Evaluation of screening algorithms based on self-collection and HPV testing with partial genotyping for the prevention of cervical cancer among HIV-infected women in resource-limited countries: results of the ANRS 12375 study

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Background

 Cervical cancer (CC) is the leading cause of cancer death among women living with HIV (WLHIV).

 WHO recommends HPV testing for primary CC screening because of its high sensitivity

- Triage is needed to identify HPV+ women having cervical intraepithelial neoplasia grade 2 or worse (CIN2+) and requiring treatment.
- The ANRS-12375 study aimed to assess the performance (sensitivity, specificity), feasibility and benefit of the triaging options :
- Visual inspection with acetic acid and/or lugol (VIA/VILI)
- Partial genotyping (16/18/45)
- VIA/VILI combined with partial genotyping.

Methods

- N = 2,228 WLHIV (age: 30 to 49) from Abidjan (Côte d'Ivoire [CI]), Bobo-Dioulasso (Burkina Faso [BF]) and Phnom Penh (Cambodia [KH])
- <u>Screening strategy</u>



The performance of the triage options was evaluated with histology as reference.

ABCD criteria for cervical precancer diagnosis

These simplified criteria for VIA/VILI have been developed to increase accuracy for triaging HPV+ women.



For the visual inspection to be considered positive, criteria A and D (i.e. acetowhite area >5mm) or criterion B must be present.

Reference: Petignat et al. BMJ Open 2022



Prevalence of cervical lesions

| | CIN2+ | Cancer |
|-----|-----------------------|----------|
| CI | 55 (10) | 8 (1.5) |
| BF | 12 (10) | 1(1) |
| KH | 14 (25.5) | 9 (16) |
| All | 81 (11,5% - 13,5%) | 18 (2.5) |

Among HPV+ pariticipants, n = 747 had a biopsy and/or endocervical brushing with valid pathology result.

Visual inspection after a positive HPV test is a good triage option with high sensitivity



Study population

| | CI | BF | Kh |
|--------------|-----------------|-----------------|----------------|
| | N = 1474 | N = 421 | N = 333 |
| Age | 43 (39 - 47) | 42 (39 - 46) | 42 (39 - 45) |
| Nadir CD4 | 219 (114 - 348) | 223 (123 - 370) | 144 (49 - 241) |
| ART duration | 9 (5 - 13) | 11 (8 - 13) | 12 (9 - 15) |
| | | | |
| | | | |
| | | | |

Results outlines

- 1.11% of cervical lesions
- 2. Visual inspection after HPV test identify >80% of precancerous lesions
- 3. **85%** of participants were treated in 1 visit
- 4. The strategy is well accepted: **99%** of women recommend it and would do it again

E-Poster EPB091





More information:

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