, 95% CI: 0.97–1.09), but the association strengthened using the modified cutpoint (RRR=1.09, 95% CI: 1.01–1.17). Using the manufacturer's cutpoint, the RRR for BV was 1.73 (95% CI: 0.71–4.19) vs. RRR=2.70 (95% CI: 0.94–7.79) for the modified cutpoint. For partner concurrency, the RRR using the manufacturer's cutpoint was 1.47 (95% CI: 0.71–3.07), vs. RRR=3.45 (95% CI: 1.12–10.57) for the modified threshold.

**Conclusion** Changing the test cutpoints affected observed associations with previously-identified HSV-2 risk factors. HSV-2 prevention interventions informed by correlates of HSV-2 infection must be aware that different target populations may emerge depending on which cutpoints are adopted.

**Disclosure** No significant relationships.

P095

#### AGE DISPARITY AND SOCIODEMOGRAPHIC CORRELATES OF HERPES SIMPLEX VIRUS TYPE 2 (HSV-2) SEROPOSITIVITY IN SOUTH INDIA

<sup>1</sup>Makella Coudray\*, <sup>2</sup>Abraham Degarege, <sup>3</sup>Anisa Khan, <sup>3</sup>Kavitha Ravi, <sup>3</sup>Vijaya Srinivas, <sup>4</sup>Jeffrey Klausner, <sup>2</sup>Purnima Madhivanan, <sup>5</sup>Caitlyn Placek. <sup>1</sup>Florida International University, Epidemiology, Miami, USA; <sup>2</sup>Florida International University, Epidemiology, Miami, USA; <sup>3</sup>Public Health Research Institute of India, Mysore, India; <sup>4</sup>UCLA David Geffen School of Medicine and Fielding School of Public Health, Epidemiology, Los Angeles, USA; <sup>5</sup>Ball State University, Epidemiology, Muncie, USA

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**Background** Age, gender, sexual history, marital status, education, socioeconomic status and geographic location are known risk factors of Herpes simplex virus type 2 (HSV-2) seroprevalence. There is a paucity of data on the potential association between increasing age difference between sex partners and HSV-2 infection. This study investigated the relationship between increasing age difference between sex partners and HSV-2 infection in Mysore, India, due to a lack of studies documenting this phenomenon in HSV-2 seropositive individuals in India.

**Methods** This study presents one section of a larger comparative study conducted between October 2016 and July 2017 in collaboration with the Public Health Research Institute of India, that assessed drug use and risky sexual behavior among adults in Mysore, India. Study personnel conducted structured interviews with men and women to assess demographic variables, reproductive health, risky sexual behavior and relationship history. ELISA testing (Focus Diagnostics HerpeSelect® 2 ELISA IgG, Focus Technologies, Cypress, CA) was used to determine the presence of HSV-2 antibodies.

**Results** There were 351 participants included in the study. The prevalence of HSV-2 in this sample was 9.4% (95%CI: 6.3%, 12.5%). HSV-2 infection was correlated with partner age difference and religio. The odds of HSV-2 infection significantly increased among the study participants with an increase in the age difference with their sex partner (OR: 1.22, 95% CI: 1.06, 1.40). The odds of HSV-2 infection was significantly lower among Hindus as compared to non-Hindus (OR: 0.19, 95% CI: 0.04, 0.84). There was no significant difference in

the prevalence of HSV-2 infection by sex, education, or occupation.

**Conclusion** HSV-2 seroprevalence was relatively low in this population compared to regional and global rates. HSV-2 seropositivity was associated with an increasing partner age difference. This highlights the need for further research in this area in different Indian settings to determine what the dynamics of this phenomenon.

**Disclosure** No significant relationships.

P096

#### VULVAR ZOSTER

<sup>1</sup>Christine Remar Concepcion\*, <sup>2</sup>Maria Bandola. <sup>1</sup>University of the Philippines, Department of Obstetrics and Gynecology-Section of Infectious Diseases, Manila City, Philippines; <sup>2</sup>University of the Philippines – Philippine General Hospital, Manila, Philippines

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**Background** Herpes Zoster infection is part of the two distinct syndromes of infections secondary to varicella-zoster. The other syndrome being the primary infection of varicella (chickenpox) which is a contagious but benign illness. Reactivation of this primary infection results to herpes zoster or shingles. Shingles is a uniquely localized disease with unilateral radicular pain and a vesicular rash limited to the area of the skin innervated by a single dorsal root or cranial sensory ganglion. Clinically significant pain usually accompanies the dermatomal rash of herpes zoster. This pain may persist for weeks, months, or even years after the herpes zoster rash has healed, a debilitating complication known as (PHN) postherpetic neuralgia. This condition disables a individuals infected with shingles especially among the elderly. We are presented with a rare case of vulvar zoster in a 52 year old nulligravid. The case presented with pain, pruritus, rashes and eventually ulcers along the dermatomal line of the vulva. Clinical improvement was noted upon treatment with an anti-viral.

**Disclosure** No significant relationships.

P099

#### RISK OF ACQUIRING HIV INFECTION AMONG EXPOSED INFANTS IN SELECTED PRIMARY HEALTH CARE FACILITIES IN IBADAN OYO STATE NIGERIA

<sup>1</sup>Aishat Usman\*, <sup>2</sup>Olubunmi Ayinde, <sup>3</sup>Esther Asekun-Olarinmoye. <sup>1</sup>Texila American University, Public Health, Georgetown, Guyana; <sup>2</sup>Oyo State Ministry of Health, STI and HIV, Ibadan, Nigeria; <sup>3</sup>Osun State University, Community Medicine, Osogbo, Nigeria

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**Background** In 2016, Nigeria recorded 37,000 new HIV infections among children out of the total of 60,000 new infections in West and Central Africa, representing 62 per cent of the new infections. This study was conducted to determine the outcomes of HIV exposed infants and the risk of acquiring HIV infections at the final outcome of 18 months

**Methods** This is a retrospective cohort study of exposed infants between January 2015-december 2016. A proforma was used to abstract information from clinic records on socio-demographics characteristics, ARV prophylaxis, mode of delivery, birth weight, infant prophylaxis, Early infant diagnosis (EID), referral to ART. Cox proportion hazard regression model was