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

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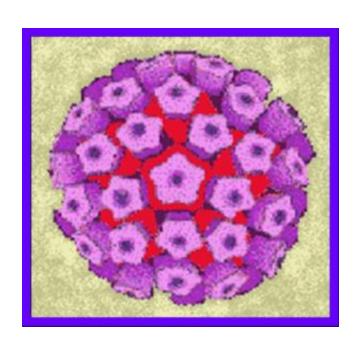


#### The Facts...

- 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

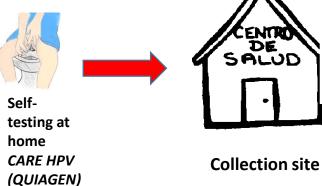
- New molecular tests to detect the presence of HPV in the vagina / cervix.
  - CareHPV (quiagen)
- Could be done by women in the comfort of their homes (self-administered swab)





HOPE: Improving women's health using molecular selftesting 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

Colposcopy & treatment according to findings





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





**Processing at Central Lab** 





New model for Cervical Ca prevention: HOPE

Results and reminders by SMS

#### Identifying potential women "champions"





## Training for women "champions"

- Two-day workshop
- 59 women trained

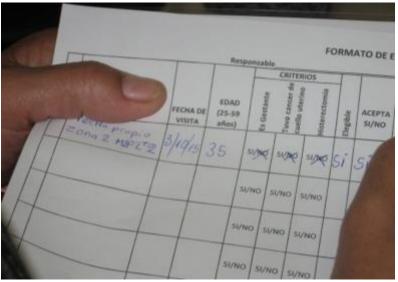


### Learning about self-collection of samples



#### How to fill forms and record information









## Practicing what they have learned









### **HOPE Ladies:** the champions!!



#### Pachacútec-Ventanilla

Bahía Blanca: 18 womenPerú Corea: 23 womenSanta Rosa: 18 women

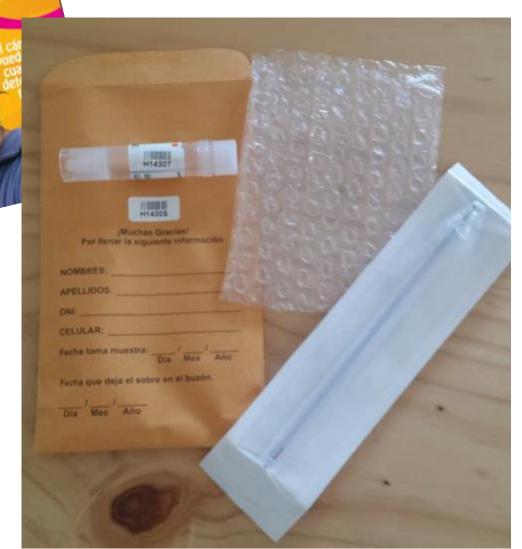
Total 59

Ages: 27-57yo





**Screening Kit** 



#### **Collection sites 24/7 hours**









## Transportation of samples to lab









## **Central District laboratory**

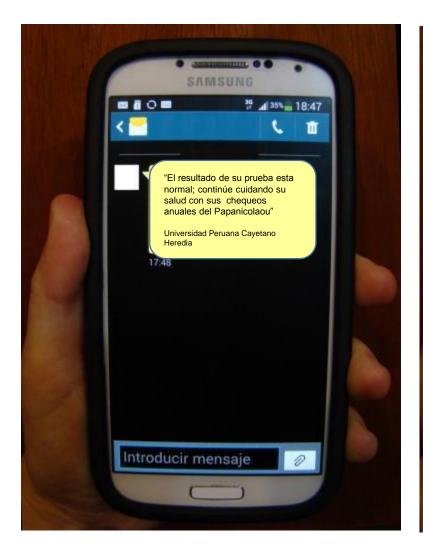


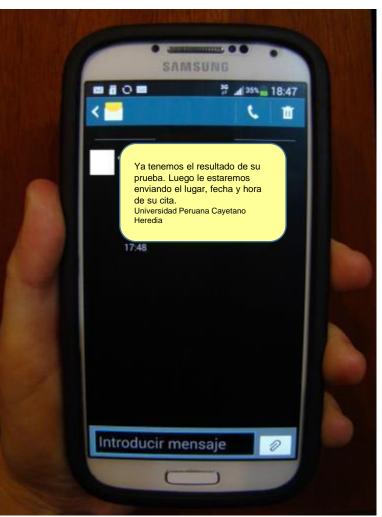


Laboratorio Referencial DIRESA Callao



#### Results, reminders send through SMS





## Results

	N
Number of kits distributed by HOPE Ladies	2217
Number of kits (envelopes and samples) found in the "collection sites"	2131 (96.1%)
	266 (12.5%)
Number of positive HPV tests	
Number of HPV (+) who signed consent for colposcopy, PAP	
and biopsy	252 (94.7%)
	49/412
Abnormal Biopsies (High grade, Cancer)	(11.9%)

## **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 selftesting) and use of cel 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

Support

**Public Sector:** 

Health Ministry establishments

Users: Women from private sector

Users: 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



- Concytec
- DIRESA CALLAO
- Grand Challenges Canada