

# HIV prevalence by age at a single institution providing cervical cancer screening and treatment for women in the Southern Region of Malawi

Laurel Guthrie, MD – Loma Linda University

Topic: Cervical

## Objectives

Malawi's HIV prevalence of 8.9% among adults is one of the highest in the world; women constitute 62% of HIV positive (HIV+) patients and 37% of all cancers in Malawi women are cervical. The highest HIV prevalence (HIVP) is in the Southwest region at 14% where this study took place. We investigated the outcomes of cervical cancer screening, stratified by HIV status, for patients seen at a single rural hospital in Malawi.

### Methods

Cervical cancer screening clinic records from 2016-2021 at a single rural hospital were retrospectively reviewed for number of patients screened per month and year, age category, and HIV status. HIVP was compared to reported national Malawian data. Abstracted cervical cancer screening parameters included: type of screening (Pap vs visual inspection with acetic acid (VIA), speculum exam only, not documented) and screening results (normal vs abnormal).

#### Results

In total, 15,432 patient records were available for review. HIV status was available starting January 2017; of 14,185 patients screened for cervical cancer, 6,339 (44.7%) were HIV+. When stratified by year (Table), HIVP in screened population rose from 1.8% (2017) to 23% (2018), 39% (2019), 59% (2020), and finally 82% (2021). HIVP stratified by age was available starting in 2020: in patients screened in 2020, HIVP was 25% in women age < 25, 64.5% in women age 25-49, and 58.9% in women age > 49. In 2021, HIVP was 56.7% in women age < 25, 83.5% in women age 25-49, and 84.1% in women age >49. Abnormal screenings were more frequent in HIV+ patients between 2017-2020 (Table), but this trend reversed in 2021. Of note, the COVID pandemic peaked in 2021 in Malawi. In 2021, there was a higher absolute number of abnormal screens in HIV+ patients compared to HIV- patients (61 vs 21).

#### Conclusions

HIVP in this cohort is 45%; national HIVP is 10.8% among women 15-49. Documented HIVP in the clinic population increased from 1.8% to 82% between 2017 and 2021. Cervical abnormalities were more frequent in HIV+ than HIV- patients. Enrichment of the patient cohort with HIV+ cases may be due to a decreasing likelihood of HIV- patients seeking screening during the COVID-19 pandemic, as well as implementation of HIV control guidelines with resultant testing and diagnosis leading to increased referrals for secondary disease process screening (cervical cancer in this case).

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