Greetings! I am pleased to see that we are different. May we become greater than the sum of both of us.

Vulcan Greeting
Cervical Cancer Prevention Program in Ethiopia

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Acknowledgements
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Overview

• Describe the dissemination and implementation study design
• Review results
• Conclusions and challenges
Background

- Approximately 95% of women in low-middle income countries (LMICs) have never been screened for cervical cancer
- 80% of women newly diagnosed with cervical cancer live in LMICs
- Ethiopia has no population-based screening program, and rates of cervical cancer morbidity and mortality are increasing rapidly
- With only four oncologists and one cancer treatment center for 96 million residents, treatment times are significantly delayed, leading to death
Purpose

- The purpose of this study was to assess the feasibility and acceptability of implementing a single visit approach (SVA) program in Ethiopia by training nurses and physicians to perform screening for cervical lesions and treatment.
• SVA is an established and efficacious strategy to control cervical cancer in LMICs
• Successful implementation documented in Thailand, India, etc.
Aims

• Prevalence of cervical cancer
• Frequency of referrals for additional diagnosis and treatment
• Sociodemographic and clinical characteristics of the women screened
Design

• Dissemination and Implementation
Methods

• A non-profit U.S. organization called GO DOC GO trained 17 nurses and physicians to perform visual inspection with acetic acid (VIA), cryotherapy, and loop electrosurgical excision procedure (LEEP).
• The program was implemented at the University of Gondar, Ethiopia, GYN clinic between October 2014 and January 2015.
• Providers training:
  – Over 3 days with half-a-day of pathophysiology and clinical presentation, followed by two-and-a-half days of observation and supervised procedures.
# Demographic Characteristics

<table>
<thead>
<tr>
<th>Demographic Characteristics</th>
<th>Mean</th>
<th>Std Dev</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td></td>
<td></td>
<td>326</td>
<td>81</td>
</tr>
<tr>
<td>Education (Years)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td></td>
<td></td>
<td>260</td>
<td>65</td>
</tr>
<tr>
<td>1 to 5 Years</td>
<td></td>
<td></td>
<td>19</td>
<td>4.6</td>
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<td>6 to 11 Years</td>
<td></td>
<td></td>
<td>123</td>
<td>31</td>
</tr>
<tr>
<td>Age</td>
<td>38.9</td>
<td>8.3</td>
<td></td>
<td></td>
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<tr>
<td>Number of Sexual Partners</td>
<td>1</td>
<td>0.1</td>
<td></td>
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<tr>
<td>Number of Pregnancies</td>
<td>3.67</td>
<td>2.84</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Live Births</td>
<td>3.22</td>
<td>2.72</td>
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</table>
Results

- 402 women were screened
- All women offered the program accepted
- The incidence of pre-cancer and invasive cancer was 36% (n=142) and 15% (n=6), respectively
- In logistic regression models, predicting cervical lesions, controlling for age and education, each pregnancy was associated with 1.1 times the odds of presenting with lesions, (CI=1.13-1.21, p<.01)
Results, continued

• Controlling for age, education and parity, those with an HIV diagnosis had 3.24 times the odds of presenting with lesions (CI=1.90-5.50, p<.0001) than those without a diagnosis of HIV.

• 2 people were referred for additional testing and diagnoses.
Conclusions

• The SVA program was safe, acceptable, and feasible in Gondar, Ethiopia
• Program well accepted in departmental mission
• Departmental plan in place for sustainability
Challenges

• Garnering the trust of female participants
• Establishing partnership with providers
• IRB approvals across multiple institutions
• Translation to ensure content equivalence (procedure, study consent)
• Shortage of materials such as:
  – acetic acid, purified CO₂ gas,
  – LEEP wires;
  – occasional power interruption
Thank you to our partners: