Integration of Care and Treatment for Multi-Morbidities into HIV Care

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CIRA AIDS Science Day 2023
and 25th anniversary symposium

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PEPFAR

• Massive impact on global HIV/AIDS incidence and mortality
  – Over $100 billion since 2003
  – Sub-Saharan Africa focus, complemented by The Global Fund

• Vertical programmatic focus on HIV prevention, testing, and treatment generate concerns about sustainability
  – Failure to fully integrate with national primary care programs
  – Concerns about community and political base of support

Immunosuppression as a risk factor for HPV-induced cervical disease progression
1. Women do not come in for screening

2. Health care providers do not screen women at visits

3. Colposcopy for abnormal screen not done

4. Patients do not get appropriate therapy

5. System failure: Women gets cervical cancer

Adapted from Trimble C. Johns Hopkins U.
Global Cervical Cancer Prevention

• Almost completely preventable by screening and HPV vaccine
  • HPV testing
  • Pap smear
  • Visual inspection with acetic acid (VIA)

• We know what to do in a clinic, however How do we bring a program “to scale” in real world settings?
<table>
<thead>
<tr>
<th>Country</th>
<th>Rank</th>
<th>Mortality Rate/100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zambia</td>
<td>1</td>
<td>39</td>
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<tr>
<td>Malawi</td>
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<tr>
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<tr>
<td>Uganda</td>
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<td>Nigeria</td>
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</table>
Prevalence and predictors of squamous intraepithelial lesions of the cervix in HIV-infected women in Lusaka, Zambia

Groesbeck P. Parham\textsuperscript{a,b,*}, Vikrant V. Sahasrabuddhe\textsuperscript{c}, Mulindi H. Mwanahamuntu\textsuperscript{d}, Bryan E. Shepherd\textsuperscript{c}, Michael L. Hicks\textsuperscript{c}, Elizabeth M. Stringer\textsuperscript{a,b}, Sten H. Vermund\textsuperscript{b,c}

Gynecol Oncol 2006; 103: 1017-22
Improving screening in low-resource settings

Visual inspection with acetic acid (VIA)

RCT evidence of a long-term mortality benefit of VIA-screening

Nurse taking a digital cervical photograph post VIA
Low cost!
Nurses are the backbone of the cervical cancer prevention program
First phase of rapid expansion: VIA and digital cervicography

Implementation of ‘see-and-treat’ cervical cancer prevention services linked to HIV care in Zambia

Mulindi H. Mwanahamuntu¹,²,⁴, Vikrant V. Sahasrabuddhe⁴, Krista S. Pfandler⁶,⁷, Victor Mudenda¹,², Michael L. Hicks⁷, Sten H. Vermund⁴, Jeffrey S.A. Stringer⁶,⁷ and Groesbeck P. Parham⁶,⁷

AIDS 2009; 23: N1-N5
Communication and social mobilization

- Regular meetings with Ministry of Education
- Continued media orientation
- Great investment (time and funds) into social mobilization
- Continued community and individual engagement within existing sociocultural contexts
- Gender and equity considerations
  - Rural vs. Urban
  - In- vs. Out-of-school
  - HIV+ vs. HIV negative (including HPV vaccine 3 vs 2 dose considerations)
Health Fairs
Lessons learned: Implementation Science in Cervical Cancer Prevention

• To develop cancer prevention programs in LMICs, it is smart to piggyback on ongoing global health implementation programs (e.g., PEPFAR)
• Task shifting to nurses and clinician support by telemedicine.
• Community mobilization and peer-to-peer support systems vital for broader community-level acceptance
• Build capacity for cancer Rx (“don’t screen if you can’t treat”)
• Bottom-line
  – Saving lives with sustained efforts at modest cost!
  – We need vaccines to “turn off the tap”
Sept. 13, 2011: Launch of the Pink Ribbon Red Ribbon® Initiative Dr. Groesbeck Parham with Dr. Anthony Fauci, Ambassador Eric Goosby, Dr. Beatrice Wiafe Addai, and the moderator (George W. Bush Institute, Komen Global Alliance, & UNAIDS)

Health in Action

Advancing Cervical Cancer Prevention Initiatives in Resource-Constrained Settings: Insights from the Cervical Cancer Prevention Program in Zambia

Mulindi H. Mwanahamuntu¹,², Vikrant V. Sahasrabuddhe³, Sharon Kapambwe¹,², Krista S. Pfaendler⁴, Carla Chibwesha¹,⁵, Gracilia Mkumba¹,², Victor Mudenda⁶, Michael L. Hicks⁶, Sten H. Vermund³, Jeffrey S. A. Stringer¹,⁵, Groesbeck P. Parham¹,²,⁵*

Cervical cancer screening as a model

• Core primary care services for chronic conditions
  – Basic mental health services (references below)
  – Tuberculosis and other respiratory diseases; Hypertension
  – Essential drugs, including decentralized chemotherapy

• Core public health services for co-morbidities
  – Malaria control; Vaccinations; WASH (water and sanitation)
  – Emergency responses, e.g., COVID-19, Ebola, Zika