Cervical Cancer screening in Kinshasa, feasibility and challenges

CTB

Research Team

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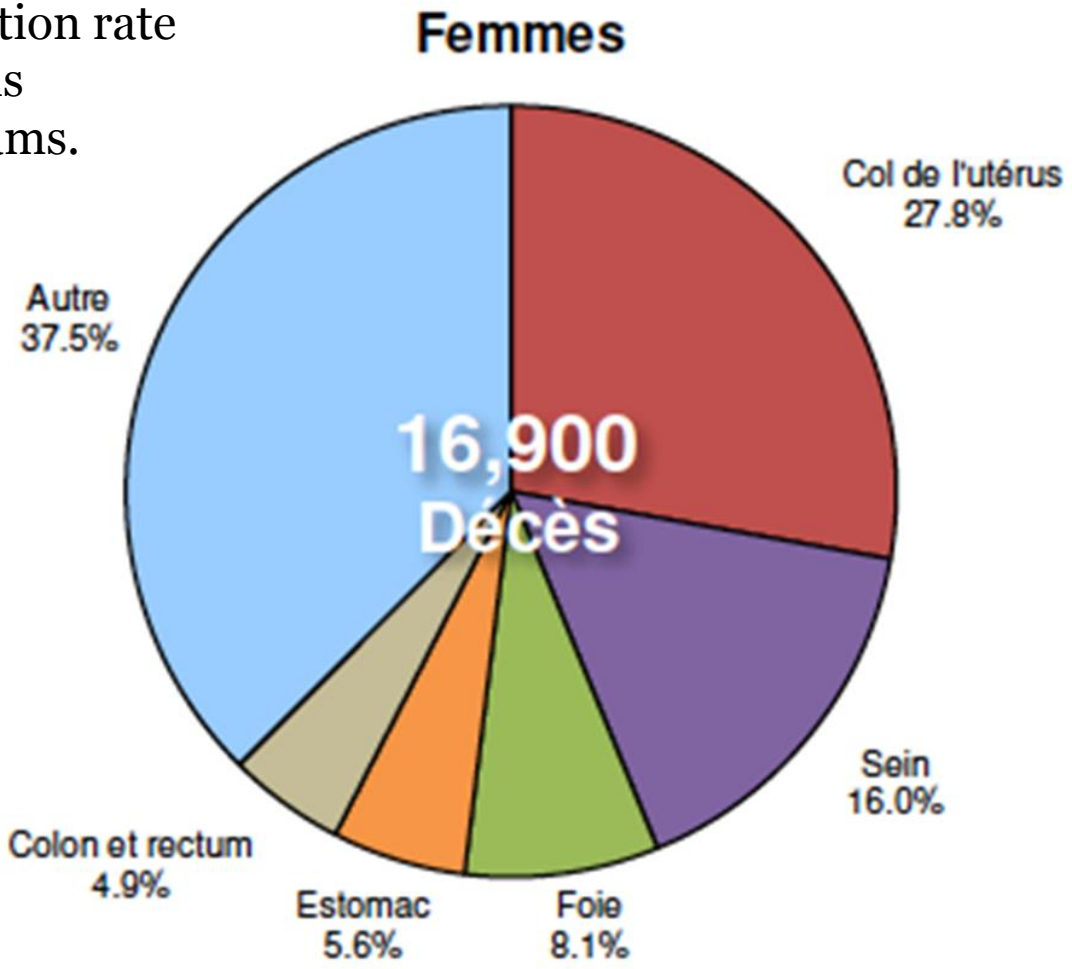
Deaths related to cancer in DRC: 2014

- High HPV-HR infection rate
- No HPV vaccinations
- No screening programs.



Rationale and Objectives of the study

- National strategy for early detection and treatment of pre-cancerous lesions is lacking

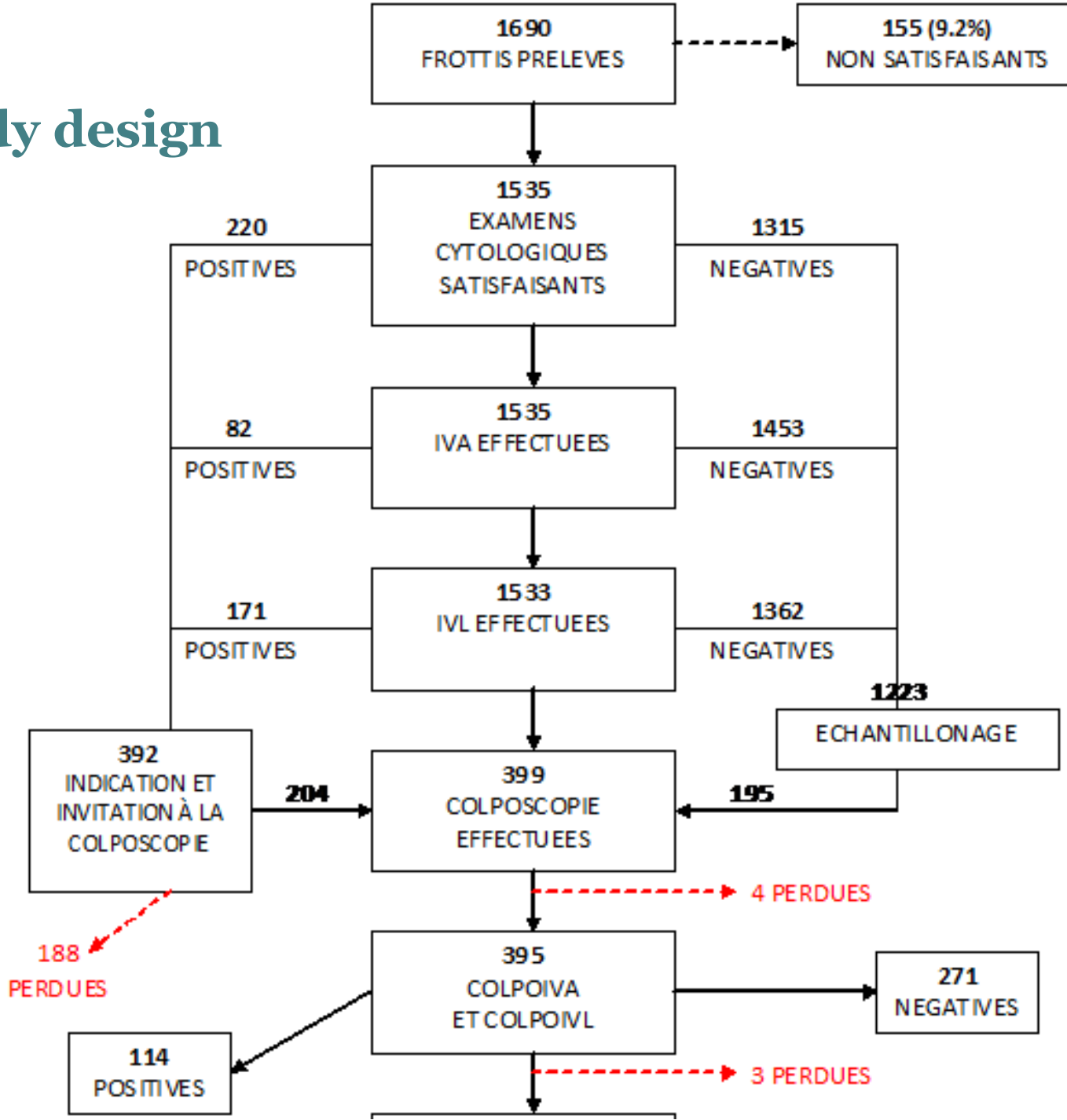
- Cytology based screening is expensive

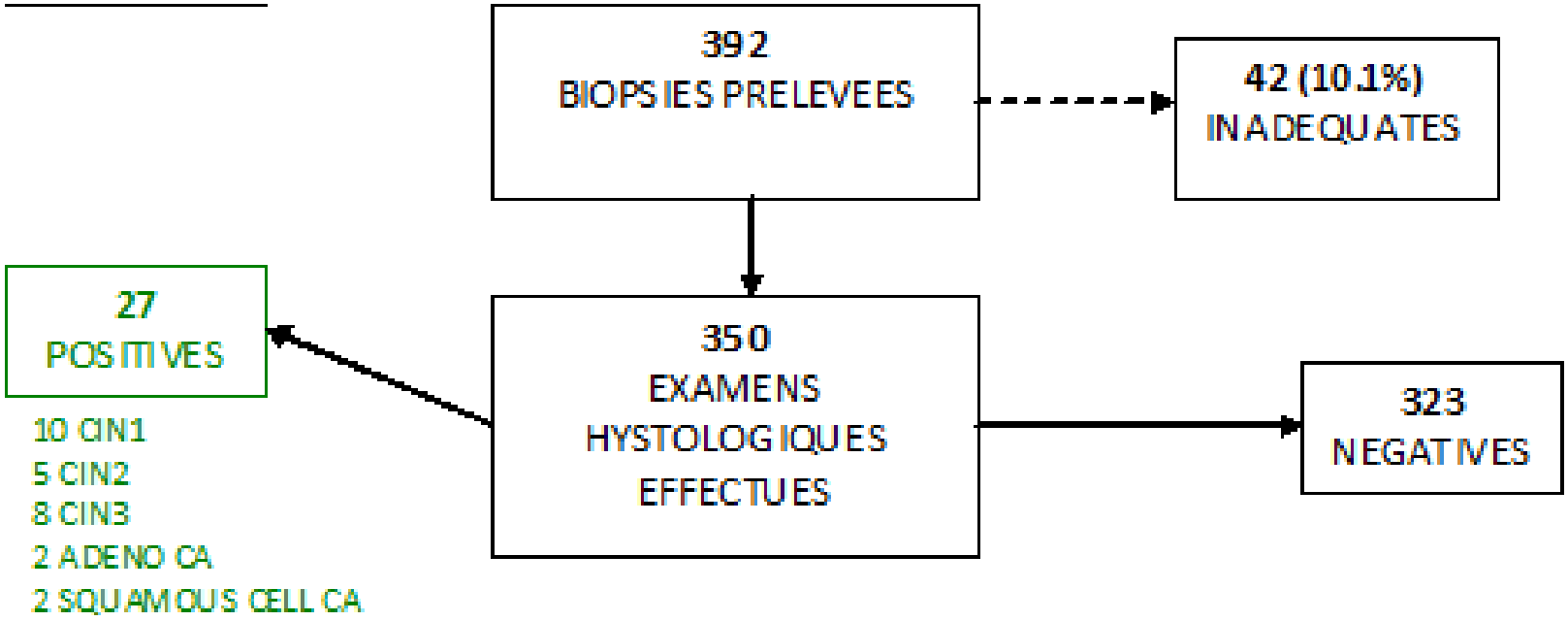
- VIA/VILI would be an affordable alternative

- Studies show variable results

Validate affordable, feasible diagnostic tools to propose a rational, evidence based screening strategy for the context of the DRC

Study design




392
BIOPSIES PRELEVEES
42 (10.1%)
INADEQUATES
350
EXAMENS
HYSTOLOGIQUES
EFFECTUES
27
POSITIVES
10 CIN1
5 CIN2
8 CIN3
2 ADENO CA
2 SQUAMOUS CELL CA
323
NEGATIVES

Screening tests performances

	PAP SMEAR % c.i.95%	IVA % c.i.95%	IVL % c.i.95%
SENS	55.5 % (37.3, 72.4)	18.5 % (8.1, 36.7)	33.3 % (18.6, 52.1)
SPEC	80.5 % (75.8, 84.4)	87.3 % (83.2, 90.5)	72.9 % (67.8, 77.5)
VPP	19.2 % (12.0, 29.3)	10.8 % (4.7, 23.0)	9,3 % (5.0, 16.8)
VPN	95.5 % (92.4, 97.4)	92.7 % (89.2, 95.1)	92.8 % (89.0, 95.4)

Cost effectiveness

Test	Unit Price	Sensitivity	Cost effectiveness /test
IVA	5,05	16,13	31,31
IVL	5,06	32,26	15,69
IVA+IVL	10,11	38,71	26,12
Pap smear	15,32	55,56	27,57

Conclusions Phase I

- Cervical Cancer Screening is feasable in DRC
- VIA = simple method but not sensitive and poor positive predictive value
- Papanicolau: best results but logistically heavy, most cost-effective

Recommendations

- Papanicolau smear as screening test
- Technical plateau needed to enhance knowlede in cytology
- VIA: allthough simple method, demands prolonged training
- More reflection needed to establish a sensibilisation, screen and treat model which is feasable and effective in the DRC

WOMEN PROFILE for AFRICA

Implementation of Cervical Cancer Screening in Kinshasa (Phase II)

4 Sites:
- Binza Ozone
- Kisangani
- Matete
- Lemba

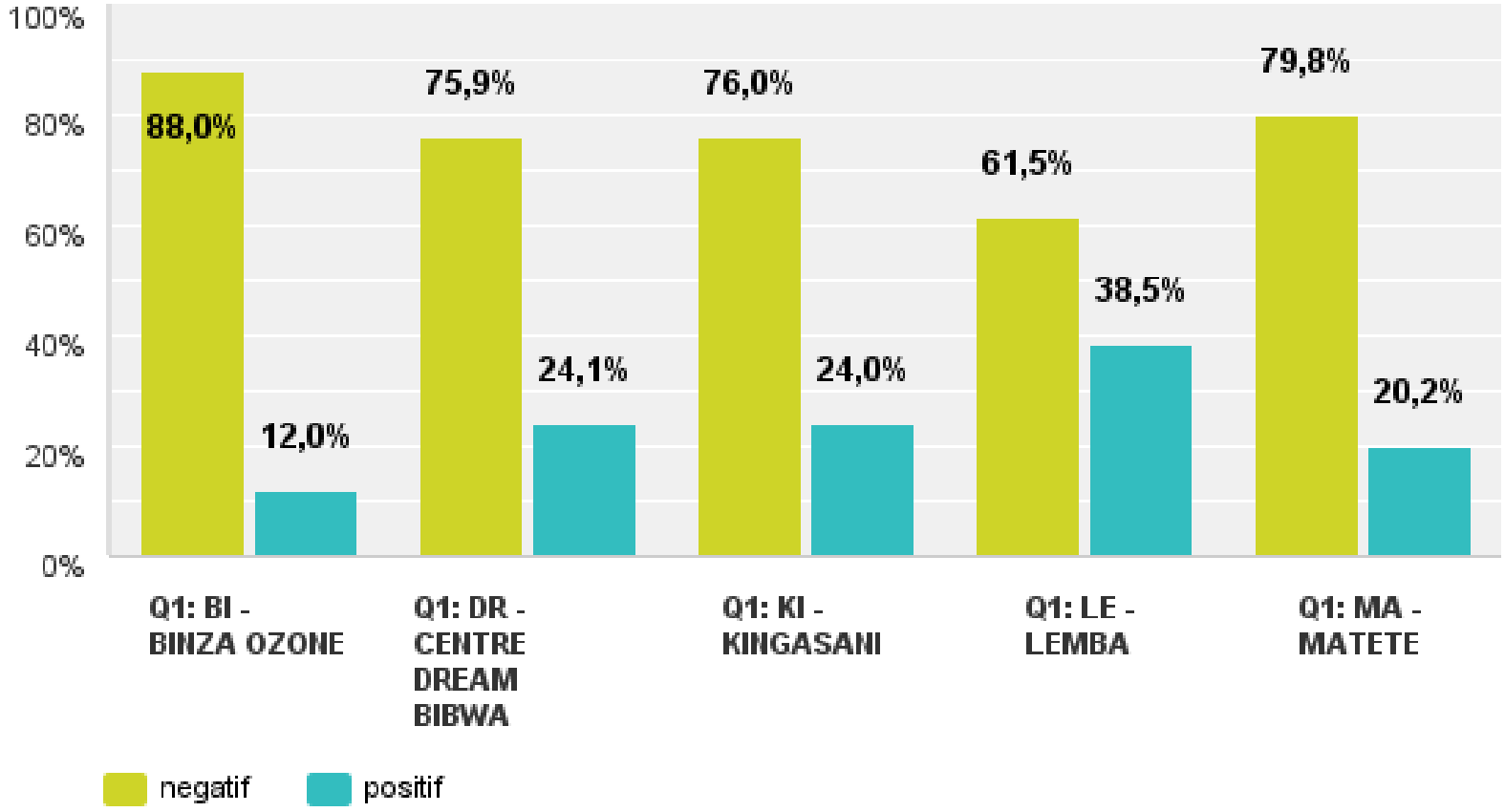
Multidisciplinary team:
- Coordinators
- Medical doctors
- Nurses
- Cytotechnicians
- Anatomopathologists

Approach:
- Using Health facility human resources
- One day a week is dedicated to screening activities (pap smear/ VIA/ VILI)
- Monitoring and supervision
- Technical support based on local expertise

WOMEN PROFILE for AFRICA

Q8 VIA

Hanno risposto: 993 Hanno saltato la domanda: 18



Huge differences in IVA performances for the different centers

Pap-smear and VIA results

PAP SMEAR RESULTS	IVA negatif	IVA positif	TOTAL
négatif,	434	154	**590**
Low grade	40	10	**50**
Ascus,	9	3	**12**
ASC-H,	6	5	**11**
SIL,High grade SIL,	5	4	**9**
modification cellulaires réacitve,	4	1	**5**
Squamous cell carcinoma,	0	1	**1**
AGC + neoplastic atièpical glandular cells	0	0	**0**
TOTAL	**498**	**178**	**678**

Of course not possible to compare, because the gold standard is biopsy..
But there is material of reflection...the modelling should continue for a while before deciding a strategy.

WOMEN PROFILE for AFRICA

Conclusion and Take home message

- VIA performance is stronly dependant to the operator
- Inter-person variablity is abundant
- Could be solved by stronger training?

- Pap smear is the test that seems to be the most reliable in the context of the DRC
- Need for heavy logistics but feasable

Thank you for your attention