



Managing virological failure in people living with HIV: giving the patient a chance, not the first line!

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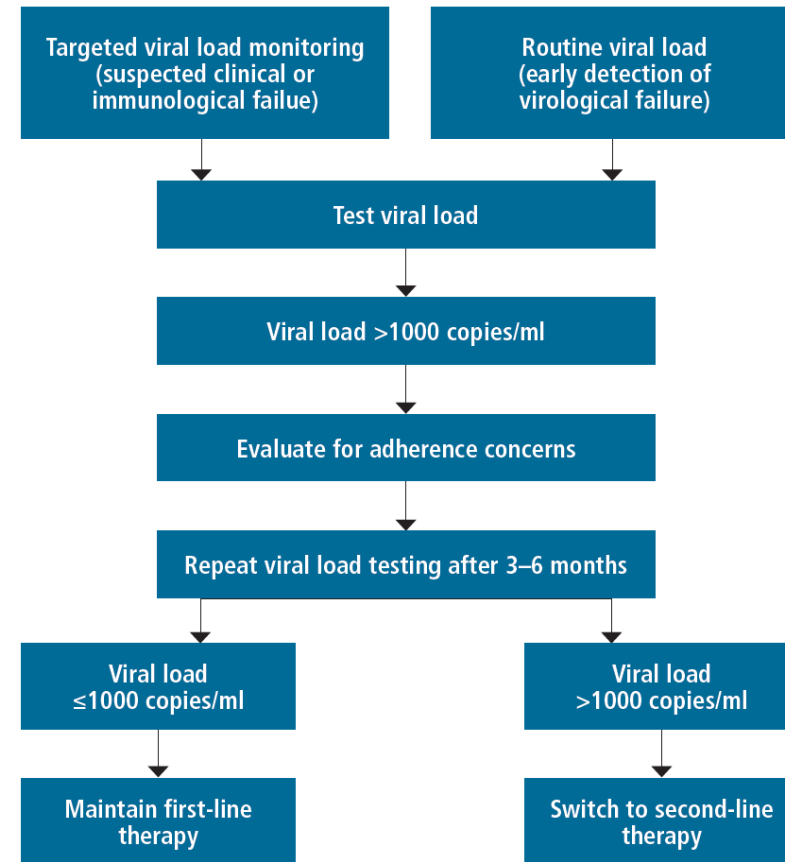
THEME

AIDS FREE AFRICA - INNOVATION, COMMUNITY, AND POLITICAL LEADERSHIP
AFRIQUE SANS SIDA - INNOVATION, COMMUNAUTÉ ET LEADERSHIP POLITIQUE



Context

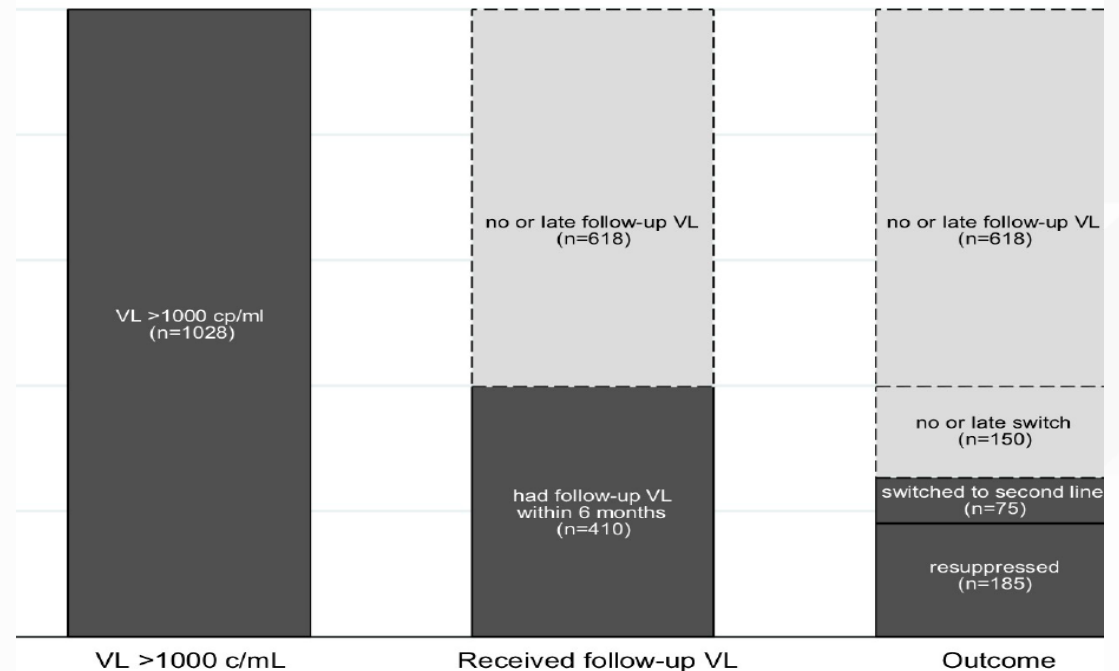
- In order to reach the final 90 of the 90-90-90 UNAIDS goal, access to viral load (VL) monitoring must be expanded to all the people living with HIV on antiretroviral therapy.
- In case of virological failure (>1000 cp/mL), WHO and national programs recommended the use of VL algorithm because of the high cost and low availability of genotyping.
- Adherence counselling result in re-suppression in 46.1% (CI_{95%} 42.6% to 49.5%) of patients, avoiding unnecessary drug regimen changes. (Meta analysis, 6280 patients, 21 studies, Ford et al. J AIDS 2019)



In the real life, management of virological cascade is a challenge

- Among patients in first-line ART with confirmed virological failure, only 53.4% (CI_{95%} 40.1% - 66.8%) are appropriately switched to a different regimen. (Meta analysis, 6280 patients, 21 studies, Ford et al. J AIDS 2019)
- Analyses to identify gaps and focus quality improvement to ensure that action is taken on the results of viral load testing

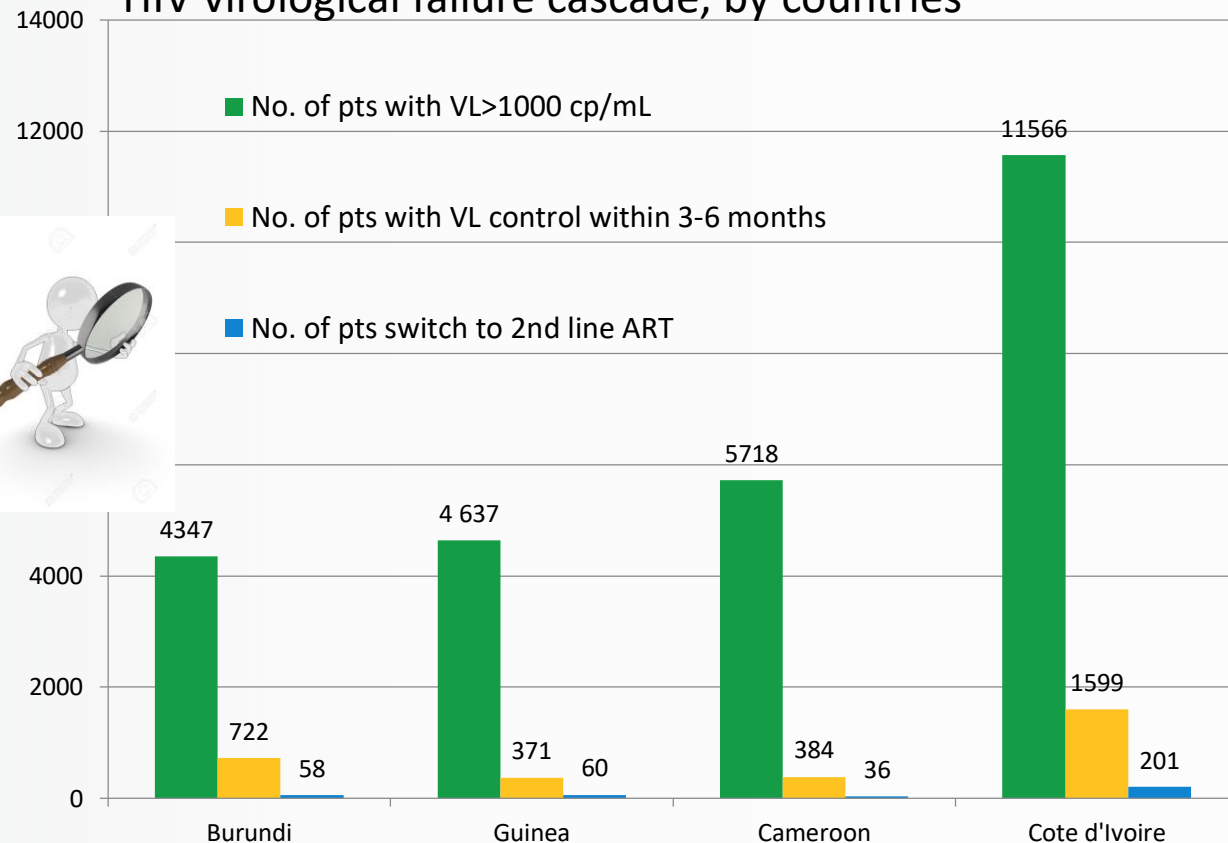
VL monitoring cascade in rural Lesotho. Glass et al. Plos One 2019



HIV viral load failure cascade, OPP-ERA project 2014-2019, 26268 patients with first VL>1000 cp/mL

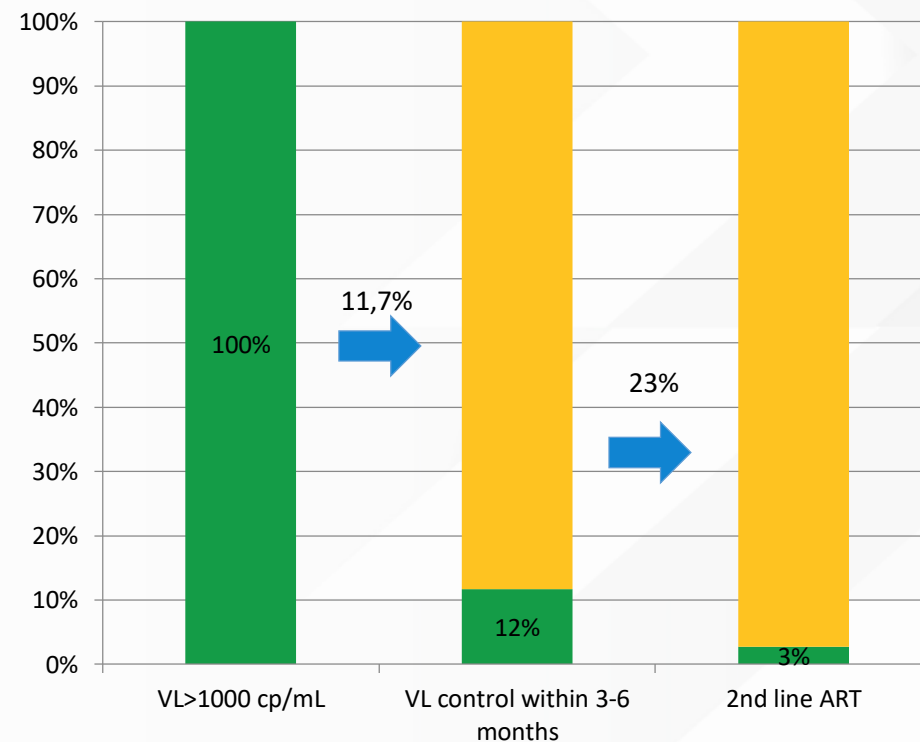


HIV virological failure cascade, by countries



See Poster WEPEB081

HIV virological failure cascade, global



Objective and Methods

- Objective: to investigate reasons associated to the low use in 2nd line ART by ART prescribers.
- Methods: quantitative and qualitative survey, during April and June 2019 in Burundi, Guinea, Cameroon and Cote d'Ivoire.
- Participants: ART prescribers and HIV program manager
- ✓ Self administered questionnaires to ART prescribers:
 - ✓ Knowledge survey (n=71)
 - ✓ Raison associated with low 2^{nde} line use survey (n=56)
- ✓ Qualitative data: focus groups and clinical training.

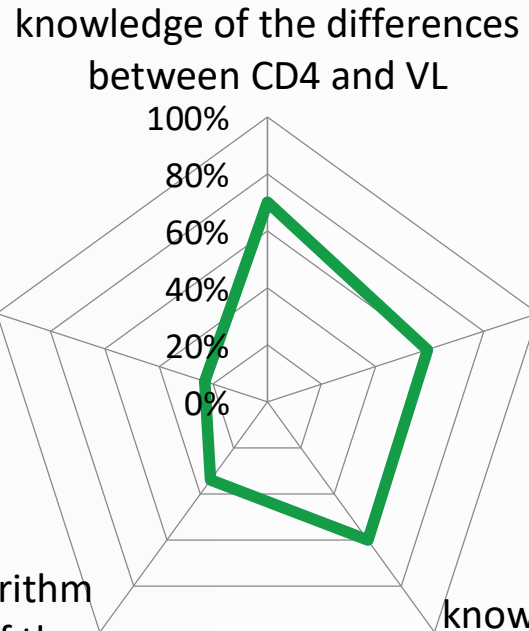
Participants characteristics

Participants characteristics	knowledge survey	low use of 2 nd line survey
Number	71	56
Sex ratio F/H	31/40	25/31
Age (EIQ)	36,5 (31-44)	37 (31,5-47)
Years HIV care (EIQ)	6 (3-9)	6 (3-10,75)
Medical diploma	62 (87%)	50 (89%)
Working in associative health facility	17 (24%)	13 (23%)
Country	Guinea: 21 Cameroon: 15 Cote d'Ivoire: 12 Burundi: 23	Guinea: 18 Cameroon: 15 Cote d'Ivoire: 12 Burundi: 12

ART prescribers' knowledge of VL and viral failure management

ability to interpret the VL algorithm
(compliance with the 1000 cp/mL
threshold)

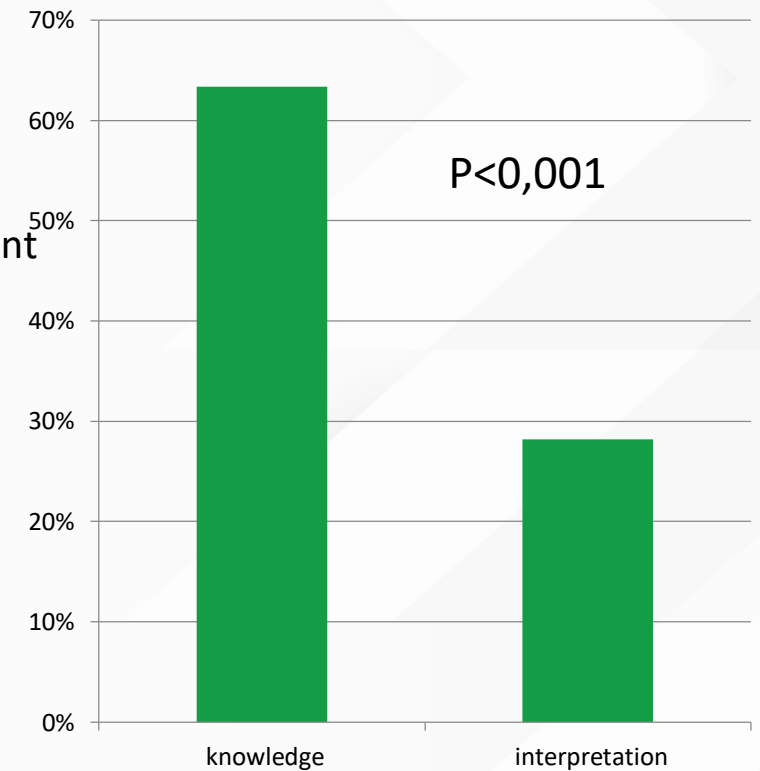
ability to interpret the VL algorithm
(interpretation of the delay of the
control VL)



knowledge of 2nd line treatment
regimens

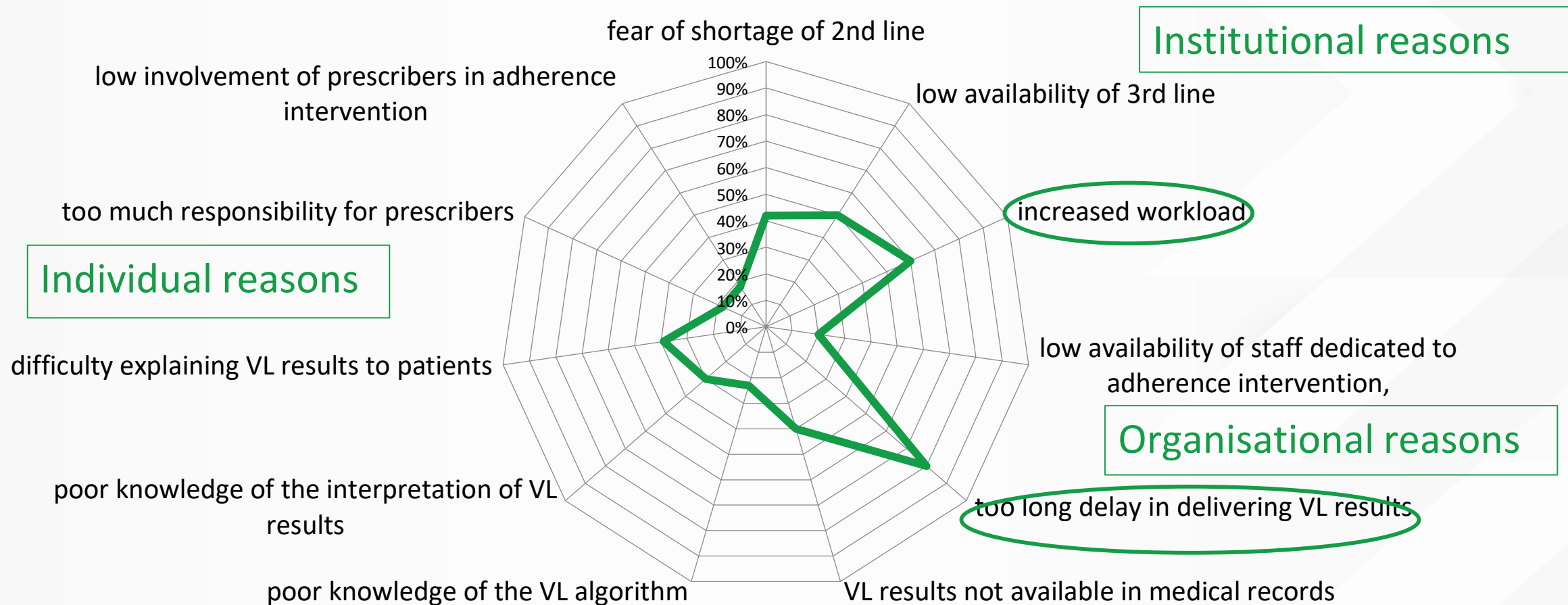
knowledge of prescription of 2nd
line treatments

Viral load knowledge and ability
to interpret VL algorithm



ART prescribers' point of view on the reasons associated with the low switch to 2nd line

(% of participants who strongly agree or somewhat agree with the proposal)

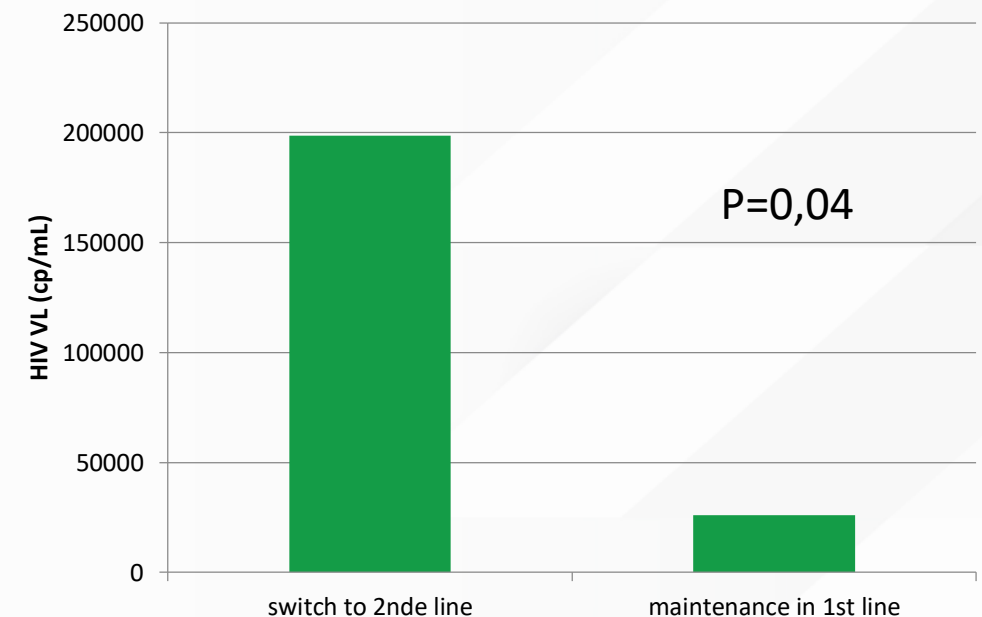


But what happens in an almost “perfect world” ?

Retrospective survey on 29 patients in virological failure, ANSS, Burundi

Characteristics	data
Total number of VL measure from the initiation of ART, median (EIQ)	5 (3.5-6)
Turn around time VL results (days), median (EIQ)	12 (7-17)
Result of VL >1000 cp/mL notified in the medical chart, N(%)	80/99 (81%)
Adherence intervention notified in the medical chart, N(%)	66/99 (67%)
Proportion of patients who have benefited from switch to 2nd line (%)	11/29 (38%)
Duration of viral replication (nb of days after the 1st VL>1000 cp/mL to date of switch or date of medical chart evaluation), median (EIQ)	499 (400-537)

Median VL value at time of virological failure is associated with 2nd line switch



See Poster WEPEB082

Perceptions of 2nd line and patients in VF by HIV programme managers and ART prescribers

The second line is seen as a rare and precious resource:

- HIV program managers:

- Difficulties of financial prioritization: cost of second-line treatment in a context of treat all recommendations and decrease in international funding

- Consequence: limit and control the use of the 2nd line

☞ *"Give the first line a chance"; "we took away the second line because they were doing anything"*

- ART prescribers:

☞ *"we were told to be careful", "we must preserve the first line"; "we must be able to justify"*.

Negative representation of 2nd line

☞ *"sanction", "failure", "fear", "responsibility", "workload"*.

Negative representation of patients in virological failure

☞ *"not serious", "liars", "delinquents", "offenders"*

The challenge of adherence counselling

- Adherence improvement before initiating 2nd line is a major concern

☞ *"you have to ensure proper adherence before moving to the 2nd line".*

However:

1) Adherence counselling and failure announcement seems mainly injunctive and dramatic

☞ "you have to make an effort", "you have to take your treatment regularly", "otherwise the virus will multiply", "you will get sick"

☞ "if he doesn't understand, you have to be hard, to scare him", "this is your last chance, after it's death"

2) The mechanisms of virological failure are poorly analyzed.

VF is only perceived as the consequence of non adherence which is perceived as patients' fault.

The main causes of VF spontaneously mentioned are:

- Lying and not understanding patients

☞ *"patients lie", "if the patient tells you that he is not taking his treatment once, you can multiply by 10"*

- Mains other reasons: psycho-social difficulties, unprotected sex, traditional medicine

3) Evaluation of adherence is difficult

- Undetectable VL seems often used as a proxy of adherence

The interpretation of the VL algorithm

Viral load >1000 copies/ml

The threshold of 1000 cp/mL is known but its interpretation is a challenge:

- a decrease reflects the effectiveness of adherence counselling

💬 *"it's going down, that's good, that means we have to continue to strengthen adherence."*

- an increase reflects continued non-adherence

💬 *"not serious patient"*



Repeat viral load testing after 3–6 months

- The 3-6 months period is known but its interpretation is a challenge:

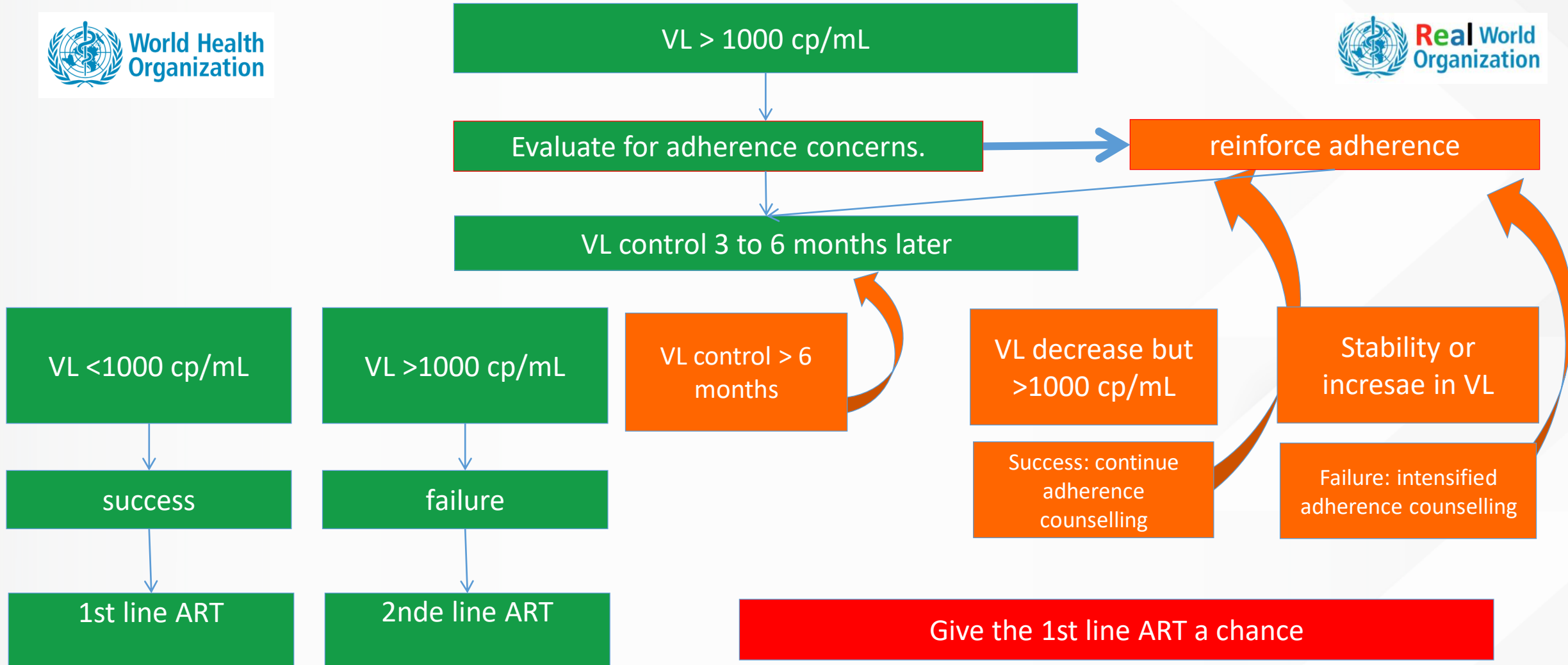
💬 *"if my patient had a sample in January and I had the result in March, from when I count 3 months?"*

- This deadline is difficult to reach in practice:
 - VL turn around time (lab and clinical site)
 - Wait until next patients' visit
 - Delay for re-sampling
- results returned after 6 months are considered not to comply with the algorithm



Most often, lead to further adherence intervention and new VL test

Towards an unofficial VL algorithm...?



CONCLUSIONS

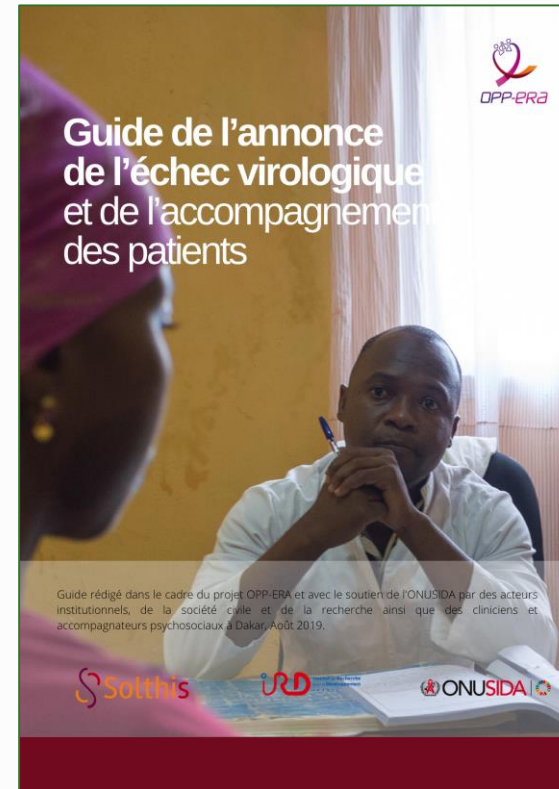
- Limits: methods (no individual ITW, no ethnographic survey...), restricted to ART prescribers.
- Prescribers highlight structural and organizational reasons:
 - VL turn around time
 - Human resources concerns (HR turn-over, task delegation, workload...)
 - 2nd (and 3rd line) supply
- Fear of national program manager for unjustified use of 2nd line is a limiting factor.
 - Improve 2nd line quantification and communication between actors.
- Prescribers have a good theoretical knowledge of the VL algorithm in contrast to difficulties of interpretation and practical application.
 - VL algorithms need to be explained (or modified) to make them applicable on the field.
- Prescribers (and patients) are not prepared for failure, the announcement is most often dramatic and guilt-ridden.
- Adherence counselling is a challenge especially when patients are suffering from negative representation.
 - the mechanisms of failure are poorly analysed and patients are not prepared for 2nd line

Recommendations: some tools developed in the frame work of the OPPERA project

- Guide: the announcement of virological failure and patient support (“let’s talk about failure” working group)
- Practical training module
- Many other tools available (english and french)

OPPERA toolkit link:

<https://toolkit-chargevirale-oppera.solthis.org>



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