New generation
New drugs
New harms
The rise and rise of club drugs

Dr Owen Bowden-Jones
Club Drug Clinic
4. NUMBER OF ADULTS AGED 18-24 STARTING TREATMENT 2005-11, BY DRUG

- Opiates only
- Opiates and crack
- Cannabis
- Cocaine
- Crack only

TOTAL NUMBER OF ADULTS AGED 18-24 STARTING TREATMENT
2005-06: 18,500
2010-11: 14,009

National Treatment Agency 2011
Figure TDI-1. Trend in estimated number of new clients entering treatment by primary drug used, from 2004 to 2009 figures in this series...]

Part (ii) Numbers of clients by primary drug

<table>
<thead>
<tr>
<th>Year</th>
<th>Heroin</th>
<th>Cocaine</th>
<th>Cannabis</th>
<th>Other stimulants</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2005</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2006</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2007</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>2008</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2009</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

EMCDDA 2011

Wellbeing for life
Are people giving up drugs, or moving on to different substances?

Where would we look for evidence?
Legal high linked to up to 100 deaths

Miaow miaow, the former ‘legal high’, could be killing users at a rate of one a week, the Government’s drug advisers warned yesterday.

Legal highs exploded in use in the UK in 2009, first led by the arrival of mephedrone, nicknamed miaow miaow. Photo: REX
Legal high made me run naked in Tesco

A hard rain's gonna fall... and fall and fall and fall
Festival drug seizures

Total street value of drugs seized at each festival and their breakdown by drug

- Cannabis (all forms)
- Cocaine (all forms)
- Ecstasy/MDMA
- Ketamine
- Methadone
- Piperazine/BZP
- Mephedrone/MCAT
- Others/unknown

Glastonbury

- £13,004
- £12,752
- £8,277
- £7,088
- £1,234
- £2,510

Guardian 2012
Pooled urine analysis

- anonymous
- non attributable
- no ethical issues
- informed consent not required
- no female samples

Source: Dr John Ramsey. TICTAC Communications Ltd
## Drugs detected in a single pooled urine collection

**Wardour Street, London, March 2012.**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Presence</th>
</tr>
</thead>
<tbody>
<tr>
<td>alprazolam</td>
<td>carbamazepine</td>
</tr>
<tr>
<td>diphenhydramine + metabolites</td>
<td>ketamine + metabolites</td>
</tr>
<tr>
<td>ketamine + metabolites</td>
<td>methyl methcathinone</td>
</tr>
<tr>
<td>paracetamol</td>
<td>THC metabolites</td>
</tr>
<tr>
<td>amitriptyline</td>
<td>cathine</td>
</tr>
<tr>
<td>metabolites</td>
<td>EDDP</td>
</tr>
<tr>
<td>lamotrigine</td>
<td>methylphenidate metabolite</td>
</tr>
<tr>
<td>paroxetine</td>
<td>theobromine</td>
</tr>
<tr>
<td>amphetamine</td>
<td>cetirizine + metabolites</td>
</tr>
<tr>
<td>ephedrine / pseudoephedrine</td>
<td>lidocaine + metabolites</td>
</tr>
<tr>
<td>metoprolol + metabolites</td>
<td>propranolol</td>
</tr>
<tr>
<td>theophylline</td>
<td>thioridazine</td>
</tr>
<tr>
<td>benzocaine</td>
<td>chlorpheniramine + metabolites</td>
</tr>
<tr>
<td>etoricoxib</td>
<td>MDMA</td>
</tr>
<tr>
<td>minoxidil</td>
<td>qetiapine + metabolites</td>
</tr>
<tr>
<td>benzoylclegonine</td>
<td>citalopram + metabolites</td>
</tr>
<tr>
<td>fluoxetine</td>
<td>meclofenamic acid</td>
</tr>
<tr>
<td>morphine</td>
<td>quinine</td>
</tr>
<tr>
<td>tramadol + metabolites</td>
<td>thioridazine</td>
</tr>
<tr>
<td>betaxolol</td>
<td>clozapine metabolite</td>
</tr>
<tr>
<td>gabapentin</td>
<td>methadone</td>
</tr>
<tr>
<td>nevirapine</td>
<td>ranitidine</td>
</tr>
<tr>
<td>xylometazoline</td>
<td>thioridazine</td>
</tr>
<tr>
<td>bisoprolol metabolite</td>
<td>codeine</td>
</tr>
<tr>
<td>HMMA</td>
<td>methiopropamine</td>
</tr>
<tr>
<td>nicotine</td>
<td>sildenafil metabolites</td>
</tr>
<tr>
<td>zolpidem</td>
<td>thioridazine</td>
</tr>
<tr>
<td>bufotenine</td>
<td>dextromethorphan</td>
</tr>
<tr>
<td>hydrochlorothiazide</td>
<td>methamphetamine</td>
</tr>
<tr>
<td>nordazepam</td>
<td>stanozolol + metabolites</td>
</tr>
<tr>
<td>hordenine</td>
<td>ranitidine</td>
</tr>
<tr>
<td>caffeine</td>
<td>dextrophan</td>
</tr>
<tr>
<td>ibuprofen</td>
<td>methoxyphenamine + metabolites</td>
</tr>
<tr>
<td>omeprazole + metabolites</td>
<td>temazepam</td>
</tr>
<tr>
<td>capsaicin</td>
<td>cotinine</td>
</tr>
<tr>
<td>isoxxsuprine</td>
<td>methylhexaneamine</td>
</tr>
<tr>
<td>oxazepam</td>
<td>tetramisole</td>
</tr>
<tr>
<td>ethanol 91mg/100mL</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Dr John Ramsey. TICTAC Communications Ltd
New psychoactive substances across EU

EMCDDA Annual Report 2012
Online sites selling NPS across EU

2010: 314
2011: 690

EMCDDA Annual Report 2012
NRG-3 Energy-3

Location: /NRG-3 Energy-3

17-alpha,21-Dihydroxy-16-alpha-methylpregna-1,4,9(11)-triene-3,20-dione 21-acetate

You can buy NRG3 from Legaliis and receive your delivery the following day so long as the order payment is received before 3PM. This is the newest and best product available on the market and really has had great reports. We still supply the Energy 2 but we wont supply cheap or NRG 2.

When compared to other products like MDAI or D2PM our recommendation is to try this and enjoy the results.


**STRICTLY NOT FOR HUMAN CONSUMPTION**
Who are using these new substances?
300,000 estimated Mephedrone users

113,000 estimated Ketamine users
## Drug use by ‘clubbers’

<table>
<thead>
<tr>
<th>Drug</th>
<th>Percentage (lifetime)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecstasy</td>
<td>89.5</td>
</tr>
<tr>
<td>Cocaine</td>
<td>84.6</td>
</tr>
<tr>
<td>Ketamine</td>
<td>66.1</td>
</tr>
<tr>
<td>Benzodiazepines</td>
<td>42.0</td>
</tr>
<tr>
<td>Mephedrone</td>
<td>41.3</td>
</tr>
<tr>
<td>GHB</td>
<td>15.2</td>
</tr>
<tr>
<td>Crack</td>
<td>13.6</td>
</tr>
<tr>
<td>Heroin</td>
<td>6.7</td>
</tr>
</tbody>
</table>

Winstock et al. Addiction 2010, 106, 154-161
However, only a **small increase** in club drug presentations for treatment

NDTMS data 2009-2011

• **SO WHAT IS GOING ON?**
• **Theory 1**: Use of NPS/club drugs is overestimated

• **Theory 2**: People are using NPS/club drugs but the drugs are not causing significant problems

• **Theory 3**: People are using NPS/club drugs and developing problems **BUT** they are not presenting to ‘traditional’ opioid/crack services
Club Drug Clinic

• Aims of clinic
  – Provide assessment and treatment specifically for people with problematic use of club drugs
  – Better understand what drugs people are using and what risks they pose (Early detection of substances and trends)
  – Develop an evidence base for treatment
What does the clinic offer?

- Information and advice
- Assessment of **substance use**
- Assessment of other problems – **physical**, psychological
- **Keyworking** – individual and group
- Specific **medical** treatments
- Specific **psychological** treatments
- Support for relatives
Central and North West London NHS Foundation Trust

......and

• Point of care **sexual health screening**
• Fast-track **urology** assessment
• **LGBT** specific keyworking
• Emergency **medical** pathway
Central and North West London NHS Foundation Trust

Referral

• **Remove barriers** to treatment

  – Treatment **not** dependent on local funding
  – **Confidential** – minimum data

  – Agency – referrals form
  – **Self-referral** – ‘phone, **e-mail** (less than 30 seconds !)
Central and North West London NHS Foundation Trust

Overdone it?

We can help

www.clubdrugclinic.com
The Club Drug Clinic is a new service for people who have begun to experience problems with their use of recreational drugs.

Club drugs that people may experience problems with can include:

- GBL
- Ketamine
- Crystal Meth and other amphetamines
- Cocaine
- MDMA
- Mephedrone
- Legal highs

The Club Drug Clinic is a team of specialist doctors, nurses, counsellors and psychologists who are all experienced in helping people who have a problem with drugs. The team is based in Chelsea & Westminster Hospital.

What sort of help does the clinic offer?
Who is attending the Club Drug Clinic?

- Heterosexual clubbers/students
- Gay men
- 3/4 first drug treatment episode
- Average age – early 30s. Established drug use
- Half Employed
- 1/4 Injecting, 1/5 Previous History of Injecting
Breakdown of Primary Drug

- GBL
- Crystal Meth
- Ketamine
- Mephedrone
- Cocaine
LGBT drug use (Primary, secondary and tertiary)
Central and North West London NHS Foundation Trust

Heterosexual drug use (Primary, secondary, tertiary)

- Cocaine
- Ketamine
- Alcohol
- MDMA
- GBL
- Mephedrone
Ketamine

- Short acting, dissociative anaesthetic
- Acute
  - Euphoric
  - Analgesia
  - Hallucinations
  - Sedation
  - ‘K hole’
- Chronic effects
  - Ulcerative Cystitis
  - Dependence?
• **Ulcerative cystitis**
  – Thick, ulcerated bladder wall
  – Decrease bladder volume

• **Supra-pubic pain**

• **Dysuria**

• **Polyuria**

• **Haematuria**

• **Severe pain** often leads to repeated dosing
Mephedrone

- Synthetic stimulant (cathinone)
- Alert, euphoric, pro-social
- Short-term
  - Post binge depression, anxiety
  - Severe paranoia
- Long term
  - Dependence ?
GHB/GBL

- Clear liquid. Industrial solvent
- Diluted in drink. Typical dose 1-2 mls
- Euphoria, disinhibition, pro-sexual
- Significant overdose risk
- **Severe** dependence-hourly dosing
- **Severe** withdrawal syndrome
What about legal highs?

- 32 different legal highs
- “Pick and mix”
- Effect of legality?
- No primary presentations
Summary

• **Changing patterns** of drug use
• Young people using range of **stimulant** and **dissociative** substances
• **Injecting** behaviours!
• Users **poorly engaged** in ‘traditional’ drug services
• Innovative new models to **engage**
• Short and long terms **harms** poorly understood
• Effective **treatments** need further research
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