EVALUATION OF HPV TYPES AMONG WOMEN ENROLLED IN THE MULHER CERVICAL CANCER SCREENING STUDY IN MOZAMBIQUE

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Introduction The objective of our study is to describe the high-risk human papillomavirus (HR-HPV) types noted among women enrolled in the MULHER Study, a prospective trial of Mozambican women undergoing cervical cancer screening with HPV testing in conjunction with family planning services.

Methods From January 2020 to January 2023, 9,014 women aged 30–49 years in Maputo City and Gaza Province, Mozambique underwent cervical cancer screening. Cervicovaginal samples were self-collected (97.5%) or provider-collected (2.5%) and primary HPV testing was performed using the GeneXpert HPV testing platform (Cepheid Inc, Sunnyvale, CA, USA) which provided genotyping for HPV16, HPV18/45, and non-16/18/45. Women with positive HPV testing underwent surgical excision procedure (LEEP). Our objective was to describe the pathologic results of LEEP specimens performed as part of the MULHER Study, a prospective trial of primary HPV testing for cervical cancer screening in Mozambique.

Results Of the 9,014 women enrolled, 2,805 (31.1%) tested positive for at least one HR-HPV type: HPV16 (n=477, 17%), HPV18/45 (n=688, 24.5%) and non-16/18/45 (2,157, 76.9%). 23.2% of participants with HR-HPV had multiple types present. HR-HPV infection was more frequently observed among women living with HIV (WLWH) compared with HIV-negative women (39.5% vs. 24.2% respectively; p<0.001), with non-16/18/45 also being the most frequent type in this population (69.6%). Among women with cancer, HPV16 was the most frequent type noted (58%).

Conclusion/Implications Our findings suggest that non-16/18/45 was the most frequent HR-HPV type among women in our study cohort in Mozambique overall; and HPV16 is the most common among women with cervical cancer. Further study is needed to determine the role of HR-HPV genotyping in follow-up and treatment, particularly among WLWH in Mozambique.