MDMA related deaths in France

and the french register data
(D.R.A.M.E.S.*)

*Décess en Relation avec l’Abus de Médicaments et Substances

*Fatalities in relation with abuse of licit or illicit drugs

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MDMA use in France
(CSAPA CAARUD ; OPPIDUM, 2014 CEIP)

• 4% of patients (use in the last 7 days)

• MDMA users : older (mean : 31.1 years)
  (70 % > 26 ans ; 53 % in 2005)
• Oral MDMA use ↓ : 72 % (94 % in 2005)
• Nasal use ↑ : 22 %
• IV use ↑ : 16 %
• Polydrug users : 98%
• Alcohol + MDMA : 63%

(Also polydrug use in MDMA users evaluated by G.P.’s)
French drug related deaths

• French problematic drug users: 230 000 (Costes, 2009)

• 160 000 patients with buprenorphine or methadone treatment

• Drug induced estimated deaths in France in 2007 (capture-recapture DRAMES, OCRTIS, CépiDc): 1 175 persons (Janssen, 2011)

• Fatalities: 0.5% / year of problematic drug users (2% in Lettonia)

• Methadone and buprenorphine related deaths > 50% if DRAMES is representative
DRD France
Methodology of D.R.A.M.E.S. data register
(Décès en Relation avec Abus de Médicaments Et Substances)

- Systematic complete toxicological analysis and forensic study with autopsy
- Exclusion of suicide cases and car crash accidents
- Expertise of each case and imputability of each substance
- Cases of responsible drugs with no other cause of death: drug related death
- Indirect participation of drug in death: not drug related death (ex. LSD and drowning)
<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Received cases</td>
<td>376</td>
<td>388</td>
<td>446</td>
<td>398</td>
</tr>
<tr>
<td>Included cases</td>
<td>276</td>
<td>316</td>
<td>346</td>
<td>328</td>
</tr>
<tr>
<td>Experts</td>
<td>31</td>
<td>36</td>
<td>41</td>
<td>32</td>
</tr>
<tr>
<td>No other cause</td>
<td>247</td>
<td>280</td>
<td>310</td>
<td>285</td>
</tr>
<tr>
<td>Deaths indirectly due to drugs</td>
<td>29</td>
<td>36</td>
<td>36</td>
<td>43</td>
</tr>
<tr>
<td>Excluded cases (other causes)</td>
<td>100</td>
<td>72</td>
<td>100</td>
<td>70</td>
</tr>
</tbody>
</table>

(27%) (19%) (22%) (18%)
Illicit drugs related deaths (2010 → 2013)

14 amphetamine cases:
- 11 MDMA
- 2 MDMA + amphetamine
- 1 Amphétamine
32 MDMA related deaths in France (2010-2013 DRAMES)
MDMA≈ 3 % of 1122 drug related deaths
(4 in 2010 ; 5 in 2011; 10 in 2012 ; 13 in 2013)
32 MDMA related deaths
(DRAMES 2010-2013)
(comparison with all DRAMES cases)

(4 in 2010 ; 5 in 2011; 10 in 2012 ; 13 in 2013)

In these 32 cases : other responsible substances ?
other substances related deaths ?

• Other substances may also be responsible of death :
  mean : 1.5 other substance (median : 1)

• MDMA and no other related substance to death: 43% (73%)
32 MDMA related deaths (DRAMES 2010-2013) (comparison with all DRAMES cases)

In these 32 cases: other associated substances participate to death

- Other associated substances: mean: 2.6 (median: 2)
  DRAMES 2013: associated S.: mean: 3.5 (median: 3)

- MDMA with no other associated substances: 21% (14%)
Associated substances (A.S.) in case of MDMA related deaths (DRAMES 2010-2013)
(comparison with all 2013 A.S. DRAMES cases)

- Opiate association : 36 %
- Benzodiazepine association : 7 % (51 %)
- THC association : 14 % (40 %)
- Ethanol association : 14 % (27 %)
Other “XTC” in France ; Ex : PMMA
2010 : 1 PMMA related death (DRAMES)
2014 : 2 PMMA-MDMA-amphetamine (DRAMES)

- European alert in 2015 (EMCDDA)
- French alert (2015)
- Risk of serotonin syndrome
  (Experimental study in Rat)

- Risk of ↑ of different « XTC » related deaths
French MDMA related deaths

Conclusions

• Increased MDMA deaths and increased use since 2010
• Few other substances (S. related deaths) : median : 1
• Insufficient tox. analysis ↗ evaluation of associated drugs
• Opiate association is frequent (36 %)
• Even if different profile, polydrug use ↗ MDMA mortality
• Insufficient prevention
• Information (treatment of “overdoses”) may ↗ prevention
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