Substitution treatment coverage calculation in Norway ++

HRDU meeting Lisbon 23-26 September 2014

Ellen J. Amundsen, Norwegian Institute for Alcohol and Drug Research

www.sirus.no
Themes

• Standard coverage calculation – the Norwegian experience

• Influential factors and pitfalls

• Usefulness of OST coverage calculations
Standard coverage calculations

- \( n \) = the number of clients in OST
- \( N \) = the number of opiate users (OST clients + other HROU)

- Coverage = \( \frac{n}{N} \)

- Main question: How do we find data?
OST clients misuse opioids

- What do we do about persons in OST who are HROU of opioids other than the prescribed substitution opioid or generally misuse the prescribed substitution opioid

- Should we adjust n (in OST) to the ‘successful’ OST clients?
Changes during a time period

What about those who enter OST or leave OST during the year? Count them as OST and/or HROU?
Examples of estimates of OST coverage in Norway - 1

Coverage opioid users

1. The number in OST all year (persons in OST at the beginning of the year + those who enter); \( n_{\text{ost}} = 7450 \)

2. The number of HROU by mortality multiplier, risk of death 3 per 100 person years and a probability of 0.7 to die of a drug related opioid death; \( n_{\text{HROU}} = 9143 \)

3. Withdraw double counting: During a week 9 percent in OST had used heroin. Assume the same percent for other opioids. For heroin users the probability of use in a single week is \( \frac{2}{3} \) – assume this also for other opioids; \( n_{\text{double}} = 1234 \)

4. Coverage of OST = \( \frac{n_{\text{ost}}}{n_{\text{ost}} + n_{\text{HROU}} - n_{\text{double}}} \) = 0.49
Examples of estimates of OST coverage in Norway - 2

Coverage heroin users

1. The number in OST all year (persons in OST at the beginning of the year + those who enter); \( n_{\text{ost}} = 7450 \)

2. The number of HRHU by mortality multiplier, risk of death 3 per 100 person years and a probability of 0.7 to die of a drug related heroin death; \( n_{\text{HROU}} = 3635 \)

3. Withdraw double counting: During a week 9 percent in OST had used heroin. For heroin users the probability of use in a single week is \( 2/3 \); \( n_{\text{double}} = 1006 \)

4. Coverage of OST = \( n_{\text{ost}} / (n_{\text{ost}} + n_{\text{HRHU}} - n_{\text{double}}) = 0.74 \)
Examples of estimates of OST coverage in Norway - 3

Coverage opioid users, survey at the street-level

1. The number in OST in survey); n_ost = 409
2. The number of HROU in survey; n_HROU = 1013
3. Withdraw double counting; n_double = 225
4. Coverage of OST = n_ost/ (n_ost + n_HROU – n_double) = 0.34

NB! Underreporting of (integrated) OST-patients who do not show up at street level
Technical pitfalls

- Mix period data and data on a given date
  - One year prevalence of HROU and the number of OST clients by the end of the year
- Estimate yearly proportions of persons from shorter period proportions
  - Estimate yearly proportion of HROU among OST clients from misuse of opioids during a week
- Forget double counting
  - Some HROU are in OST
Ideological pitfalls and usefulness of OST coverage estimation

• A high coverage does not mean that persons in OST do not misuse heroin/opioids. Estimate the coverage of non-misusers in OST?
• OST was originally intended to help heroin users. Estimate the coverage for those?
• ‘Old’ heroin users may misuse all kinds of opioids.
• A new group of opioid misusers has emerged who partly misuse OST drugs as well as other pharmaceuticals with opioids. Who to include and will OST be relevant for these persons?
• Can a high OST coverage still be interpreted as a positive characteristic?
Thank you for your attention!