Final Phase of a Public Sector HPV Testing-Based Cervical Cancer Screening Project in El Salvador

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Disclosures

I have no commercial relationship with any corporate entity that produces or sells products related to HPV

Basic Health International has an agreement with the Ministry of Health of El Salvador to oversee a HPV DNA test donation initiative from QIAGENcares for an implementation program

Basic Health is Sub grantee of PATH’s Scale Up project in Central America

Funding for this project was provided by:

• Einhorn Family Charitable Trust
• Union for International Cancer Control (UICC)
• PATH
• Qiagen Cares donated HPV tests
Background

- El Salvador has one of the lowest cervical cancer screening rates in Latin America
- The country has very low follow-up rates for abnormal cytology
At 1 year Follow-up

369 cases reported in National Ministry of Health Records

148 Met criteria for study

49 charts not located

99/148 charts located

Treatment status within one year of HSIL result

44/99 (44.4%) Received Treatment

51/99 (51.5%) No treatment

4/99 (4.0%) Treatment > one year

Adherence to recommended follow-up care after high-grade cytology in El Salvador

Marenko Mora1, Susan Massaro1, Karla Allen1, Todd A. Arellano1, Rachel Mesh1, Susana Callejo2, Jose Vale3, Rosario Arellano1, Maria Cruz1
Background

- Ministry of Health (MOH) saw the opportunity to introduce and implement a low-cost HPV DNA test through a donation program
- Developed a proposal for a 3 phase implementation project
The CAPE Program: Cervical Cancer Prevention in El Salvador

• In 2012, the MOH received a donation of a low-cost HPV DNA test to pilot the CAPE program

• BHI provided technical assistance for the implementation

The low-cost HPV DNA test is portable and easily adapted for use in low-resource settings
CAPE Phase 1 and Phase 2

- Phase 1: Oct. 2012 – March 2013
  - Educated community members, trained healthcare providers
  - 2,000 women screened
  - Evaluated feasibility of self-sampling
  - Received additional HPV test donations
  - 8,000 women assigned to either colposcopy or “screen-and-treat” cohort
Cohort A: Colposcopy referral (standard of care)

Self & Provider collection

HPV+ → Results in 1 to 2 weeks

HPV - → Repeat test in 5 years

Colposcopy appointment made when positive results are received

Positive colposcopy → Treatment (LEEP, cryotherapy, cone biopsy) following biopsy results

Negative colposcopy → HPV test in 1 year
Cohort B: Screen and Treat (Innovation)

Self & Provider collection

HPV+ → Results in 1 to 2 weeks
Visual Triage by Gynecologist
- Treatable with cryotherapy → Treated with cryotherapy by a gynecologist in the same visit
- Not treatable with cryotherapy → Referred to colposcopy

HPV- → Repeat test in 5 years
CAPE Phase 1 and Phase 2

Women in the “screen and treat” group were lost to follow-up at much lower rates: 5.2% vs. 29.7%
CAPE Phase 3: Regional Scale-Up

Adoption on a regional level
4 Departments
~60 municipalities in one of 5 regions of the country
Target population:
- women age 30-59
- no history of screening in > 2 years

SCREEN AND TREAT
Health promoters contacted women at home to schedule screening appointment at community clinic or health unit
CAPE Phase 3: Regional Scale-Up

- Objective: To screen 20,000 women using screen-and-treat management strategy for HPV+

HPV screening
- HPV+
  - Visual triage
  - Immediate treatment if eligible (cryotherapy)
- HPV-
  - Screen in 5 yrs
  - Referral to other colposcopy if ineligible
### Results (March 2017)

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women screened (from 20,000 target)</td>
<td>17,966</td>
<td>89.8%</td>
</tr>
<tr>
<td>Samples tested</td>
<td>17,966</td>
<td>100%</td>
</tr>
<tr>
<td>HPV Positive Results</td>
<td>2,209</td>
<td>12.3%</td>
</tr>
<tr>
<td>Underwent VT (from 2,209)</td>
<td>1,949</td>
<td>88.2%</td>
</tr>
<tr>
<td>Received cryotherapy (from 1,949)</td>
<td>1,650</td>
<td>84.6%</td>
</tr>
<tr>
<td>Referred to colposcopy (from 1,949)</td>
<td>299</td>
<td>15.4%</td>
</tr>
</tbody>
</table>
Conclusions

• Large-scale deployment of screen-and-treat strategy has improved follow-up for HPV+ women
• An important factor in the success of the CAPE project is that it took place within the existing MOH infrastructure
• Program will be completely transferred to MOH in 2017 with plans to expand it nationally
• CAPE serves as a model for other low-resource countries planning to introduce HPV testing as part of cervical cancer control program