

DRUCK-Studie

Drogen und chronische Infektionskrankheiten

Sero-behavioural survey among injecting drug users in Germany
using RDS

Preliminary results of pilot study 2011

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HIV/AIDS, STIs and other blood-borne infections

Druck-Studie

- Objectives
- Study design
- Characteristics of pilot study population
- Seroprevalences for HIV, HCV, HBV
- Discussion

Objectives

- To determine HIV, Hepatitis C and Hepatitis B prevalence among IDU in selected German cities
- Collection of representative KABP data (including determining risk profiles)
- To improve prevention of HIV and Hepatitis among PWID in Germany

Study design DRUCK-Studie

- Multicenter cross-sectional study 2012-15 (funded by the MoH)
 - Close collaboration with low-threshold drug facilities
- Recruitment method: **Respondent Driven Sampling**
 - Incentives: 10€ for participation , 5€ for each recruited person
- Anonymous testing – offering participants to receive test-results (pre- and post-test counselling)
 - HIV rapid tests offered
- Sample size calculation: 2000 IDU (in 8 cities)
- 2 pilot cities in 2011 (n=534)

Biological and KAPB data

Capillary Blood (Dried Blood Spots; DBS)

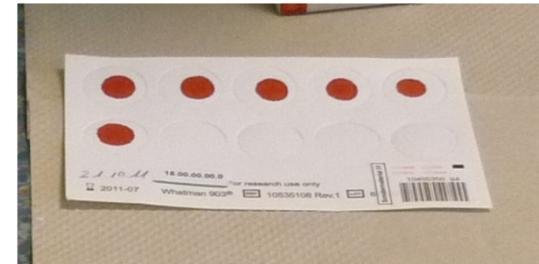
HIV: Anti-HIV: ELISA, Blot

Hepatitis C: Anti-HCV ELISA, Blot

HCV-RNA

Genotyping in a random selection of RNA+ samples

Hepatitis B: HBsAg, Anti-HBs, Anti-HBc, HBV-DNA



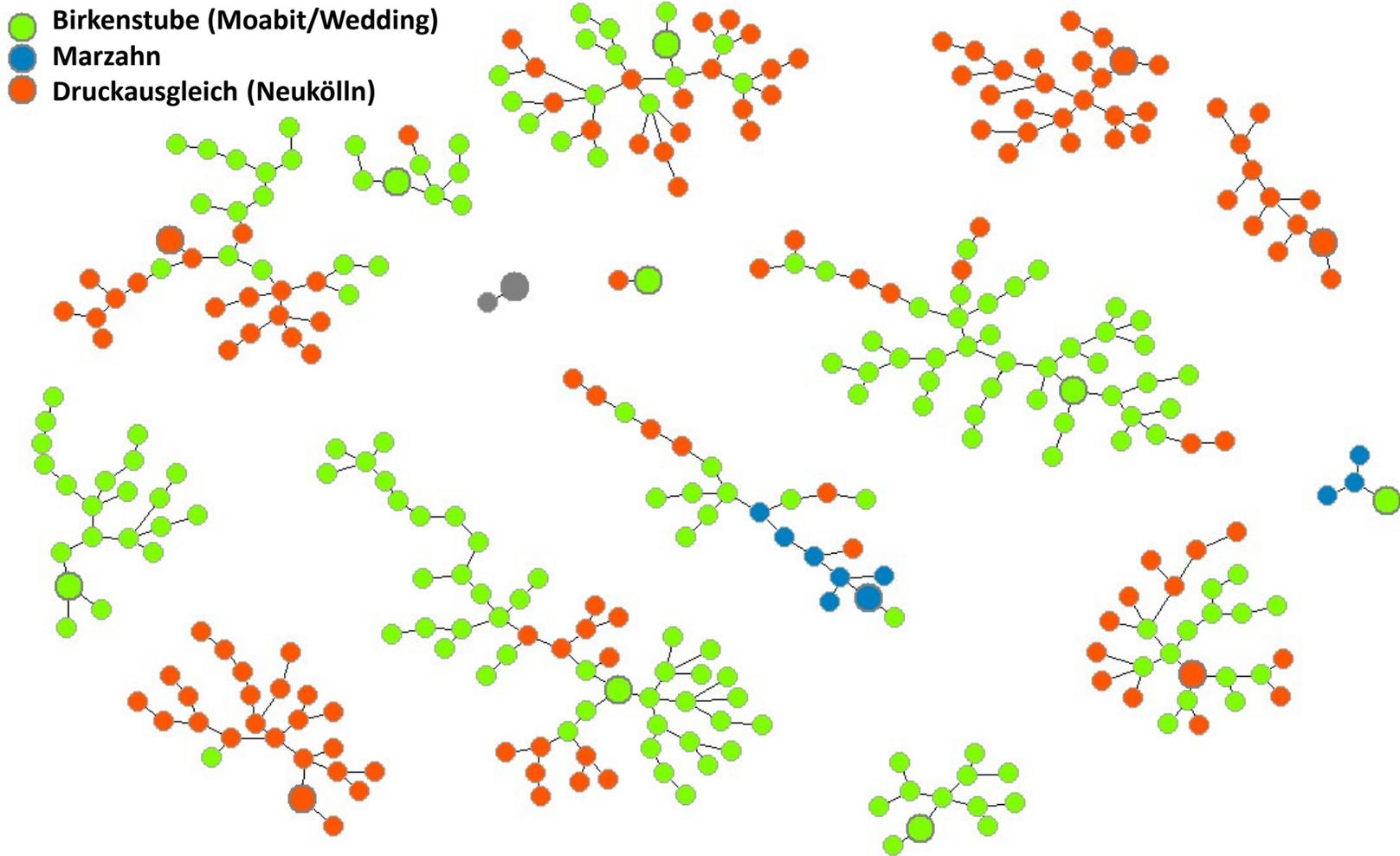
KAPB-data (Knowledge attitudes practices behaviour)

- questionnaire assisted interview (trained interviewer, 30-40 minutes interview)
- Anonymous
- German and Russian version
- Data on network size, sociodemographics, drug consumption, therapy, needle /paraphernalia sharing /sex / health status/ incarceration/ testing history/ knowledge

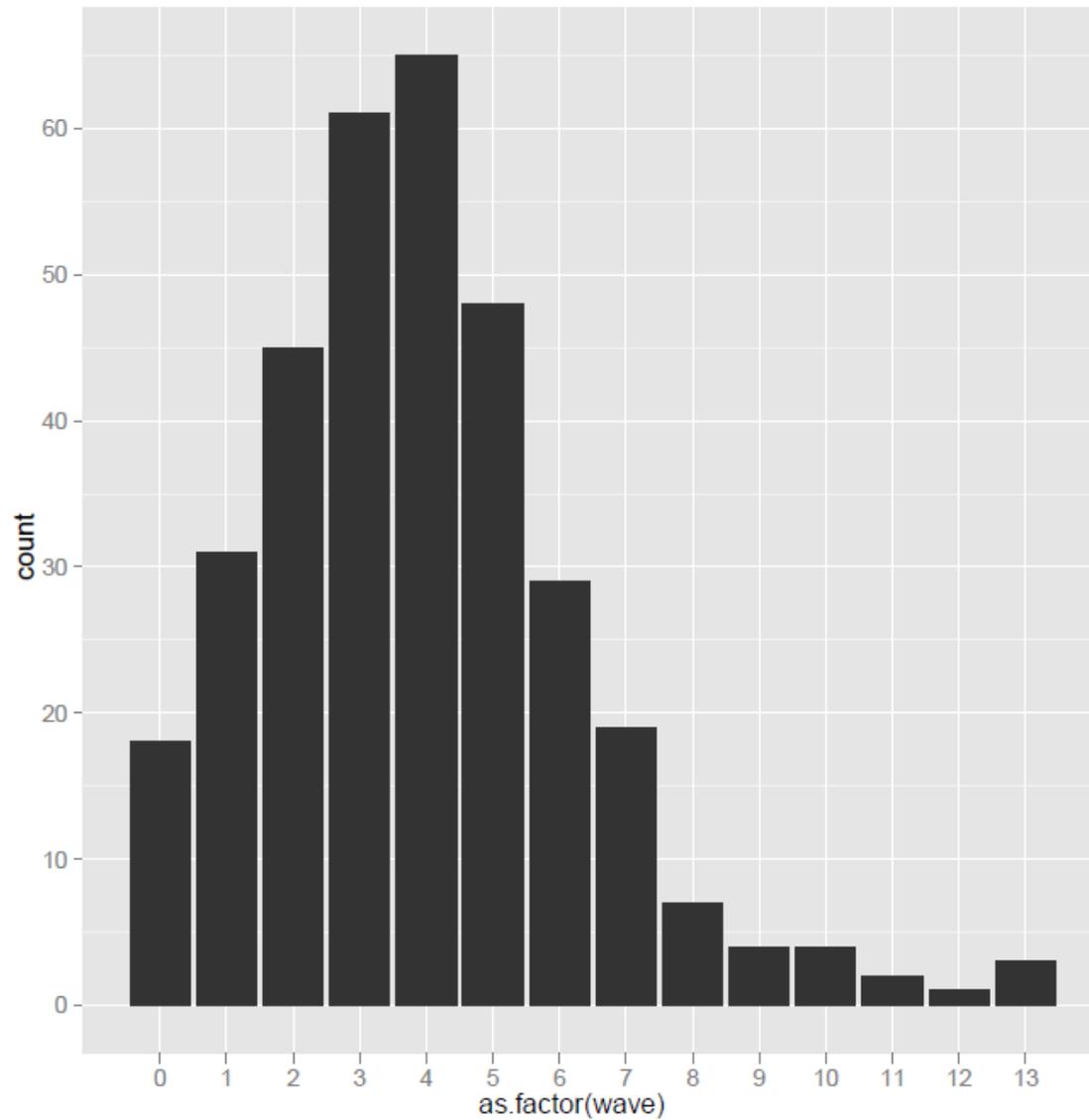
Pilot study 2011

	Berlin	Essen
Inclusion criteria	Injecting in last 12 months, living in the study city, min 16 years old	
Recruitment period	26.05. – 31.07.2011 8 weeks	21.10. – 2.12.2011 6 weeks
Study sites	2 major 2 small	1 Study site
N (participants)	337 (aim: 250 - 400)	197 (aim: 200 – 250)
Proportion female IDU	18% (n=62)	20% (n=39)
Median age (range)	35 y (18 – 60)	38 y (19 – 55)
Proportion Eastern/Central Europeans	26%	13%

Network in Berlin (4 study sites)



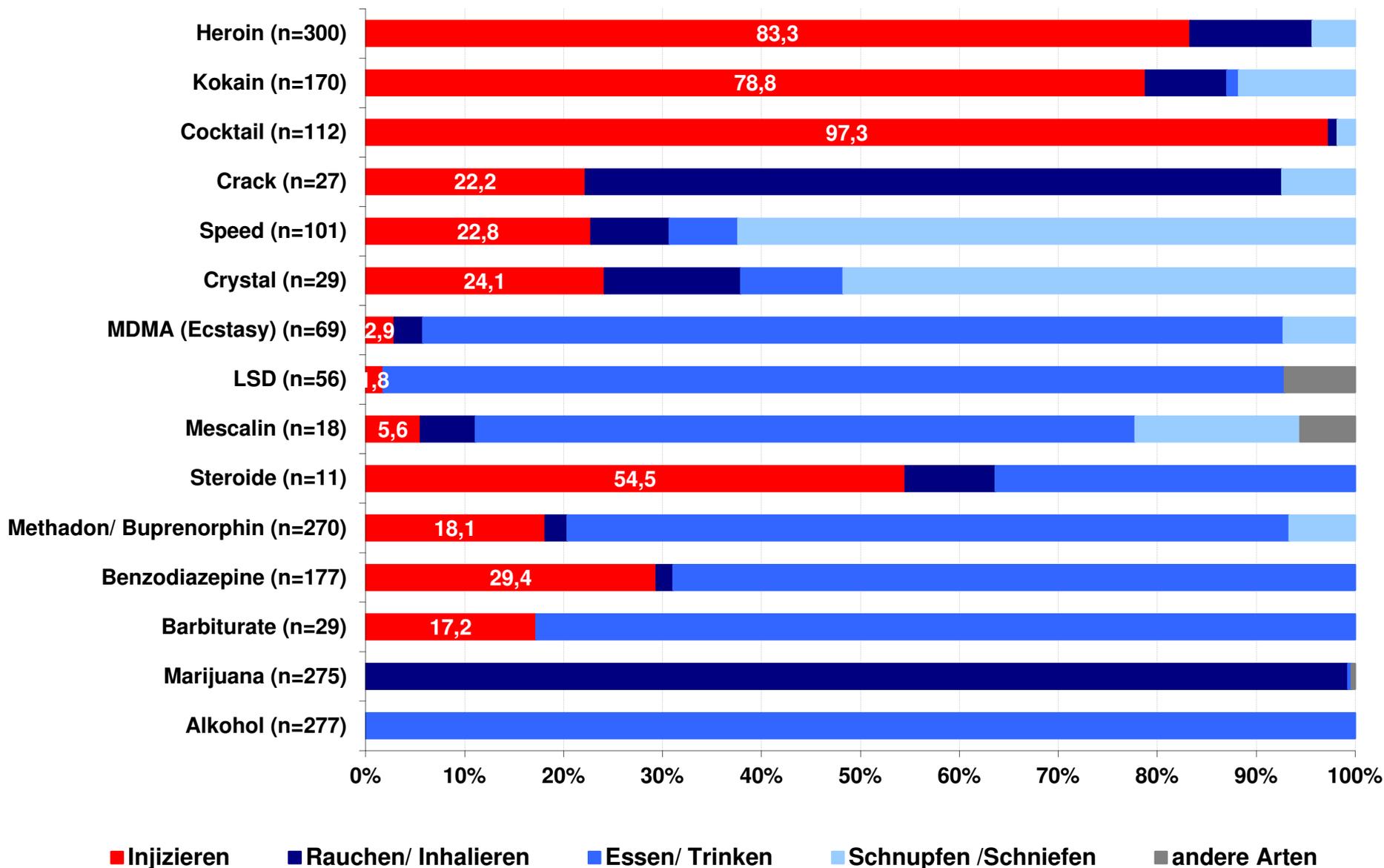
Netzwerkgröße und Rekrutierung pro Welle



Berlin + Essen (n=534)

Currently in OST:	42% (n=223)
Heroin in last 4 weeks:	82% (434/530)
methadon /buprenorphine in last 4 weeks :	82% (365/447)
Ever in prison:	80% (426/533)
Ever injecting in prison:	37% (157/425)
Ever homeless:	64% (340/529)
Age first injection:	22 years
New injectors:	7% (37/530)

Most common way of consumption



Injecting Drug Use (last 30d)

Having injected last 30 d	86%	459/534
injecting daily	36%	165/459
Number sterile n/s obtained (median)		10/15 (0-500)
number of persons using needles/syringes already used by other person	11%	50/444
Number of persons giving used n/s to others	11%	49/439
number of persons sharing n/s/spoons/filter or water	40%	178/447
Number persons with whom n/s were shared		1.2 (median)

Sex partners and condom use (last 12 months)

Sexual intercourse in last 12 months	74% (391/529)
- One steady partner	54% (213/391)
- multiple partners	42% (166/391)
- Number of sexpartners (median, range)	2 (0-112)
condom use last intercourse	44% (152/345)
condom use last intercourse non-steady partner	57% (148/261)
Sex in exchange for money, drugs, etc	8% (32/386)
Condom use when having sex in exchange... (always or sometimes)	84% (26/32)

HIV

	Berlin (n=337)		Essen (n=197)	
	n	%	n	%
Ever HIV tested	298	88%	184	93%
In last 12 months	170	57%	125	68%
Never tested	31	10%	11	6%
HIV positive	13	3.9%	12	6.1%
RDS weighted %		3,9% [1,3%-7,2%]		3% [1,0%-6,2%]

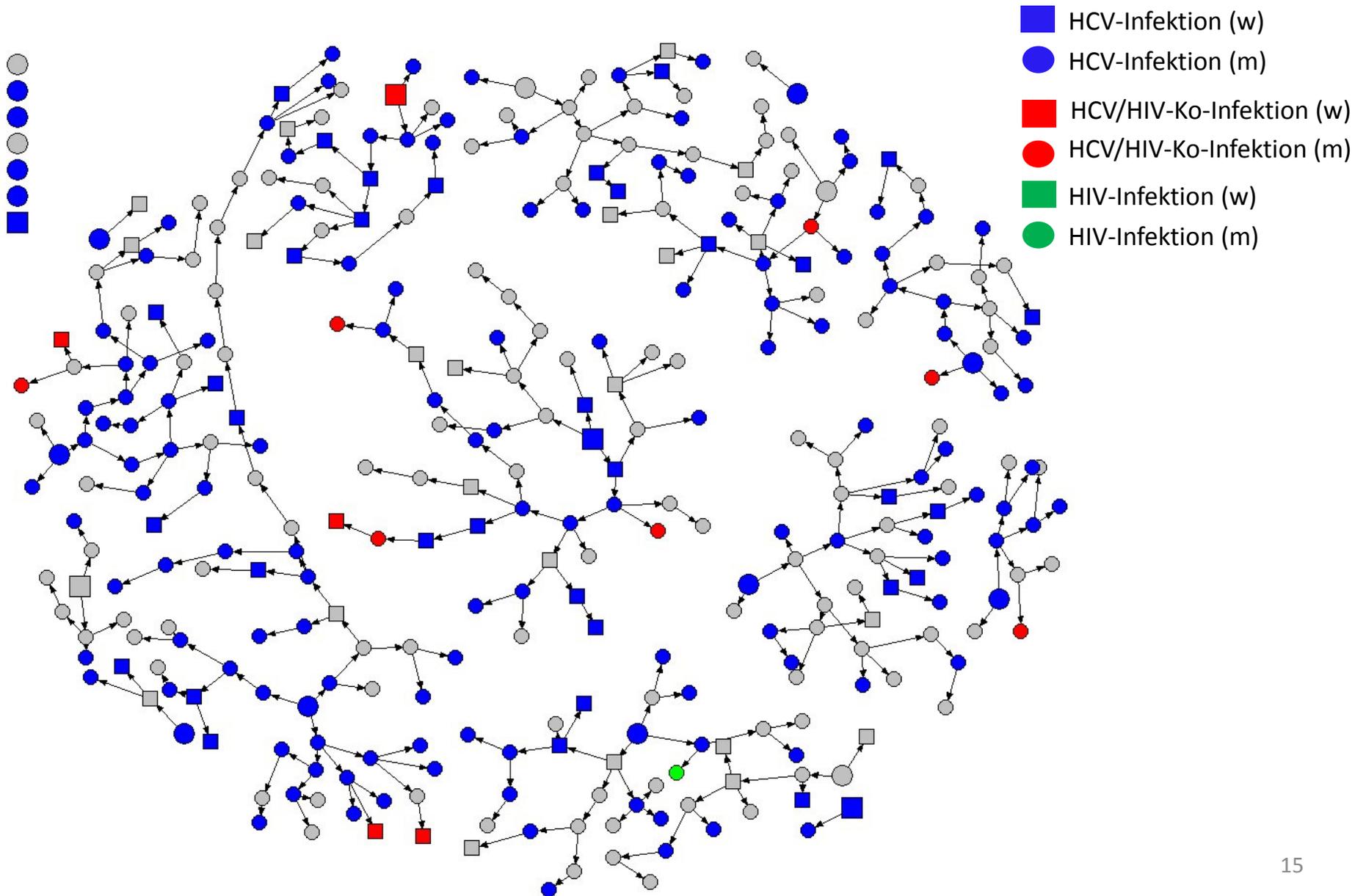
Hepatitis C

Ever HCV tested: 85% (Berlin) 93% (Essen)

	Anti HCV			HCV RNA		
	n	%	RDS weighted %	n	%	RDS weighted %
Berlin (n=337)	193	57,3%	52,5% [44,5%-60,6%]	125	37,1%	36,9% [28,6%-44,7%]
Essen (n=197)	144	73,1%	79,7% [69,3%-86,9%]	89	45,2%	58,0% [43,7%-70,1%]

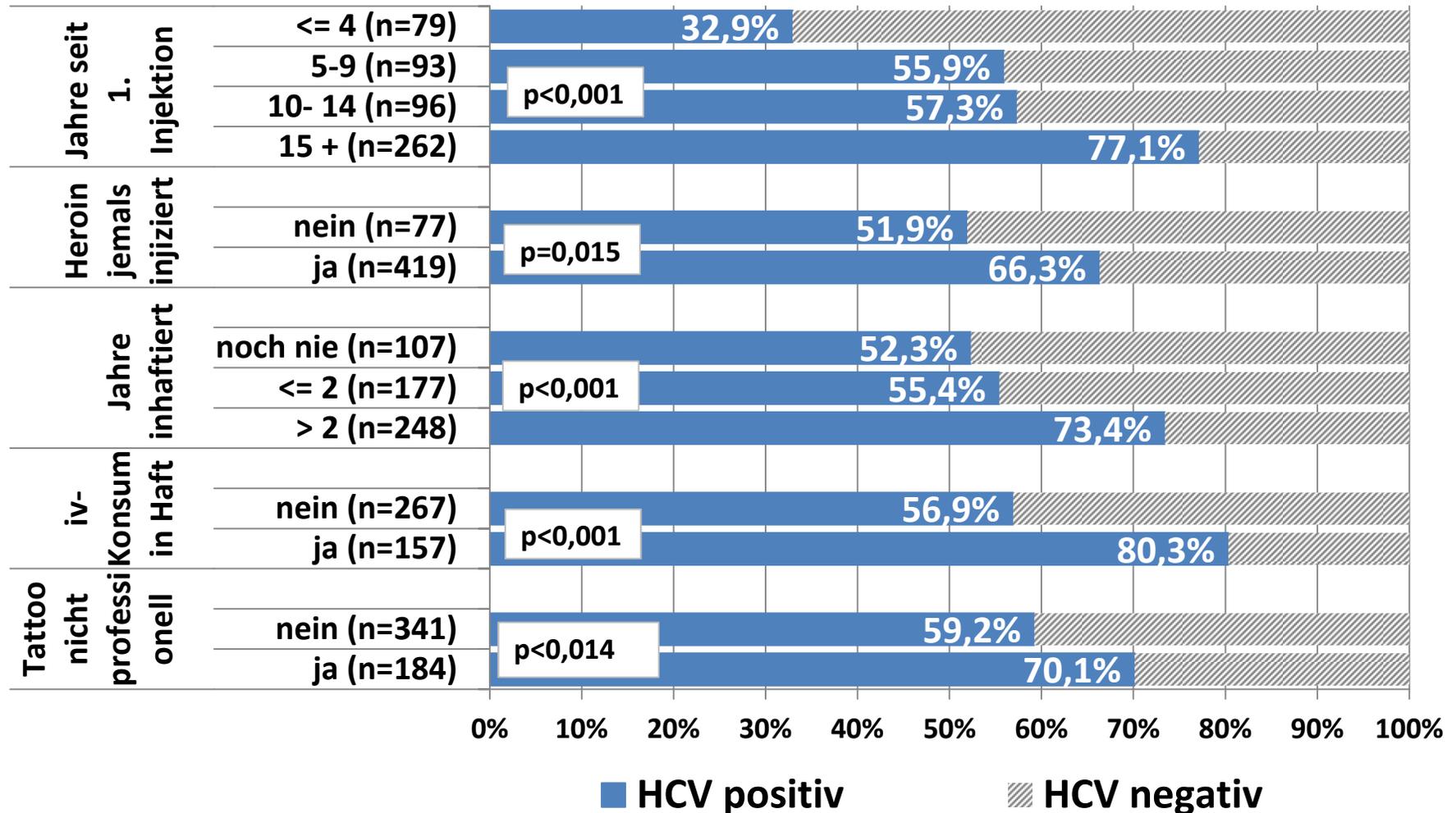
Anti-HCV from DBS: Sensitivity: 97,8%, Specificity: 100%

Network Berlin: HIV/ HCV infections



Characteristics of HCV-positive IDU

(n=534)



HCV positive = Anti HCV+ or HCV-RNA+ oder both

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Hepatitis B Seroprevalences in Berlin und Essen

HBsAg DBS: Sensitivity: 98,6%, Specificity: 100%
 Anti-HBc DBS: Sensitivity : 97,1%, Specificity : 100% (in HIV neg samples)
 Anti-HBs DBS: Sensitivity : 97,5%, Specificity : 100% (in HIV neg samples)

	HBsAg + (Anti HBc +)			Anti HBc/ Anti HBs +			Anti HBs +		
	n	%	RDS weighted %	n	%	RDS weighted %	n	%	RDS weighted %
Berlin (n=337)	1	0,3	0,8% [0%-1,2%]	54	16,0	13,0% [8,5%-18,4%]	51	15,1	17,0% [9,9%-24,8%]
Essen (n=197)	5	2,5	1,9% [0,1%-5,0%]	60	30,5	29,9% [18,6%-43,0%]	45	22,8	19,7% [10,4%-32,9%]

From now on:

- Capture recapture combined with RDS
- Testing for HTLV
- Questions concerning sex, n/s sharing and cleaning of used n/s in prison
- Modification of knowledge questions

Discussion

- Offering test results and HIV rapid testing?
 - staff for pre /posttest counselling, MD
 - Test results logistics (comparing self-reported and lab data)
 - Batch analysis vs higher costs when providing results ASAP
- Value of RDS?
 - Reaching those otherwise not reached by services???
 - Limited in the pilotstudies (<15%)
 - Seroprevalences only for each city not nationwide
- Multiple study sites simultaneously (coupon management issues)

Thank you!



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