

Drug use among prisoners an estimation of the prevalence

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The Swiss Context.

- Approximately 83 prisoners per 100'000 inhabitants (BFS, 2016).
 - Total of 117 prisons (BFS, 2016).
 - Swiss Federal Office for Public Health guarantees *adequate and individualised treatment to every prisoners* (BAG, 2012).
 - Today, Opioid Substitution Treatment (OST) and other prevention measures available in every prison (Pfefferle, 2015).
 - Needle exchange programmes available in ca. 10% of prisons (ebd.).
 - Every prisoners should see GP within 3 weeks after entry (SAMW, 2002 cit. by Moschetti et al., 2015).
- Switzerland not involved in European collaborative research.

The European Context.

- EMCDDA is developing an *European Questionnaire on Drug Use among Prisoners* (EQDP) (EMCDDA, 2014)
- It specifies (Part II, p. 25) ...

«The data collected through surveys in prisons have several limitations (..) It is therefore important to triangulate the survey's results with other information sources, which may come from other studies, routine data collection and other unofficial information sources (Carpentier et al., 2012)».

Swiss routine data indicating drug use among prisoners.

PRISONERS' FILES

1. Legal Files

Legal measure: In-patient treatment for Drug Abuse (Art. 60 StgB)
Condemnation for fraction of Swiss Law on Narcotics

2. Medical Files

Illegal drug use according notes from health care providers
ICD-10 Diagnoses related to illegal substance use
Prescribed medication
Treatment indicators (OST / counselling for detoxification)

3. "Legal-medico" files

Positive drug tests in prison

Methods

the Agequake in Prison Study

“... custody and health care *for ageing prisoners*”.

- Twenty-six (out of 109 in 2012) prisons fulfilled study’s inclusion criteria.
- Fifteen prisons (58%) agreed to participate in the study.
- Files of *all* prisoners, aged 50 and older, collected from those prisons.
- From each prison, same number of files belonging to younger prisoners randomly collected.
- Ethics committees (n=10) of all involved cantons approved the study.

- Files for a total of 406 prisoners transcribed by hand inside prison.
- November 2011 - April 2014.

Limitation of the available data.

- Data was *not* collected for purpose of the present study
→ focuses on health of elderly prisoners in general.
- Older prisoners have lower prevalence rates of illegal drug use than younger.
- Older prisoners (50+) are still a minority in prison population (7% in a Swiss sample: Moschetti et al., 2015).
- Older prisoners make up half (50%) of our sample
→ *age groups have to be analysed separately.*
- Files from females (n=26/two prisons) were excluded for present study.

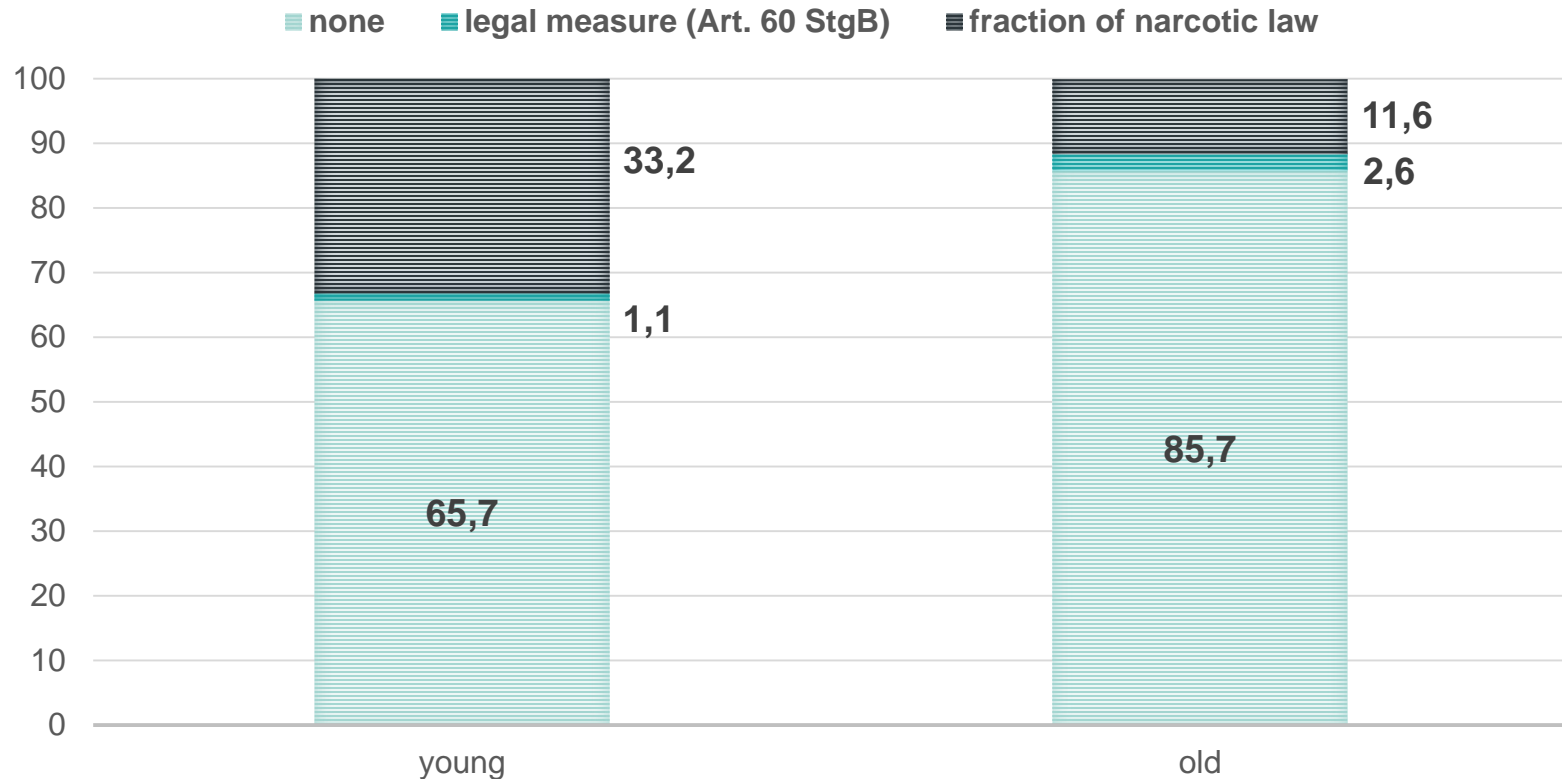
Results

prisoners' files

Sample description.

Males, only	young	old	total
<i>n</i>	190	190	380
Age (years): range	20-49	50-75	20-75
Age (years): mean	34.3	58.8	46.6
Nationality: Swiss [vs. other]	29.5%	64.2%	46.8%
Prison type: closed [vs. (semi-) opened]	64.7%	63.7%	64.2%
Time in prison (years): mean	2.5	5.2	3.8

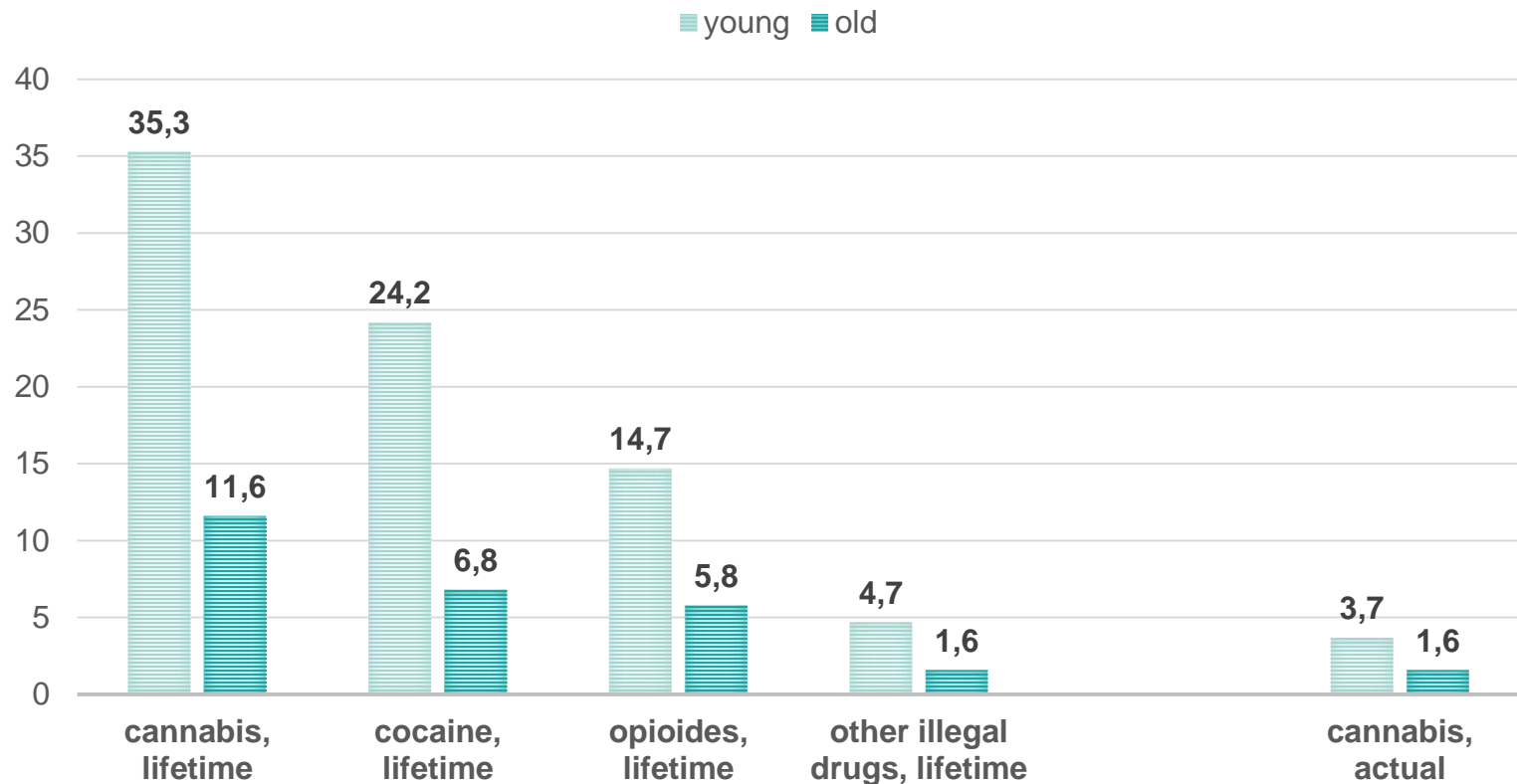
1. Prevalence (%) legal measures and condemnations



young: total n=190 / old: total n=190

2.1 Prevalence (%) illegal drug use

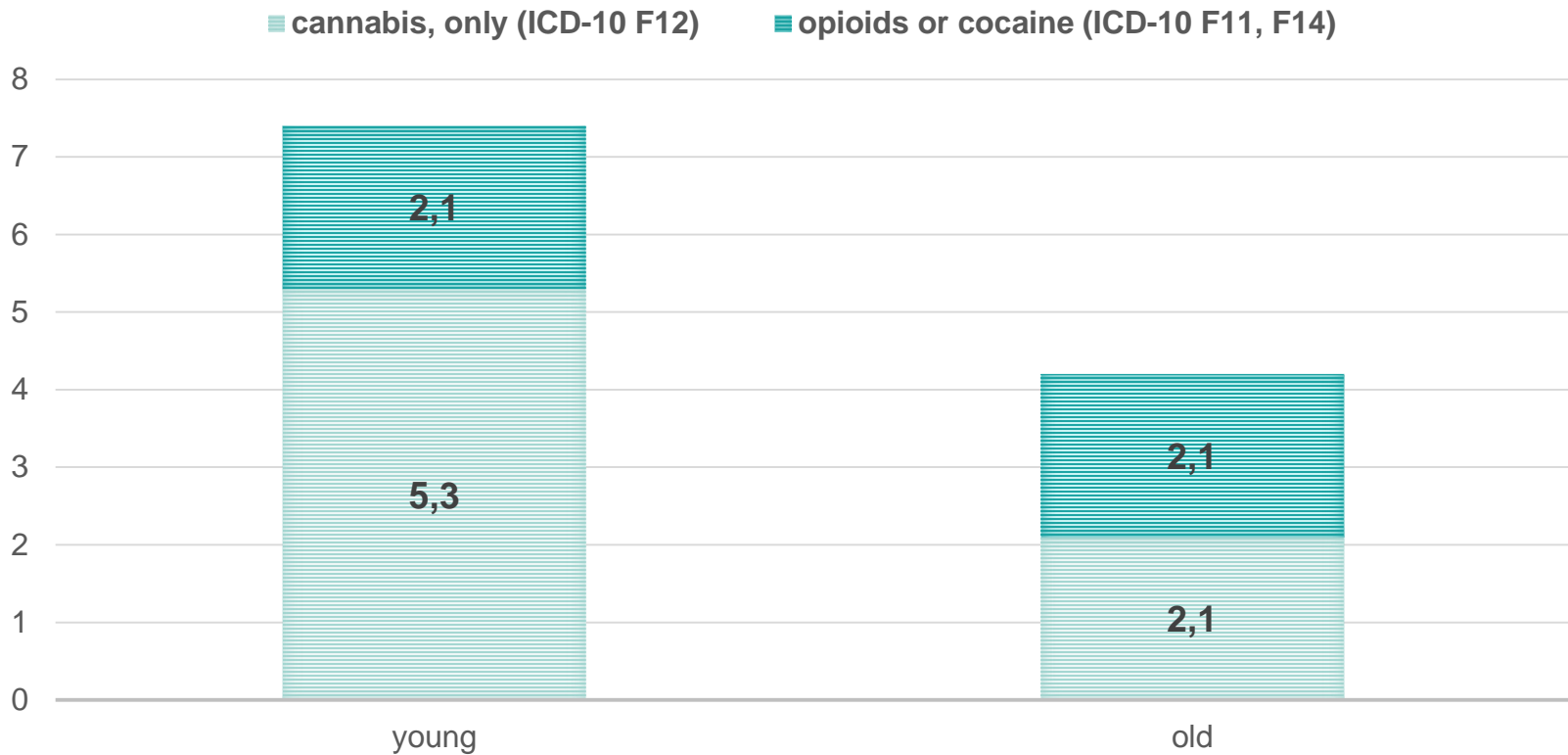
According notes in medical files from physicians



for each category: young total n=190, old total n=190

2.2 Prevalence (%) ICD-10 Diagnoses

Includes ICD-10 F11 (opioids), F12 (cannabis), F14 (cocaine), and F16 (hallucinogens),
not counted are diagnoses for F13 (sedatives/hypnotics), F15 (stimulants), F19 (multiple substance use)



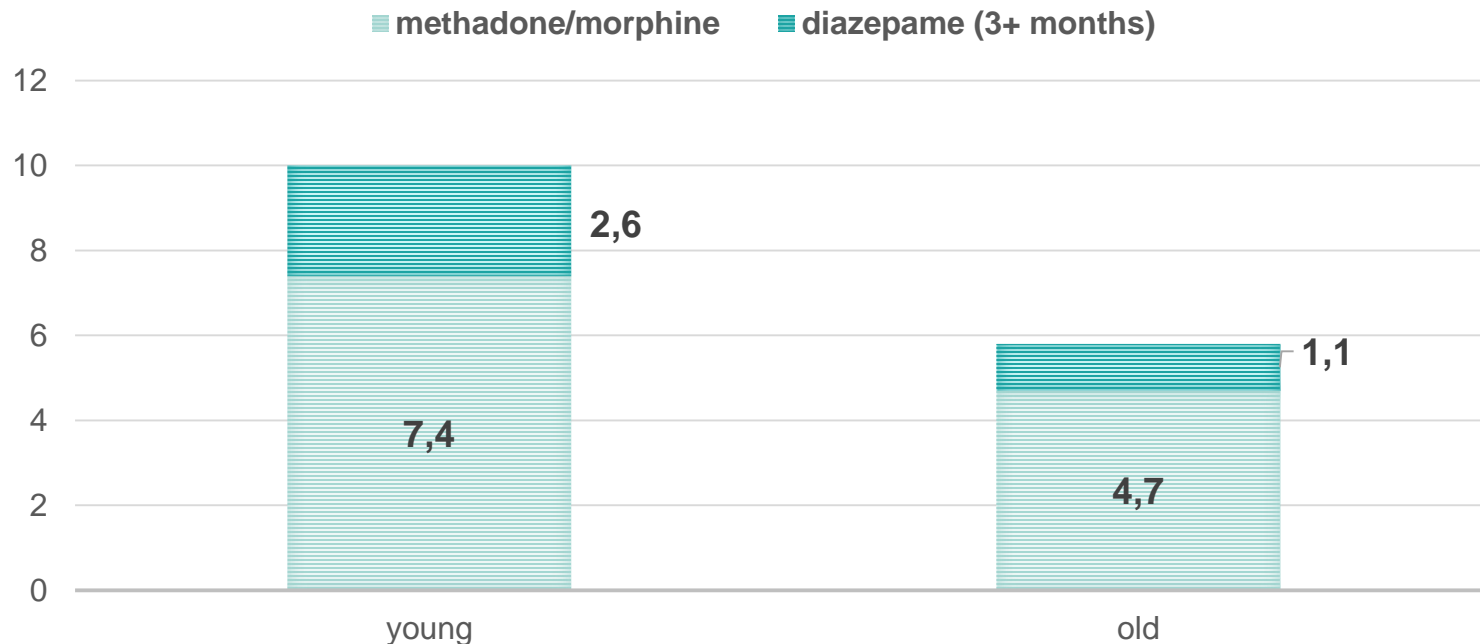
* including 1 case with ICD-diagnose for hallucinogens (F16) in addition to cannabis

young n=190, old n=190

2.3 Medication typically used in treatment of opioid dependence (past 5 years)

Methadone (N07BC02/N02AC02) and/or Morphine (N02AA01, e.g. *Severe Long, MST*)

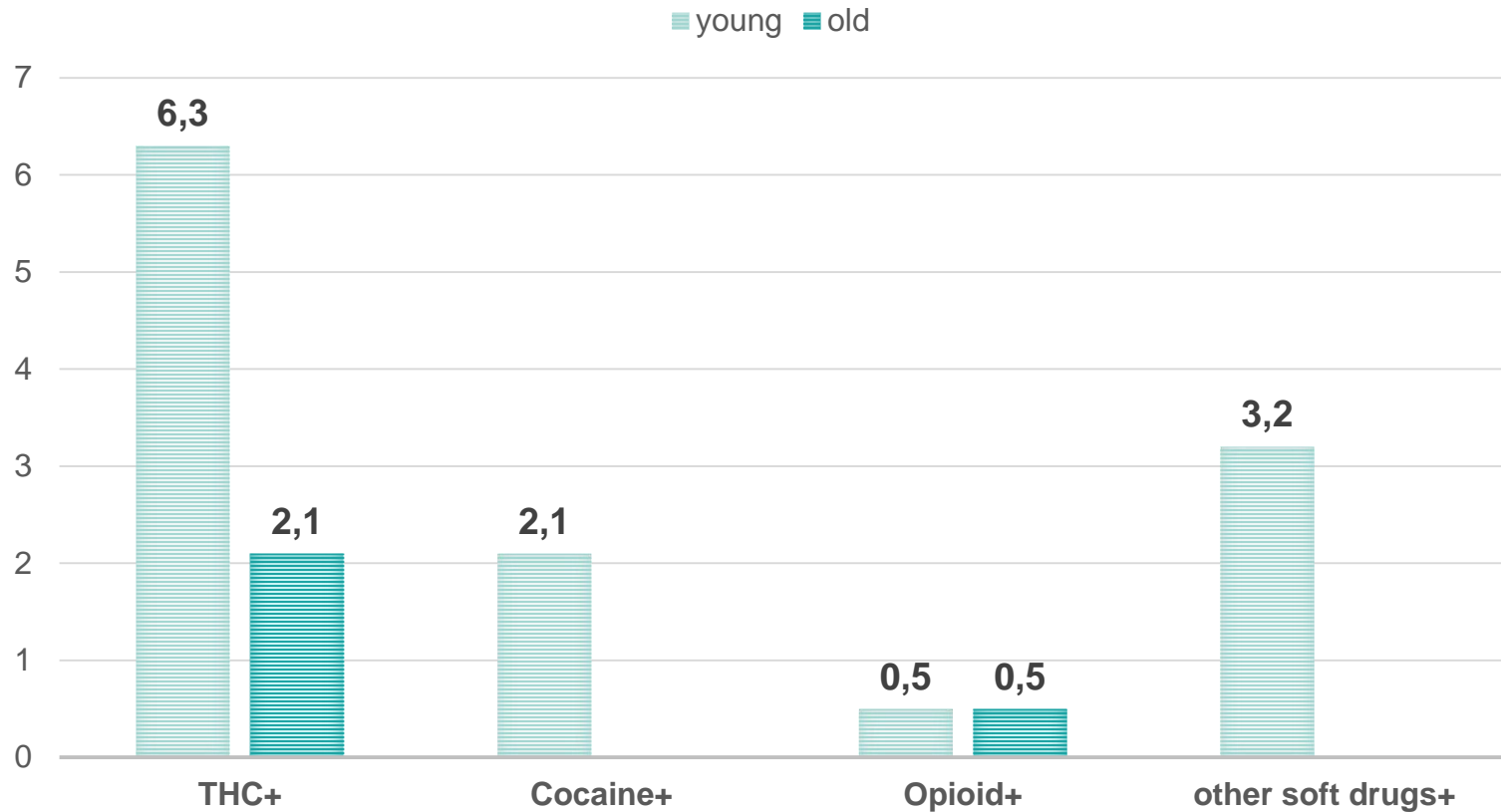
Benzodiazepines* (N05BA01, Diazepam, e.g. *Valium Roche*), for at least 3 months without interruption



* Other typical Benzodiazepines Clonazepam, Flunitrazepam, Midazolam were not prescribed

young n=190, old n=190

3. Prevalence (%) positive drug tests in prison



for each category: young total n=190, old total n=190

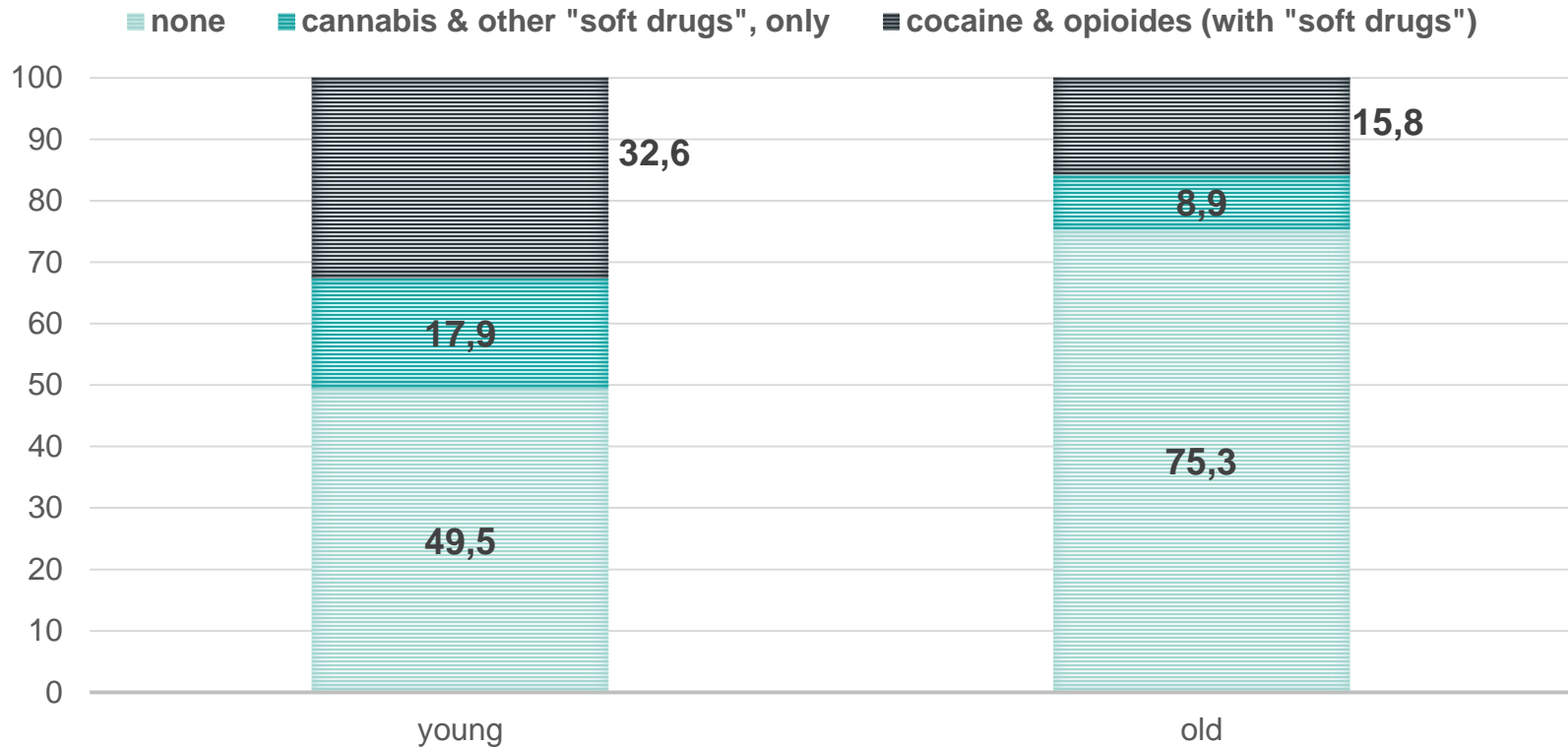
4. Overall-Indicator: Illicit drug use among prisoners – final estimation of prevalence rates

1. Legal Files
2. Medical Files
3. “Legal-medico” files



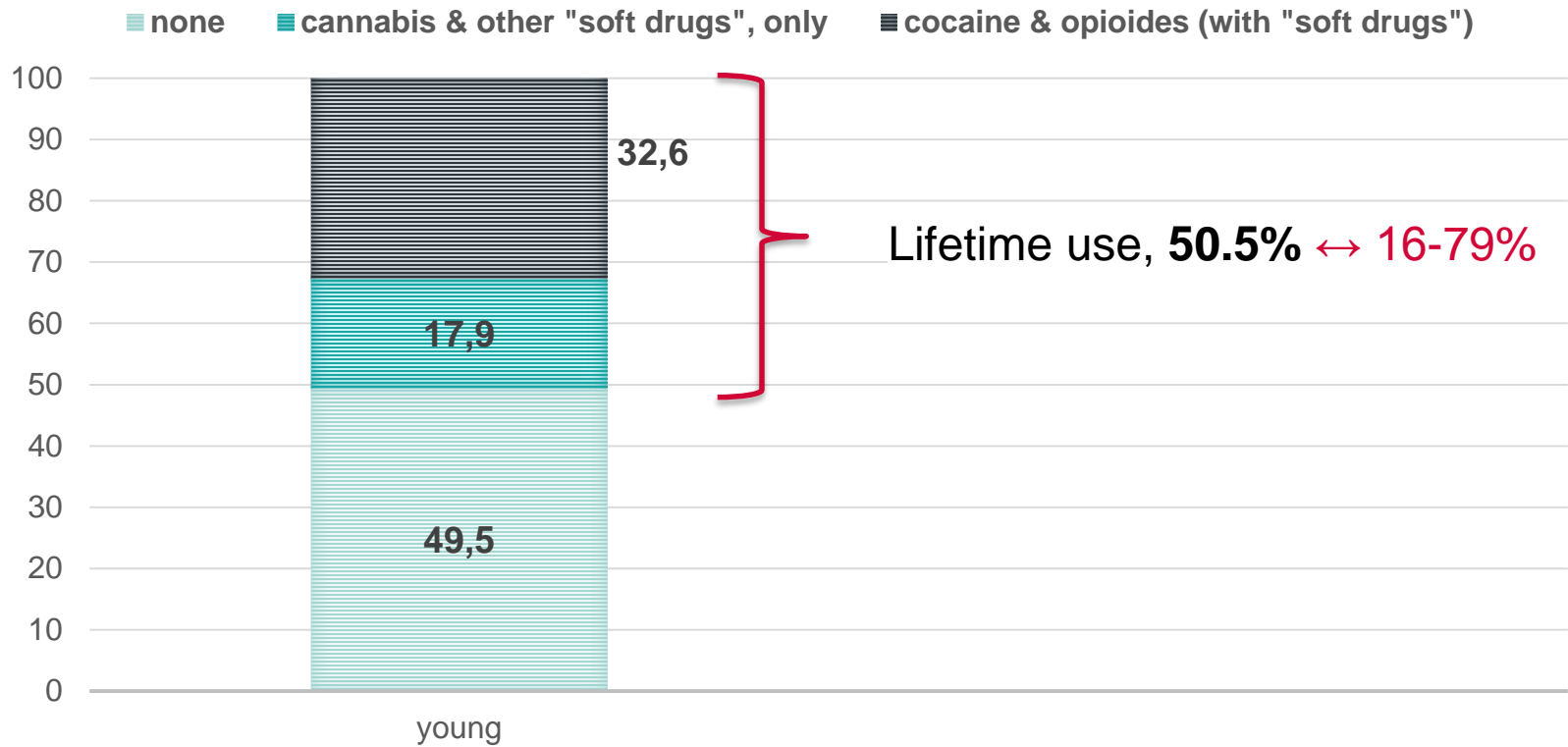
IF (1. = positive) OR (any 2. = positive) OR (3. = positive)
→ **Overall-Indicator = positive**

4.1 Overall-Indicator: Lifetime use of illegal drugs – excluding categories, according drug type



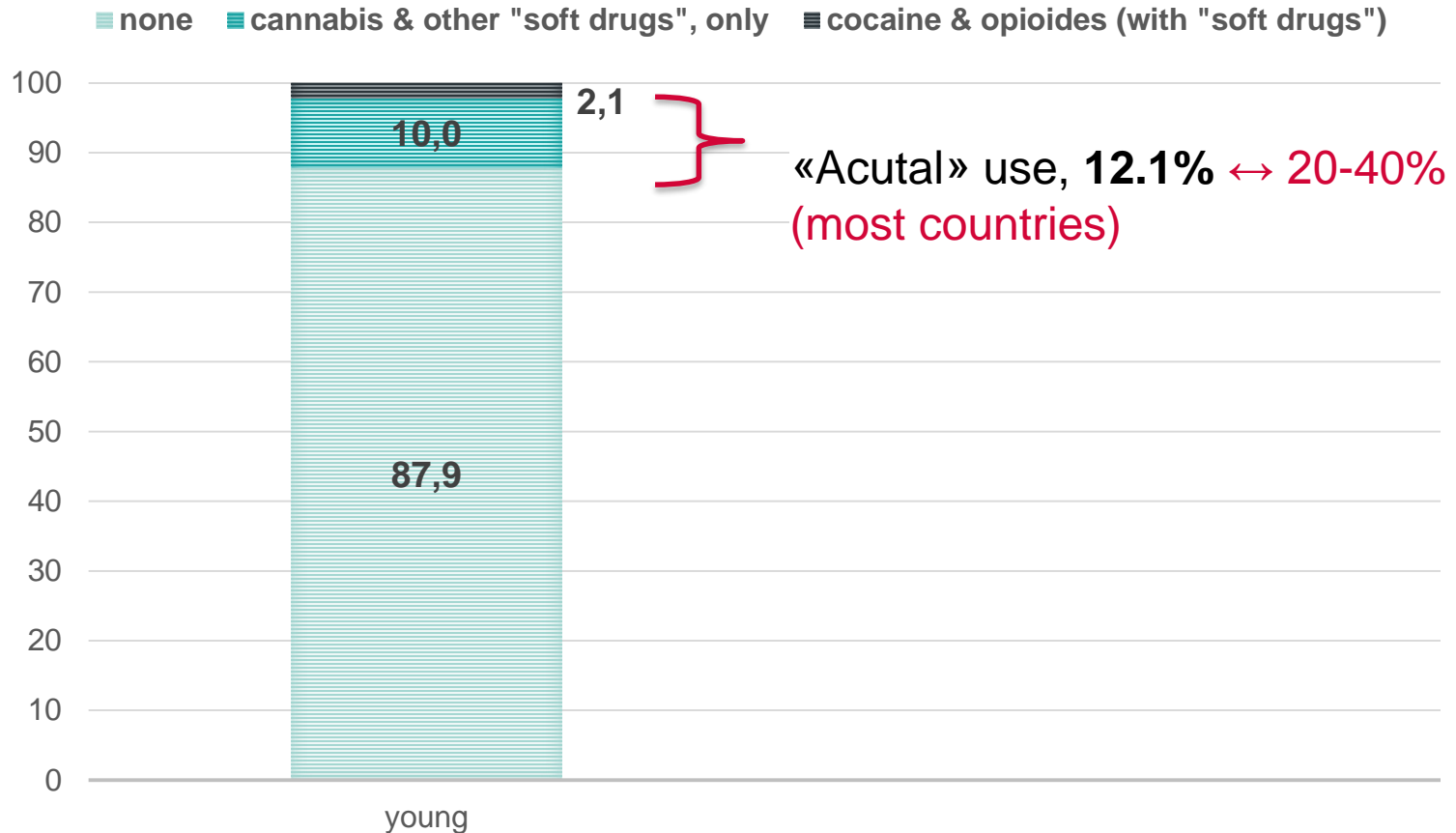
young: total n=190 / old: total n=190

4.1 Overall-Indicator: Lifetime use of illegal drugs ↔ EMCDDA, 2012



young: total n=190

4.2 Overall-Indicator: “Actual” use (use during prison stay) ↔ EMCDDA, 2012



young: total n=190 / old: total n=190

Discussion & Conclusions

Using Routine Data to estimate prevalence rates of illegal drug use among prisoners...

Problems (-)

- Prevalence rates are underestimated, especially “actual” use.
- Prisoners’ files were not maintained complete and concise.

Advantages (+)

- Data already available.
- No interference with filed.
- Cost effective.

Final Conclusions.

- With analyses of prisoners' files
→ we were able to estimate ***lower limit*** of prevalence rates.
- If files were kept *more accurately*
→ could be an effective and useful tool to estimate prevalence rates in a more precise way.

To be discussed further ...

- Do we even want more comprehensive prisoners' files?
- Who would have to keep such files? (Health care professionals?)



Thoughts are free, Mr. Müller, ...

Thank you.

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Ethical discussion.

Principles of Biomedical Ethics **(Beauchamp & Childress, 1977)**

Beneficence

- actions that serve the best interests of patients
- analysing prisoners' files has to be aimed at improve prisoners' health, and nothing else

Non-maleficence

- "first, do no harm"
- analysing prisoners' files is not an invasive method, does not (physically) harm prisoners

Justice

- fair distribution of health services
- analysing prisoners' files can be the basis to a fair distribution of health services (principle of equivalence of care)

Autonomy

- prisoners' right to self-determination
- respect for prisoners' ability to make informed decisions about personal matters (*informed* consent)
- prisoners have to understand what the study is about and to consent
- analysing prisoners' (medical) files could conflict with their personal rights and autonomy (prison as the "total institution" par excellence!?)

Qualitative interviews

Methods

Qualitative interviews with (elderly) prisoners

- 12 prisons (out of 15 prisons from quantitative study) agreed to participate in the qualitative study, too
- 35 oldest individuals (males and females) were selected for qualit. Interviews
- Semi-structured interview guide
- Interviews in German or French
- Interviews inside prison (November 2012 - October 2013)
- Interviews audio-recorded, transcribed, anonymized
- Coded according topic (here: illicit drug use)
- analysed here: Elderly *males* n=30 (aged 51-75 years)

Qualitative part: “quantified” results

Total interviews male prisoners (n)	30
Refused/avoided answer or not asked	5
Denied any illicit drug use	13
Admitted lifetime “soft” drug use	5
Admitted lifetime “hard” drug use	5
Admitted cannabis use inside prison	2

→ *Qualitative interviews:*

Adequate method to assess illicit drug use among prisoners?

Example: Citation from qualitative interviews

*«Letztes Jahr am Geburtstag war ich auch hier drin, und dann ein paar haben gewusst, dass ich Geburtstag habe, also zum Trinken zum Anstossen gibt es nichts, dann hat man mich halt schnell mal eingeladen zum **zwei, drei Züge Marihuana, Gras oder wie sagt man dem?**»*

Male prisoner (344GXB)



admits cannabis use - *as a unique exception* - inside prison.

Citations from qualitative analyses

Q: «*Mhm, und wie sieht es aus mit illegalen Drogen, Aufputzmittel, Marihuana, irgendwas?*»

A: «***Nie, nie, nie, nie, nie.***»

Male prisoner (44GIVB)



A majority never used any illicit drug or denied it, respectively (n=13). Five prisoners avoided or refused an answer or were not asked at all, because interviewer felt that such a question would be inapt...

Citations from qualitative analyses

*«Nein ich, nein, nein ich hatte nie Drogen gehabt. Ich habe schon von jung weg nie, also **als ich jung war habe ich ein paar Male Haschisch geraucht**, ehrlich gesagt, aber da war ich fünfzehn, sechzehn. Und **nachher von dort weg nie, nie mehr, nie mehr**. Und ich will auch jetzt gar nicht anfangen! Nein, für was?»*

Male prisoner (366GXIIIB)



A third of the sample (n=10) admitted lifetime use, but denied present use: five prisoners admitted lifetime cannabis or other «soft» drug use and five assumed in addition lifetime opiate use.



University
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Extras.

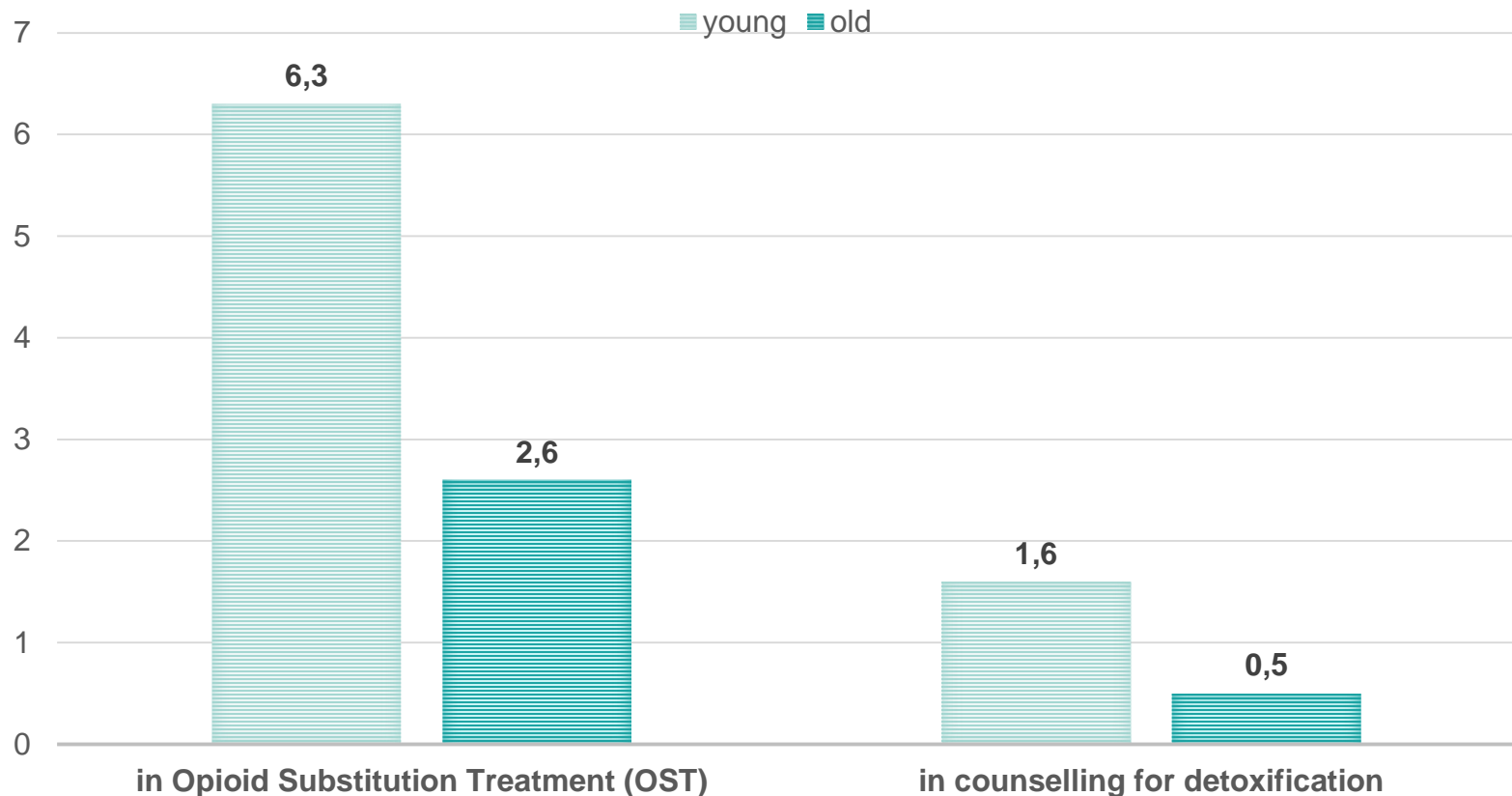
Why are prevalence rates of illicit drug use among prisoners needed?

- Prevalence rates are high compared to general population (e.g. EMCDDA, 2012; Fazel et al., 2006).
- Research is still rather scarce (e.g. Carpentier et al., 2012; Weilandt & Stöver, 2008).
- Knowledge is needed to assess treatment needs, for prevention and policy measures (→ *Principle of Equivalence of Care*).

Existing studies about illegal drug use among Swiss prisoners.

- Some studies about prevention measures (infectious diseases) and treatment in prison (e.g. Hausser et al., 1999; Masia et al., 2007).
- Some epidemiological studies on prisoners (illegal) drug use *for single cantons* (e.g. Moschetti et al., 2015; Wolff et al., 2011).
- Last epidemiological study on national level 25 years ago (Swiss Health Survey, 1992/1993).
- Switzerland is not involved in European collaborative research on drug use among prisoners.

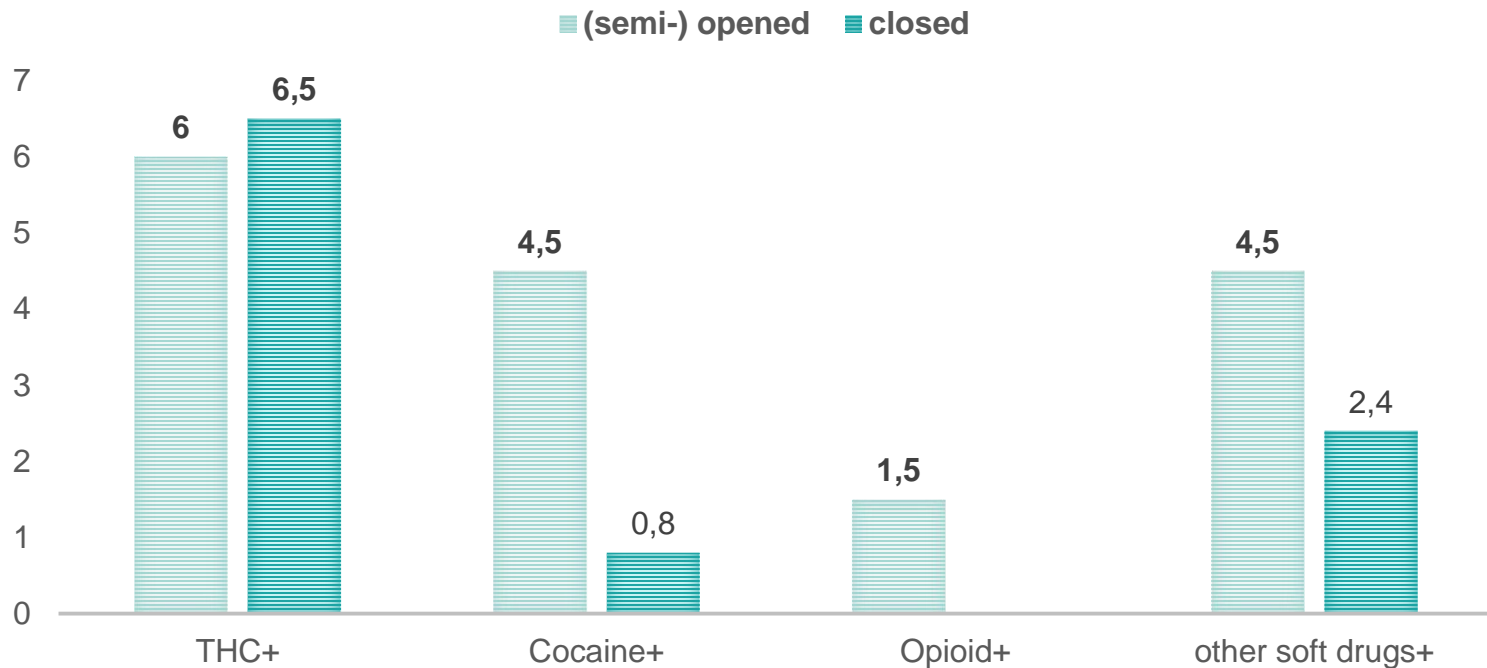
2.4 Medical files: Prevalence (%) treatment during present prison stay



young: total n=190 / old: total n=190

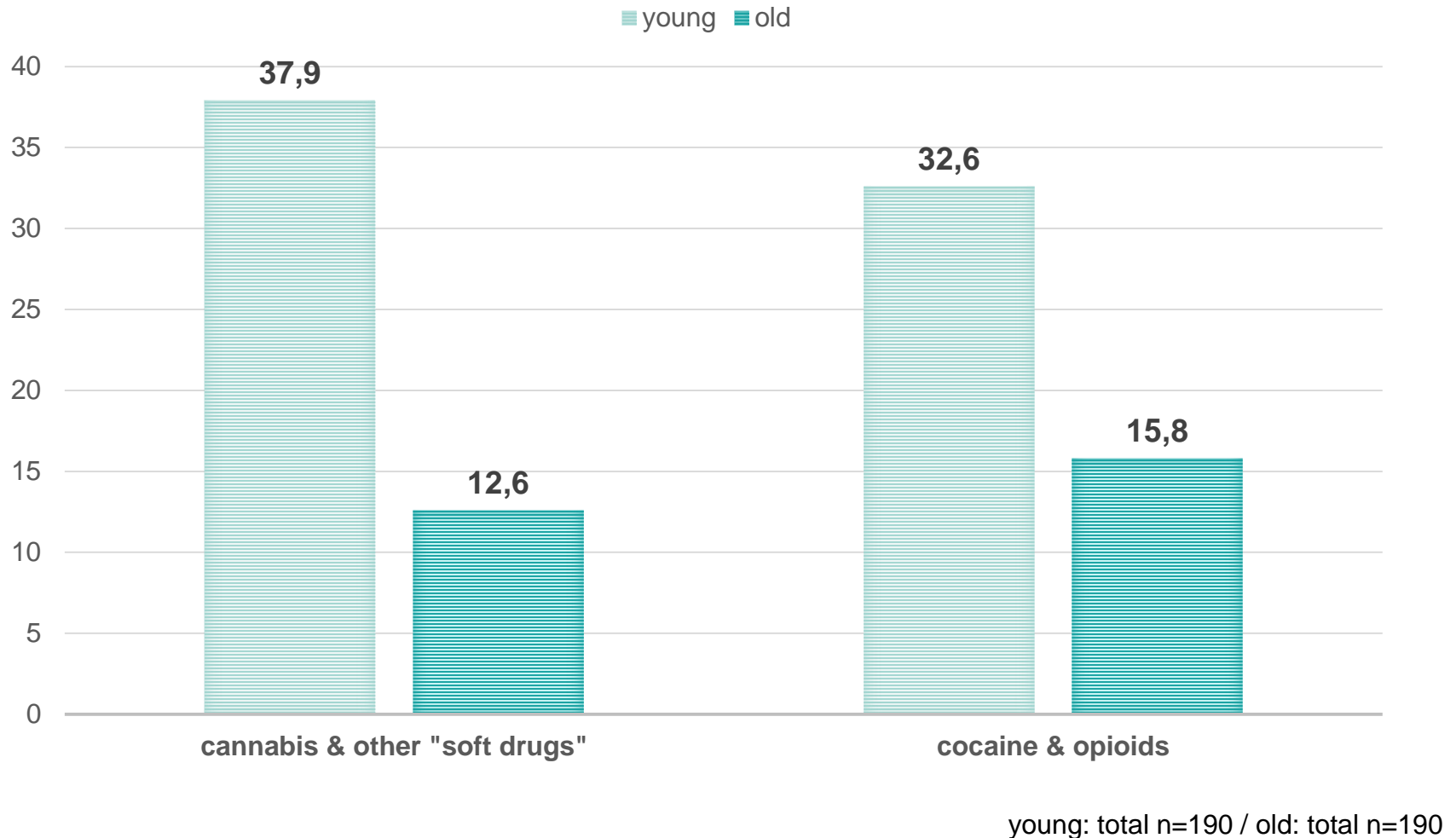
3. Legal-medico files: Positive drug tests in prison – closed vs. other prisons

Young (20-49 years) prisoners, only

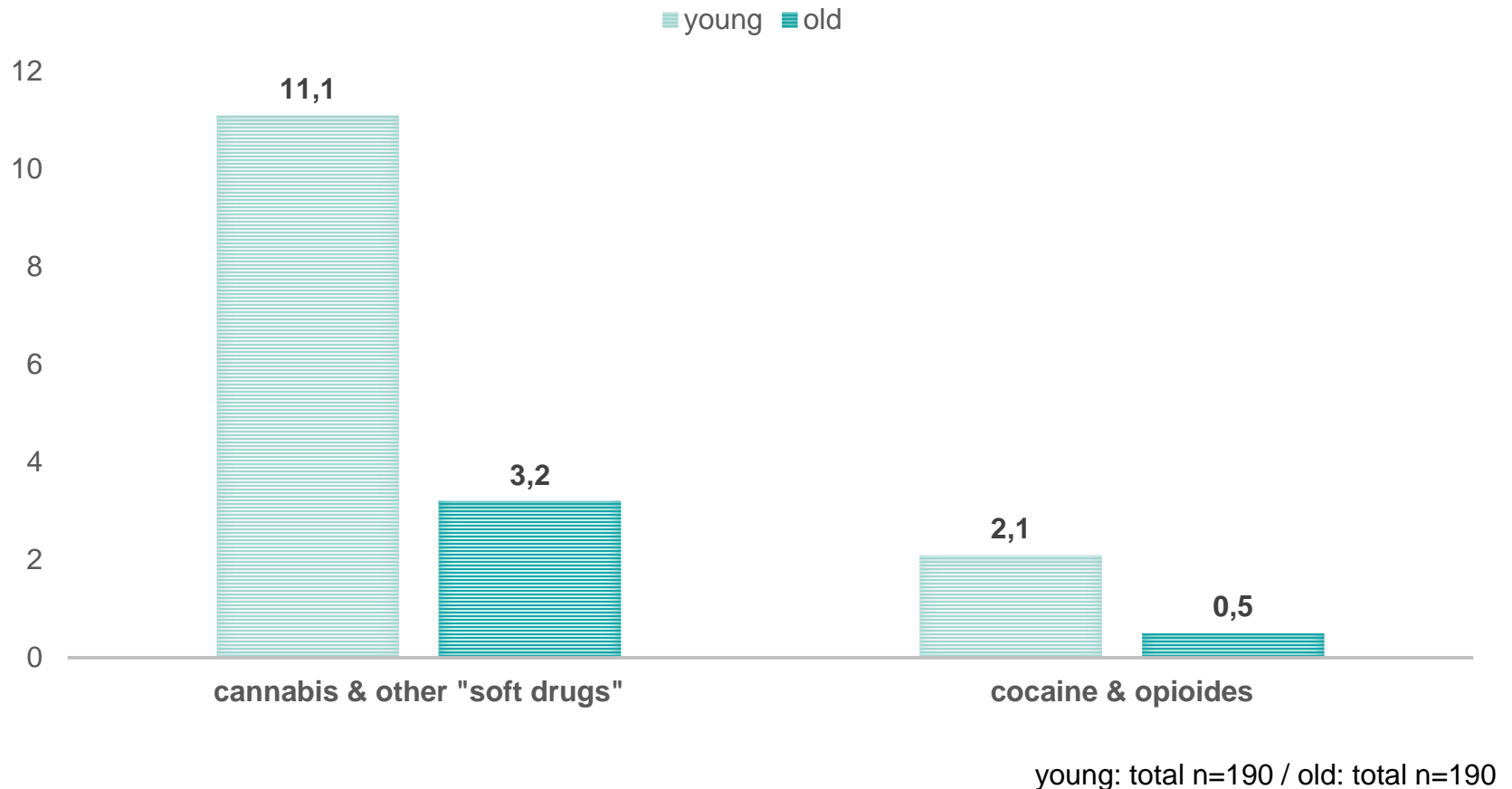


for each category: (semi-) opened total n=67 / closed total n=123.

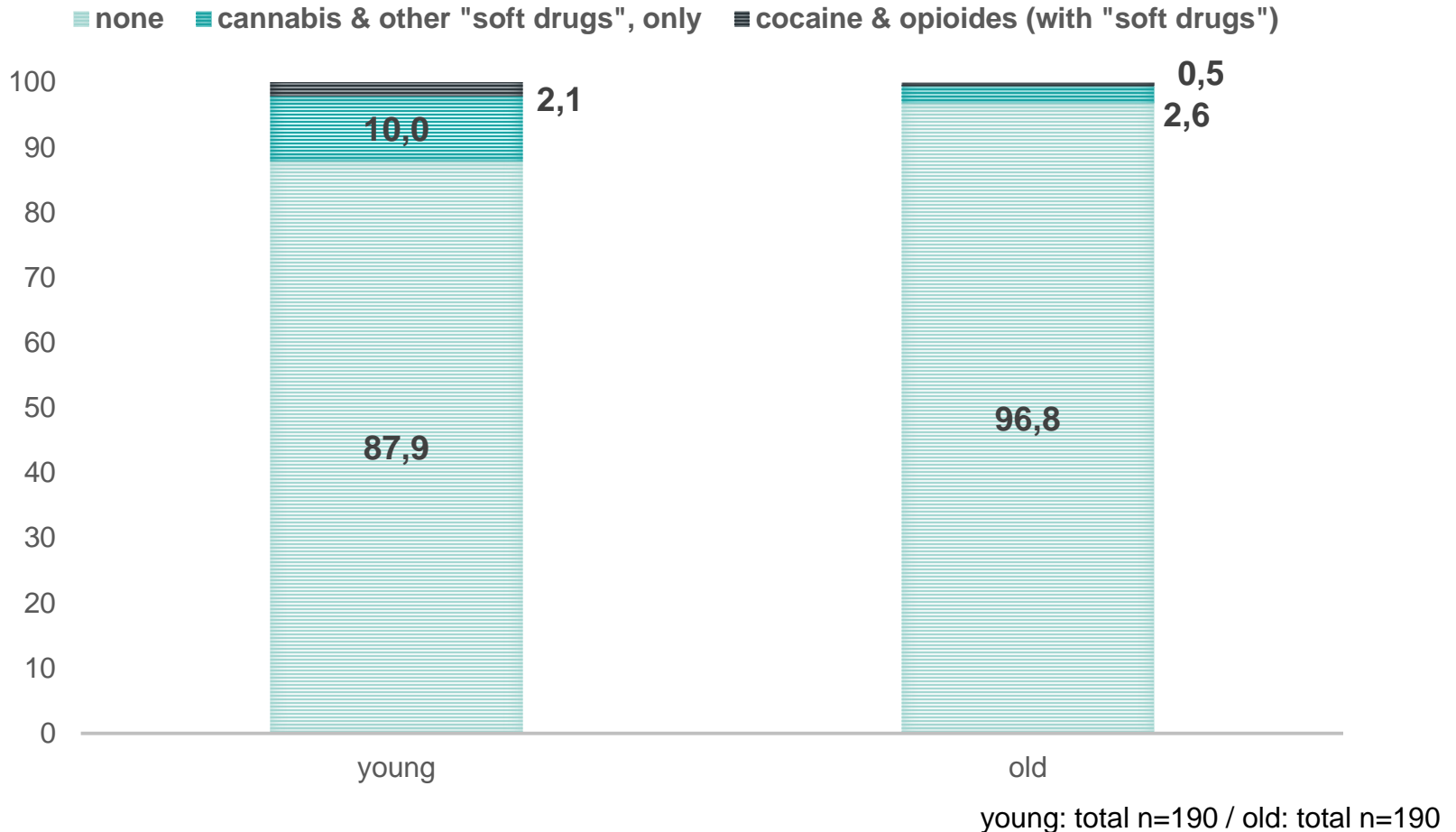
4.1 Overall-Indicator: Lifetime prevalence rates, according drug type



4.2 Overall-Indicator: Prevalence rates “actual” use (use during prison stay), according drug type



4.2 Overall-Indicator: “Actual” use (use during prison stay) – excluding categories, according drug type



Comparison of prevalence rates (“Overall-Indicator”) to European studies (↔ EMCDDA, 2012, Selected Issue)

LIFETIME USE

- Any illegal drug: 50.5% ↔ 16-79%
- Cannabis (“soft drugs”): 37.9% ↔ 12-70% (cannabis)
- Cocaine & opioides: 32.6% ↔ 6-53% (cocaine), 15-39% (heroine)

ACTUAL USE / DURING PRISON STAY

- Any illegal drug: 12.1% ↔ 20-40% (in most countries)
- Cannabis (“soft drugs”): 11.1% ↔ NA (most frequent)
- Cocaine & opioides: 2.1% ↔ 1-21% (heroine)

“Agequake” Study: younger prisoners (20-49 years), only: total n=190