HOPE: Improving women´s health using molecular self-testing for screening of Human Papilloma Virus (HPV)

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The Facts...

• In the world, cervical cancer is the third most frequent cancer in women.

• The human papilloma virus (HPV) is the cause of cervical cancer.

• In Peru, it is the number one cancer affecting women
  • 34.5 / 100,000 women (higher than the LA avg 24.1)

• Reasons for this high incidence:
  • Frequent HPV infection
  • Only 40.3 % of women have a PAP (fear, knowledge)
  • PAP sensitivity to detect cancer is low: 42.5 %
There are new ways of detecting the presence of the virus, which would help us to detect the problem before cancer occurs

• **New molecular tests** to detect the presence of HPV in the vagina / cervix.
  • *CareHPV (quiagen)*

• Could be done by women in the comfort of their homes (self-administered swab)
HOPE: Improving women’s health using molecular self-testing for screening of Human Papilloma Virus (HPV)
Women from the community: Champions! Trained!
Providing information and screening kits to women at home for self-testing

Self-testing at home
CARE HPV (QUIAGEN)

Collection site

Colposcopy & treatment according to findings

Final result:
Healthy women: early detection, better prognosis, empowering women
Social innovation model

New model for Cervical Ca prevention: HOPE

Processing at Central Lab

If HPV +

Results and reminders by SMS
Identifying potential women “champions”
Training for women “champions”

- Two-day workshop
- 59 women trained
Learning about self-collection of samples
How to fill forms and record information
Practicing what they have learned
HOPE Ladies: the champions!!

Pachacútec-Ventanilla

- Bahía Blanca: 18 women
- Perú Corea: 23 women
- Santa Rosa: 18 women

Total 59
Ages: 27-57yo
Collection sites 24/7 hours
Transportation of samples to lab
Central District laboratory

Laboratorio Referencial DIRESA Callao
"El resultado de su prueba está normal; continúe cuidando su salud con sus chequeos anuales del Papanicolaou."

Universidad Peruana Cayetano Heredia

Ya tenemos el resultado de su prueba. Luego le estaremos enviando el lugar, fecha y hora de su cita. Universidad Peruana Cayetano Heredia
# Results

<table>
<thead>
<tr>
<th>Description</th>
<th>N</th>
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</thead>
<tbody>
<tr>
<td>Number of kits distributed by HOPE Ladies</td>
<td>2217</td>
</tr>
<tr>
<td>Number of kits (envelopes and samples) found in the “collection sites”</td>
<td>2131(96.1%)</td>
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<tr>
<td>Number of positive HPV tests</td>
<td>266 (12.5%)</td>
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<td>Number of HPV (+) who signed consent for colposcopy, PAP and biopsy</td>
<td>252 (94.7%)</td>
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<tr>
<td>Abnormal Biopsies (High grade, Cancer)</td>
<td>49/412 (11.9%)</td>
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Learning Points

- From more than 2100 women screened, 2/3 never had PAPs before (HPV+:12.5%): improve coverage
- Women love self-testing!
- Collection sites open 24/7 critical
- Technology is appreciated
  - New tests!
  - Getting results by SMS messages!
- New National Guidelines in Peru include for cervical cancer screening the use of HPV molecular testing and self-testing
  - New Plan for the Control of Cervical Cancer
  - Has started in the north of Peru: Tumbes
Conclusions

• New technologies like HPV molecular testing (and self-testing) and use of cell phones can improve Cervical Cancer control

• The “HOPE ladies” (women health promoters-leaders) are incredible powerful to reach women (and families) that otherwise may not show to a health center.
  • Other issues could be addressed, other technologies could be introduced!

• There is a need of scaling up the model
  • Through the MOH (plan ready, Budget ready, now political will!)
  • New model for social business with GCC (looking for angel investors)
    • Buy one test, help one rural woman to have the test and say goodbye to cervical cancer…
    • Incentives for HOPE ladies, training on other issues e.g. HPV vaccine etc.
**Social Business Model**

**Private sector:**
Clinics, private insurance

**Public Sector:**
Health Ministry establishments

**Support**

**Users:**
- Women from private sector
- Women from public sector

**Service by “HOPE Ladies”** at home & collection sites:
- Information and screening kit, and deliver to lab
- Results by cel phone (including referrals)
- Women: Pay for testing and service (private)
- Pay for testing by MOH and service by women (public sector)
Gracias… Thank you!
Acknowledgments

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