Polydrug use among drug treatment clients in Europe. What implications for treatment?

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20 years of Monitoring – Key indicators expert working groups – EMCDDA Technical conference
What is polydrug use?

- Consumption of two or more illicit or licit psychoactive substances within a specific (same) timeframe

- Cover a wide range of behaviours: different patterns of use and populations

- Reasons for use: potentiate the effects of one substance, or counterbalance it, or switch to different substance (for long time frame), etc.

- Elevates risks to health due to the additive or multiplicative toxicity of substances

- Increase the risk of death, overdose

- Complicates diagnosis and treatment

- Complex monitoring
  - Higher frequency and increased health risks among high risk drug users

See www.emcdda.europa.eu/publications/selected-issues/polydrug-use
Polydrug use problem (according to TDI ver. 3.0)

Aim to assess whether a client is a problematic user of more than one drug at the same time

When two or more psychoactive substances are known to be involved, but it is impossible to assess which substance is contributing most to the disorder (ICD-10)

Clinical decision used in a restrictive way
Secondary drugs (according to TDI ver.3.0)

- Drugs used in addition to the primary drug
- Substances that cause problems for the client
- Alcohol included/tobacco excluded
- Up to four secondary drugs possible to record for each individual

- Ordered according to clinical relevance OR
  - used by injection
  - frequency of use
  - if none possible, the list of substances

- Citations and number of individuals for limited primary drugs reported
Polydrug use problem by country
(Percentage of clients entering treatment that reported a polydrug use problem)

2013 TDI FONTE DATA - 16 countries reporting data on the variable polydrug use. In some countries high number of cases with missing information on polydrug use. (BG, NO; SE, UK with more than 80% missing)
“Polydrug” use among clients entering treatment (opioids + cocaine + cannabis + stimulants) ALL CLIENTS in 2013: 486 066

Clients using only the primary drug - 46%
Clients using PRIMARY + ONE additional drug - 29%
Clients using PRIMARY + TWO additional drugs - 25%

2013 TDI FONTE DATA – Data available for 19 countries. Base of clients reporting secondary drugs: 288 481. (86 % of reported clients with primary drugs: opioids, cocaine, cannabis and stimulants)
Citations of secondary drugs (by group of substances (%))

- Cannabis (90,585) 23%
- Opioids (75,590) 19%
- Alcohol (74,587) 19%
- Cocaine (67,929) 17%
- Stimulants (43,824) 11%
- Hypnotics and sedatives (24,695) 11%
- Other substances (11,548) 6%
- Hallucinogens (7,115) 3%
- Volatile inhalants (987) 2%

2013 TDI FONTE DATA — Total number of citations = 485,422
29 countries reporting data on citations of secondary drugs
Citations of secondary drugs
(percentage of cannabis and alcohol citations among all citations, by country)

- Estonia
- Croatia
- Luxembourg
- Norway
- Malta
- Finland
- Austria
- Greece
- Romania
- Italy
- Sweden
- Bulgaria
- Slovenia
- Poland
- Portugal
- Germany
- Latvia
- Denmark
- Ireland
- United Kingdom
- Hungary
- Belgium
- Slovakia
- Netherlands
- France
- Czech Rep.
- Cyprus
- Turkey
- Spain

EU-average

- Cannabis
- Alcohol

23%
18%
Citations of secondary drugs  
(by drug type (%))

- **OPIOIDS**
  - Heroin: 57%
  - Methadone: 19%
  - Buprenorphine: 14%
  - Fentanyl: 10%
  - Other opioids: <1%

- **COCAINE**
  - Cocaine HCL: 66%
  - Crack cocaine: 34%

- **STIMULANTS**
  - Amphetamines: 33%
  - MDMA and derivates: 7%
  - Methamphetamines: 6%
  - Synthetic cathinones: 5%
  - Other stimulants: 5%

- **HYPNOTICS AND SEDATIVES**
  - Benzodiazepines: 87%
  - Other hypnotics & sedatives: 10%
  - Barbiturates: 2%
  - GHB / GBL: 1%

- **HALLUCINOGENS**
  - LSD: 31%
  - Other hallucinogens: 18%
  - Ketamine: 51%

2013 TDI FONTE DATA – 29 countries reporting data on citations of secondary drugs; Total number of citations = 485 422

Citations by generic drug: opioids = 75 590; Cocaine = 67 929; Stimulants other than cocaine = 43 824; Hallucinogens = 7 115; Hypnotics/Sedatives = 24 695; Cannabis = 90 585; Alcohol = 74 587;
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<tr>
<th>Country</th>
<th>Heroin</th>
<th>Methadone</th>
<th>Buprenorphine</th>
<th>Fentanyl</th>
<th>Other opioids</th>
<th>Powder cocaine</th>
<th>Crack</th>
<th>Amphetamines</th>
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</table>

Citations of secondary drugs (selected other substances, by country (%))
## Polydrug use among clients (by primary drug)

<table>
<thead>
<tr>
<th>Category</th>
<th>OPIOIDS</th>
<th>COCAINE</th>
<th>CANNABIS</th>
<th>STIMULANTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary drug users out of all drug clients *</td>
<td>40 %</td>
<td>13 %</td>
<td>30 %</td>
<td>8 %</td>
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<tr>
<td></td>
<td>(175 753)</td>
<td>(55 849)</td>
<td>(130 569)</td>
<td>(34 060)</td>
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<tr>
<td>Clients using only the primary drug **</td>
<td>37 %</td>
<td>39 %</td>
<td>50 %</td>
<td>37 %</td>
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<td></td>
<td>(40 422)</td>
<td>(10 208)</td>
<td>(25 242)</td>
<td>(6 352)</td>
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<tr>
<td>Clients using more than the primary drug</td>
<td>63 %</td>
<td>61 %</td>
<td>50 %</td>
<td>63 %</td>
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<tr>
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<td>(69 093)</td>
<td>(15 773)</td>
<td>(25 255)</td>
<td>(10 708)</td>
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<tr>
<td>Clients using PRIMARY + ONE additional drug</td>
<td>28 %</td>
<td>33 %</td>
<td>29 %</td>
<td>39 %</td>
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<td></td>
<td>(31 210)</td>
<td>(8 448)</td>
<td>(14 779)</td>
<td>(6 673)</td>
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<tr>
<td>Clients using PRIMARY + TWO additional drugs</td>
<td>35 %</td>
<td>28 %</td>
<td>21 %</td>
<td>24 %</td>
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<td>(37 883)</td>
<td>(7 325)</td>
<td>(10 476)</td>
<td>(4 035)</td>
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</table>

* - Data from 30 countries  ** - Data available only for 19 countries.

For Opioids, clients reporting secondary drug = 124 463; for Cocaine = 29 746; Cannabis = 74 839; Stimulants = 17 775.
Polydrug use among clients with opioids as primary drug (most popular secondary drug)

Most popular secondary drug (%), excluding UK

- Cannabis: 33%
- Powder cocaine: 18%
- Hypnotics & Sedatives: 15%
- Other opioids: 10%
- Alcohol: 6%
- Amphetamines / methamphetamines: 6%
- Heroin: 7%
- Other substances: 2%
- Crack cocaine: 2%
- Other stimulants: 1%

Most popular secondary drug (%), including UK

- Cannabis: 21%
- Hypnotics & Sedatives: 15%
- Powder cocaine: 18%
- Other opioids: 11%
- Alcohol: 10%
- Amphetamines / methamphetamines: 4%
- Heroin: 4%
- Other substances: 1%
- Other stimulants: 1%
- Crack cocaine: 27%

2013 TDI FONTE DATA – Only 19 countries reporting data on secondary drugs. Total number of Opioids of clients reporting secondary drug = 124 463.
Polydrug use among clients with opioids as primary drug (most popular secondary drug combinations)

Most popular secondary drugs combinations (%)

excluding UK

Cocaine & Cannabis: 22%
Cannabis & Alcohol: 5%
Cannabis & Hypnotics & Sedatives: 5%
Cocaine & Hypnotics & Sedatives: 4%
Cocaine & Amphetamines / Methamphetamines: 4%
Amphetamines / Methamphetamines & Cannabis: 3%
Other combinations: 36%

including UK

Cocaine & Cannabis: 14%
Crack & Alcohol: 8%
Crack & Cannabis: 7%
Hypnotics & Sedatives & Cannabis: 6%
Other opioids & Cannabis: 6%
Other opioids & Cocaine: 6%
Other opioids & Hypnotics & Sedatives: 5%
Crack & Hypnotics & Sedatives: 4%
Other stimulants & Cannabis: 4%
Cannabis & Alcohol: 5%
Other opioids & Hypnotics & Sedatives: 4%
Other combinations: 40%

2013 TDI FONTE DATA – Only 19 countries reporting data on secondary drugs.
Total number of Opioids of clients reporting secondary drug = 124 463.
Polydrug use among clients with cocaine as primary drug (most popular secondary drug + most popular secondary drug combinations)

Most popular secondary drug (%)

- Cannabis: 33%
- Alcohol: 36%
- Heroin: 11%
- Powder cocaine: 6%
- Other stimulants: 7%
- Amphetamines / Methamphetamines: 2%
- Hypnotics & Sedatives: 2%
- Crack cocaine: 1%
- Other opioids: 1%
- Other substances: 1%

Most popular secondary drug combinations (%)

- Cannabis & Alcohol: 28%
- Heroin & Cannabis: 10%
- Alcohol: 36%
- Hypnotics & Sedatives & Cannabis: 3%
- Cocaine & Cannabis: 3%
- Amphetamines / Methamphetamines & Alcohol: 4%
- Amphetamines / Methamphetamines & Cannabis: 5%
- Heroin & Alcohol: 7%
- Other stimulants & Cannabis: 5%
- Other combinations: 35%

2013 TDI FONTE DATA – Total number of clients with cocaine primary drug reporting on secondary drugs = 15 773. Percentages calculated out of all individuals primary cocaine clients. 19 countries reporting data on secondary drugs for primary cocaine clients. The % of the combinations of primary substance + 2 additional substances calculated excluding not known and other substances.
Polydrug use among clients with cannabis as primary drug (most popular secondary drug + most popular secondary drug combinations)

Most popular secondary drug (%)

- Powder cocaine: 11%
- Alcohol: 51%
- Cannabis: 8%
- Amphetamines / Methamphetamines: 9%
- Other stimulants: 7%
- Other substances: 5%
- Hypnotics & Sedatives: 4%
- Other opioids: 2%
- Heroin: 2%
- Crack cocaine: 1%

Most popular secondary drug combinations (%)

- Alcohol & Other substances: 11%
- Cocaine & Alcohol: 14%
- Other stimulants & Alcohol: 9%
- Cocaine & Other stimulants: 8%
- Cannabis & Alcohol: 5%
- Hypnotics & Sedatives & Alcohol: 4%
- Other stimulants & Other substances: 4%
- Cocaine & Amphetamines / Methamphetamines & Alcohol: 3%
- Amphetamines / Methamphetamines: 4%
- Heroin & Cocaine: 4%

2013 TDI FONTE DATA – Total number of clients with cannabis primary drug reporting on secondary drugs = 25 255. Percentages calculated out of all individuals primary cannabis clients. 19 countries reporting data on secondary drugs for primary cocaine clients. The % of the combinations of primary substance + 2 additional substances calculated excluding not known and other substances.
Polydrug use among clients with stimulants as primary drug (most popular secondary drug + most popular secondary drug combinations)

Most popular secondary drug (%)
- Cannabis 66%
- Alcohol 12%
- Heroin 5%
- Crack cocaine 1%
- Other opioids 3%
- Other stimulants 4%
- Other substances 3%
- Hypnotics & Sedatives 2%
- Powder cocaine 3%
- Amphetamines / Methamphetamine 1%

Most popular secondary drug combinations (%)
- Cannabis & Alcohol 21%
- Cannabis & Other stimulants 9%
- Cannabis & Other substances 8%
- Cannabis & Cocaine 6%
- Cannabis & Other opioids 5%
- Cannabis & Heroin 8%
Summary and key issues

- Large part of drug clients are using more than one drug
- A group with polydrug use problem – great country differences in diagnosis and registration
- Large country variations in data recording and interpretation

- Most common combinations:
  - Opioids + cannabis + cocaine
  - Cocaine + cannabis + alcohol (with either cocaine or cannabis as primary drug)
  - Stimulants + alcohol + cannabis
  - Other groups less frequent but still relevant for treatment (e.g. BZD + opioids)

- What implications for diagnosis and treatment? Specific treatment? Different treatment for typologies? Treatment guidelines for specific drugs combinations (e.g. BZD + opioids)

- What the next steps for monitoring and analysis
Limitations

- Still several countries not reporting data on secondary drugs and polydrug use
- Aggregated data reported and limited analysis
- EMCDDA analysis of combinations based on three substances: primary, secondary and tertiary
- Different number of secondary drugs registered and reported by country
- Country differences in the interpretation of secondary drugs (hierarchy)
- Different ways to record polydrug use problems
- Data quality problems: e.g. what does it mean when the same drug is reported as primary and secondary drugs? Or when cannabis is primary drug and heroin/cocaine are secondary?
- Not known patterns of polydrug use: how those drugs are taken: simultaneously (opioids + cocaine) or in different time? Injected or not?
- Not known the socio-demographic profile of clients with polydrug use (compared to single drug users and according to drug combinations)