

Background

- There is lack of data on distribution of human papillomavirus (HPV) genotypes among women living with HIV (WLHIV) in Uganda.
- Yet, WLHIV are more likely to be infected with human papillomavirus (HPV) and to have persistent HPV progressing to cervical pre-cancer and/or invasive cervical cancer compared to HIV negative women.
- Information on epidemiology of high-risk HPV (hrHPV) infections and prevalence of specific HPV genotypes is very vital in mounting an effective response to the growing challenge of cervical cancer in Uganda.

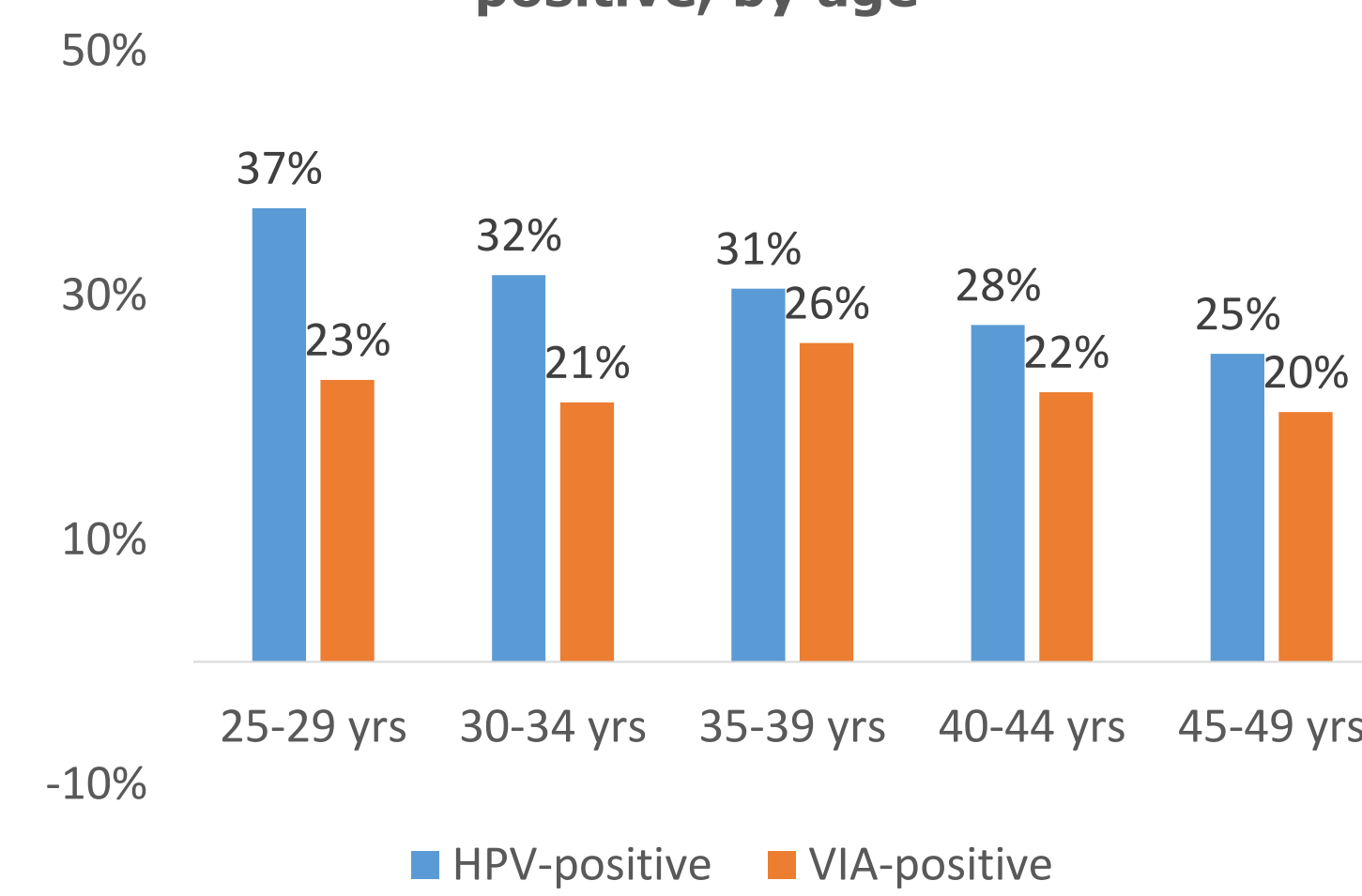
Methods

- A pilot cervical cancer screening program was conducted between September and April 2021.
- HPV testing using self-collected vaginal samples was offered to WLHIV aged 25-49 attending antiretroviral clinics in 10 high-volume hospitals.
- Samples were processed using GeneXpert and Hologic Panther devices.
- HPV+ women were referred for Visual Inspection with Acetic acid (VIA) triage, and those having precancerous or cancerous lesions were treated with cryotherapy, thermocoagulation, LEEP or referred for further management.
- Data was collected from hospital registers to determine the distribution of HPV genotypes and prevalence of cervical precancerous lesions among HPV positive WLHIV.

Results

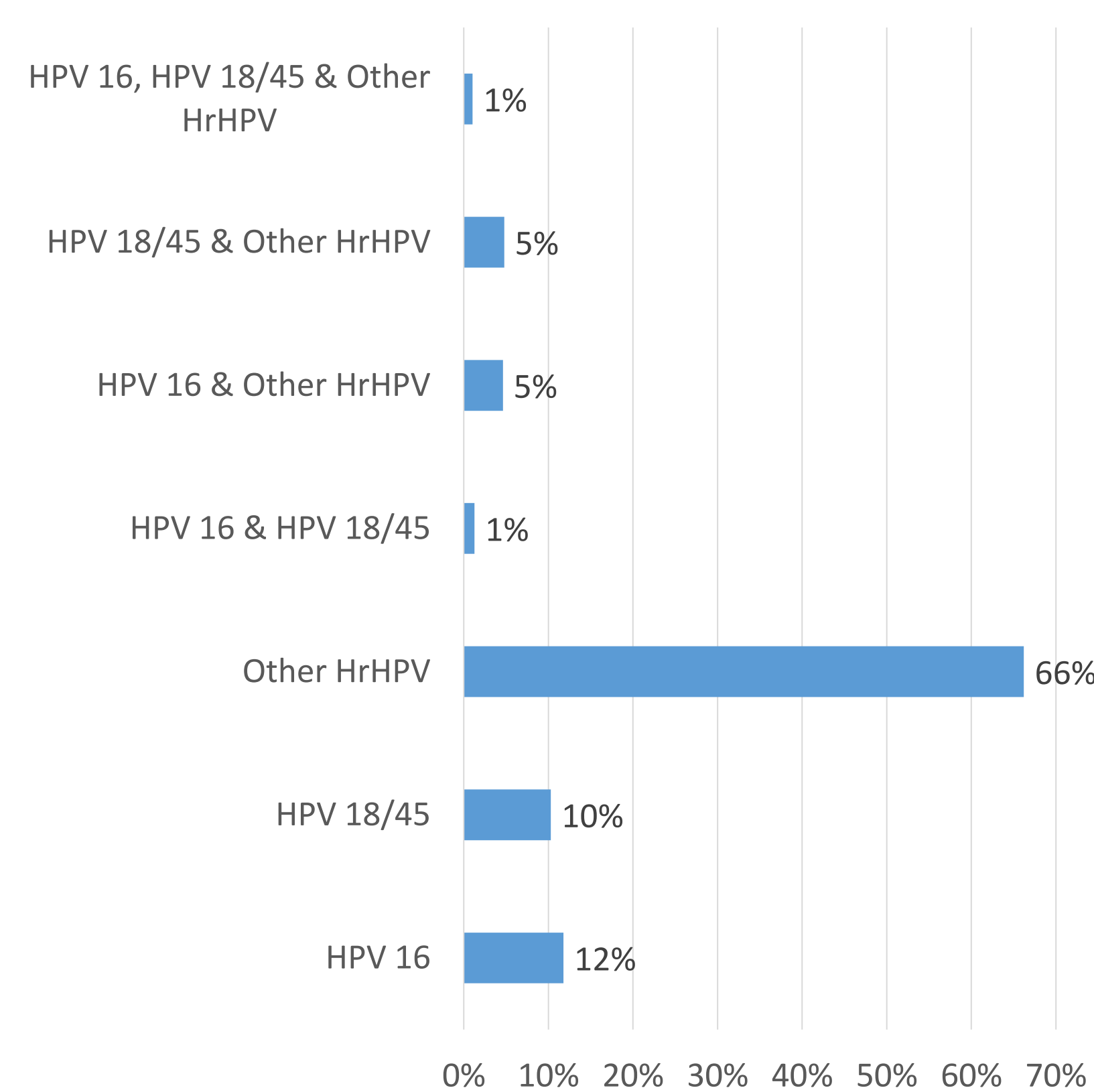
- Across the 10 pilot sites, 6,611 WLHIV were offered screening and 6,012 (91%) had a valid result. HPV positivity rate was 30% (1,817), and higher in the younger age groups.
- Of the HPV+ women, 214 (12%) were HPV16 positive, 187 (10%) were HPV 18/45 and 1,203 (66%) had other hrHPV genotypes as a pooled result including HPV 31, 33, 35, 39, 51, 52, 56, 58, 59, 66 and 68.
- 213 (12%) of the women had multiple infections with hrHPV genotypes.

Figure 1: Proportion HPV-positive and VIA-positive, by age



- 823 (45%) of the HPV+ women were effectively linked to care and triaged with VIA.
- 173 (21%) were found with precancerous lesions, of whom 137 (79%) were treated as appropriate.
- Fourteen women were found to be suspicious of cancer and referred for further management.

Figure 2: Proportion of HPV positive women by High-Risk HPV



Conclusions and Recommendations

- HPV positivity among WLHIV was 30%.
- Prevalence of pre-cancerous lesions among HPV positive women was 21%.
- HrHPV infections are common among WLHIV, including HPV16 and HPV18 that cause majority of cervical cancer.
- HPV+ WLHIV found to have no lesions during the pilot need to be proactively followed-up to ensure that non-regressive infections are appropriately managed.
- The pilot results informed a national decision to adopt HPV testing as the preferred cervical cancer screening modality.
- WLHIV have been prioritized as part of ongoing scale up of HPV testing.

Acknowledgements

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