

# DECREASE OF HIV PREVALENCES OVER TIME AMONG PEOPLE WHO INJECT DRUGS (PWID) attending the harm reduction (HR) program of Médecins du Monde (MdM), in Dar Es Salaam, Tanzania



J. Bouscaillou<sup>1</sup>, S. Massawe<sup>2</sup>, A. Voets<sup>2</sup>, S. Pont<sup>2</sup>, M. Prouté<sup>1</sup>, N. Luhmann<sup>1</sup>  
1: Médecins du Monde, France; 2: Médecins du Monde, Tanzania



## → INTRODUCTION

HIV among PWID presents an important challenge to HIV control efforts in Africa. MdM operates a HR program in Temeke district, Dar es Salaam, Tanzania, to reduce HIV transmission and HIV/AIDS-associated morbidity and mortality among PWID. Our analysis aims at describing the evolution of the epidemic from 2011 to 2013 in this most at risk population.

## → METHODS

### PROGRAM

Since 2011, MdM provides needle and syringe programming, testing and counselling for HIV and referral into care and treatment to PWID and non injecting drug users (NIDU)



### DATA COLLECTION

Systematic data collected consist in participants' demographics, date and content of each visit, and screening results for HIV and hepatitis.

### ANALYSIS

#### → Population and HIV status

HIV status at the first screening of the beneficiaries was used to study the prevalence of HIV over time and the risk factors associated with HIV status. Beneficiaries screened between January 2011 and December 2013 were included in the analysis.

#### → Assessing the effect of HR

In order to assess the effect of the activities targeting PWID, we compared the changes over time of the proportion of new HIV cases between PWID and NIDU above 30. Spearman correlation coefficient between year and HIV results was calculated in each group, and compared by bootstrap.

## → RESULTS

### POPULATION

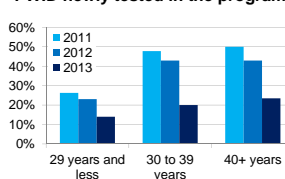
Between January 2011 and December 2013, 1013 people were newly screened for HIV: 118 in 2011, 457 in 2012 and 438 in 2013. Mean age was 33.1, 86% were men, 441 were PWID and 572 NIDU at the moment of screening

### DECREASE OF HIV AMONG PWID

Proportion of PWID testing HIV positive decrease over the years, with 40.0% (95%Confidence Interval (95CI) 30.3 – 49.7) in 2011, 31.3% (95CI 25 – 37.8) in 2012 and 17.8% (95CI 12 – 25.3) in 2013 (test for trend  $p < 0.001$ ). Year of testing remains significantly associated with HIV status after adjustment for age and sex. Increasing age and being a women were also associated with positive HIV status, with adjusted odd ratios of 1.05 (1.01 – 1.08) and 3.81 (95CI 1.92 - 7.55) respectively.

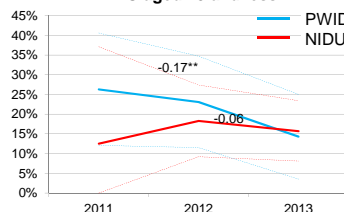
	HIV+	p
2011	40%	30.3% - 49.7%
2012	34.4%	25% - 37.8%
2013	18.7%	12% - 25.3%
W	53.7%	38.2% - 69.2%
M	27.0%	22.6% - 31.4%
<29	21.2%	14.2% - 28.2%
30-39	31.1%	25.2% - 37%
40+	39.7%	28% - 51.5%

Proportion of HIV+ among PWID newly tested in the program



### COMPARISON WITH NIDU

Proportion of HIV+ among PWID and NIDU aged 29 and less



HIV decrease over time was not observed among non-injecting drug users enrolled in the program. However, the HIV trend over time among PWID was not significantly different from those found among NIDU when tested with bootstrap.

## → DISCUSSION

### MAIN RESULT

We observed a significant decrease of HIV among the PWID newly tested by the program between 2011 and 2013. This decreased was not observed among NIDU.

### HYPOTHESES

This result is potentially related to the efforts made in terms of access to quality HR services in the district in the past few years.

To few NIDU were screened in 2011 and we could not demonstrate a significant difference in the HIV trend between PWID and NIDU. Yet, the absence of decrease over time among NIDU confirm the idea that activities targeting PWID like NSP are effective to prevent new infections.

However, the decrease seems quite fast, especially among people above 30. AIDS related deaths due to the very limited access to ARV in this population could have play a role in this phenomenon. Other confusing factors may have influence d these results.

### RECOMMENDATIONS

HR activities seems effective to prevent HIV transmission among PWID. PWID, and especially women, remain very affected by the epidemic.

- ✓ HR should be scaled up and reinforced in Dar es Salaam, and Tanzania with women friendly activities
- ✓ Access to ARV for PWID should be improved

### Acknowledgment

We thank all our beneficiaries, the whole Tanzanian team, and our partners in Dar Es Salaam – TANPUD, Vama, Mukikute, the Ministry of Health, and the city council of Temeke.

