Tackling inequities in access to cancer prevention, early detection & treatment by rural women: Case of Cervical Cancer

Chemtai Mungo, MD, MPH, FACOG
Assistant Professor, Obstetrics and Gynecology
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Cervical cancer – disparities in mortality from a preventable disease

(Map shows countries sized by number of cervical cancer deaths. Numbers represent age-standardized mortality rates.)

United States
2.4 per 100,000

Uganda – 44.4 per 100,000
Tanzania – 54 per 100,000
Malawi – 75.9 per 100,000
Swaziland – 53.1 per 100,000

Cervical cancer mortality rates

Eastern Africa
Middle Africa
USA
Western Europe
The Development of Cervical Cancer

- Preventable
- Primary & secondary prevention
- 570,000 cases annually, 90% in LMICs
- Rural women bear highest burden

Typical timespan from HPV infection to cancer: 10-30 years

Globoccas, 2020
2018: WHO Call for Cervical Cancer Elimination

**THE ARCHITECTURE TO ELIMINATE CERVICAL CANCER:**

**VISION:** A world without cervical cancer

**THRESHOLD:** All countries to reach < 4 cases 100,000 women-years

**2030 CONTROL TARGETS**

- **90%** of girls fully vaccinated with HPV vaccine by 15 years of age
- **70%** of women screened with an high precision test at 35 and 45 years of age
- **90%** of women identified with cervical disease receive treatment and care

**SDG 2030:** Target 3.4 – 30% reduction in mortality from cervical cancer

The 2030 targets and elimination threshold are subject to revision depending on the outcomes of the modeling and the WHO approval process.

**Tools:**

- HPV vaccine
- POC HPV tests, self-sampling
- Same-day treatment of precancer

Dr Tedros Adhanom Ghebreyesus
WHO Director - General

WHO 2018
Primary Prevention: HPV Vaccination

• 2020: Only 31% of countries in SSA had national HPV vaccination programs
• School-based programs impacted by Covid-19 pandemic, vaccine supplies
• New evidence for 1-dose, increase access

Bruni et al (2021)
Secondary Prevention: Screening and treatment of cervical precancer

• Unlike high-income countries, services offered by non-physicians

• Screen & treat: Fewer visits, couple screening with same-day treatment

• Move screening & treatment from hospitals/tertiary centers and closer to rural communities
HPV Self-Collection for Screening

- HPV test endorsed by WHO as first-line
- Ideal for self-sampling
- Community or home-based screening
- Point of care tests: Same day results
- Accurate – multiple studies
- Acceptable
- Cost-effective

HOW TO TAKE YOUR OWN HPV TEST

**STEP ONE**
- Lower your underwear
- Twist the red cap and pull out the swab
- Look at the swab and note the red mark is closest to the swab tip

**STEP TWO**
- Get in a comfortable position
- Insert the swab into your vagina, aiming to insert up to the red mark

**STEP THREE**
- Remove the swab gently 1-3 times
- That removes the swab
- It should not hurt

**STEP FOUR**
- Remove the swab and place it back in the tube
- Return the tube to your doctor or nurse
- If you have any questions, ask your doctor or nurse
HPV Self-Collection: highly acceptable

- Jeronimo et al (2017) - women prefer self-collection

- 20,461 women enrolled in study

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<td>% of women who provided vaginal sample</td>
<td>86.8</td>
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Community-based HPV screening

- Increased access vs facility-based care
- Use of HPV self-sampling
- Cost-effective: part of multi-disease campaign
- Linkage to treatment: immediate vs facility-based
Treatment of precancerous lesions: Use of portable devices

Who, 2019
Access: Moving from policy to practice

- Many LMICs endorsed WHO Elimination agenda
- Ensure high coverage of screening & treatment in rural areas – still mostly focused in urban areas
- Digital innovations can bridge gaps
- Address health workforce shortages in remote clinics
- Linkage to tertiary care key
- Advocacy and accountability
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