EMERGING TRENDS IN ALTERNATIVE ROUTES REPORTED FOR PRESCRIPTION DRUG MISUSE:
An International Perspective

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Routes of Misuse/Abuse

• Routes of misuse/abuse of any drug, including prescription opioids, are associated with varying levels of risk

• Understanding routes of misuse/abuse of prescription opioids and user characteristics can aid with approaches to education, prevention and treatment of prescription drug misuse/abuse

• International perspectives are presented
International Perspectives from Multiple Data Sources

- Substance Abuse/Opioid Dependence Treatment Centers
  - EUROPAD (France, Germany, Italy, Spain)
  - RADARS® System Treatment Center Programs Combined (US)

- Poison Center
  - RADARS® System Poison Center Program (US)
  - National Poison Data System (NPDS) (US)

- Online Surveys
  - National Survey of Non-Medical Use of Prescription Drugs (UK)
  - RADARS® System College Survey Program (US)
Treatment Centers

Sites:
- France, Italy, Germany, Spain, United States

Data Collected:
- Demographic information
- Treatment history
- Primary drug used to get high before coming to program
- Past 30-day use to get high and if injected
Primary Endpoints

• **Primary Drug** = “used the most to get high with before coming to this program”
  - Each patient can report ONLY ONE primary drug

• **Endorsed Drug** = “used in past month (or 90 days) to get high”
  - Each patient can report MULTIPLE endorsements
Gender Differences in Reported Injection
Last Time In Substance Abuse Treatment

- **Less Than 1 Month Ago**
- **More Than 1 Month Ago**
- **Never**

### No injection use in past 30 days
- Less Than 1 Month Ago: 135
- More Than 1 Month Ago: 179
- Never: 158

### Injection use in past 30 days
- Less Than 1 Month Ago: 4
- More Than 1 Month Ago: 16
- Never: 8

### No injection use in past 30 days
- Less than 1 month: 1635
- More than 1 month: 6361
- Never: 2596

### Injection use in past 30 days
- Less than 1 month: 603
- More than 1 month: 5009
- Never: 1333
Injections by Drug Endorsed

![Bar chart showing the number of injections by drug endorsed. Heroin has the highest number of injections, followed by fentanyl, and then other drugs with much lower numbers.](Europad.webp)
Drug Endorsements “to get high”
January 2012 to December 2014
Drug Endorsement with INJECTION
January 2012 to December 2014

Number of respondents

Quarter

Buprenorphine
Fentanyl
Hydrocodone
Hydromorphone
Methadone
Morphine
Oxycodone
Oxymorphone
Tramadol
PC Exposure & Injection Population Rates (all opioids)

Intentional Abuse Exposure per 100,000 population

Quarter

PC Injection Population Rates by Drug

- Oxycodone
- Fentanyl
- Hydrocodone
- Hydromorphone
- Morphine
- Oxymorphone
- Methadone
- Buprenorphine
- Tramadol

Intentional abuse inject calls per 100,000 population

Quarter: 2009-2014
PC Exposure & Injection Prescriptions Dispensed Rates (all opioids)

Intentional Abuse Exposure per 1,000 prescriptions dispensed

Quarter

PC Exposure & Injection Prescriptions Dispensed Rates (all opioids)
PC Injection Prescriptions Dispensed Rates by Drug
Heroin Rates by Route of Abuse – NPDS
January 2005 to January 2014

Rate per 100,000 Population

- Other/Unknown
- Injection
- Inhalation
National Survey

- United Kingdom July 2015
- 2500 participants in <10 days
- General population

- Non-medical use of prescription drugs
  - Use of a medication without a doctor’s prescriptions or in a way other than your doctor instructed
Alternative Route w/Non-Medical Use

*Note that alternative routes include all routes other than swallowing (inject, inhale, chew, dissolve, other)
College Survey

- United States since 2008
- 2000 participants per launch (3 launches per year)
- Self-identified college students

- Non-medical use of prescription drugs
  - Use of a medication without a doctor’s prescriptions or in a way other than your doctor instructed
Alternative Route w/Non-Medical Use

*Note that alternative routes include all routes other than swallowing (dermal, inject, inhale, chew, dissolve, other)
Key Findings

- Routes may vary across programs and across countries but non-oral misuse/abuse is a problem in ALL countries.
- Rates of prescription drug abuse in US are declining although alternative routes of abuse are still an issue, perhaps in general population and early initiates.
- Routes are different by drug substance – what is the role of abuse deterrent formulations?
- Heroin trends indicate rise in inhalation as well as injection.
Thank You
QUESTIONS

Thank You