

CD4 point-of-care testing as intervention improving linkage to care - lessons learned from Poland.

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Background

- Point-of-care CD4 T-cells testing has been proposed as method to shorten the time from HIV diagnosis to antiretroviral therapy (cART) initiation thus improve clinical outcomes.
- Investigate impact on linkage to care in community-based voluntary counselling and testing (CBVCT) in central Poland.

Methods

- All clients who presented at two CBVCT in Warsaw and had positive ELISA test has been offered a CD4 count testing simultaneously with WB test, however as an extra blood sample. All tests were anonymous.
- The CD4 test results has been given at the same time as WB result.
- Data collected in 2010-2013 in CBVCTs were linked with HIV clinics records using WB test number as unique identifiers. Individuals were followed from the day of CBVCTs visit until first clinical visit or 4/06/2014.
- Persons registered in HIV clinics were considered linked to care.

Results

- In total 123 clients were tested HIV-positive in CBVCT in 2012-2013.
- 30 had CD4 count tested. 42 (65.8%) clients were linked to HIV care. Linkage rate did not differ between CD4 testing groups (66.7% of tested vs 65.6% of not tested for CD4; $p=0.91$). There was no significance difference in time to linkage, $p=0.52$.
- In total 81 (65,8%) clients started cART. 19 (28,8) in CD4 group and 47 (71,2) in others ($p=0,07$). There was significant difference in time to starting cART, $p=0.005$ – Table 1.

Conclusions

- In Poland, a resource rich country, CD4 point of care testing had no effect on linkage to care, but positive impact on time to starting cART.
- This may reflect increased patients awareness regarding treatment benefit received from additional consultation with CBVCT counsellors. But people who had never HIV test before decided for CD4 test more often.

Table 1. Group characteristic

Characteristic	All N=123	CD4 tested at CBVCT N=30	CD4 not tested in CBVCT N=93	P value
Age in years <i>Median (IQR)</i>	30.0 (26.2-35.2)	30.2 (25.4-36.3)	30.0 (26.4-34.2)	0.84
MSM <i>N (%)</i>	98 (79.7)	24 (80.0)	74 (79.6)	0.96
Higher education <i>N (%)</i>	94 (76.4)	26 (86.7)	68 (73.1)	0.27
HIV-positive partner <i>N (%)</i>	25 (20.3)	5 (16.7)	20 (21.5)	0.57
Never tested for HIV before <i>N (%)</i>	38 (30.9)	14 (46.7)	24 (25.8)	0.041
Time to first visit at HIV care in months <i>Median (IQR)</i>	0 (0-14)	0 (0-8)	1 (0-15)	0.52
Time to starting ARV in months (for those who started) <i>Median (IQR)</i>	3 (1-14)	1 (0-2.5)	6 (1-16)	0.005
First CD4 at HIV clinic <i>Median (IQR)</i>	389 (284-509)	363 (163-496)	391 (310-509)	0.17
First HIV RNA at HIV clinic <i>Median (IQR)</i>	25344 (5324-117082)	23023 (11656-92293)	25344 (4238-117082)	0.66

