

**P719** PREVALENCE AND TYPE-SPECIFIC DISTRIBUTION OF ONCOGENIC HUMAN PAPILLOMAVIRUS AMONG FEMALE SEX WORKERS IN COTONOU, WEST AFRICA

<sup>1</sup>Fernand Guédou\*, <sup>1</sup>Luc Béhanzin, <sup>1</sup>Ella Goma-Matsétsé, <sup>1</sup>Marlène Aza-Gnandji, <sup>1</sup>Nassirou Geraldo, <sup>2</sup>Fatoumata Korika Tounkara, <sup>3</sup>Julie Guenoun, <sup>4</sup>François Coutlée, <sup>5</sup>Benjamin Hounkpatin, <sup>6</sup>Michel Alary. <sup>1</sup>Dispensaire IST, Cotonou, Benin; <sup>2</sup>Axe Santé des Populations et Pratiques Optimales en Santé, HSS, Social and Preventive Medicine, Québec, Canada; <sup>3</sup>Centre de Recherche du Centre Hospitalier de l'Université de Montréal, Département de Microbiologie et Infectiologie, Montréal, Canada; <sup>4</sup>l'Université de Montréal, Microbiologie Médicale et Infectiologie, Montreal, Canada; <sup>5</sup>University of Abomey Calavi, BP, Benin; <sup>6</sup>CHU de Quebec – Université Laval, Quebec, Canada

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**Background** Female sex workers (FSW) are at higher risk of Human Papillomavirus (HPV) infections. Yet, few data exist on the prevalence and the types of HPV circulating among them. Baseline data from FSW recruited in a longitudinal study were analyzed to determine the prevalence and type-specific distribution of oncogenic HPV among FSW in Cotonou.

**Methods** Data from 309 FSW with valid cervical specimens (out of 312 enrolled) were analyzed. Cervical specimens were processed through March 2019, using the Linear Array HPV genotyping test (LA-HPV) (Roche Molecular Systems). Where appropriate, a real-time PCR assay specific for type 52 was performed to control for cross-reactivity with HPV-33, 35 or 58. The overall and type-specific prevalence of oncogenic HPV were estimated according to the level of risk: high risk (HR-HPV) and low risk (LR-HPV).

**Results** The mean age of the 309 women at enrollment was 34.97 ( $\pm$  10.66) and that at their first intercourse was 17.53 ( $\pm$  2.66). Almost half of them (45.8%) were Beninese and 25.8% were HIV positive. Condom use at the last sex with clients and boyfriend was reported by 97.7% and 14.5% of women, respectively. At least one HR-HPV was detected in 237 women (88.3%) and the ten most frequent were HPV58 (37.5%), HPV16 (36.6%), HPV52 (28.8%), HPV35 (23.3%), HPV68 (22.0%), HPV18 (20.7%), HPV45 (15.2%), HPV33 (11.0%), HPV59 (9.1%), HPV51 (6.5%). LR-HPV were found in 186 women (60.2%): HPV81 (23.6%); HPV61 (23.0%); HPV72 (15.2%); VPH42 (12.0%); VPH70 (8.4%), VHP54 (5.8%); VPH 6/VPH11 (5.5%) and VPH40 (2.6%). HR-HPV presence was not associated with HIV status ( $p=0.897$ ) while that of LR-HPV was ( $p=0.037$ ).

**Conclusion** To our knowledge, this study is the first to provide HPV data among FSW in West Africa. The high prevalence and atypical distribution of oncogenic HPV among this high risk population might have implications for vaccine design.

**Disclosure** No significant relationships.

**P722** AN UNUSUAL CONSTELLATION OF SYMPTOMS: OUTPATIENT DIAGNOSIS OF NEUROSYPHILIS WITH NO HISTORY OF PRIOR SYPHILIS SYMPTOMS

Elizabeth Liu\*, Eliza Newbury-Palma, Jacob Taylor, Anthony Izokaitis. *Mercy Muskegon, Medical Education, Muskegon, USA*

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**Background** Neurosyphilis presents in early and later stages of syphilis. Cerebrospinal fluid, meninges and vascular structures

are involved in the early stages of neurosyphilis, while in the late stage; cerebral tissue and spinal cord parenchyma are affected. Neurosyphilis can manifest with many different symptoms. Diagnosis criteria remains ambiguous and treatment options are classified very low quality of evidence by World Health Organization. We present a case of neurosyphilis with progressive sensory loss whose primary and secondary phases were not detected.

**Methods** 52 year old male initially presented with upper respiratory symptoms, headache, facial swelling, and visual disturbances. 20 pound weight loss, positive candida throat culture, diagnosis of panuveitis, and progressive hearing loss prompted diverse differential workup. Rapid plasma reagin and fluorescent treponemal antibody absorption were positive suggesting syphilis and with neurologic symptoms met neurosyphilis diagnosis. After penicillin treatment, symptoms resolved and labs showed disease resolution.

**Results** RPR titer high 1:128. In 2 months, WBC count increased from 9.8 to 22.0. CSF analysis showed a neutrophilic leukocytosis with elevated protein. Repeat CSF 6 months post-treatment showed negative VDRL CSF qualitative and titer negative. RPR 1:4. Syphilis antibody  $\geq$  70.0 high.

**Conclusion** Neurosyphilis can be encountered in sensory, neuropsychiatric and neurologic domains. The incidence of syphilis in Michigan has increased from 365 to 480 cases and with a national 10.5% increase from 2016 to 2017. In this case, neurosyphilis improvement was observed with resolution of sensory deficits with penicillin treatment. Impaired cognition or mood disturbance were not observed throughout the patient's clinical course. Attention should be given to progressive sensory loss because syphilis in its early stages can be overlooked, left untreated and can lead to irreversible manifestations. This case illustrates the need for further awareness on neurosyphilis as this disease can present in forms that are not common to what the current literature shows.

**Disclosure** No significant relationships.

**P724** A CONDITIONAL PAY-FOR-PERFORMANCE PROGRAM TO IMPROVE SYPHILIS SCREENING IN CHINESE STD CLINICS: A PILOT INTERVENTION

<sup>1</sup>Shen Hongcheng, <sup>1</sup>Cheng Wang, <sup>1</sup>Shujie Huang, <sup>2</sup>Christopher Weisen, <sup>1</sup>Bin Yang, <sup>1</sup>He-Ping Zheng, <sup>3</sup>M Kumi Smith\*. <sup>1</sup>Guangdong Center for STD Control and Prevention, Guangzhou, China; <sup>2</sup>University of North Carolina Chapel Hill, Chapel Hill, USA; <sup>3</sup>University of Minnesota Twin Cities, Epidemiology and Community Health, Minneapolis, USA

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**Background** Under-screening of syphilis in clinical settings is a pervasive problem, especially in resource constrained settings where heavy patient loads and competing health priorities inhibit health providers' ability to meet screening coverage targets. We piloted a "conditional pay-for-performance (P4P) strategy," which rewarded providers at sexually transmitted disease (STD) clinics a monetary bonus for every confirmed case of syphilis they screened. By tying rewards to the number of cases detected, this strategy seeks to incentivize providers to concentrate their counseling efforts on indicated patients who need it the most.

**Methods** Five STD clinics in a high syphilis transmission setting of China participated in the 6-month intervention. Data