The European Experience: Prescription Drug Misuse in France, Germany, Italy and Spain

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Introduction

• A *mosaic* approach – use of multiple different data sources, surveying different populations, collecting important outcome measures

• Important to look within a country, comparing trends across countries but quantitative rates not comparable due to varying methodology, cultures, market availability

• Important to be product and route specific to identify risks and evaluate interventions such as abuse deterrent formulations
Early Signals/ Contextual Experience

Patients in Substance Abuse Treatment

EUROPAD

Web Monitoring

Early Signals/ Contextual Experience

Users/ Buyers

StreetRx

Criminal Justice/Law Enforcement

Drug Diversion

Survey of Non-Medical Use of Prescription Drugs

The Mosaic Approach

Acute Health Events

Global Toxicsurveillance Network (GTNet)

General Adult Population

Survey of Non-Medical Use of Prescription Drugs
Europe – Dosage Units per Population

France

Germany

Italy

Spain

Legend:
- Buprenorphine
- Codeine
- Fentanyl
- Hydromorphone
- Hydromorphone
- Methadone
- Morphine
- Oxycodone
- Sufentanil
- Tapentadol
- Tramadol
Primary Drug Used to Get High in Past Month

- Oxycodone
- Tramadol
- Methadone
- Morphine
- Morphine
- Codeine
- Buprenorphine
- Heroin

Percent Respondents
France- EUROPAD

Route of Primary Drug

- Injected
- Dermal
- Sniffed Snorted
- Smoked
- Dissolved in Mouth
- Chewed
- Swallowed
- Other

0% 10% 20% 30% 40% 50%
France GTNet–Adult Human Intentional Abuse Exposures Reported to Poison Center
France Summary

• Codeine and tramadol by far the most utilized, most other opioids increasing

• Patients entering substance abuse treatment most often report heroin and buprenorphine as their primary drug of abuse
  • Sniff/smoke primary drug 42%
  • Inject primary drug 35%

• Opioids and benzodiazepines are most common intentional abuse exposures reported to poison centres
Europe – Dosage Units per Population

France

Germany

Italy

Spain

- Buprenorphine
- Codeine
- Fentanyl
- Hydrocodone
- Hydromorphone
- Methadone
- Morphine
- Oxycodone
- Sufentanil
- Tapentadol
- Tramadol
Primary Drug Used to Get High in Past Month

- Tramadol
- Morphine
- Buprenorphine
- Methadone
- Heroin

Germany - EUROPAD
Germany GTNet–Adult Human Intentional Abuse Exposures Reported to Poison Center

![Graph showing the rate per 100,000 population for different substances over years 2012 to 2016. The graph includes lines for opioids, stimulants, benzodiazepines, and GABA analogues.]
Germany Summary

- Tramadol is most utilized product, oxycodone and hydromorphone utilization increasing

- Patients entering substance abuse treatment most often report heroin followed by methadone as their primary drug of abuse
  - Smoked primary drug 48%
  - Injected primary drug 47%

- Stimulants and benzodiazepines are the most common intentional abuse exposures reported to poison centres, with increasing rates of opioids and GABA analogs
Europe – Dosage Units per Population

Graphs showing the dosage units per population in France, Germany, Italy, and Spain from 2011 to 2016. The graphs are color-coded to represent different drugs:
- Buprenorphine
- Codeine
- Fentanyl
- Hydrocodone
- Hydromorphone
- Methadone
- Morphine
- Oxycodone
- Sufentanil
- Tapentadol
- Tramadol

The graphs indicate trends in dosage units over time for each country and drug category.
Primary Drug Used to Get High in Past Month

- Methadone
- Oxycodone
- Tramadol
- Heroin

Percent Respondents

0% 10% 20% 30% 40% 50% 60% 70%
Italy GTNet–Adult Human Intentional Abuse Exposures Reported to Poison Center

![Graph showing the rate per 100,000 population for various substances from 2012 to 2016. The graph indicates a decrease in benzodiazepines and an increase in opioids and GABA analogues.](image)
Italy Summary

• Codeine most commonly utilized opioid, oxycodone utilization increasing and has surpassed tramadol; tapentadol also rising

• Patients entering substance abuse treatment most often report heroin followed by tramadol as their primary drug of abuse
  • Smoked primary drug 55%
  • Injected primary drug 36%

• Benzodiazepines most common intentional abuse exposure reported to poison centres
Europe –Dosage Units per Population

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<th>France</th>
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| 2011  | ![Graph](image)
| 2012  | ![Graph](image)
| 2013  | ![Graph](image)
| 2014  | ![Graph](image)
| 2015  | ![Graph](image)
| 2016  | ![Graph](image)

Legend:
- Buprenorphine
- Codeine
- Fentanyl
- Fentanyl
- Hydrocodone
- Hydromorphone
- Methadone
- Morphine
- Oxycodone
- Sufentanil
- Tapentadol
- Tramadol
Primary Drug Used to Get High in Past Month

- Hydrocodone
- Oxycodone
- Morphine
- Methadone
- Buprenorphine
- Tramadol
- Codeine
- Heroin

Percent Respondents
United Kingdom - EUROPAD

Route of Primary Drug

- Injected
- Dermal
- Sniffed/Snorted
- Dissolved in Mouth
- Chewed
- Swallowed
- Other
UK GTNet–Adult Human Intentional Abuse Exposures Reported to Poison Center

![Graph showing the rate per 100,000 population for different substances over years. The graph compares Opioids, Stimulants, Benzodiazepines, and GABA Analogues.]
United Kingdom Summary

• Codeine most commonly utilized opioid, morphine utilization increasing

• Patients entering substance abuse treatment most often report heroin and codeine as their primary drug of abuse
  • Smoked primary drug 67%
  • Injected primary drug 33%

• Benzodiazepines and stimulants are most common intentional abuse exposures reported to poison centres
Conclusion

• Country-specific data is important as the landscape is unique for each (e.g. utilization, culture, behaviors)

• While magnitude and patterns vary, heroin is most commonly reported primary drug for patients entering substance abuse treatment however prescription opioid abuse/misuse detected in all countries

• Detectable level of acute health events associated with prescription opioid exposures have been reported.

• Larger mosaic important to understand complex issues like prescription drug misuse
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Questions?
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