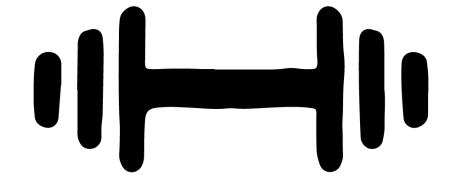
# Anabolic steroid and other doping substance use among Finnish prisoners

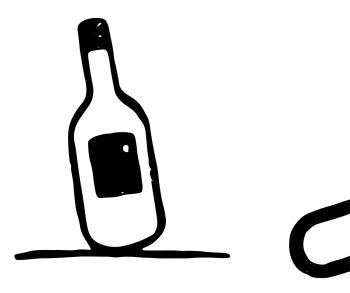
#### **Jukka Koskelo**

Research and Development Director A-Clinic Foundation Finland



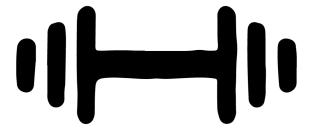
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# Background

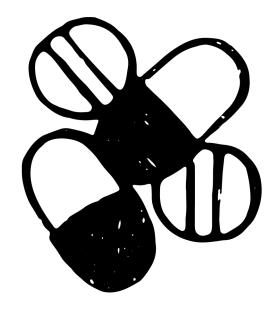


A-Clinic Foundation 1955→

Dopinglinkki 2010→



## Prevalence



Finnish national survey 2010→

~ 1%

Global anabolic steroid use\*

6.4% men1.6% women

<sup>\*</sup> Sagoe D et al. The global epidemiology of anabolic-androgenic steroid use: A meta-analysis and meta-regression analysis. Ann Epidemiol. 2014;24(5):383-98.



## Previously studied



Lifetime AAS use 30.0% of male, 6.4% of female prisoners. Havnes et al., 2020 [1]



AAS experience: 5.0% of female and 28.1% male. Lundholm et al., 2010 [2]



AAS use in the current prison 3.7%. Korte et al., 1998. [3]

<sup>[1]</sup> Ingrid Amalia Havnes, Anne Bukten, Eline Borger Rognli, Ashley Elizabeth Muller. Use of anabolic-androgenic steroids and other substances prior to and during imprisonment - Results from the Norwegian Offender Mental Health and Addiction (NorMA) study, Drug and Alcohol Dependence, 2020.

<sup>&</sup>lt;sup>[2]</sup> Lena Lundholm, Kerstin Käll, Sussi Wallin, Ingemar Thiblin. Use of anabolic androgenic steroids in substance abusers arrested for crime, Drug and Alcohol Dependence, 2010.

<sup>[3]</sup> Taimi Korte, Jaana Pykäläinen, Timo Seppälä. Drug abuse of Finnish male prisoners in 1995, Forensic Science International, 1998. .

## Background



Questionnaires

Mental health interview

Measurements

**Oral health** 

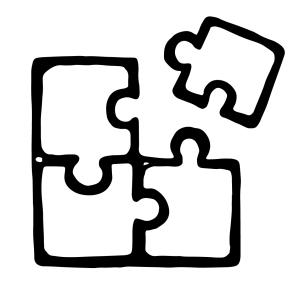






## Sample

Average age



<u>Men n=403</u>

**Women n=126** 

37.0 (11.0)

37.4 (9.8)

Principal offence category

Drug offence Violent offence 94 (23.3%)

206 (51.1%)

20 (20.6%)

61 (51.6%)







## Results

Used doping agents 34 % 44% 4%

Doping use during imprisonment 20%

Most commonly used

Testosterone 45%

AAS 35%

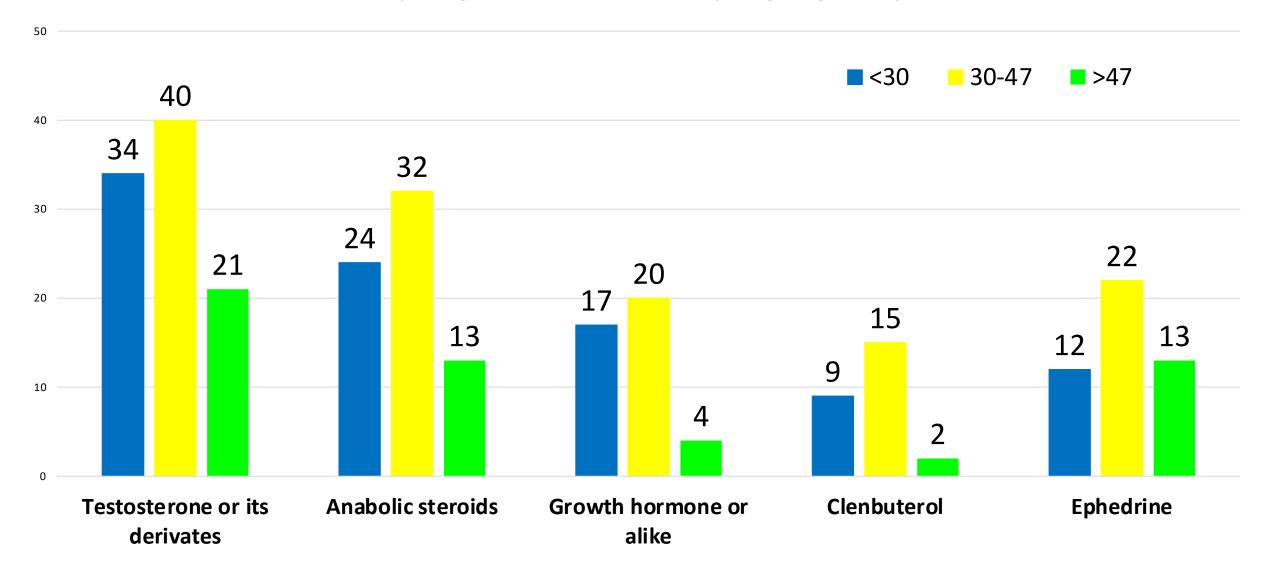
Ephedrine 10%





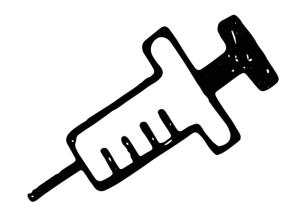


#### Use of doping substances by age groups (%)





#### Results



HCV among who injected doping substances 54%

Doping users (injecting) started injecting in prison 49%







#### Recommendations

**Education** 

**Research based information** 

Development of health services in prison

**Future research** 







## Thank you!

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