


**RDS study among PWID in Kohtla-Järve, north-east of
Estonia:
prevalence of HIV and risk behaviours
(an update, based on 2016 study,
and methodological considerations)**



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Methods:



• Studies for assessment risk behaviours and prevalence of infectious diseases among people who inject drugs (PWID) have been conducted in Estonia since 2005



• respondent driven sampling (RDS) was used to recruit PWID



• data collection was conducted from May-June 2016

• participants had to be 18 years or older, speak Russian or Estonian, have been injecting drugs in the last 4 weeks, and be able to provide informed consent

• an interviewer-administered questionnaire in face-to-face interviews was used

• interviews were held in a room of the syringe exchange program

• venous blood was collected from participants and tested for HIV, HCV, HBsAg



Overview of the study



In total of 350 PWIDs from Kohtla-Järve and nearby were recruited

71% (n=249) were male



92% (n=322) were Russian speaking

88% (n=305) lived in Kohtla-Järve or nearby since birth

43% (n=152) reported participation in previous study conducted in the same area in 2012

Mean age*

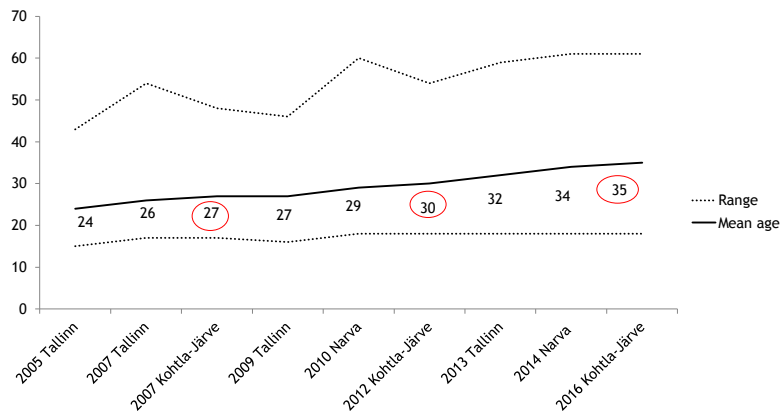
*inclusion criteria was being 18 or older



Mean age was 35 years (range 18 to 61 years)

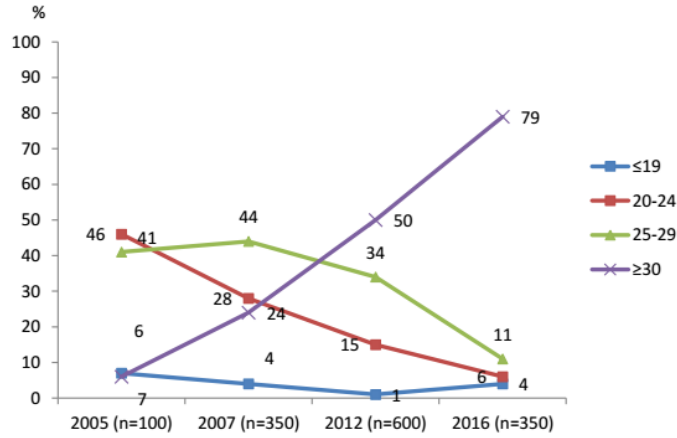


Females were slightly younger than males (32 years versus 35 years)

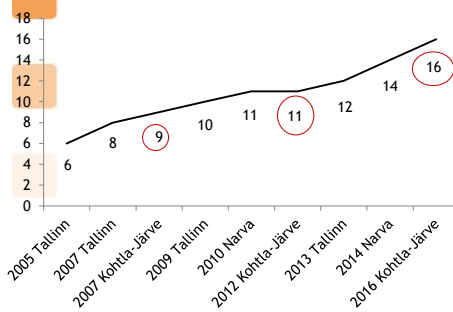




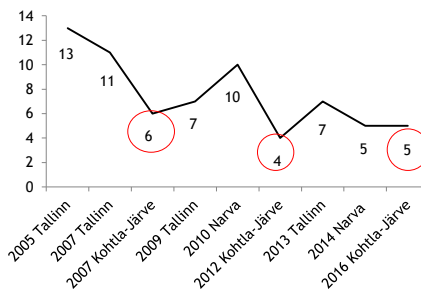
Age group distribution (Kohtla-Järve)



Median duration of injecting drug use (years)



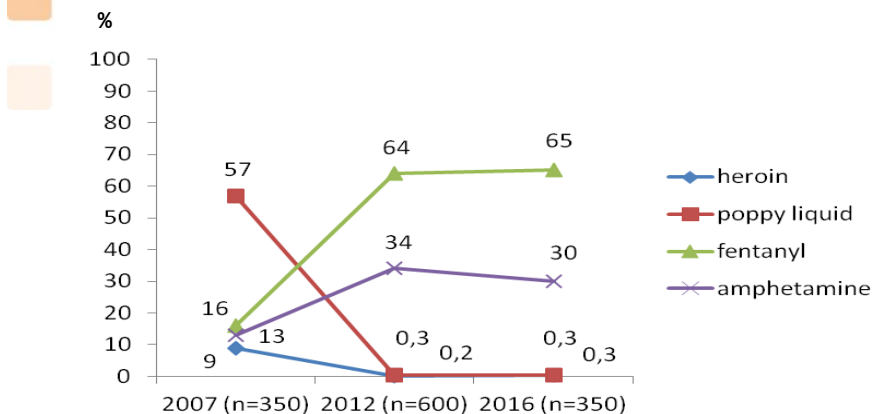
Injecting career 2 years and less (%)



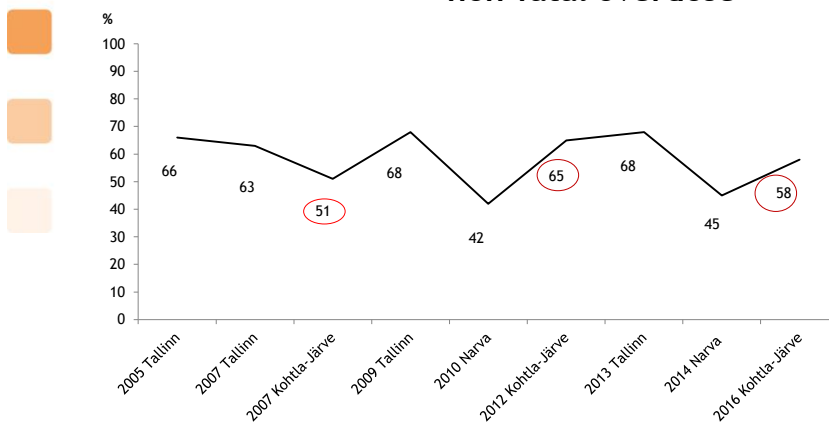
In 2016 study:
the mean age of starting injecting was 18 years (range 10–35 years)

Main drug injected in last 4 weeks (Kohtla-Järve)

The main drugs were fentanyl (65%, n=222) and amphetamine (30%, n=103)



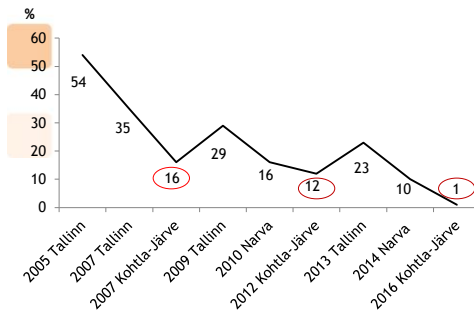
Life-time prevalence of self-reported non-fatal overdose



In 2016 study:

58% (n=201) of respondents self-reported life-time non-fatal overdose experience
15% (n=52) had experienced non-fatal overdose during last year

Sharing of used syringes (last 4 weeks):



Main sources for clean syringes (last 4 weeks) in 2016:

	<i>n</i>	%
Outreach worker	169	51.1
Syringe exchange program	148	44.7
Friends	6	1.8
Pharmacy	5	1.5
Other injecting drug users	2	0.6
Family	1	0.3

2% of participants had never received clean syringes from SEP and/or from outreach worker

85% of participants usually returned used syringes to SEPs or outreach worker

7% threw away into the trash

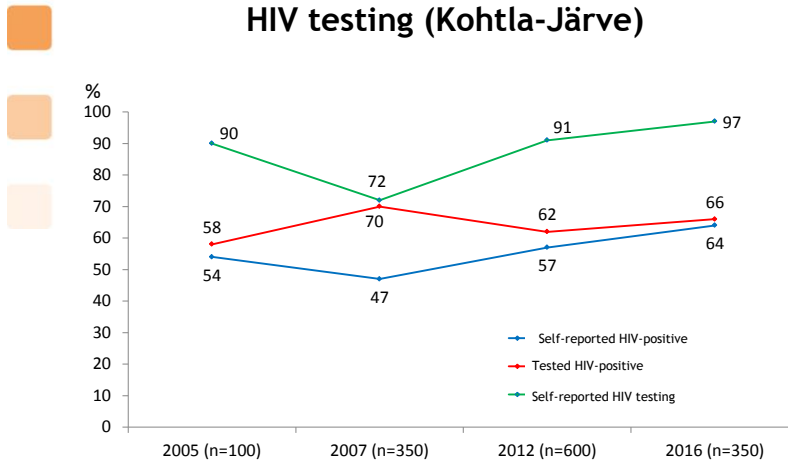
7% gave to a friend who returned to SEPs or to an outreach worker



Prison history (2016 Kohtla-Järve)

- 51% (n=177) of the study participants had prison history during their life
 - mean 3 times (median 3, range 1-12 times)
 - mean 3 years (median 5, range 1 month - 27 years)
- 29% (n=51) injected drugs in prison; 37% (n=19) of them injected drugs during last imprisonment
- Those who injected in prison had, longer period from last imprisonment (median 10 years vs 3 years; p=0,006)
- More HIV (73% vs 60%; p<0,008) and HCV (90% vs 73%; p<0,001) infected among those who had been in prison

Knowledge of HIV serostatus compared to HIV testing (Kohtla-Järve)



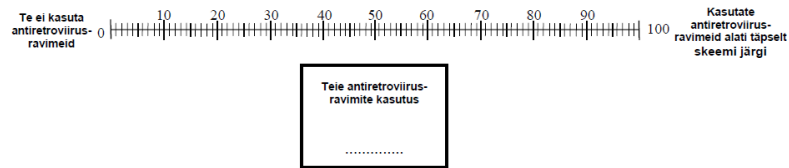
2016 study results (1)

- 91% (n=198) of HIV-positive has been in contact with an infectionist
 - 94% (n=186) of them self-reported visiting infectionist regularly (at least once a year)
 - 89% (n=175) knew their CD4 counts; 87% (n=153) remembered their last CD4 count
 - mean number of CD4 was 395 cells/mm³ (median 350 cells/mm³)
- 95% of them, who started ART, were on ART during the study
- Mean time from the first positive HIV-test to ART was 6 years (range 0-17)

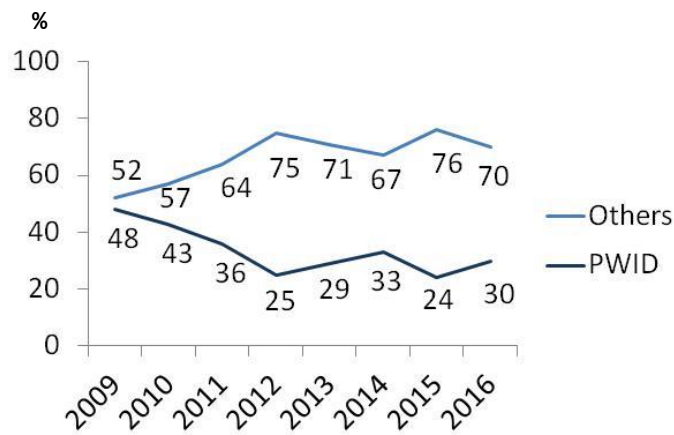
2016 study results (2)



Mean score to self-reported ART adherence was 78 points (median 80, range 20-100)



New HIV cases among clients of anonymous testing centers
by injecting drug use
(according to Estonian National Institute for Health Development data)

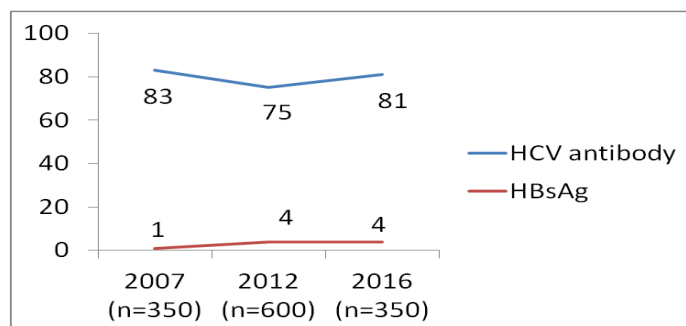


Hepatitis (according to Estonian Health Board data)



- The incidence rate of acute hepatitis B has decreased from 1.2 per 100,000 population (n=16) in 2011 to 0.6 per 100,000 population (n=8) in 2016 (Health Board)
- The incidence rate of acute hepatitis C has decreased from 1.3 per 100,000 population (n=17) in 2011 to 1.1 per 100,000 population (n=15) in 2016 (Health Board)

Hepatitis prevalence (Kohtla-Järve)



- HCV antibody prevalence among PWID ranges from 61 to 94% (81% in 2016 study; 95%CI 77,0-85,4)
- HBsAg prevalence ranges from 3 to 22% (4% in 2016 study; 95% CI 2,0-6,3)

Coinfections (2016 study):

Among HCV-positive persons, 80% were also HIV-positive

Among HIV-positive persons 98% tested HCV-positive

Drug treatment (in 2016 study):



49% (n=172) of the study participants had received drug treatment during their life,

24% (n=84) were on OST during the study

Methodological considerations



- Data collection was conducted from May-June 2016, Kohtla-Järve
- Calculated sample size - n=350
- Study started with 6 PWID (seeds), selected by study team

18 year or older

Drug injecting last 4 weeks

Living in Kohtla-Järve or nearby

Are able to give informed consent to participate in the study

Estonian or Russian speaking

Agrees with the study procedures (incl. HIV, HBV, HCV tests)

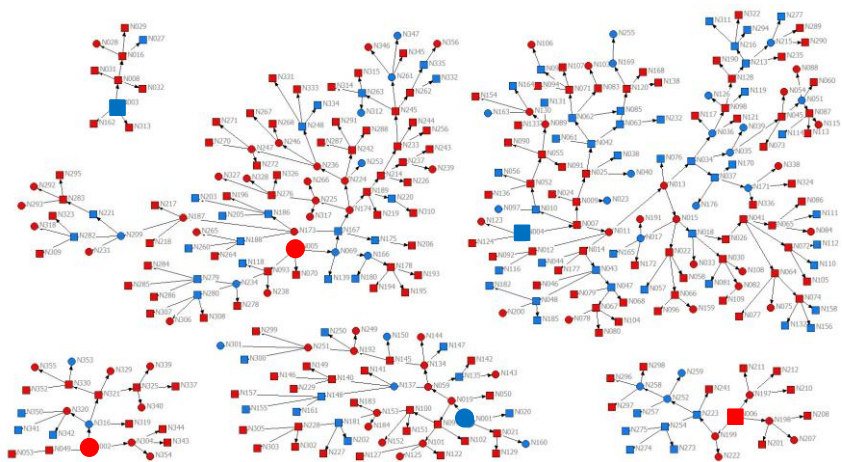
Haven't participated in this study

- ID codes for double checking and further linking to different databases (causes of death registry etc)
- 10 waves - diverse sample

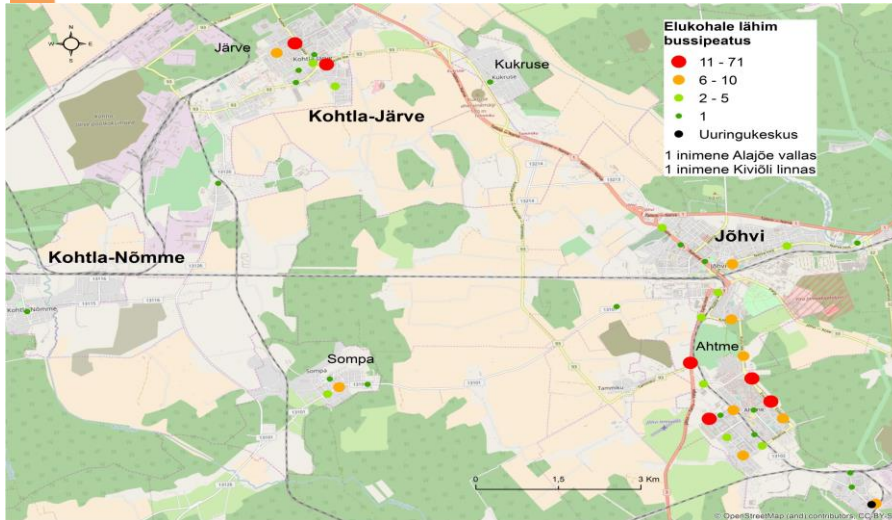
Characteristics of seeds

No of seed	Male	Female	HIV -	HIV +	Russian	Estonian	Amphetamines	Opiates	Sex work	Age
1		x	x		x		x			33
2		x		x	x			x	x	33
3	x		x		x			x		31
4	x		x			x		x		39
5		x		x		x		x		33
6	x			x	x			x		33

Recruitment chains



The nearest bus stop to living place (living primarily in last 6 months)



Thank you!