New patterns of drug use in Hungary

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First glance

- From 2009 on – decrease in heroin availability, seizures, mortality figures
- Qualitative data showed appearance of new substances
- Forensic data sources showed appearance of new substances
- From 2010 a boom in new substances, mostly two types:
  - synthetic cathinones, other stimulants
  - synthetic cannabinoids

Note: Forensic analyses of substances seized were the first to detect these substances in a reliable way.

In 2012 we still have scarce epidemiological data.
Seizures data

Seizures data: low availability of heroin, increased availability of cathinones since 3rd quarter of 2010

Source: Hungarian Institute for Forensic Sciences, 2012
Seizures data

The frequency of occurrence of cathinone derivatives (number of cases) in the materials and on objects analysed, broken down by month, 2010-2011

Source: Hungarian Institute for Forensic Sciences, 2012
<table>
<thead>
<tr>
<th>Cathinones</th>
<th>Synthetic cannabinoids</th>
<th>Amphetamines</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>metilone</td>
<td>JWH-018</td>
<td>4-FA</td>
<td>MXE</td>
</tr>
<tr>
<td>3,4-DMMC</td>
<td>AM-2201</td>
<td>FA</td>
<td>TFMPP</td>
</tr>
<tr>
<td>pentedrone</td>
<td>JWH-073</td>
<td>6-APB</td>
<td>DBZP</td>
</tr>
<tr>
<td>butilone</td>
<td>JWH-122</td>
<td>4-MA</td>
<td>salvinonin-A</td>
</tr>
<tr>
<td>4-FMC</td>
<td>JWH-210</td>
<td>3-FA</td>
<td>AMT</td>
</tr>
<tr>
<td>MDPBP</td>
<td>JWH-081</td>
<td>2C-D</td>
<td>1,4-buthandiole</td>
</tr>
<tr>
<td>PVP</td>
<td>JWH-250</td>
<td>2C-E</td>
<td>pFPP</td>
</tr>
<tr>
<td>N-ethilecatinone</td>
<td>RCS-4</td>
<td>3-FMA</td>
<td>2-DPMP</td>
</tr>
<tr>
<td>ehtilone</td>
<td>JWH-019</td>
<td>N-etilamphetamine</td>
<td>4-MTA</td>
</tr>
<tr>
<td>FMC</td>
<td>UR-144</td>
<td>2-PEA</td>
<td>5-MeO-AMT</td>
</tr>
<tr>
<td>pentilone</td>
<td>JWH-022</td>
<td>4-APB</td>
<td>M-ALPHA</td>
</tr>
<tr>
<td>bufedrone</td>
<td>AM-1220</td>
<td>4-FMA</td>
<td>mitragynine</td>
</tr>
<tr>
<td>3-FMC</td>
<td>JWH-203</td>
<td>2C-H</td>
<td>ODT</td>
</tr>
<tr>
<td>MPPP</td>
<td>JWH-251</td>
<td>5-APB</td>
<td>salvorine</td>
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<tr>
<td>naphirone</td>
<td>AM-694</td>
<td>MDAI</td>
<td></td>
</tr>
<tr>
<td>BMDP</td>
<td>CP47,497</td>
<td>DMMA</td>
<td></td>
</tr>
<tr>
<td>MDPPP</td>
<td>pravadoline</td>
<td>FMA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AM-2233</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>JWH-180</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of drug</td>
<td>number of seizures</td>
<td>quantity seized</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>--------------------</td>
<td>-----------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>2011</td>
<td>2010</td>
</tr>
<tr>
<td>Herbal cannabis (kg)</td>
<td>2,220</td>
<td>2,073</td>
<td>528.1</td>
</tr>
<tr>
<td>Cannabis plant (plant)</td>
<td>213</td>
<td>192</td>
<td>14,824</td>
</tr>
<tr>
<td>Cannabis resin (kg)</td>
<td>44</td>
<td>63</td>
<td>8.5</td>
</tr>
<tr>
<td><strong>Heroin (kg)</strong></td>
<td><strong>73</strong></td>
<td><strong>22</strong></td>
<td><strong>97.8</strong></td>
</tr>
<tr>
<td>Cocaine (kg)</td>
<td>132</td>
<td>108</td>
<td>14.4</td>
</tr>
<tr>
<td>Amphetamine (kg)</td>
<td>484</td>
<td>483</td>
<td>71.2</td>
</tr>
<tr>
<td>Herbal substances with synthetic cannabinoids (kg)</td>
<td>51</td>
<td>465</td>
<td>14.8</td>
</tr>
<tr>
<td>Synthetic cannabinoids in powder form (kg)</td>
<td>5</td>
<td>51</td>
<td>0.01</td>
</tr>
<tr>
<td><strong>Cathinone derivatives in powder form (kg)</strong></td>
<td><strong>353</strong></td>
<td><strong>595</strong></td>
<td><strong>9.08</strong></td>
</tr>
<tr>
<td>Cathinone derivatives in tablet form (pc)</td>
<td>60</td>
<td>144</td>
<td>3,990</td>
</tr>
</tbody>
</table>

Source: Hungarian Institute for Forensic Sciences, 2012
Other data sources

- GPS (ESPAD): mephedrone LTP 6% (5th highest, ~ATS)
- NFP qualitative studies: increasing number of cathinone users get in touch with services; transition of primary substance, % of opiate users dropped
- DRD: Decreasing heroin related mortality since 2010
- recreational / sniffing / eating NPS use is present (~ATS)? addiction potency, emergency visits, overdose issues, polydrug use, negative after-effects, psychiatric commorbidty
- time lag to treatment?
- problematic NPS use: injecting, actual treatment demand
National seroprevalence survey 2006-2011 among IDUs at NSPs and DTCs by primarily injected drug

- 40% amphetamines
- 5% mephedrone
- 3% MDPV

Source: National Centre for Epidemiology and National Focal Point
Routine testing in 5 cities, 2010-2011 among IDUs at NSPs and DTCs by primarily injected drug

- proportion of new and young IDUs slightly increasing

Source: National Centre for Epidemiology and National Focal Point
Risk behaviours (%), 2010-2011
Routine testing in 5 cities, among current IDUs

• proportion of IDUs injecting several times a day increased from 17% to 29%.

• IDUs received a used syringe from 2 or more persons (last 4 weeks) - increased from 13% to 20%

• among current „other drug” injectors (2011):
  needle/syringe sharing: 41%
  any injecting equipment sharing: 61%

Source: National Centre for Epidemiology and National Focal Point
NSP clients 2009 – 2011
national coverage, by primarily injected drug

Source: National Focal Point and Tarjan 2012
Qualitative data
NFP qualitative studies and annual national meeting of NSP service providers (December 2011)

- More frequent injection times/ per day (10-20 times)
- Younger IDUs attend programmes
- Sometimes NPS users start their injecting carrier with these drugs
- Preparation for injection is quicker and more simple – use in open scene
- Lack of information on substances injected and on consequences at service providers
- Physical/mental problems of NPS injectors develop more rapidly
- Increased demand for sterile syringes, more frequent contacts at NSPs

Source: National Focal Point, Horváth et al. 2011, Csák 2012
New trends in TDI

Proportion of users of heroin, amphetamines and other stimulants among clients already treated before (first chart) among clients starting treatment for the first time (second chart) (not in QCT), between 2007 and 2011 (%)

Source: National Centre for Addictions and Hungarian NFP, 2012
Qualitative data
NFP study among in- and outpatient service providers, outreach and NSPs on new phenomena in 2010 and 2011 (study repeated)

- IDUs shifting from heroin to amphetamines or new psychoactive substances (synthetic cathinones)
- IDUs use what is available + lower price of NPS
- (ex) legal status – more openly used in public spaces
- Novelty + perception of low risk
- Changing substances – sold under the same street name (MP) – IDUs do not know what they inject, dealers do not know what they sell
- Purity „strength” varies, high variety of combinations

Source: National Focal Point, Horváth et al. 2011, Csák 2012
Tools and challenges of monitoring

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Data sources

Reliable, valid infos about NPS come only from the
- Early warning system (EWS)
- Police seizure data

because of the exact analytical chemistry and detection of NPS in substances.

Other infos are based on 1) invalid? self-reporting or 2) other data of limited validity (e.g. detection in biological samples).

Data collection tools – mostly the yearly ‘routine’ tools – were / are inflexible to follow the emergence of the NPS.

> slow technical process of changing a data collection tool
> NPS appear and disappear so quickly that those tools cannot follow
> present categories are inadequate
Unknown substances – unknown mixtures

General population survey (GPS)

Have you used meow-meow in the last 12 months?
Have you used any white (brown?) powder in the last 30 days?
Have you ever bought any legal highs in a shop / online?

>> tools revision, street names, language and question forming, reference periods

Treatment data (TDI)

Self reported primary / secondary drugs
Polydrug use definition / changing active substances

Users guess what they use, but it can be anything!
> can change within a year of reporting (both: substance, pattern)
> substance that causes „the most problems” cannot be identified
> categorising new drugs can be problematic (e.g. other stimulants) when reporting

Panel II: Tools and challenges of monitoring
Legal status – drug-related...?

Drug-related mortality (DRD)
> We do not report on deaths related to legal drugs – Will we?
> Limited infos on metabolism, cross-reactions, problems with analytics
> Missing reference substances, technical infos and financing for new and quickly changing drugs > labs may not detect NPS
> Limited info on toxicity (direct deaths)
> Limited infos on long-term somatic effects (indirect deaths un(der)reported)

Other forensic issues
> Substances may be detected, that is presence in biological samples but influence / role of the NPS in a situation (e.g. road accident, violent crime) is not clear
> Quasi compulsory treatment > NPS are not illegal thus no reference to treatment
Problem drug use (PDU)

‘Problem drug use is defined as ‘injecting drug use or long-duration/regular use of opioids, cocaine and/or amphetamines’ - EMCDDA def.

> Theoretical definition now does not name NPS e.g. cathinones

> Injecting any drugs is included but that is only part of the phenomenon

> NPS may be more clean / stronger than classical drugs (e.g. strong synthetic cannabinoids, cathinones without cutting agents)

>> NPS use can be as problematic as use of those

? include in the PSU / PAU population

> When estimating the number of the hidden population of problematic drug users police datasets and treatment data may be of limited use
Interpretation problems

- Inflexible categories in national and EMCDDA data collection tools
  - growing case numbers in categories ‘other drugs’, ‘other stimulants’, ‘not elsewhere classified’
  - Police arrest figures may decrease
  - No ICD-10 specific categories, no T-codes for poisoning

Consequence I: Underreporting

- Difficulties in time series analyses
  - changing to NPS influences time series analyses
  - changing in categories, case definitions

Consequence II: Misinterpretation

Panel II: Tools and challenges of monitoring
Example for the ‘interpretation issue’

Prevalence of HCV (%) among IDUs by the injected drug

From 2009 to 2011 many heroin users changes to cathinones
The national prevalence rate is ~stable
>> increase among non-opioid injectors, decrease among heroin users ?
>> not HCV prevalence changed but the primarily injected drug!
Reitox workshop in Budapest
April, 2012

Participating countries: Austria, Czech Republic, Hungary, Italy, Lithuania, Poland, Romania, Slovakia, Spain, United Kingdom, EMCDDA

The aims of the meeting were:

- to strengthen exchange of information on prevalence and patterns of new psychoactive substance use,
- to discuss ideas and practical solutions to data collection challenges,
- to facilitate exchange of information on promising responses,
- to discuss how to evaluate available information, studies and how to disseminate information on new substances,
- to identify and set up a group of countries that face similar challenges related to new psychoactive substances (i.e. new substances dominate the market, injecting drug use, increasing treatment demand).
New tools, new approaches

Many countries mentioned already:

- NFPs involved in national risk assessments
- introduction of new categories
- using open categories/questions
- breaking down broader EMCDDA categories into country-specific sub-categories
- complementary data collection to reveal information not reported (at all or traceably) in routine systems
- connecting quantitative and qualitative data, infos
- or only use qualitative infos
(selected) Proposals by the workshop

- The impact of the phenomenon of NPS on EMCDDA definitions (e.g. polydrug use, problem drug use) should be further assessed.
- New categorizations should be harmonized across indicators.
- The structure of NR is not optimal as no place is given to provide a cross indicator analysis on e.g. the NPSs situation.
- Solutions have to be developed not only for collecting data at national level but also for reporting data from national level to EMCDDA – guidance from EMCDDA where to report (e.g. in NR, Fonte, BPP).
- Timeliness – solutions to handle the problem that in 2012 AR 2010 data is reported, not present situation, especially important with NPSs.
Exchange on data collection challenges related to new psychoactive substances use

*workshop documents and presentations*

www.drogfokuszpont.hu  → EWS

>> Reitox workshop on new psychoactive substances

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www.drogfokuszpont.hu
Discussion

- Data sources
  - > validity
  - > technical difficulties of tool revisions

- Unknown substances – unknown mixtures
  - > problems with self-reporting
  - > problems with analytics, metabolism

- Legal status – drug-related... ?
  - > changing case-definitions, legal actions, forensic issues

- Interpretation problems
  - > problems with categorisation
  - > statistics breakdown by primary drug
  - > time series analyses