Abstract

Objective. To assess Human Papillomavirus (HPV) type distribution among men ages 18 years and older recruited from three different countries utilizing a common protocol for sampling HPV detection, and to evaluate whether HPV detection differs by age and country.

Material and Methods. The study protocol includes a pre-enrollment run-in visit, a baseline (enrollment) visit, and nine additional visits after enrollment scheduled six months apart. For this analysis, the first 1,160 men who completed both the run-in and baseline visit were included. To maximize sampling and prevent fraying of applicators, three different applicators were utilized to sample the external genitalia of participants among different anatomic sites. These samples were later combined to form a single sample for the detection of HPV using polymerase chain reaction (PCR) for amplification of a fragment of the HPV L1 gene.

Results. Among 1,160 men from Brazil, Mexico, and the United States (U.S.), overall HPV prevalence was 65.2%; with 12.0% oncogenic types only, 20.7% non-oncogenic types only, 17.8% both oncogenic and non-oncogenic, and 14.7% unclassified infections. Multiple HPV types were detected in 25.7% of study participants. HPV prevalence was higher in Brazil (72.3%) than in the U.S. (61.3%) and Mexico (61.9%). HPV 16 (6.5%), 51 (6.5%), and 59 (5.3%) were the most commonly detected oncogenic infections, and HPV 84 (7.7%), 62 (7.3%), and 6 (6.6%) were the most commonly detected non-oncogenic infections. Overall HPV prevalence was not associated with age. However, significant associations with age were observed when specific categories of oncogenic, non-oncogenic, and unclassified HPV infections were considered. Conclusions. Studies of HPV type distribution among a broad age range of men from multiple countries is needed to fill the information gap internationally with respect to our knowledge of HPV infection in men.

Keywords

HPV, males, multicenter study, sexual behavior.