LOW HCV PREVALENCE AMONG HIV+ INDIVIDUALS IN SUB-SAHARAN AFRICA

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INTRODUCTION

According to WHO estimates, 80 million people globally are chronically infected by hepatitis C virus (HCV) and 2.3 million people living with HIV are co-infected with HIV and HCV. HIV and HCV infections share common risk factors (ex, unscreened blood transfusion, unsafe injection).[1]

As new drugs with better efficacy and tolerability become widely available, data on the burden of HCV among HIV patients in sub-Saharan Africa is lacking.[2,3]

We present the results of screening activities among HIV positive cohorts at 5 MSF-supported sites in 4 countries in Eastern and Southern Africa.

AIM

To assess HCV prevalence among HIV positive patients

METHOD

Design

- Analysis of routine patient data and survey data

Study Population

- All HIV-positive adults screened for HCV antibodies
- Between 2014 and 2016

Study Settings

- Kenya:
  - Kibera (Nairobi)
  - Homa Bay
- Malawi: Chiradzulu
- Mozambique: Maput
- Uganda: Mbarara

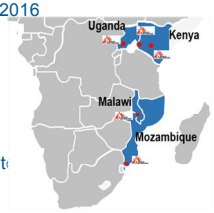

Fig 1: Map of study sites

Procedures

- Site-specific screening strategy implemented in collaboration with MoH or partners

Laboratory Procedures

- Serology screening: OraQuick HCV Rapid Antibody Test (OraSure Technologies, USA)
- HCV Viral Load (q-PCR): Laboratory platforms

RESULTS

Sites	Screened patients N	Reactive HCV RDT N	Positive serology % (95% CI)	Detectable HCV VL / Tested N (% Detectable)	Confirmed CHC out of total screened % (95% CI)	Remarks
Maputo, Mozambique	2600	30	1,15% (0,81-1,64)	26/30 (86%)	**1% (0,68-1,46)**	Advanced HIV disease or high risk groups
Chiradzulu, Malawi	385	2	0,52% (0,14-1,87)	Not done	**Not done**	HIV cohort, under ARV Treatment for > 10 years
Homa Bay, Kenya	351	1	0,28% (0,05-1,59)	Not done	**Not done**	HIV patients in In-Patient Department
Mbarara, Uganda	7500	18	0,24% (0,15-0,38)	5/17 (29%)	**0,07% (0,03-0,16)**	MoH HIV cohort
Nairobi, Kenya	4500	10	0,22% (0,12-0,41)	2/10 (20%)	**0,04% (0,01-0,17)**	Kibera HIV cohort

Table 1: Results of HCV screening among HIV patients at 5 MSF sites

A. Screening Results

In Maputo (Mozambique), the clinic-based screening targeted patients with advanced HIV disease or those belonging to a high-risk group, such as intravenous drug users.

In Chiradzulu (Malawi), a clinic-based survey included 385 HIV positive patients under ART treatment for >10 years.

In Kenya, 4,500 patients in the Kibera HIV cohort were screened (informal urban settlement in Nairobi). In Homa Bay, a survey was conducted among 351 patients in the district hospital.

In Uganda, voluntary HCV screening was performed in the HIV cohort of Mbarara District Hospital.

The highest prevalence was found in Mozambique, where screening was offered to high risk groups and patients with advanced HIV disease.

B. Confirmation of Chronic Hepatitis C (CHC) (3 sites)

Confirmation of active infection with viral load (VL) was done in 3 sites. Despite the small number of VL tests performed, the low proportion of HCV in Uganda and Kenya raises the question of cross-reactivity of serological tests in these contexts.

	Maputo Mozambique	Mbarara Uganda	Nairobi Kenya
Gender			
Female	0	5	1
Male	26	0	1
Age (year), median	40	43	36
Viral Load (IU/mL), median	769.000	2,990,000	3,014,583
Genotype			
1	13	0	0
3	1	0	0
4	2	5	2
Treatment	Sof + Dac	Sof + Led	Sof + Led

Table 2: Description of patients with confirmed CHC at 3 MSF sites
Sof : Sofosbuvir, Dac: daclatasvir, Led: Ledispasvir

CONCLUSIONS

- In 4 sub-Saharan countries, HCV prevalence among PLWHA was low, ranging between 0.04 and 1%.
- The higher prevalence of HCV in Mozambique may be linked to the screening of high-risk populations, especially PWIDs.
- For these countries, the data on prevalence are scarce. Different studies have reported prevalence of 1-10% among PLWHA in Kenya, 0.06-5.6% in Uganda and 0-15 % in Mozambique. Our results are lower than the previous published estimates.
- Access to screening, VL testing and HCV treatment remains a challenge in sub Saharan countries.
- Data on specific high-risk groups such as intravenous drug users are still lacking.
- Adequate assessment of the prevalence of HIV-HCV co-infection is needed to guide screening and treatment strategies at national and regional levels.

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