CERVICAL CANCER SCREENING OUTCOMES AMONG WOMEN IN ESWATINI, LESOTHO, AND SOUTH AFRICA: A RETROSPECTIVE COHORT STUDY.

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Background

- Cervical cancer remains the leading cause of cancer death among women in Southern Africa, with incidence rates far exceeding global averages – Eswatini (95.9/100 000), Lesotho (60.5/100 000), and South Africa (33.2/100 000)
- Mortality remains alarmingly high, reaching 64.3/100 000 in Eswatini, 42.3/100 000 in Lesotho, and 19/100 000 in South Africa, reflecting persistent gaps in screening, vaccination, and access to timely treatment
- This study evaluated cervical cancer screening outcomes at three sites in Eswatini, Lesotho, and South Africa from January 2018 to December 2019

Methodology

- **Participants:** 9,128 women across different age groups.
- **Screening Methods**: Visual Inspection with Acetic Acid (VIA) and Pap smear.
- **Data Collection:**
  - South Africa: REDCap
  - Eswatini: MySQL from the electronic medical record (EMR)
  - Lesotho: REDCap and paper-based registers
- **Analysis:** Data were consolidated and analyzed using Stata 13.1.
  - Logistic regression and Chi-squared tests were used to explore associations, with p-value <0.05 considered significant.
- **Ethical approval: Eswatin**i - IRB00011253 ; Lesotho - ID02-2021; South Africa - M200650.

Results

- **HIV Prevalence:** In Eswatini, cervical cancer screening was offered to patients who came to the ARV clinic with most women on HIV treatment (93.6%). Treatment status was often unknown in Lesotho (68.8%) and South Africa (65.3%).
- **Screening:** Pap smear coverage was 97% in South Africa, with clearer diagnostic outcomes.
- Eswatini had an 80.8% VIA screening rate. Lesotho had low VIA screening coverage (39,4%).
- Women screened in South Africa were significantly older, 59.1% were over the age of 40 years of age compared to the women in Eswatini (33.5%) and Lesotho (39.3%) (P<0.001).
- Women who were HIV positive were four times more likely to have HSIL compared to women who were HIV negative **(aOR=4.1; 95% CI: 3.4-4.9),** and women who had first intercourse when eighteen years and older were almost 1.5 times more likely to have HSIL **(aOR=1.4;95% CI:1.2-1.7).**

Table 1: Association between High-grade squamous intraepithelial lesions (HSIL) and HIV status

HIV status	High-grade squamous intraepithelial lesions			
	No		Yes	
	No.	%	No.	%
Negative	3392	68.4	216	34.3
Positive	1570	31.6	414	65.7
Total	4962	100	630	100
OR = 4.1 (95% CI: 3.5-4.9; P<0.001)				

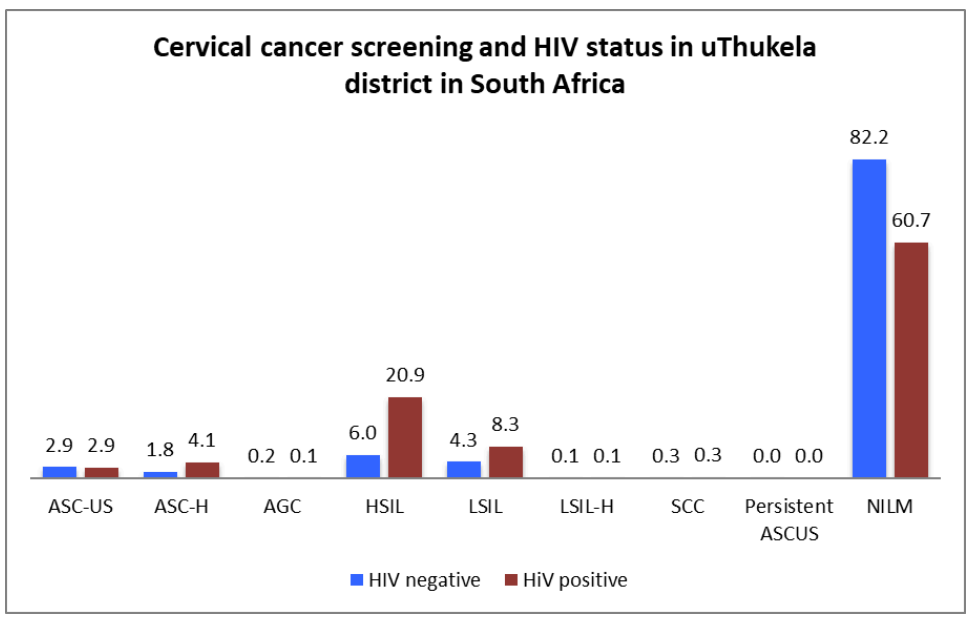

Figure 1: Cervical cancer screening and HIV status

Conclusion and Recommendations

Conclusion

- This study reveals significant disparities in screening coverage and outcomes in Eswatini, Lesotho, and South Africa, emphasizing the need for targeted interventions in low-resource settings like Lesotho.

Recommendations

- **Target High-Risk Populations:** Prioritize screening for HIV-positive women and other high-risk groups through tailored outreach and health education programs.
- **Expand Screening Access:** Increase the availability of cervical cancer screening services, particularly in rural and low-resource areas, using both Pap smears and VIA to ensure early detection.
- **Improve Diagnostic Quality:** Enhance training for healthcare providers in screening techniques and diagnostic processes to reduce inaccuracies and ensure timely follow-up care.
- **Include cervical cancer screening in HIV monitoring**