Mortality cohort studies among problem drug users in Poland

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# The goals of the study

- to estimate mortality rate among problem drug users
- to identify risk factors of deaths related to problem drug use
- to formulate recommendations for mortality prevention addressed to problem drug using population

# Definition of problem drug use

Regular, frequent drug use and experiencing serious drug related problems

- All drugs included
- Problems as one of definition criteria
- Justification:
  - Data available individual data from residential treatment only, lack of information on types of drugs used (the ICD diagnose only)
  - Dominating patterns of drug use polydrug use
  - Research traditions
  - Demand from policy makers and professionals

## Method

#### Data collection procedure

- Preparing data base of treated drug users eliminating double counting in 12 years period
- Checking vital status using national electronic population register
- Analyses:
  - Crude mortality rate, standardized mortality ratio, potential years of life lost, Kaplan-Meier survival analysis and Cox regression
- Population
  - Drug users treated in 2000-2011 in residential drug addiction treatment in whole country
- Follow up period: 2000-2013

### **Research** materials

- Size of initial group 96 135
  - Vital status identified 74 192 (77.2%)
  - Vital status unidentified 21 943 (22.8%)
- Number of person-years 560 523
- Number of deaths 5 727 (7.7%)
  - Crude mortality rate (CMR) 10.2 per 1000 person/years
- Standardized mortality ratio (SMR) 3.3 (95% CI: 3.2 – 3.4)

#### Factors of mortality (Cox regression model)



Factors of mortality (Cox regression model) – cont.



Factors of mortality (Cox regression model) – cont.



### Factors of mortality (Cox regression model) – con.



### Conclusions

#### High risk of death for:

- males
- Iow educated
- not employed
- Iiving alone or homeless
- discharged from treatment without complete success
- These group should be matter of concern and interventions
- Further analysis needed to explore complicated structures of relationships

## **Restrictions and limitations**

- Relatively high share of cases with unidentified vital status
  - ID code (initials, date of birth, gender) not always stable and unique
  - Data quality in treatment data base and population register not perfect
- Limited scope of information available in
  - treatment data base
  - national register of deaths
- Data protection issues causes of deaths unavailable yet