

Abstract

Assessing cervical precancer treatment rate among women utilising the Johannesburg public sector through record linkage of laboratory data

Background

Screening is important to prevent cervical cancer, but is only effective if women who screen positive for precancer undergo precancer treatment. Routine health information systems in South Africa currently do not monitor precancer treatment rates.

Methods

A retrospective cohort of 67 208 women screened in Johannesburg, 2017, used record linkage of laboratory records – cytology with high-grade squamous intraepithelial lesions (HSIL), and histology. The HSIL prevalence; and follow-up, confirmation and precancer treatment rates were calculated; as were the time intervals between these. Variables were compared across age, HIV status, screening facility type and subdistrict through logistic regression, Kruskal-Wallis and Wilcoxon rank-sum tests.

Results

HSIL prevalence was 6.2%. Follow-up occurred in 26.6% of the 4 182 women with HSIL on cytology over a median of 131 days. Treatment rate was 16.1%, performed in a median of 151 days. Screening at hospitals, CHCs and in subdistrict B had the highest follow-up and treatment rates.

Conclusions

Precancer treatment rates are far below the WHO's elimination target. A simpler screening cascade; benchmarking against high-performing subdistricts; and improved information systems may improve precancer treatment rates to reduce cervical cancer incidence.