Cervical Cancer Prevention – Better Tools, Greater Coverage, Towards Elimination

Issues and Opportunities

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Director

Joint UNFPA-UNICEF-WHO Meeting:
Where the World is Going and What we Should do Next

UN City, Copenhagen, Denmark
25 Sept 2018
About Jhpiego

• Who we are
  › Global health non-profit
  › Johns Hopkins University affiliate
  › 3,700 + employees in 40 countries

• What we do
  › Global, regional and In-country
  › Work with MOHs and local stakeholders
  › Health Systems, Services Delivery, Advocacy
  › RMNCAH, HIV/AIDs, Malaria, IDs, NCDs – Cervical, Breast, HTN, DM

www.jhpiego.org
WHERE ARE WE TODAY IN SCREENING COVERAGE?

70 % coverage*
- 338 m
- 59 m / yr

* WHO - Proposed Intermediate Target towards Elimination by 2030

Stalworthy, Internal Technical Report, 2017
Woman’s Journey: Navigating Cervical Cancer Prevention Service

- **Concern over risk**
- **Seek service**
- **Access Facility**
- **Screen Service**
  - VIA
  - HPV
  - Cytology
- **Screen Negatives**
  - Followup 5 yrs
- **Screen Positive Treat**
  - On-site
  - Same visit
- **Screen Positive Treat**
  - Refer
  - Next care level
- **Suspect Lesion**
  - Refer for more tests

**Barriers and Hurdles**
- Social/Cultural, Personal Belief
- Behavioural
- Opportunity and Economic
- Geographic
- Health System
  - Readiness
  - Capability and Capacity
  - Effectiveness
  - Cost

Community and Primary Health Care Level
Next Level of Care – District, Province
Regional Facilities
SERVICE DELIVERY MODEL *
SCREEN AND TREAT IN 1 VISIT

1  Counseling
2  Speculum Exam to see Cervix
3  Apply 3-5% Acetic Acid to Cervix
4  Inspect Cervix for lesions after 1 minute
5  Discuss results with the woman.
6  Offer treatment option if positive
7  Post-procedure Care Instructions and Follow-up reminders

* Using s-nurses/midwives, and general practitioners
COUNTRY: TANZANIA

• HDI – LOW (154, 2017)
• Population & Density – 59.5 M and variable density as low as 1 (and as high as 137 (Zanzibar) per Sq Km
• Girls and Women > 15 yrs – 15 M
• Cervical cancer incidence and death women 15-44 ranks 1st and 1st, respectively
• HIV/AIDS – 810 K in > 15 yrs or HIV prevalence of 5 %

UNDP, 2017
CO/IARC Information Centre on HPV and Cancer, 2017
UNAIDS, 2017
**National Level-Secondary Prevention**

**Key Highlights of Numbers: 2013-2018 June**

- **New clients screened with VIA:** 817,011
- **Clients screened with VIA+ results:** 41,254 (5%)  
  - **Eligible VIA+ clients treated with Cryotherapy on the same day:** 16,600 (80%)
- **New clients with suspect cancer:** 13,566 (1.6%)  
  
**Secondary: VIA and Cryo treatment sites:** 600

- **26 referral sites for LEEP services**
- **>2000 providers trained on VIA**
- **40 national trainers**

**WHO HPV TEST STUDY**

- **CareHPV**

**National Level Target by December 2018:** Screen 3,000,000
COUNTRY: MOZAMBIQUE

- HDI – LOW (180, 2017)
- Population & Density – 30.7 M and about 39 people/sq Km
- Girls and Women > 15 yrs – 8 M
- Cervical cancer incidence and death women 15-44 ranks 1st and 1sr, respectively
- HIV/AIDS – 1.2 M in > 15 yrs or HIV prevalence of 15 % or 1 of every 7

UNDP, 2017
CO/IARC Information Centre on HPV and Cancer, 2017
UNAIDS, 2017
**MAIN RESULTS - 2009 - 2017**

Trained Health workers: **1,550**  
SVA at the primary Health Facility (VIA&Cryotherapy) - **180 HF**

- **Referral sites** (Colposcopy, biopsy, LEEP)  
  7 Facilities

- **549,708** women who received VIA screening

**Women with VIA positive result: **33,806 (6.1%)**

- Eligible women received Cryotherapy on the same day: **19,400 (82%)**

- Women referred due lesions ≥ 75%: **5,268 (15.6%)**
### 2016-21 National CECAP Program: Consolidation and Expansion

#### GOALS:

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<tbody>
<tr>
<td>Moz Women 30-54</td>
<td>2,969,862</td>
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<td>Screening with VIA by 2015</td>
<td>330,000</td>
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#### Coverage of cervical cancer screening in target women 30-55 years

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
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<tr>
<td>10%</td>
<td>10%</td>
<td>14%</td>
<td>18%</td>
<td>22%</td>
<td>26%</td>
<td>30%</td>
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#### Services

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<tr>
<th>Services</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
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<tr>
<td>Primary</td>
<td>152</td>
<td>207</td>
<td>262</td>
<td>317</td>
<td>372</td>
<td>427</td>
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<tr>
<td>Referral sites</td>
<td>5</td>
<td>7</td>
<td>9</td>
<td>11</td>
<td>12</td>
<td>13</td>
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<tr>
<td>HPV Vaccine</td>
<td>Introduction of HPV vaccine at national level after the demonstration project</td>
<td></td>
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<tr>
<td>HPV Test</td>
<td>Introduction of HPV test for screening</td>
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</table>
COUNTRY: BOTSWANA

- HDI – HIGH (101, 2017)
- Population & Density – 2.3 M and 3 people/sq km
- Girls and Women > 15 yrs – 733,418
- Cervical cancer incidence and death in women 15-44 ranks 1st and 2nd, respectively
- HIV/AIDS – 210 K in > 15 yrs or ~1 of 3 are HIV Positive
- Cytology in all facilities and 2/3 also have VIA
- Coverage : 25 % (2017 NCCPP Data)

UNDP, 2017
CO/IARC Information Centre on HPV and Cancer, 2017
UNAIDS, 2017
Rationale:

• Challenges of current screening methods used—cytology and visual inspection with acetic acid (VIA)—include lack of coverage and access to timely screening and treatment.

• HPV testing offers accuracy, reliability, convenience and potential for efficiency in linking with treatment

Intervention:

• Technology: HPV Testing (GeneXpert) and Digital Health (CommCare) for data and client tracking

• Approach: Self-collected through community and facility engagement, Screen and Treat using Visual Assessment for Treatment and cryotherapy/LEEP for screen positives
RESULTS AND NEXT STEPS

• SCREENING & TREATMENT (n= 1022)
  › Almost all received result (1019 or 99.7%) and 93 % (948) received their results w/in 1 week
    » HIV (+) vs HIV (-) women – 40 % and 25 % ,respectively
  › Nearly all hr-HPV (+) cases were assessed for treatment (96 %)
  › Close to 95 % of hr-HPV (+) cases were treated

• ACCEPTABILITY – Overall YES
  › Self-collection by women

• ACTION:
  › Results disseminated with MOH and stakeholders
  › Incorporation of HPV testing into National Strategy
  › Planning for roll out
SCALING UP CHALLENGES WITH VIA

## Challenges to Reaching Population Coverage

### Implementation

- Application – technology itself impacting service approach
- Opportunistic vs. Structured – impacts performance and results indicators eg. 40-50 women every month to yield 4-5 VIA positive
- Static versus Outreach – fixed facility based or mobile services
- Case Load – High versus Low Case Loads
- Stand-alone versus Integrated Services
- Quality assurance
- Cost Efficiency

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**Monitoring national cervical cancer prevention and control programmes**: quality control and quality assurance for visual inspection with acetic acid (VIA)-based programmes, WHO, PAHO, 2014
### WHAT ABOUT HPV TEST AND SELF SAMPLING?

**ADVANTAGES, ISSUES AND CHALLENGES**

<table>
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<tr>
<th>Factors potentially affecting HPV test based screening programs</th>
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<td><strong>+</strong></td>
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<tr>
<td>- Highly sensitive/ slightly lower specificity</td>
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<td>- High negative predictive value</td>
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<td>- Recommended by WHO when feasible</td>
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<td>- Variety of test platform eg. careHPV, GeneXpert, ArborVitae, CoBAS etc.</td>
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<td>- Frontline to near frontline test access</td>
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<td>- Facility or Community based collection</td>
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<td>- Self sampling acceptable and offers the possibility of improved coverage</td>
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<td>- Cost – direct and indirect including initial equipment investment; recurring consumables</td>
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<td>- Performance – Lower specificity, triaging for HPV positives needing follow-up. Improved volume of test positives need to match capacity for triage and treatment</td>
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<td>- Infrastructure and Quality Assurance should consider the entire test continuum and monitor key steps and processes to ensure high-quality testing and accuracy of results delivered to patients</td>
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## OPPORTUNITIES FOR SCALING UP SCREENING

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<thead>
<tr>
<th></th>
<th>National Policies/ Strategies</th>
<th>Readiness Screen &amp; Treat Platform</th>
<th>HPV TEST</th>
<th>FINANCING POTENTIAL</th>
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<tr>
<td><strong>BOTSWANA</strong></td>
<td>+ Scaling up</td>
<td>+ 2/3 facilities with VIA services</td>
<td>+ GeneXpert – also in MDR TB program</td>
<td>Botswana, 1 of 7 Pepfar Focus for Cecap funding for HIV + women UNITAID?, USAID? GFATM.</td>
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<tr>
<td></td>
<td>+ HPV test in nat’l document</td>
<td>+ TX being rolled out using cryo</td>
<td>+ Successful I imp study</td>
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<tr>
<td></td>
<td>+ Tx Ablation cryo +/- thermal</td>
<td>+ Trainers and trained providers</td>
<td>+ Scale up interest</td>
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<td></td>
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</tr>
<tr>
<td></td>
<td>+ Tx Ablation cryo</td>
<td>+1550 trained providers</td>
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<td></td>
<td></td>
<td>+ Core team of master trainers</td>
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<tr>
<td><strong>TANZANIA</strong></td>
<td>+ Scaling up with 2018 target of 3 M + HPV test in nat’l document + Tx Ablation cryo, +/- Thermal</td>
<td>+ 600 + SVA facilities</td>
<td>+ careHPV study by WHO/IARC GeneXpert machines for MDR TB programs</td>
<td>GFATM ? UNITAID? PEPFAR ? USAID? + WLHIV 5 % or 820 K + 65 K new cases/yr</td>
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<td></td>
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<td>+ 2000 trained providers</td>
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<td></td>
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<td>+ 40 core team of trainers</td>
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Thank you!