

# Cervical cancer prevention in Malawi: HPV vaccination and cervical pre-cancer screening coverage

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## Background

Cervical cancer can be prevented with HPV vaccination and precancer screening. Malawi is the country with the second highest cervical cancer (CC) incidence and CC-related mortality worldwide. In 2018, the Ministry of Health and MSF set up a comprehensive CC program in Blantyre City and Chiradzulu District. Two surveys were conducted to estimate HPV vaccination coverage among 9-10-year-old schoolgirls, and CC screening coverage in women 25-49 years.

## Methods

Two cross-sectional population-based surveys were conducted in Blantyre City and Chiradzulu District. The HPV vaccination survey took place in 2020 following the second round of a national HPV vaccination campaign and included all 9- and 10-year old girls in households identified with geospatial sampling. The CC screening coverage survey was conducted in 2019 and included women aged 25-49 years.

## Results

The HPV vaccination coverage survey included 1,024 9- and 10-year-old girls. School attendance was almost universal (99.5% overall). HPV vaccination dose one coverage among all eligible girls in Blantyre was 59.9% (95% CI 54.9-64.7%) and 67.6% in Chiradzulu (95% CI 62.2-72.5). Dose two coverage among 10-year-olds was lower, 29.9% (95% CI 23.2-37.5) in Blantyre and 28.2% (95% CI 21.5-35.9) in Chiradzulu. Common reasons for non-vaccination were practical (56.5% of respondents), such as being absent from school or ill on the day of vaccination.

CC screening history was obtained for 1,850 women. The percentage of women ever screened for CC was highest in Blantyre at 40.2% (95% CI 35.1-45.5), 38.9% (95% CI 32.8-45.4) in Chiradzulu with supported CC screening services, and lowest in Chiradzulu without supported CC screening services at 25.4% (95% CI 19.9-31.8). Among 623 women screened, 49.9% reported the main reason they were screened was health facility recommendation, and 98.5% would recommend CC screening to others. Overall, 95.6% of women had some knowledge about CC, but only 55.1% of participants believed themselves to be at risk.

## Conclusions

HPV vaccination and CC screening have shown promising population coverage, yet there is still a long way to go to reduce the burden of CC incidence and mortality in Malawi. Engaging target populations with correct, understandable and individually relevant information, and making programs more available and accessible (e.g. multiple in-school vaccination days, and mobile CC screening clinics) may overcome demand and supply side barriers.

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