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**UNIVERSITÄT
BERN**

HepHIV 2014
5-7 OCTOBER BARCELONA
HIV and Viral Hepatitis: Challenges of Timely Testing and Care

Characteristics of Foreign-born Patients in the Swiss Hepatitis C Cohort Study: Implications for National Screening Recommendations

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HCV screening in Switzerland

- Previously and ongoing: HCV screening of persons with **intravenous drug abuse (IVDA)**
 - Recently, also **foreign-born patients** recognized as risk group
- new Federal Office of Public Health (FOPH) recommendation:
screening of persons born in countries with
HCV-prevalence $\geq 2\%$ (WHO)*

* Negro F Schweiz. Ärztezeitung 2013; Fretz R et al SMW 2013

Background

- Foreign-born persons from prevalence $\geq 2\%$ -countries:
 - Outside Europe: limited number
 - Europe: **Italy** , Romania
- Worldwide, HCV in $\geq 50\%$ transmitted via procedures within the healthcare system

Objective

Characterisation of foreign-born HCV patients
(esp. without history of IVDA)

→ Refinement of the existing screening
recommendations

→ „Fine-tuning“ of whom to screen,
→ Increase of screening feasibility

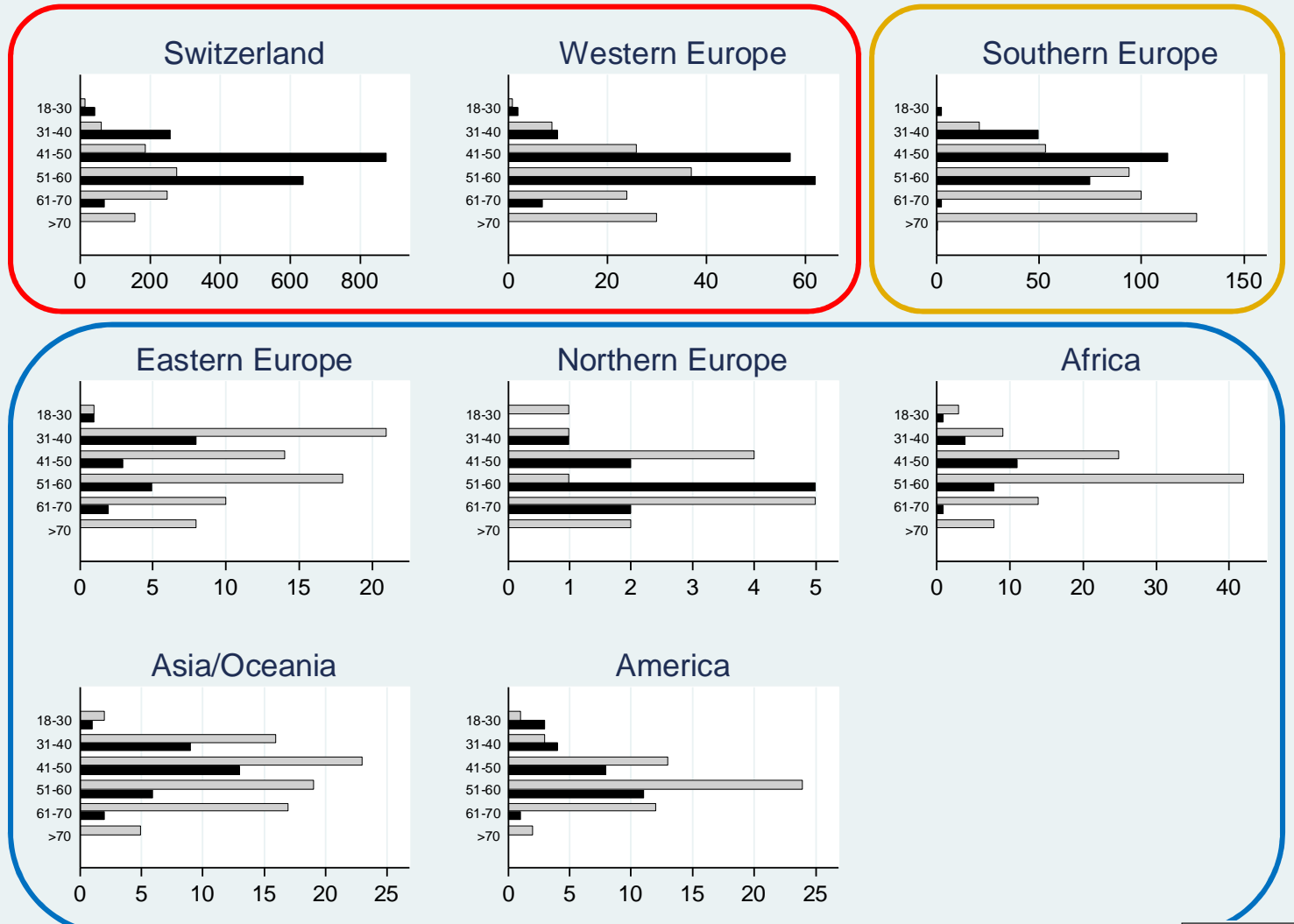


Sources of data

	SCCS At 8 major treatment centres (+ subcentres)	FOPH registry With first HCV diagnose
Data entry	yearly, longitudinal	only initially
Patients	4`252	47`754
Data completeness*	99%	57%

Patients in the SCCS by region of birth, history of IVDA and age

Mostly IVDA



In ≤60 y
both IVDA
and (non-) IVDA

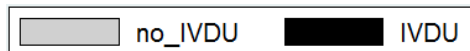
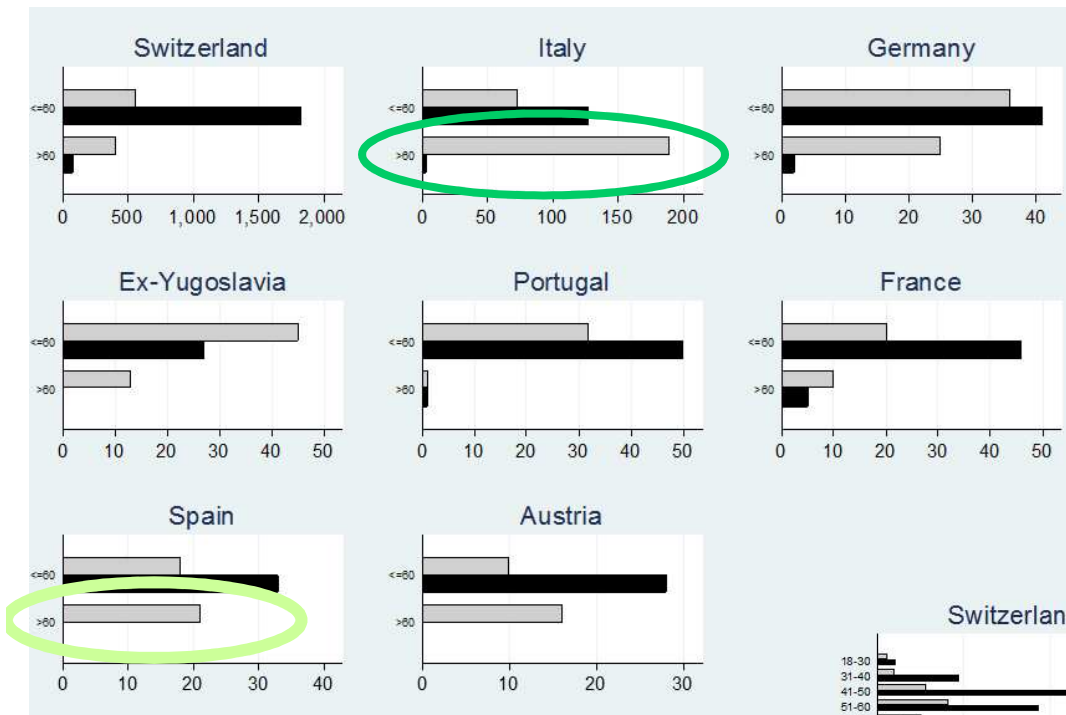
>60y, non-IVDA

Non-IVDA
across
all ages

no_IVDU IVDU

SCCS

Countries with presence of $\geq 1\%$ of patients in SCCS and/ or FOPH registry



Only Italian- and Spanish-borns >60y:
significantly increased compared to
representation in general population

Country of origin	Among SCCS patients* Number / %	Among FOPH registry patients* Number / %	Among Swiss population** Number / %	SCCS resp. FOPH vs Switzerland
Italian-born	194 (22.3)	1280 (16.8)	107881 (6.0)	< 0.001
Spanish-born	21 (2.4)	160 (2.1)	15713 (0.9)	< 0.001

* with information on age, risk group, country of birth

** N = 1'796'774

Italy

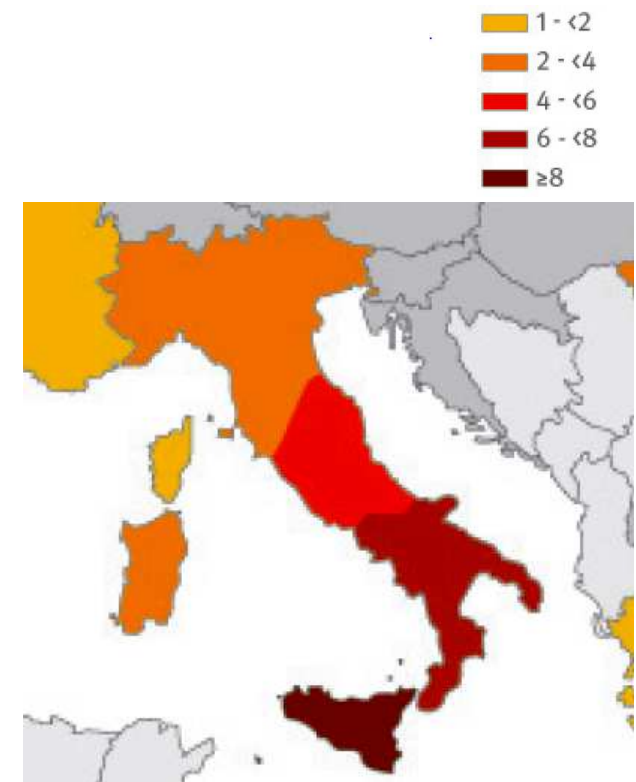
Wave of HCV infections in 1950-1970 especially in Southern Italy

- by parenteral injections with multi-use syringes
- during prolonged hospital stays
- in TB treatment units

Spain:

*↑ prevalence in patients >60 y
risk factors: multi-use of syringes,
hospital treatments*

Review: Cornberg 2011



ECDC

Italian-born patients: IVDU versus non-IVDU (SCCS)

		History of IVDA	No history of IVDA with age >60 y	p-value
Percentage males		82%	58%	< 0.001
HIV positive		12%	1%	< 0.001
Anti-HBc positive		57%	34%	< 0.001
Genotype	1	42%	64%	< 0.001
	2	3%	30%	< 0.001
	3	44%	2%	< 0.001
	4	11%	4%	0.019

→ Patient characteristics clearly different

Cirrhosis in Italian-/Spanish-borns >60y without history of IVDA (SCCS)

Country of birth	Age in 2014	Number	At registration number (%)	During follow-up* number (%)	Child-Pugh class	Deaths / dropouts
Italy, Spain	61-70	90	24 (27)	13 (14)	A = 95%	6 / 23
	71-80	118	39 (33)	16 (14)	A = 89%	17 / 26
	> 81	7	3 (43)	1 (14)	A = 100%	2 / 0

* average time in cohort = 5.2 y for Italian-, 6.3 y for Spanish-borns

- Cirrhosis rate is high and increases with age
- most cirrhosis patients still at earlier stage

Conclusions

- Foreign-born HCV patients: **frequent non-IVDA transmission**. Screening only IVDA patients would miss these.
- Testing in countries with $\geq 2\%$ prevalence: includes **Italian-borns**, misses **Spanish-borns** (>60 y non-IVDA pat.)
- Before screening Italian-/Spanish-borns with non-IVDA and age >60 y:
cost-effectiveness analysis needed, considering:
 - **old age** (mean: 72 years)
 - high rate of **cirrhosis** at earlier stage
- Although the analysis is specific for Switzerland, HCV patient characteristics could help to target screening **also in other countries**

Thank you for your attention!

