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Applying social stress theory to understand HIV care engagement among hospitalised patients with advanced HIV infection in rural Kenya.

Presented at ASSHH 2018 pre-conference. Monday 23/07, 13:30-14:45, University of Amsterdam.

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Background:

Despite widespread antiretroviral provision, hospitals in many African countries including Kenya are overburdened by patients with advanced HIV illness, often due to adherence challenges and treatment failure. Drawing on social stress theory, we explored the role of social circumstances and relationships in the HIV treatment histories of hospitalised patients with advanced HIV infection.

Methods:

Fifteen in-depth interviews were conducted with hospitalised patients with advanced HIV who had previously initiated first-line antiretroviral therapy in Homa Bay, Kenya. Topic guides covered patients' health journeys, experiences with treatment and pathways to care. Observations were undertaken in the hospital. Interviews were audio-recorded, transcribed and translated into English. Data were coded inductively, aided by NVivo, and analysed thematically.

Results:

Stress which manifested through despair, anger and loss of hope was prominent throughout participants' accounts of their lives with HIV. Two main sources of stress were identified. Firstly, chronic poor health meant that some participants lost sources of income and were dependant on family members, leading them to experience a variety of financial concerns. Secondly, conflicts within intimate relationships were common, and often related to sero-discordancy, disagreements surrounding polygamous living arrangements, or tensions over marital and childbearing desires. Many women reported sexual, emotional or physical violence from intimate partners.

Participants responded to these sources of stress in different ways: some related somatic symptoms to their anxiety, including headaches, chest pain and stomach disorders. Many described how stress undermined their ability to follow their treatment regimens or visit health services during periods of ill-health prior to hospitalisation. Some participants mentioned intentionally stopping their antiretroviral therapy drugs to end their life. Conversely, others described gaining courage and hope from supportive community outreach workers, peers living with HIV, or family members helping them to re-engage with HIV care.

Conclusions:

The social nature of the stresses experienced by participants in this setting and their responses to them were often closely tied to their engagement with HIV care prior to their hospitalisation for advanced HIV-related illnesses. Structural interventions, community outreach services and

the provision of mental health services for people living with HIV may facilitate long-term (re)-engagement in HIV care.

Field evaluation of the Biocentric® platform for HIV viral load testing utilizing plasma samples in Swaziland: a diagnostic accuracy study

Tuesday 24/07 12:30-14:30, Poster Exhibition area, Hall 1. Category B8.

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Background:

Viral load (VL) testing is recommended by the World Health Organization (WHO) to monitor the effectiveness of antiretroviral therapy (ART), and it is being scaled-up in resource-limited settings. However, not all VL platforms commercially available have been thoroughly evaluated. We assessed the diagnostic performance of the Biocentric assay for VL quantification under routine field conditions in Swaziland.

Methods:

From 10/2016 to 03/2017, paired plasma samples were collected prospectively from pre-ART and ART patients at Nhlanguano and Lobamba health centres. Samples were tested blindly on the national reference method (Roche) and compared to the Biocentric assay at two labs (Nhlanguano: Lab-1, Mbabane: Lab-2). Laboratory staff in Lab-1 were experienced with the Biocentric method and staff in the newly established Lab-2 were newly trained. We calculated precision (correlation, Bland-Altman) and accuracy (sensitivity, specificity) using the WHO-recommended VL threshold of 3.0 log₁₀ (=1,000) copies/ml. In addition, the positive (PPV) and negative predictive (NPV) values were calculated assuming that 20% of VLs are detectable in patients on ART.

Results:

In total 370 patients participated, of whom 364 (98.4%) paired samples were successfully analysed. Seventy (19.2%) samples had a VL > 3.0 log₁₀ on the reference standard. The correlation between both methods was high (r=0.93, p<0.01) and the Bland-Altman analysis showed a minimal mean difference (-0.02 log₁₀; 95% limits of agreement: -1.15 to 1.11). Overall sensitivity and specificity were 88.6% (78.7-94.9) and 98.3% (96.1-99.4). Sensitivity was higher in Lab-1 (100% [71.5-100]) compared to Lab-2 (86.4% [75.0-94.0]) and specificity was similar (Lab-1: 97.9% [94.6-99.4]; Lab-2: 99.1% [94.9-100.0]). For both labs combined, the PPV was 92.9% (84.5-96.9) and the NPV was 97.2% (94.7-98.5). The PPV was similar between Lab-1 (92.1% [81.6-96.9]) and Lab-2 (95.9% [76.6-99.4]), and the NPV was higher in Lab-1 (100%) compared to Lab-2 (96.7% [93.9-98.2]).

Conclusions:

The diagnostic performance of the Biocentric assay was comparable with the reference Roche assay. Inter-laboratory differences indicate, however, that attention should be paid to provision of sufficient trainings and quality control processes during the scale-up of VL testing.

Simplifying switch to second line ART: Predicted effect of a policy of defining 1st line failure of efavirenz-based regimens by a single VL > 1000 in sub-Saharan Africa

Tuesday 24/07, 12:30-14:30, Poster Exhibition area, Hall 1. Category C33.

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Background:

Many individuals failing first line Antiretroviral Therapy (ART) never receive second line ART, or do so after long delays. For people on ART with a viral load (VL) > 1000 cps/ml WHO recommends VL measurement 3 months after enhanced adherence support, with switch to a 2nd line regimen occurring if VL elevation persists. The need for a confirmatory VL prior to switching to a 2nd line regimen may delay or prevent switching. Here we use an established individual-based model of HIV transmission, progression and the effect of ART which incorporates drug resistance in order to consider this question.

Methods:

Using this mathematical model, we compare the effect of a policy requiring one VL > 1000 copies/ml for people failing efavirenz-based regimens to be switched to second line, with one requiring two consecutive values > 1000 cps/ml. We simulated a range of setting-scenarios reflecting the breadth of the epidemic seen in sub-Saharan Africa; taking into account potential delays in defining failure and switching to 2nd line regimens.

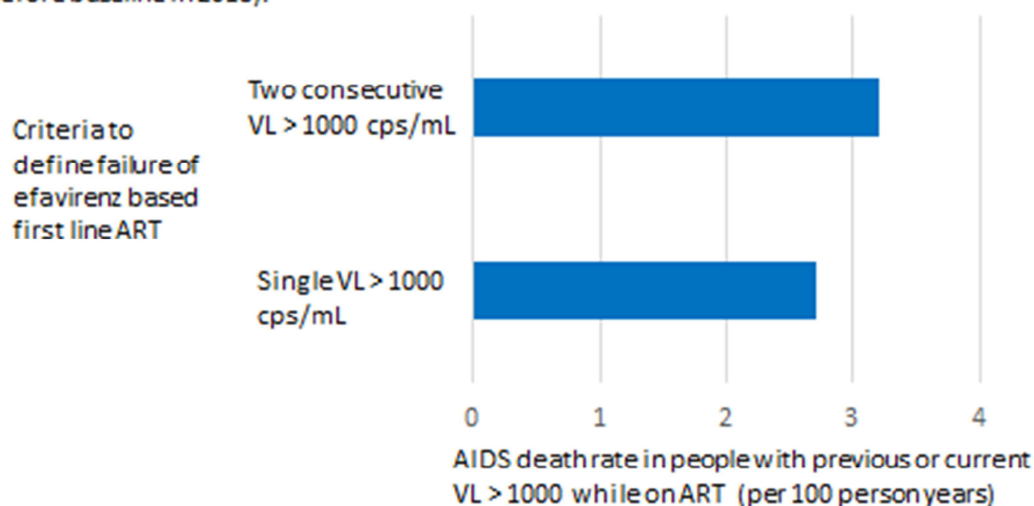
Results:

The generated setting scenarios had in 2018 19% (13% - 33%) of people on ART with an NNRTI mutation and 88% (77% - 93%) with viral load < 1000 copies/ml. Among those having experienced a VL>1000 copies/ml on ART, using a single VL > 1000 to define failure of efavirenz-based 1st line regimens would lead to a higher proportion of people with NNRTI resistance having been switched to a second line regimen (62% vs 43%; difference 19% (16% - 22%)), resulting in a median (over setting scenarios) 20% reduction in the rate of AIDS death (90% range 2% - 32%; from a median of 3.2 to 2.7 per 100 person years) over 3 years from 2018.

Conclusion:

Relaxation of the requirement for two consecutive VL values > 1000 to define 1st line failure of efavirenz-based regimens should be considered.

Figure 1. AIDS death rate (over 3 years; 2018.75 - 2021.75) in people with previous or current VL > 1000 while on ART according to criteria to define failure of efavirenz based first line ART. (excluding people who had already switched to 2nd line ART before baseline in 2018).



Percent reduction in rate for single VL > 1000 vs two consecutive VL > 1000 cps/mL:
Mean 19% (95% CI 17% - 21%) Median 20% (90% range 2% - 32%)

“We decided not to tell him because he would tell everyone else.” Care-giver and young people's experiences of disclosure in Kinshasa, Democratic Republic of Congo

Tuesday-Thursday 24-26/07, 12:30-14:30, Poster Exhibition area, Hall 1. Category D12.

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Background:

It is estimated that 42,000 children ≤15 are living with HIV in DRC (UNAIDS 2015). WHO recommends disclosure for HIV-positive children of school-going age, but the process remains challenging for health-care workers and care-givers. Non-disclosure is probably associated with poor outcomes during adolescence; including increased risk of poor adherence and retention, and treatment failure. Médecins Sans Frontières has been working in Kinshasa since 2002, providing treatment and support to children/adolescents living with HIV, and their care-givers. Children in DRC can only be informed of their HIV status with the approval of their care-giver, which, along with the age of consent for HIV testing being 18, can cause delays in disclosure.

Methods:

Thirty in-depth interviews were conducted with care-givers (n=20) and HIV-positive children/adolescents (n=10) to understand their experiences of disclosure. Ten care-givers who had disclosed to their children and 10 who had not were purposively selected. Care-givers included biological parents, grandmothers, siblings and community members. Interviews were conducted in Lingala, translated, transcribed, then coded and analysed using NVivo.

Results:

Several children suspected they had HIV before disclosure, commonly asking why they had to take medication or were ‘*always ill*’. Care-givers and children perceived benefits of disclosure to include improved adherence and improved behaviour at home. Care-givers who had not disclosed to their children wanted to protect themselves and their families from stigmatisation, and were fearful their children could tell others. HIV positive care-givers were reluctant to disclose to perinatally infected children because they felt guilty and did not want their children to blame them. There was also a perception amongst interviewees that there could be a risk of suicide relating to disclosure. Many children had more than one care-giver, often due to being orphaned, which delayed disclosure and made adherence support more challenging.

Conclusions:

The fear of stigmatisation and not wanting to upset their children prevented several care-givers from disclosing. HIV-positive care-givers, particularly mothers, need additional support to overcome their fears and help their children understand their status. Attention should be given to non-primary care-givers involved in adherence support and disclosure as they also play a significant care-giving role for children living with HIV.

The first experience with ART adherence clubs in Maputo, Mozambique: An analysis of a second-line ART subcohort

Wednesday 25/07, 12:30-14:30, Poster Exhibition hall, Area 1. Category E47.

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Background:

The Adherence Club (AC) model of care was piloted by Médecins Sans Frontières (MSF) starting in 2007 in South Africa. AC model offers patient-centred access to antiretroviral therapy (ART) to clinically stable patients and reduces the number of consultations in health-care facilities. In Maputo, MSF started to run AC in collaboration with Ministry of Health (MoH) in October 2015, at Centro de Referencia Alto Maé (CRAM), an MSF-supported health facility which assists complex HIV patients. Therefore, this is one of the first descriptions of an AC cohort of patients with a history of treatment failure.

Methods:

A retrospective analysis of patients' data from CRAM enrolled in AC clubs and receiving second-line ART treatment was performed. The analysis spanned October 2015 to January 2018. In addition to death, lost-to-follow-up (LFU) or coinfection with tuberculosis, reasons for exiting AC can be: unsuppressed viral load (VL) or sending a "peer" twice in succession (another person collecting medication). Kaplan-Meier curve was used to analyse retention in AC (RIAC) and retention in care in health facility (RIC).

Results:

The analysed cohort contains 687 patients on second-line ART, with median age at enrolment of 40 years [IQR:35-42] and 429 (63%) being female. All patients were stable and with VL<400 copies/ml at enrolment in AC. During study period, 6 (0.9%) patients died and 5 (0.7%) were LFU. RIAC at months 12, 18 and 24 was 95% [CI:93-97%], 87% [CI:86-92%] and 83% [CI:78-87%], respectively. In the analysed period, 23 (3.4%) of patients exited AC due to unsuppressed VL, of which 6 (26%) successfully suppressed VL afterwards and returned to AC. Additionally, 24 (3.5%) patients exited AC due to sending "peer". Patients who exited AC continued to be treated in the same facility, hence, the RIC of AC patients in our facility for the same period was 99% [98-100%], 98% [CI:96-99%] and 97% [CI:95-99%].

Conclusion:

Patients with a history of treatment failure can have good outcomes in AC. Furthermore, by reinforcing counselling of patients who exit AC due to unsuppressed VL, patients can achieve VL re-suppression and return to AC. Finally, overall retention in care of AC second-line patients is encouragingly high.

Clinical characteristics and hepatitis C (HCV) treatment outcomes among people who actively use drugs in an HIV cohort in Churachandpur and Moreh districts of Manipur, India

Wednesday 25/07 12:30-14:30, Poster Exhibition area, Hall 1. Category B66.

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Introduction:

Hepatitis C treatment outcomes in active drug users coinfecting with HIV/HCV is of interest to design programs of care. Treatment outcome in drug users is infrequently reported from limited resource contexts. MSF provides care to HIV/HCV coinfecting patients through two clinics in Manipur state of eastern India. HCV care program includes integrated treatment for HCV, HIV, co-morbidities, psychosocial support and harm reduction services. Context experiences low-intensity conflict and high burden of HIV, HCV, Tuberculosis and drug use. This study explored HCV treatment outcomes among active drug users in a HIV/HCV coinfecting population.

Methods:

Retrospective cohort analysis was conducted on HIV/HCV coinfecting patients treated for HCV between Oct 2017 & Jan 2018 at MSF clinics. Demographic, biological, clinical characteristics, treatment and outcome data of patients were retrieved from electronic database. Risk of negative treatment outcomes which included SVR12 failure, lost to follow up and death among patients actively using drugs was tested using step-wise logistic regression.

Results:

Among 356 patients registered, treatment outcomes of 230 patients (74.1% male) were available. 28 (12.1%) patients, majority being male (n=26, 92.8%) actively used drugs during HCV treatment. Between active and non-drug users, 17/28 (60.7%) & 178/202(88.1%) cured, 10/28 (35.7%) & 18/202 (8.92%) failed, 1/28 (3.6%) & 4/202 (1.98%) were LFU and 0/28 & 2/202 (0.99%) died. Six patients failing SVR12 cured at SVR24 among whom 5 (83.3%) were treated with sofosbuvir+peginterferon+ribavirin. Of 11 patients with negative outcome and active drug use, four (44.5%) received interferon treatment. Negative treatment outcome risk in active drug users relative to non-users was 4.5 (95%CI 1.8-11.27, n=227) in model adjusted for sex, cirrhosis and interferon treatment.

Conclusion:

Provision of HCV care in people actively injecting drug is feasible, when integrated with HIV and TB care, with link to psychosocial support and harm reduction. In our small sample size HIV/HCV coinfecting patients actively using drugs during HCV treatment had higher risk of negative treatment outcomes. However, there was a strong association between the negative outcome with liver cirrhosis and interferon treatment, characteristics not linked to active drug use. Use of DAAs without delay is a pre-condition for successful treatment outcomes in this population.

Table 1: Association of patient's key characteristics with treatment outcome

Characteristics	Failure (%)	Success (%)	RR of failure (95%CI)	p value
Patients with treatment outcome (n=230)	35 (15.22)	195 (84.78)		
Age in years (n=230) <40 (n=97) >40 (n=133)	13 (37.14) 22 (62.86)	84 (42.86) 112 (57.14)	1.00 1.28 (0.60 –2.68)	0.51
Sex (n=230) Male (n=170) Female (n=60)	30 (85.71) 5 (14.29)	140 (71.79) 55 (28.21)	1.00 0.42 (0.15–1.14)	0.06
Drug use status Non-user (n=202) Active user (n=28)	24 (11.88) 11 (39.29)	178 (88.12) 17 (60.71)	1.00 4.7 (2.0– 11.45)	0.007
Genotype distribution 1 (n=75) 3 (n=78) 4 (n=2) 6 (n=64) Missing (n=11)	13 (37.14) 12 (34.29) 1 (2.86) 9 (25.71) 0	62 (31.79) 66 (33.85) 1 (0.51) 55 (28.21) 11 (5.64)	1.00 0.86 (0.36 – 2.0) 4.76 (0.27– 81.2) 0.78 (0.30– 1.96)	0.67
Viral load at treatment initiation <800,000 copies/mL (n=77) >800,000 copies/mL (n=144) Missing (n=9)	8 (22.86) 26 (74.29) 1 (2.86)	69 (35.38) 118 (60.51) 1 (4.10)	1.00 1.90 (0.81– 4.42) 1.07 (0.11– 9.76)	0.28
Cirrhosis of liver No (n=142) Yes (n=27) Missing (n=61)	14 (40.00) 7 (20.00) 14 (40.00)	128 (65.64) 20 (10.26) 47 (24.1)	1.00 3.2 (1.15–8.89) 2.72 (1.2 – 6.13)	0.017
Treated with interferons No ¹ (n=181) Yes (n=49)	26 (74.29) 9 (25.71)	155 (79.49) 40 (20.51)	1.00 1.34 (0.58–3.0)	0.49
Fully adjusted model ² (n=230) Active user Female sex Presence of cirrhosis Treated with interferon			4.5 (1.80–11.27) 0.51 (0.17– 1.47) 4.2 (1.41–12.67) 1.0 (0.52 – 3.21)	0.006 0.001 0.215 0.010 0.561

¹Treated with directly acting retroviral drugs; ²Result of step wise logistic regression model. Age, genotype distribution & viral load at initiation were excluded from the model. HIV stage, CD4 count, BMI, Hemoglobin, APRI score, Child-Pugh score, creatinine clearance at treatment initiation were other variables considered in the analysis.

Ensuring continuation of antiretroviral treatment in a Test & Treat programme in a rural conflict affected area of South Sudan, the experience of MSF Spain

Wednesday 25/07, 12:30-14:30, Poster Exhibition area, Hall 1. Category E38.

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Introduction:

Access to antiretroviral treatment (ART) is limited in conflict affected settings, particularly in rural areas. In Yambio, ART coverage is estimated to be 10%. Innovative strategies are needed in these settings in order to increase access to HIV services while ensuring continuation of ART in case of security deterioration. Few data on the outcomes of HIV programs in security situations are available.

Project:

In July 2015, MSF launched a Test & Treat (T&T) Pilot Project in rural areas of Yambio where the mobile teams provide HIV counselling and testing (HCT) and ART initiation at the same day. A contingency plan to continue these activities in case of security situations was developed including mapping of patients, key messages about “what to do in case of crisis” during counselling sessions, provision of a phone number to contact our team in case of drugs shortage and coordination with community health workers (CHW’s) and PLWHA associations to provide ART refill for 2 month and “run-away bags” with 3 months of ART in case security context deteriorates to a higher level. Data on retention in care and viral load suppression was regularly recorded for patients affected by conflict situations.

Outcomes:

From September 2015 to December 2017, 8 security situations have affected Yambio area by limiting the access of our mobile clinics for drugs refilling and clinical follow up. The contingency plan was activated in every situation and a total of 90 patients in 6 different locations received drugs refill through contingency. Among them, 71 (79%) were active by January 2018, 2 (2.2%) were transferred out, 1 (1.1%) died and 15 (16.7%) defaulted. Among the active patients, 58 (81.7%) had a suppressed viral load.

Conclusions:

High rates of retention in care and virological suppression of patients affected by security situations show that community based Test & Treat services are feasible and suitable for conflict affected population when contingency plan is developed in advance.

Ethics: This study was approved by the MSF and South Sudan Ministry of Health Ethics Review Board

Implementing test & start program in a rural conflict affected area of South Sudan, the experience of MSF Spain

Wednesday 25/07, 12:30-14:30, Poster Exhibition area, Hall 1. Category E42.

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Introduction:

Community-based HIV counselling and testing (CB-HCT) and early initiation of antiretroviral therapy (ART) can reduce HIV transmission and mortality. Access to HIV care in settings with low ART coverage and/or affected by conflict is still low; innovative strategies are needed to increase access and ensure continuation of ART in case of instability. Bringing HCT and ART closer to the community can be a suitable strategy in these settings. A pilot test and start project was implemented in rural areas of Yambio South Sudan, a chronically conflict-affected area. In a retrospective analysis, we aimed to determine the feasibility and acceptability of this pilot intervention.

Methods:

Programme data from July 2015 to December 2017 was analysed. The project involved five mobile teams offering HIV community sensitization, HCT and same day ART initiation at community level. A contingency plan including coordination with community health workers (CHWs) to distribute “run-away bags” with 3 months of ART was in place due to the setting.

Results:

During the analysed period, 15328 people were counselled and all of them accepted to be tested. 498 (3.2%) were found to be HIV positive and 395 (79.3%) accepted to start ART. 231 (61%) patients and 56 (15%) had CD4 count below 500cells/ μ l and 200 cells/ μ l, respectively. By December 2017, 95(24%) patients were loss to follow up, and 12 (3%) died. Retention in care at 6 and 12 months of follow up was respectively 283 (84%) and 241 (71%). 224 (out of 243) patients had an available VL at 12 months (92%) and in 179 (80%) it was suppressed. At 30 months, 243 (71%) patients are still under follow up and on ART.

Conclusions:

Our program shows a high level of acceptance to HCT and early ART initiation despite of context. Results show rates of virological suppression comparable with HIV programs at clinic level and without security concerns, the same for retention in care at 6 and 12 months. We believe this strategy could be extrapolated to other similar contexts with low access to ART and where security situation is a concern.

Successful implementation of HIV self-testing in the rural Shiselweni region of Swaziland.

Wednesday 25/07, 12:30-14:30, Poster Exhibition area, Hall 1. Category E37.

L Pasipamire¹, L Dube², E Mabhena¹, M Nzima¹, P Lopez³, ML Tombo¹, LG Abrego¹, S Mthetwa¹, M Dhlamini¹, R Nesbitt¹, M Pasipamire², SM Kabore³, R De la Tour⁴, N Lukhele², J Goiri⁴, I Ciglonecki⁴ & B Kerschberger³

¹Médecins Sans Frontières, Nhlanguano, Swaziland, ²Swaziland National AIDS Programme, Mbabane, Swaziland, ³Médecins Sans Frontières, Mbabane, Swaziland, ⁴Médecins Sans Frontières, Geneva, Switzerland

Background:

Current healthcare worker led HIV testing approaches are failing to reach all people in need for HIV testing such as men, and young people. Although WHO recommends HIV self-testing (HIVST) as a complementary testing strategy, it is rarely applied in the public health sector. Thus, Médecins Sans Frontières (MSF) and the Ministry of Health (MOH) of Swaziland aimed to demonstrate the feasibility of HIVST as an innovative testing strategy under routine conditions.

Methods:

From May to October 2017, HIVST kits have been provided through different targeted testing strategies at 9 government health facilities and at community sites in the rural Shiselweni region of Swaziland. In supervised HIVST, clients performed and interpreted the test in the presence of a health worker whilst in unsupervised HIVST, clients took 1-2 HIVST kits home for testing. We also provided tailored HIVST education and information material, established a toll-free hotline and performed structured follow-up calls to monitor possible adverse events, guide clients on interpreting the test results and advice on HIV services. Frequency statistics and proportions were used to describe the outcomes.

Results:

A total of 1462 people (681 (47%) males, median age 29 (IQR 24-35) years) were reached through HIVST. 1817 HIVST kits (averaging 1.2 test kits per client) were distributed through 6 strategies (mutually not exclusive): 810(45%) at workplaces, 582(32%) and 191(11%) at targeted event-based testing for young people and men, 64(4%) in facility-based for pregnant/lactating women, 41(2%) at safe spaces for key populations, and 129(7%) undefined. Overall, 1615(89%) of tests were unsupervised and 202(11%) were supervised. Of 750(41%) HIVST results reported, 24(3%) were HIV-positive of whom 12(50%) had a confirmatory follow-up standard test done. All clients 12(100%) had concordant HIVST and standard HIV rapid test results, and 11(92%) were enrolled into HIV care. No adverse events were reported through 521 routine follow-up calls. The telephone hotline was used 167 times, mainly to disclose results and more often by men 95 (57%).

Conclusions:

Implementation of HIVST was feasible in public health sector in rural Swaziland. This pilot informed national health policy and led to the adoption of HIVST as an additional national testing strategy in Swaziland

A “quick pick-up” differentiated model of ART delivery shows good retention in care

Wednesday 25/07, 12:30-14:30, Poster Exhibition area, Hall 1. Category E47.

T Cassidy^{1,2}, R O'Connell¹, J Euvrard³, S Ndlovu¹, LT Duran¹, SJ Steele⁴, J Oba¹, S Daho¹, A Boulle³, R Gerstenhaber⁴ & T Schulz⁵

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⁴Médecins Sans Frontières, Cape Town, South Africa

⁵KESS, Western Cape Provincial Health Department, Cape Town, South Africa

Introduction:

In the context of ART scale-up, Differentiated Models of Care (DMOC) are a key strategy to improve efficiency and cater to patient needs. Available to clinic patients after confirmed viral suppression, DMOCs include facility- or community-based counselor-led adherence clubs. Since October 2015, a quick pick-up model (QPUP) has been running in one clinic in Khayelitsha, a low-income area in Cape Town, South Africa, with high HIV prevalence. QPUP, also known as fast-lane, allows patients to collect ART directly from pharmacy, without counselor review. All three DMOC models require an annual clinical visit and viral load. We describe patient characteristics and retention in QPUP, other DMOCs and those not in any DMOC.

Methods:

We used routine clinical data of patients starting ART before July 2017 in three Khayelitsha clinics. QPUP patients are stable on ART prior to referral to QPUP. For comparability in terms of time on ART and viral suppression we matched each QPUP patient to two non-DMOC 'clinic' patients. Each QPUP patient was matched to two patients with the closest ART start date, from patients who were in care and virally suppressed at their last viral load when the QPUP patient joined QPUP. Follow-up time for both matched clinic patients began on the QPUP patient's QPUP start date. To compare QPUP with other DMOCs, only patients that joined facility or community clubs after QPUP began were included.

Results:

Those in QPUP were more likely to initiate ART at WHO Stage 1 (Table 1). A larger proportion of clinic patients are male but age is similar across groups. DMOC patients have higher retention in care compared to clinic patients (see also Figure 1) but a notable proportion return to clinic. At 12-months 96% of QPUP patients are still in ART care, but 85% remain in QPUP.

Conclusion:

QPUP outcomes suggest that reduced healthcare contact time is feasible for stable patients, although return to clinic care is not uncommon across all differentiated models. A limitation of this data is incomplete viral load capturing and self-selection of DMOC patients. We aim to further develop the QPUP model, adapting to patient needs and health facility resources.

Table 1: Baseline Characteristics and Outcomes of QPUP, Clinic and Club Patients

	A	B	C	D	E
		QPUP (N=976)	Clinic (N=1852)	Facility club (N=3138)	Community Club (N=3431)
1					
2	median age (IQR)	37.3 (32.2-43)	38.3 (32.1-45.8)	36.3 (31-42.5)	39.6 (34.3-45)
3	Number male (%)	271 (28%)	641 (33%)	742 (24%)	926 (27%)
4	N (%) WHO stage 1 at initiation	451 (46%)	668 (34%)	1198 (38%)	889 (26%)
5	Median baseline CD4 Count (IQR)	208 (113-318)	204 (120-315.5)	224 (129-332)	181 (100-268)
6	Median months on ART at DMOC start* (IQR)	41.4 (21.6-70.4)	41.3 (20.1-68.8)	34.6 (18.1-63.2)	57.5 (33-87.7)
7	12 Month Retention in ART care after first DMOC visit*	96%	85%	93%	96%
8	12 Month Retention in DMOC care	85%		79%	85%
9	Viral load within first year after first DMOC visit* % complete (%suppressed)	33% (95%)	36% (91%)	43% (96%)	77% (96%)
10	*in the case of clinic patients, DMOC start refers to the DMOC start date of the patient they were matched to				

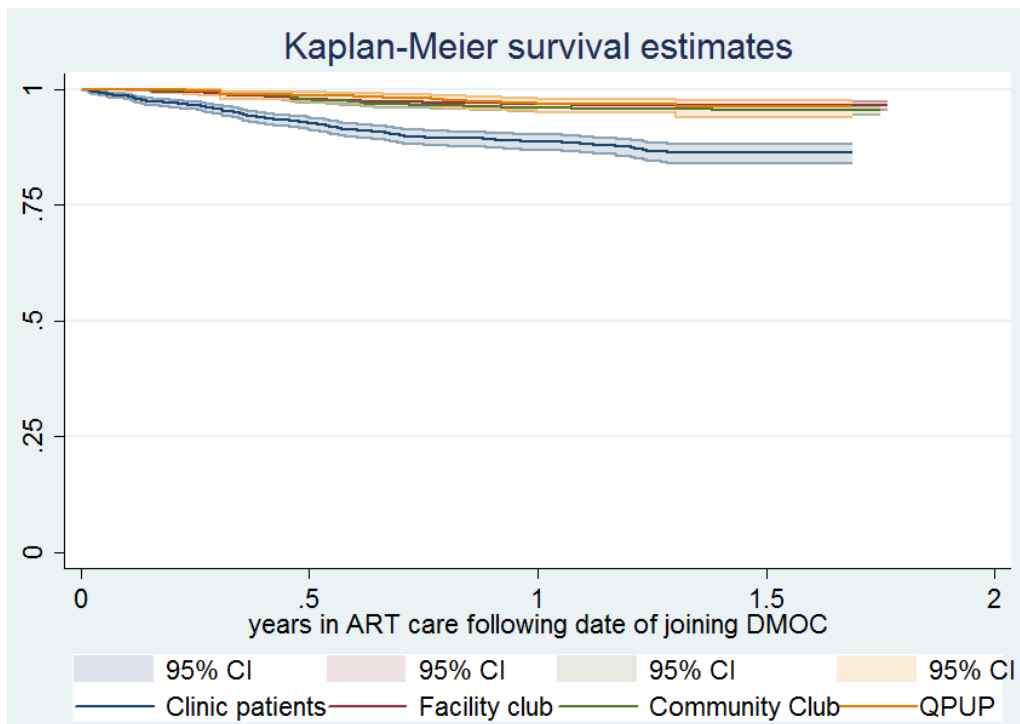


Figure 1: Kaplan-Meier survival estimates of retention in any ART care of QPUP and Club patients compared to clinic controls

"Life continues": Patient, health-care worker and community care worker perspectives on self-administered treatment for rifampicin-resistant tuberculosis in Khayelitsha, South Africa

Wednesday 25/07, 12:30-14:30, Poster Exhibition area, Hall 1. Category B14.

E Mohr¹, L Snyman¹, Z Mbakaz¹, V De Azededo², Y Kock³, L Trivino Duran¹, T Cassidy⁴ & E Venables^{5,6}

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Background:

Self-administered treatment (SAT) for rifampicin-resistant tuberculosis (RR-TB) might address the challenges faced by patients and the health care system in the administration of and adherence to treatment. This study explored patient, health-care worker (HCW) and community care worker (CCW) perspectives on a SAT programme in South Africa, in which patients were given a supply of medication to take at home after completion of the injectable phase of treatment.

Methods:

We conducted a mixed-methods study from July 2016-June 2017. The quantitative component of the study included standardized questionnaires with patients, HCWs and CCWs; and the qualitative component involved in-depth interviews with patients enrolled in the programme for varying lengths of time. Interviews were conducted in IsiXosa, translated, transcribed and manually coded. Thematic analysis was carried out.

Results:

Overall, 27 patients, 12 HCWs and 44 CCWs were enrolled in the quantitative component: 9 patients were also interviewed. Of note, 82% and 63% of the patients who completed the standardized questionnaires were HIV-infected and received a monthly supply of RR-TB treatment, respectively. Most HCWs and CCWs (83% and 73%, respectively) had a good understanding of the programme, yet less than half (48%) of patients could correctly describe the programme. Overall, 92% and 93% of HCWs and CCWs reported that the SAT pilot programme assisted RR-TB patients with treatment adherence, respectively. Additionally, 92% of HCWs reported that the programme relieved pressure on the clinic. Interestingly, 70% of patients indicated that they believed that not all RR-TB patients should be enrolled in SAT; their main concern was the adherence of other patients. Key qualitative themes from patients included the importance of a support person; SAT enabling them to integrate treatment more easily into their routines and that it was more flexible and reduced their time in the clinic.

Conclusion:

The SAT programme was acceptable from the perspective of patients, HCWs and CCWs and should be considered as a differentiated model of care for the treatment of RR-TB, particularly in settings with high burdens of HIV in order to ease management of treatment for patients and health care providers.

Operational feasibility and scope of same-day ART initiation under the WHO treat-all approach in the public sector of southern Swaziland- a prospective cohort study.

Wednesday 25/07, 12:30-14:30, Poster Exhibition area, Hall 1. Category C41.

Bernhard Kerschberger¹, Robin Nesbitt¹, Qhubekani Mpala¹, Charlie Mamba¹, Edwin Mabhena¹, Serge Mathurin Kabore¹, Munyaradzi Pasipamire², Alex Telnov³, Barbara Rusch³ & Iza Ciglencecki³

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³Médecins Sans Frontières (OCG), Geneva, Switzerland

Background:

Since 2017 WHO recommends antiretroviral therapy (ART) initiation on the day of HIV diagnosis. However, its feasibility in resource constrained settings remains uncertain. We describe predictors and outcomes of same-day ART in a well-established routine public sector HIV programme in Swaziland.

Methods:

This is a prospective cohort of adults (≥ 16 years) newly enrolled into HIV care and eligible for ART irrespective of CD4 cell count (WHO treat-all approach) at 9 health facilities in southern Swaziland, between 10/2014 and 3/2016. ART was offered on the day of HIV care registration (same-day ART) and deferred for up to 3 months for patients not ready to start treatment. Follow-up time was until 12/2016. We identified predictors of same-day ART initiation utilizing multivariate logistic regression analysis. Flexible parametric survival models were built to compare time from facility-based HIV-care registration and time from ART initiation (for patients successfully initiated on ART) to the composite endpoint loss to follow-up/death.

Results:

Of 1726 patients registered in HIV-care, with median age of 30 (IQR 25-36) years, 413/1726 (23.9%) were pregnant, and 556/1726 (32.2%) and 332/1726 (19.2%) had CD4 cell counts ≤ 200 and > 500 cells/microliter. Overall, 842 (48.8%) patients initiated same-day ART. In deferred ART ($n=884$), 747 (84.5%) initiated treatment at a median of 10 (IQR 7-22) days and 137 (15.5%) did not start ART. The probability of same-day ART initiation was increased for pregnant women (vs men) (aOR 3.55, 95%CI 2.46-5.11), HIV diagnosis ≥ 15 days (vs diagnosis on day of registration) (2.14, 1.64-2.81) and recent study period (1.93, 1.49-2.50). It was decreased for secondary (vs primary) care facility (0.24, 0.19-0.30) and presumptive TB cases (0.47, 0.30-0.74). For same-day ART, crude 2-year HIV-care attrition was lower (27.6% vs 32.5%; $p=0.009$) while ART-attrition was higher (27.6% vs 21.3%; $p=0.003$) compared to deferred ART. Confounder adjusted analyses also showed a tendency of decreased risk of HIV-care attrition (aHR 0.85; 95%CI 0.69-1.05) while the risk of ART-attrition was increased (1.65; 1.30-2.10).

Conclusions:

Although same-day ART retained more patients in HIV-care, attrition was increased in patients on ART. Improved understanding of patient readiness is required to reduce adverse outcomes of same-day ART and inform its scale-up.

PrEP for HIV prevention in Shiselweni, Swaziland: Early uptake and month one retention

Wednesday 25/07, 12:30-14:30, Poster Exhibition area, Hall 1. Category C42.

Robin Nesbitt¹, Qhubekani Mpala¹, Charlie Mamba¹, Bernhard Kerschberger¹, Edwin Mabhena¹, Marie-Luce Tombo, L Linda Abrego, Michelle Daka, Serge Mathurin Kabore¹, Sindy Matsie³, Munyaradzi Pasipamire³, Alex Telnov², Nelly Staderini², Javier Goiri² & Iza Ciglenecki²

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³Swaziland National AIDS Program (SNAP), Ministry of Health, Mbabane, Swaziland

Background:

Despite a major reduction in HIV incidence of 44% from 2011-2016 in Swaziland, specific populations remain at high risk, particularly young women and sero-discordant couples. In 2015, the WHO strongly recommended that oral pre-exposure prophylaxis (PrEP) be offered to people at substantial risk of HIV. The Ministry of Health and Médecins Sans Frontières are conducting a prospective cohort study of PrEP to determine uptake and retention among people at high risk in the rural region of Shiselweni since September 2017.

Methods:

Adults (≥ 16 years) testing HIV negative at 10 sites were offered a risk assessment with a counsellor, comprising six risk behaviours. Those at risk and interested in PrEP were screened for eligibility by a nurse, excluding acute HIV infection (AHI), renal impairment, and hepatitis B. Here we report predictors of early uptake using logistic regression, and one month retention in clients screened between September and December 2017.

Results:

Out of 438 HIV negative people screened for risk of HIV infection, 333(76%) were identified at risk, reporting a median of 2 risky behaviours in the past six months. Of those, 170 (51%) were interested in PrEP, and 121 (36%) initiated PrEP. Median age was 26.7 years (IQR 21-36), 99 (82%) were female. Females initiating PrEP were younger than males ($p=0.01$), and all clients initiated on PrEP below 20 years were female. Among those initiated, 47 (39%) reported an HIV positive partner. In multivariable analysis among clients at risk, age below 20 and above 40 years (aOR 2.53, 95 %CI: 1.22-5.26, $p=0.01$; OR 4.67, 95% CI 1.53-14.22, $p=0.007$) and an HIV positive partner (aOR 4.13, 95 %C I1.75-9.74, $p=0.001$) were predictive of PrEP initiation. Among 108 clients initiating between September and November 2017, 69 (64%) returned for month one follow up visit, with no difference by gender ($p=0.67$).

Conclusion:

The majority of HIV negative people screened for risk in Shiselweni are at risk of HIV infection. Interest in PrEP is moderate; however, there is demand among high risk target groups, namely young women and those reporting sero-discordant relationships. Strategies to increase PrEP demand and retention are required in order to optimize this intervention.

Treatment outcomes of a short standardized regimen for multidrug-resistant tuberculosis patients co-infected with HIV in Mozambique

Wednesday 25/07, 12:30-14:30, Poster Exhibition area, Hall 1. Category B14.

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¹Epicentre, Paris, France

²Médecins Sans Frontières, Maputo, Mozambique

³National TB Program, Ministry of Health, Maputo, Mozambique

⁴Médecins Sans Frontières, Geneva, Switzerland

Background:

Standardized regimen of 9-11 months duration has shown high rates of success and has been recommended by WHO as an alternative for 24 months regimen for multidrug-resistant Tuberculosis (MDR-TB) patients with no additional resistance to second line drugs and pyrazinamide. However, few data on the effectiveness of this regimen in patients co-infected with HIV are available.

Methods:

A prospective cohort study was conducted in Maputo, Mozambique, among MDR-TB HIV-positive patients. The study included patients with active pulmonary tuberculosis diagnosed as rifampicin resistant or children suspected of MDR-TB without bacteriological confirmation but documented as a close contact of confirmed MDR-TB patient, without previous treatment with second-line drugs and tested positive for HIV.

Results:

A total of 48 HIV-positive MDR-TB patients started on short course regimen between November 2015 and March 2017: 52.1% females, a median age of 34 years [IQR 29-42], a median BMI of 18.1 kg/m² [IQR 16.2-20.8] and 43.7% were previously treated for TB. They were 75.0% in clinical stage 4 and 44 (91.7%) received ART at MDR-TB treatment start. Baseline resistance was: 42.4% resistant to pyrazinamide, 44.1% to ethionamide, 2.8% to both injectable drugs and 12.5% to fluoroquinolones. MDR-TB treatment outcomes were: 19 (39.6%) cured, 14 (29.2%) treatment completed, 6 (12.5%) deaths, 5 (10.4%) treatment failure and 4 (8.3%) lost to follow-up. Among those who failed treatment, 2 (40.0%) were resistant to fluoroquinolones and 3 (60.0%) were resistant to pyrazinamide.

Conclusions:

This study on the first MDR-TB patients co-infected with HIV receiving short course regimen in Mozambique shows a good success rate compared to the conventional MDR-TB regimen despite a high early death rate and the advanced HIV stage of the patients. Resistance to fluoroquinolones seems also to be associated with a lower success rate. This confirms the WHO recommendation to exclude them from the short course regimen and stresses the need to use rapid molecular testing for fluoroquinolones resistance.

10 years of Community ART Groups (CAG): retention and viral load uptake in Tete, Mozambique

Wednesday 25/07, 16:30-16:45, Forum. Category E47.

Liina Haldna & Ana Torrens

Médecins Sans Frontières, Brussels, Belgium

Background:

Community ART groups (CAG), peer support groups involved in community ART distribution and mutual psychosocial support, were piloted by MSF in 2008 to respond staggering ART attrition in Tete, Mozambique. 10 years later, outcomes of CAG were analyzed - whether community-based care in rural setting has increased retention and improved clinical outcomes.

Methods:

Retrospective cohort design was used with data from HIV electronic register and CAG group register. A total of 2167 patients from 2008 to 2017 ever registered in CAG in Changara and Marara districts were included in the analysis. Individual level predictors of attrition were assessed using logistic regression and chi-square tests.

Results:

Mortality, LTFU and returning to individual care rates among 2167 CAG members were, respectively, 2.3, 1.6 and 1.6 per 100 person-years. Long-term retention in HIV care was found high: 93.1% at 2 years, 90.2% at 4 years and 87.5% at 9 years. Retention did not decrease significantly after 4th year ($p=0.4006$) in care. Patients who never had viral load (VL) monitored (aOR 4.266, 95%CI 3.34-5.46) or had unsuppressed VL (aOR 3.954, 95%CI 2.58-6.07) were at higher risk of LTFU or death. 53.9% of patients with VL ≥ 1000 cp/ml were part of CAG, while unsuppressed VL is CAG exclusion criteria. 15.32% of patients had joined CAG with advanced HIV (CD4 < 200 cells/ μ l), these patients were at higher risk of attrition (aOR 1.861, 95%CI 1.36-2.54).

Conclusions:

Long-term retention was exceptionally high, especially for a rural population, confirming positive results from previous studies. Nevertheless, finding about outcomes indicate that to reduce attrition, efforts are needed to strengthen the detection of PLWHA on earlier stage and to ensure clinical follow-up and VL routine monitoring. Risk factors associated with attrition demonstrate crucial added value of CAG model as peer-to-peer support and not only as community provision of ART. Results of this study have potential benefit to the global HIV response to provide out-of-clinic treatment to increasing number of patients, moreover it is a comprehensive insight how community-based care has functioned over a long period of time.

Routine viral load testing and enhanced adherence counseling for ART monitoring at a public ART centre in Mumbai, India

Wednesday 25/07, 12:30-14:30, Poster Exhibition area, Hall 1. Category E.

C. Laxmeshwar¹, S. Acharya², M. Das¹, P. Keskar², A. Pazare³, N. Ingole⁴, P. Mehta⁴, M. Arago Galindo¹, P. Gori⁵, H. Mansoor¹, S. Kalon¹, P. Isaakidis⁶

¹Médecins Sans Frontières/Doctors Without Borders, Mumbai, India,

²Mumbai Districts AIDS Control Society, Mumbai, India,

³KEM Hospital and Seth GS Medical College, Department of Medicine, Mumbai, India,

⁴KEM Hospital and Seth GS Medical College, Department of Microbiology, Mumbai, India,

⁵KEM Hospital, ART Center, Mumbai, India,

⁶Southern Africa Medical Unit, Médecins Sans Frontières, Cape Town, South Africa

Background:

WHO recommends viral-load (VL) testing as the preferred approach to monitor response to ART and diagnose treatment failure. However, India is yet to implement routine VL testing for people living with HIV/AIDS (PLHA). India being home to the third largest PLHA population in the world, urgently needs to initiate routine VL monitoring to achieve 90% VL-suppression as per UNAIDS 90-90-90 targets. Médecins Sans Frontières and Mumbai Districts AIDS Control Society are providing VL monitoring along with enhanced adherence counseling (EAC) for PLHA on ART at KEM hospital, Mumbai. This report documents findings of first Indian experience of routine VL monitoring and EAC in a high burden public ART-center.

Methods:

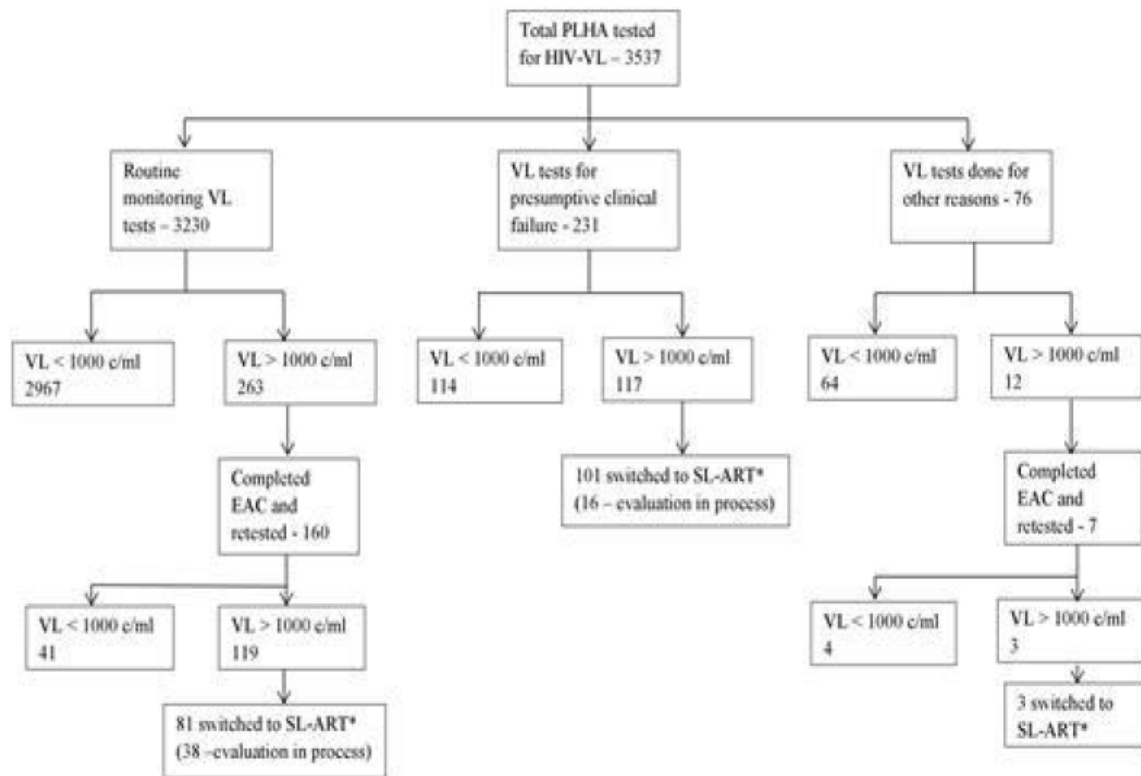
This is a descriptive study of PLHA on ART who received routine HIV-VL testing and EAC during October 2016-December 2017. Logistic regression was used to identify factors associated with VL suppression (VL < 1000c/ml).

Results:

Among 3537 PLHA who underwent VL testing, 1484(42%) were female and median age was 42 years (IQR: 35-48). Of those tested, 3369(95%) were on first-line ART, 32(1%) were on alternate first-line ART and 136(4%) were on second-line ART. Majority were referred for routine testing (3230(91%)) and clinical failure (231(7%)) (Figure). Among 3230 tested for routine monitoring, 2967(92%) had VL suppressed. Of 263 with VL > 1000c/ml, 160 completed EAC during the study period and after repeat VL 41(26%) had VL < 1000c/ml. Among 119 with VL > 1000c/ml, 81 were switched to 2 line ART. Among 231 referred for clinical failure, 117(51%) had VL > 1000c/ml and 101 have been switched to second-line ART. In unadjusted analysis using chi-square test, detectable VL was significantly associated with age ($p < 0.001$), duration on ART ($p < 0.001$) and CD4 count ($p < 0.001$). Overall, CD4 count < 500 (aOR 5.2 [95%CI 3.9-6.9]), on ART for < 5 years (aOR 1.4 [1.1-1.9]) and age < 45 years (aOR 1.5 [1.2-1.9]) were associated with VL > 1000c/ml.

Conclusions:

Results from the first routine VL program in public sector in India are encouraging and in line with UNAIDS 90-90-90 targets. Routine VL monitoring resulted in earlier switching to second line ART while preventing unnecessary switching. Use of routine VL for ART monitoring should be scaled up in India.



* Second Line Anti-retroviral therapy

Time to Switch? Outcomes of children and adolescents failing NNRTI regimens

Thursday 26/07, 12:30-14:30, Poster Exhibition area Hall 1. Category B55.

T Cassidy^{1,2}, R O'Connell¹, T Makeleni¹, V de Azevedo³, T Schulz⁴, N Dumile¹, M Mantangana¹, SJ Steele⁵, N Mkhosana¹, L Trivino Duran¹, A Boulle⁶ & J Bernheimer¹

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²University of Cape Town, Division of Public Health Medicine, School of Public Health and Family Medicine, Cape Town, South Africa

³City of Cape Town, Department of Health, Cape Town, South Africa

⁴KESS, Western Cape Provincial Health Department, Cape Town, South Africa

⁵Médecins Sans Frontières, Cape Town, South Africa

⁶University of Cape Town, CIDER, School of Public Health and Family Medicine, Cape Town, South Africa

Background:

Many children and adolescents failing ART do not access second line therapy in a timely manner. Delays in returning to clinic for confirmatory viral load testing and adherence support prior to treatment switch as required under current guidelines may contribute to delayed switching. Among those who resuppress on first line regimens the durability of resuppression is uncertain. Since 2013, Médecins Sans Frontières has run an enhanced adherence intervention program to address treatment failure in patients 0-19 years in Khayelitsha, South Africa. We describe the outcomes of participants who entered the program failing an NNRTI regimen.

Methods:

Participants were enrolled from 2013-2016. Failure was defined as VL>1000 copies/ml once, or >400 on two consecutive occasions. The intervention included: clinical care, genotype, and adherence support via individual and group counseling. ART regimen change was indicated for clinical (advanced HIV), genotypic or virologic reasons. Program success was defined as VL<400 on two consecutive occasions.

Results:

Of 192 participants, 70 enrolled on an NNRTI (5-19 yrs; 53% male; median CD4 524; median time on ART: 4.3 yrs[IQR:2-7.6]). Of the 70 on an NNRTI, 44 switched to a PI (see Figure 1). Median time to switch 5.3 months [IQR:3.3-6.4]. Reasons for switch included confirmed NNRTI resistance (n=38) and advanced HIV on entry (n=5). Those who switched were comparable to those who did not in terms of median baseline CD4 (525[IQR:293-797] vs 613 [IQR:442-903]) and age(13.1[IQR:11-15] vs 13.5[IQR:10-16]). Of the 26 who did not switch, 16 remained on an NNRTI for at least 2 VLs, of whom 13 suppressed with enhanced adherence alone. Of these 13, subsequent failure was seen in 2 participants.

Conclusions:

Less than 20% of those failing an NNRTI in this programme achieved resuppression without a change of regimen. The need for a second VL among children failing an NNRTI should be reconsidered. During the continuation of our program, we aim to implement rapid switch after one VL>1000 and advocate for dolutegravir as a more robust first line treatment.

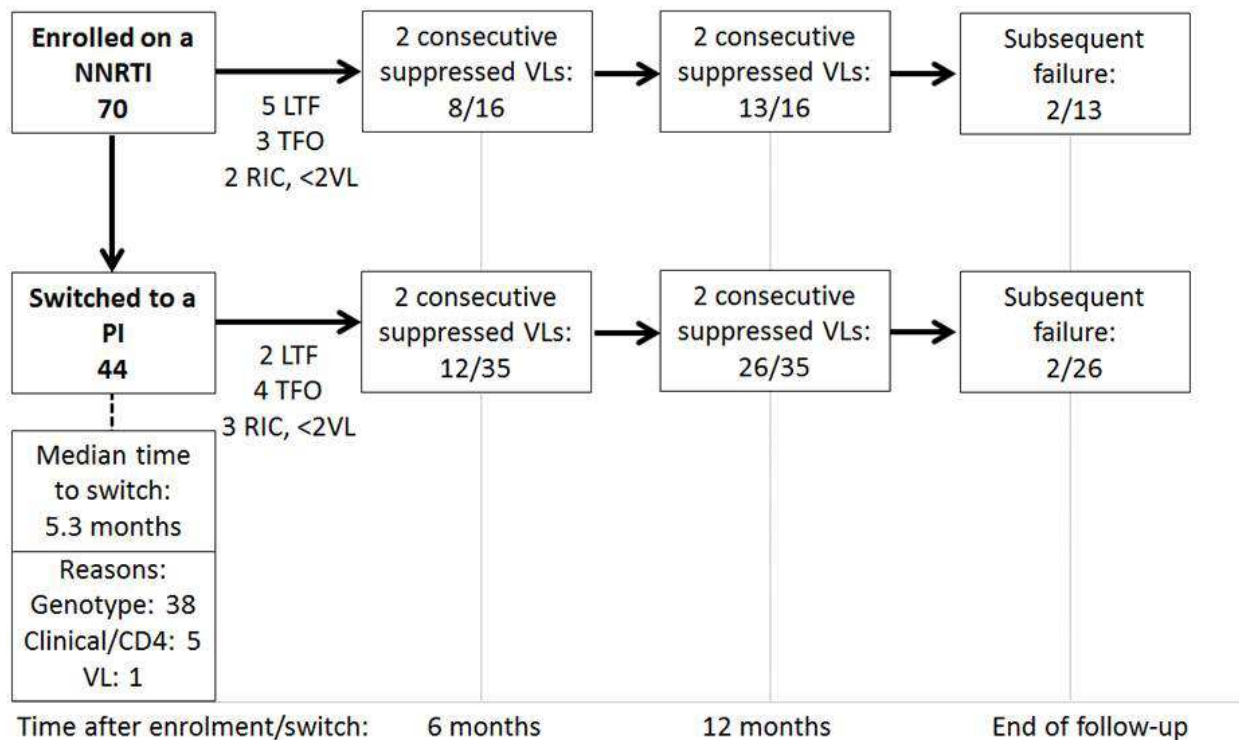


Figure 1: Viral suppression among those switching and those remaining on a NNRTI. The denominator at each point shows the number retained in care with at least two viral loads complete at that point. LTF=Lost to follow-up; TFO=Transfer out; RIC=Retained in care with <2VLs complete at time point

Expanding use of TB-LAM in HIV+ individuals with CD4 <200: evidence from MSF operational research and beyond

Thursday 26/07, 12:30-14:30, Poster Exhibition area, Hall 1. Category E19.

K England, E Fajardo, G Ferlazzo & H Huerga

Medicines Sans Frontières (MSF) Access Campaign, Geneva, Switzerland. MSF Southern Africa Medical Unit (SAMU), Cape Town, South Africa. MSF Epicentre, Paris, France.

Background:

World Health Organization (WHO) recommends the use of TB-LAM (LAM) to detect TB in HIV+ individuals with CD4 \leq 100 cells/mm or who are severely ill irrespective of their CD4 counts. MSF operational research and published literature were analysed to provide evidence for expanding use of LAM to diagnose TB among HIV+ individuals with CD4 < 200 cells/mm .

Description:

Presented are the results from MSF operational research in three locations (Kenya, Mozambique and Malawi), which included an analysis of using LAM as a diagnostic tool for HIV+ individuals with CD4 < 200. In Kenya, MSF analysed the incremental diagnostic yield achieved by adding LAM to standard algorithms in ambulatory and hospitalised HIV+ individuals. In Mozambique, LAM was used as a diagnostic tool in ambulatory settings for people with symptoms of TB and CD4 < 200. In Malawi, LAM was used to diagnose TB for HIV+ individuals regardless of symptoms and CD4 count. Furthermore, a literature review was conducted of diagnostic performance studies of LAM compared to a reference standard (culture, composite standard or Xpert) for HIV+ individuals with CD4 < 200 from March 2015 to date.

Lessons learned:

Data from Homa Bay, Kenya demonstrated that 68.2% (88/129) of patients with bacteriologically confirmed TB and CD4 < 200 were diagnosed using LAM. The additional diagnostic yield when adding LAM was 19.3% for this cohort, compared with clinical signs and microscopy alone. In Maputo, Mozambique, using LAM as a diagnostic tool for all ambulatory patients with symptoms of TB and CD4 < 200 demonstrated a positivity of 44.8% (128/286). Positivity rate among patients with CD4 100-199 specifically was 44.4% (24/54). In Chiradzulu, Malawi, using LAM in hospitalised patients regardless of symptoms showed a positivity of 30.0% (60/200) in patients with CD4 < 200 and 20.6% (13/63) in patients with CD4 100-199. Finally, the literature review identified 14 additional studies published since March 2015 which further substantiate the need to expand use of LAM to HIV+ individuals with CD4 < 200.

Conclusions/Next steps:

In conclusion, WHO should consider expanding current guidelines to include the use of LAM to diagnose TB in an expanded cohort of HIV+ individuals with CD4 < 200.

HIV prevention and linkage to care among female sex workers in Malawi: Results and lessons learned from the MSF Corridor Project

Thursday 26/07, 12:30-14:30, Poster Exhibition area, Hall 1. Category C53.

Ester Orban, Altynay Shigayeva, Patrick Mangochi, Julia Jung, Lucy O`Connell, Tom Ellman, Raphael Piringu & Reinaldo Ortuno

Background:

Mobile populations, especially sex workers (SWs), are particularly vulnerable and at high risk for HIV infection. The aim of the MSF Corridor project is to reduce HIV/AIDS and TB related morbidity, mortality and incidence among female SWs in Malawi by providing adapted models of care including prevention, access and continuity of integrated HIV, TB, and SRH care through tailored services targeting this key population.

Methods:

The project is set in three sites along the transport corridors from the Mozambican border into Malawi. SWs are enrolled into the program by peer educators during community outreach activities. HIV prevention, testing, and counselling are offered on-site, including Syphilis and pregnancy testing, STI and TB screening, and referrals for ART treatment and SRH services. Data on the outreach activities and ART information is collected via paper-based forms.

Results:

By the end of 2017, 3103 SWs were enrolled. Of those, 50% were HIV positive. HIV positivity rate was 22.8% amongst 9-18 years old SWs and 54.2% for those older 18-66 years. The active cohort (seen in outreach visit during the last 6 months) by end of 2017 comprised 1282 (41.3%). Of the HIV positive active cohort, 81.8% (493/603) were on ART and of those newly diagnosed or not on ART at enrolment, 51.1% (115/225) were initiated in the sites. Of the HIV negative SWs, 59% were seen and tested only once, 22% had two, 10% had three and only few had five or more tests. 32 SWs sero-converted during their follow up with an overall incidence of 5.9 (95% CI 4.2-8.3) per 100 person years – for SWs 9-18 years 9.3 (5.0-17.3) and for women who were 18-66 years 5.0 (3.2-7.6) respectively.

Conclusions:

The program has succeeded in reaching and enrolling a large number of beneficiaries interested in the offered services. The high HIV prevalence and incidence demonstrate the extreme risk among this group and the importance of community strategies to improve access to re-/testing, treatment and prevention, including oral HIV self-testing and PREP. Innovative strategies and further efforts are needed to reach this highly mobile population to enable access to prevention and retention in care.

Post Natal Clubs: a differentiated model of care integrating maternal, child health and prevention of mother to child transmission (PMTCT) in Khayelitsha, South Africa

Thursday 26/07, 12:30-14:30, Poster Exhibition area, Hall 1. Category E17.

AK Nelson¹, T Cassidy^{1,2}, L Trivino Duran¹, A Hoxha¹, K Buchanan¹, A Shroufi¹, R Uenishi¹, N Matangana¹, L Mdani¹, E Mohr¹, V De Azevedo³, S Abrahams³, C Hofmeyr⁴ & J Igumbor⁴

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Background:

Methods:

We adapted the adult ART adherence club model to provide double integration of care (maternal health, child health and HIV services) and components of the first 1000 days (mental health, nutrition advice and early childhood development activities) to HIV-positive mothers (stable and high risk) and their HIV-exposed-uninfected infants. The model was piloted at Town2 clinic, where antenatal prevalence is 34%, from June 2016 until now. Post Natal Clubs (PNC) were formed according to the infants' dates of birth into clubs of 2-10 MIP and were held at regular intervals (1-3 monthly) until 18 months of age. We analyzed and described maternal and child data routinely collected during the intervention.

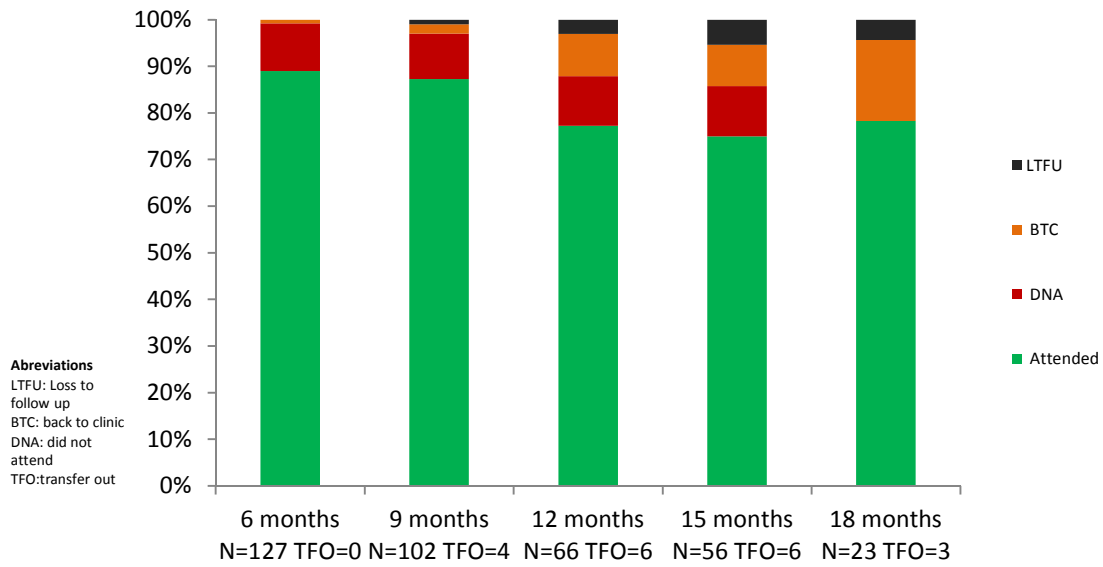
Results:

From July 2016 to December 2017, we recruited 227 mothers (8 high risk) and 232 infants (5 twins). Of the mothers who joined a PNC from week 10, 78% were still in care at 18 months (see graph 1). For the overall cohort, uptake of infants' 9 months and 18 months tests was 140/153 (91.5%) and 44/52 (84.6%) respectively with 0% positivity rate. Infants' vaccination coverage at 12 months was 75/93 (84.6%). Of the 88 mothers completing the 18 months intervention, 47 received a pap smear (53.4%) and 12 had an intra-uterine device inserted (13.6%). There were 46 instances of positive mental health screens out of 432 done (10.1%). Maternal viral load testing decreased over time but suppression remained high (see graph 1).

Conclusions:

PNCs have shown good early retention-in-care for the MIP, good viral load suppression for the mother, optimal testing uptake for the child and efficient integration of services for the mother and infant pair. Implementation and monitoring challenges of the model are being worked on for future scalability and qualitative research is being conducted.

Graph 1: Proportion of mothers attending PNC visit*



*Denominator at each point is those with enough follow-up time to be due for the visit. Only those who joined a club from week 10 are included

Table 1: Viral load completion and suppression in the PNC

Viral Load	Number	
	due	Complete* Suppressed
week 10	166	151(91%) 146 (97%)
month 6	127	107(84%) 102 (95%)
month 12	72	44(61%) 43 (98%)
month 18	26	15(58%) 14 (93%)

*some capturing still underway

Second line ART switching in Mozambique: coverage and time line.

Thursday 26/07, 12:30-14:30, Poster Exhibition area, Hall 1. Category C20.

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¹Médecins Sans Frontières, Maputo, Mozambique

²Médecins Sans Frontières-Belgique, Maputo, Mozambique

Background:

For HIV patients failing on first line treatment, switching to second line ART can be crucial for treatment success. In Mozambique, during the time of this study, all second line ART switching of suspected therapeutic failure cases had to be approved by the National or an autonomous Provincial ART Committee. The purpose of this analyzes is to determine the percentage of patients with virological failure (two viral loads ≥ 1000 cp/mL) who were submitted to the ART committee, approved to switch and that effectively switched to 2ndline ART, and the time it took for each one of these steps to occur.

Methods:

A retrospective cohort study design with routine program data was used. The study was conducted between October 2013 and March 2016 in 18 MSF supported health centers of Maputo and Tete, including a referral center for HIV treatment - CRAM in Maputo, where routine VL was implemented. All eligible patients with 2 high viral loads (≥ 1000 cp/mL) were included in the study. Standard descriptive statistics were used to report all results.

Results:

Among 1,934 ART patients with two high viral loads, only 37% were referred to the ART Committee. Of these, 96% were approved for switching to a 2nd line ART and 71% switched regimens. Effectively, 27% of all patients with virologic failure switched to 2nd line ART. The median of days between: the 2nd high VL sample collection date and referral to the ART Committee was 183 days; referral to the ART Committee and approval was 5 days and approval by the ART Committee and switch to 2nd line was 28 days. The whole cascade of 2nd line switch lasted a median of 216 days. Results differ between health centers of Maputo, Tete and CRAM.

Conclusions:

These results highlight the complexity and delay in switching patients with 1st line treatment failure to 2nd line regimens. The referral of patients to the ART Committee is challenging and access to second-line ART is low. Factors contributing towards these values include a resistance of the clinician to switch patients, stock out of 2nd line drugs and lost to follow up, among others.

Retention-in-care after implementation of a phone-call tracing strategy, in HIV-infected individuals on ART in Guinea

Poster Exhibition area, Hall 1. Category C52.

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³ISGlobal, Barcelona, Spain

Background:

Retention in care at 12 months remains below 90% in HIV cohorts followed by MSF in Conakry, Guinea. MSF has implemented differentiated-models-of-care to serve the needs of people leaving with HIV/AIDS; among them the phone-call tracing strategy directed at patients who missed a follow-up visit. We describe the impact of this strategy on long-term retention in care.

Methods:

This is a retrospective study based on routinely collected MSF program data. The eligible population was HIV patients on ART enrolled at Matam clinic, who missed a scheduled appointment between 2014-16. Cox proportional hazards models were used to assess the association between the phone call strategy and attrition from care 12 months following missed visit in order to obtain the adjusted hazard ratio (AHR) after adjusting for other demographic and clinical factors.

Results:

2153 patients with a median of 3.7 years (IQR 1.4 – 5.9) on antiretroviral treatment among those with a contact on file and 2.8 years (IQR 0.6 -5.7) among those without a phone contact, with a total of 3261 missed appointments were included in the analysis. In 37% (n=1203) of the missed appointments the patient was successfully reached by telephone. Amongst the other 63% (n=2058) missed appointments, 41% (n=1342) could not be reached because there was no contact number in the patients file. 33% (n=718) patients returned to care after being telephoned. Thirty-nine percent (n=864) of patients had 6 month spacing between visits.

As compared to individuals reached by telephone, the risk of attrition was significantly higher amongst those that could not be telephoned, but had a telephone (HR=2.05, 95%CI: 1.45-2.91 / AHR=1.86, 95%CI: 1.31-2.64), and those that had no available contact details (HR=1.40, 95%CI: 1.02-1.93/AHR=1.34, 95%CI: 0.97-1.84). Those that did not have 6 month spacing between appointments, had the highest risk of attrition after a missed appointment both before and after adjustment for other factors (HR=3.28, 95%CI: 2.29-4.68 / AHR=3.55, 95%CI:2.61-4.83).

Conclusions:

Contacting patients via telephone and implementing six-month visit spacing for stable patients, both elements of differentiated care, are associated with decreased attrition from care. Nevertheless, in order to maximize efficiency, it is important to ensure contact details are updated in the patient file regularly. Additional understanding of the profiles of patients needing more attention will help to contextualize such interventions.

Raising awareness of HIV status among learners through school-based testing in King Cetshwayo District, KwaZulu-Natal

Poster Exhibition area, Hall 1. Category E41.

Presented by Gilles Van Cutsem

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Background:

Since 2011, Médecins Sans Frontières (MSF) has partnered with the Department of Health (DoH) in wards 1-14, uMlalazi, King Cetshwayo District, KwaZulu-Natal, to decrease HIV-related mortality and morbidity. A 2013 population survey by MSF estimated that new HIV infections were highest among those aged 15-29, with incidence among young women reaching a peak of 6.2% at age 19. To reach part of this population, MSF began working with the Department of Basic Education (DBE) in 2012 to provide health services at secondary schools. These activities are in line with the national Integrated School Health Policy, and contribute toward reducing HIV infections in line with the 2017 National DBE Policy on HIV, TB and STIs.

Description:

MSF conducts annual visits for grade 8-12 learners in 32 secondary schools commencing with DBE-approved age-appropriate health education sessions promoting behaviour which prevents HIV infection and the importance of knowing your HIV status. Following the education sessions voluntary HTS, pregnancy testing, condoms, and screening for STIs and TB are offered to learners in a mobile van. HIV-positive learners are referred to a DoH facility and linked to a Learner Support Agent or Life Orientation Educator, whom MSF has trained to be year-round focal points within schools. Additionally, young males are recruited for voluntary male medical circumcision.

Health promotion in schools has increased from reaching 11,088 learners in 2013 to 14,636 learners in 2017. Between 2013 and 2017, the number of HIV tests conducted increased from 4,474 to 6,591 while positivity rates declined (Figure 1). In 2017, 45% of learners (n=6591) accepted HTS, with 1% (n=65) testing positive.

Lessons Learned:

Annual HTS with health promotion provides a safe space for learners to know their HIV status. HIV focal points in schools facilitate support and linkage to care for HIV-positive learners, and encourage healthy behavior.

Conclusions/Next Steps:

It is feasible to deliver these services in a mobile outreach model and a core element of implementing the National DBE policy should be that districts with high HIV burdens in South Africa should introduce annual HTS with Health Promotion on knowing HIV status, and train and establish HIV focal points among educators in schools.

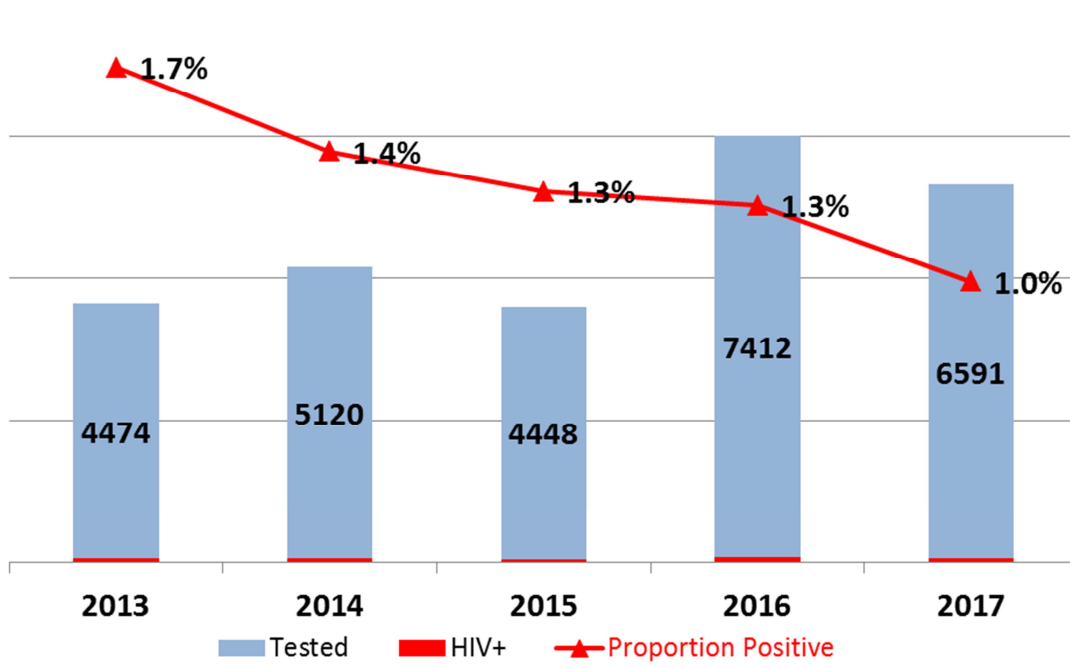


Figure 1: Numbers tested for HIV and proportion positive at schools, 2013-2017