PREVALENCE, ACCURACY AND FEASIBILITY OF HPV TESTING ON SELF-COLLECTED VERSUS DOCTORS-COLLECTED SPECIMENS IN ADAMA TOWN, ETHIOPIA

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Background

- CC is the 2nd most frequent form of cancer and the leading cause of cancer deaths among Ethiopian women.

- Current estimates indicate that every year 7095 women are diagnosed with cervical cancer and 4732 die from the disease (*Addis Tesfa ,pathfinder international 2016, Ethiopia)*

- Screening methods:
    - VIA,
    - HPV testing
    - Colposcopy
    - Biopsy directed with Colposcopy
- **Treatment:**
    - Cryotherapy
    - LEEP

Cont`d

- The CCs coverage in Ethiopia is very low **(0.6% of all women with age of 21 and older)** and also **most women do not participate in regular screening programme**, there high risk of cervical cancer observed (2016)

Study approach

- In this study the cervical cancer screening hospital unit made call to all voluntary women through media and poster to come and check for cervical screening test .

- Those who fulfils criteria and voluntary to provide self and doctor samples were involved in the study.

Objectives

- To determine the accuracy and feasibility of HPV testing on self-collected versus doctors-collected specimens of women older than or equal 20 years at three different sites at Adama town, Ethiopia.

Methods

- *Women participated voluntary for cervical cancer screening program.*

- *166 self and doctor cervical specimens were collected using plastic spatula followed by brush rinsed into Thinprep PreservCyt.*

- ***Nurse assisted Self sampling was done at clinic.***

Cont`d

- *Samples were stored with rage of 4-10 months.*

- *Samples sent and mol. Analysis was done at AML, Belgium.*

- *Specimens were analyzed using a qPCR high-throughput HPV E6, E7 assay (Riatol qPCR test).*

Results

- *The average age of the participating women was 32 years.*

- *A total of 73/83 (87.9%), 8.4% (7/83) and 3.6% (3/83) women confirmed that **self-sampling was easy and feasible, moderate and difficult respectively.***

Cont`d

- *No DNA was found in 30% of CT versus 23% in SS.*

- *Overall hrHPV prevalence was 12,5% (SS) and 8,6%(CT).*

Cont`d

- *The most prevalent HPV type was HPV51, HPV16 was only detected in 1 woman (CT+SS) and HPV18 only in 1 woman (CT).*

Cont`d:

3X3 Tables: *HPV detection using type specific qPCR (Riatol HPV test)*

Clinician taken (CT)	Self-sample (SS)			
	HPV neg	*HPV hr+*	*No DNA*	*Total*
HPV neg	46	6	1	53
HPV hr +	2	2	1	5
No DNA	8	0	17	25
Total	56	8	19	83

Cont`d

3X3 tables:

- **Kappa= 0.561**
  SE of kappa = 0.087
  95% confidence interval: From 0.392 to 0.731.

- *The strength of agreement is considered to be* **_'moderate'_**.

Cont`d

(CT)	(SS)		
	HPV neg	HPV hr+	Total
HPV neg	46	6	52
HPV hr +	2	2	4
Total	48	8	56

2X2 tables:

- **Kappa= 0.263**
  SE of kappa = 0.183
  95% confidence interval: From -0.095 to 0.621

- The strength of agreement is considered to be **'fair'**.

Cont`d

- *Therefore, there was a statistical significant difference between both sample types (P<0.001).*

Conclusions

- *HPV self-collected testing is acceptable to women in Ethiopia but sample taking needs quality improvement.*

- *The overall hrHPV prevalence is low.*

- *Genotyping information could be important to guide vaccine policy.*

- *Nurse assisted self sampling could be a good option.*

Thank you for your attentions!