# Which way goes addiction research in and for the EU?
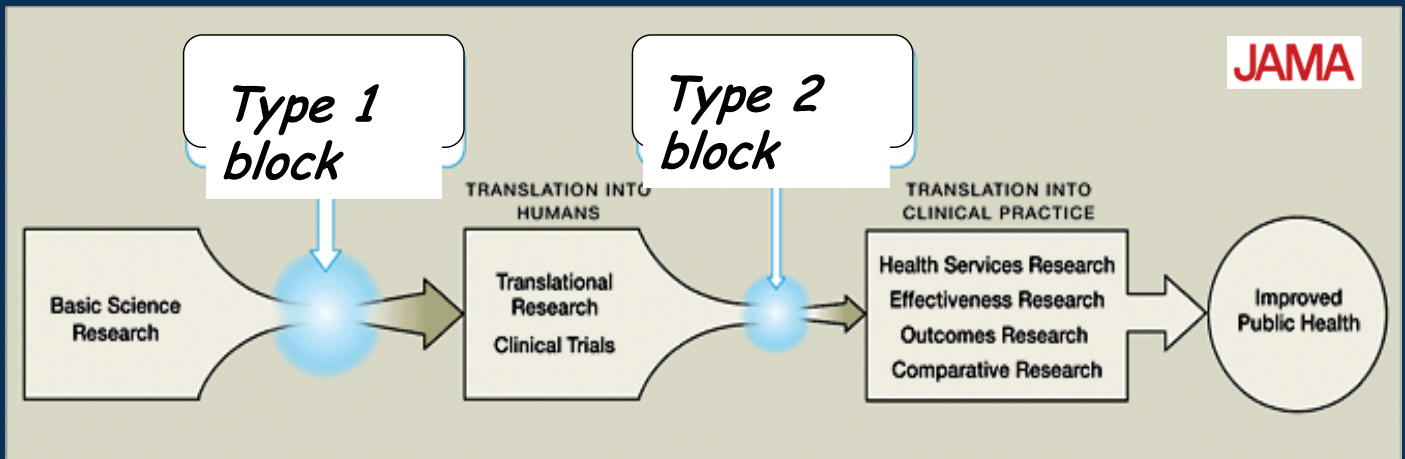
*Marina Davoli*
*Zurich, 10 September 2013*

**Patients, clinicians, carers, payers, and policymakers require reliable information when making health and social care decisions.**

**The path for implementing research into practice has unfortunately been slow**

## The long journey of research

**Two Translational Roadblocks on the Way Toward Improved Public Health**



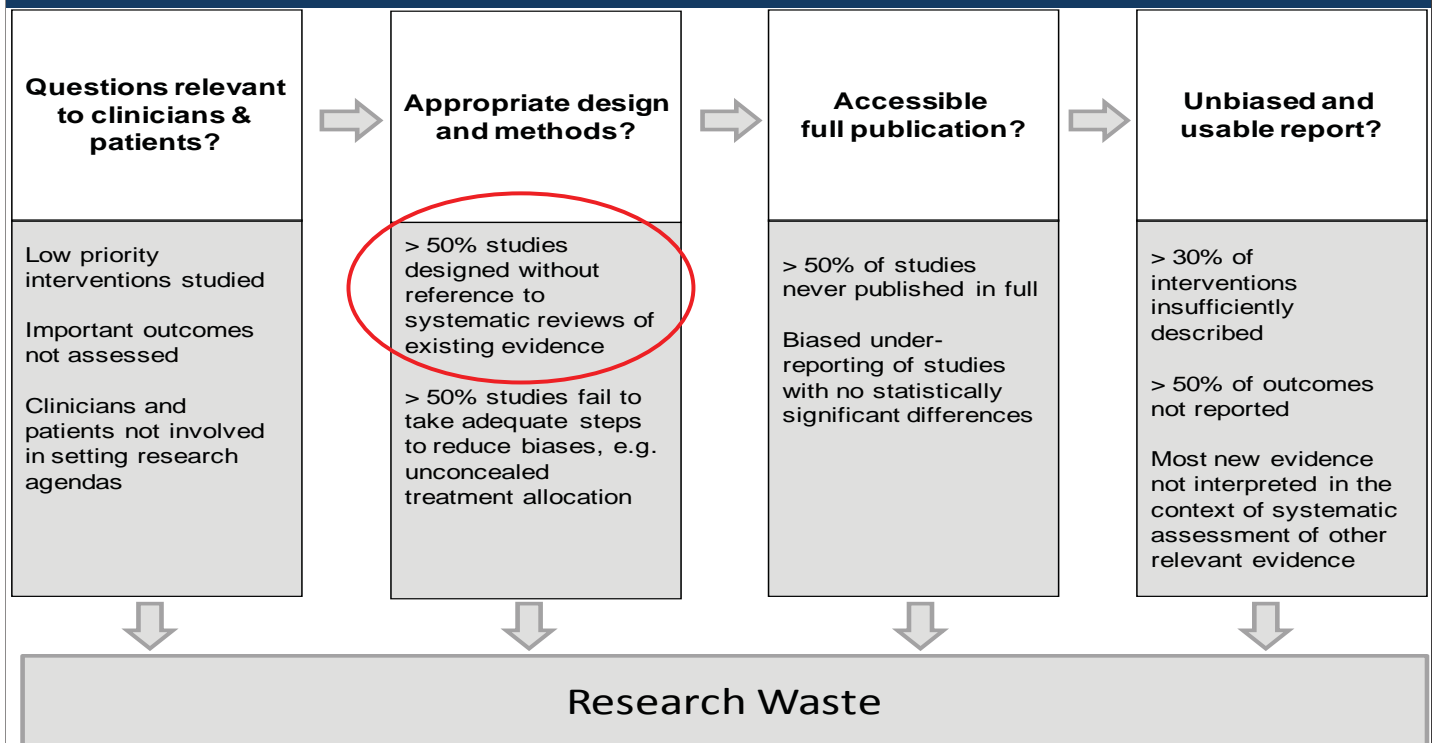*Crowley, W. F. et al. JAMA 2004;291:1120-1126.*

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# What's wrong in this logical path?

- Research often does not address relevant questions
    - For patients/people
    - For carers
    - For health services

- There is evidence of great waste in research

- Information has limited applicability for services configuration and policy making

- Knowledge per se does not shape clinical practice

- Cultural and organisational factors interfere with the implementation of effective practices

| Questions relevant to clinicians & patients? | Appropriate design and methods? | Accessible full publication? | Unbiased and usable report? |
|---|---|---|---|
| Low priority interventions studied<br><br>Important outcomes not assessed<br><br>Clinicians and patients not involved in setting research agendas | > 50% studies designed without reference to systematic reviews of existing evidence<br><br>> 50% studies fail to take adequate steps to reduce biases, e.g. unconcealed treatment allocation | > 50% of studies never published in full<br><br>Biased under-reporting of studies with no statistically significant differences | > 30% of interventions insufficiently described<br><br>> 50% of outcomes not reported<br><br>Most new evidence not interpreted in the context of systematic assessment of other relevant evidence |

## Research Waste

# How useful are Cochrane reviews in identifying research needs?

**Lorcan Clarke, Mike Clarke, Thomas Clarke**
UK Cochrane Centre, NHS R&D Programme, Oxford, UK

*Objectives*: To determine the extent to which reports of Cochrane reviews recommend the need for further research and, if so, the extent to which they make suggestions regarding that research.

*Methods*: We examined all 2535 reviews in Issue 4, 2005 of *The Cochrane Library*. Each review was categorized on the basis of whether a suggestion was included about specific interventions, participants, or outcome measures that should be included in future research. We also identified the frequency with which reviews conclude that no more research is needed or feasible, noted the need for further systematic reviewing, and refered to a relevant ongoing or planned study. We also report the number of studies listed in the 'Ongoing Studies' section in each review.

*Results*: Only 3.2% of reviews suggested explicitly that no more research is needed or feasible. In 82.0% of reviews, suggestions were made as to the specific interventions that need evaluating, in 30.2% the appropriate participants were suggested, and in 51.9% outcome measures were suggested. Suggestions for all three domains were made in 16.9% of the reviews. While 11.6% did not include a specific suggestion about any of these domains, 21.2% of reviews mention a relevant ongoing or planned study in one or both of the 'Implications for Research' and the 'Ongoing Studies' sections.

*Conclusions*: Most Cochrane reviews identify residual uncertainty and are a rich source of suggestions for further health-care research.

# Cochrane Drugs and Alcohol Group

**Authors, N= 376**

**Editors, N=9**

**Referees, N=111**

**Consumer involvement**

**Statistical advise**

## The editorial base

Marina Davoli
Laura Amato
Zuzana Mitrova
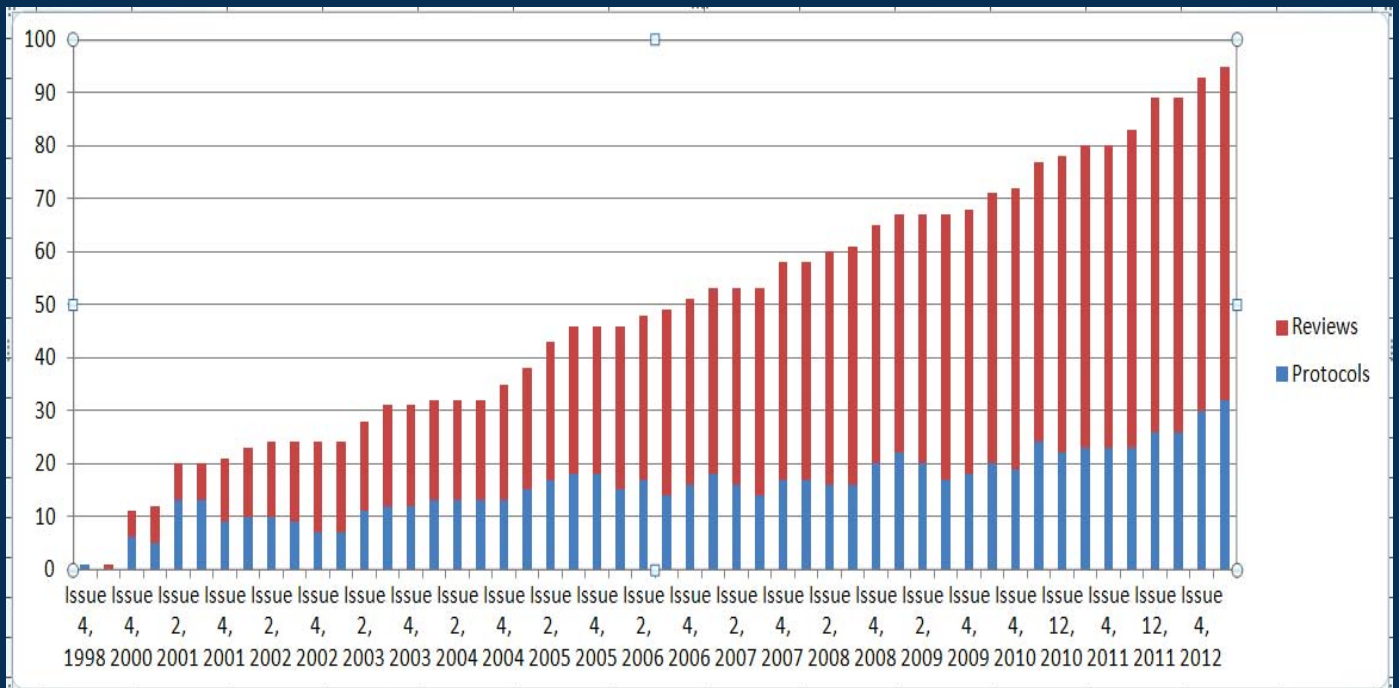Silvia Minozzi
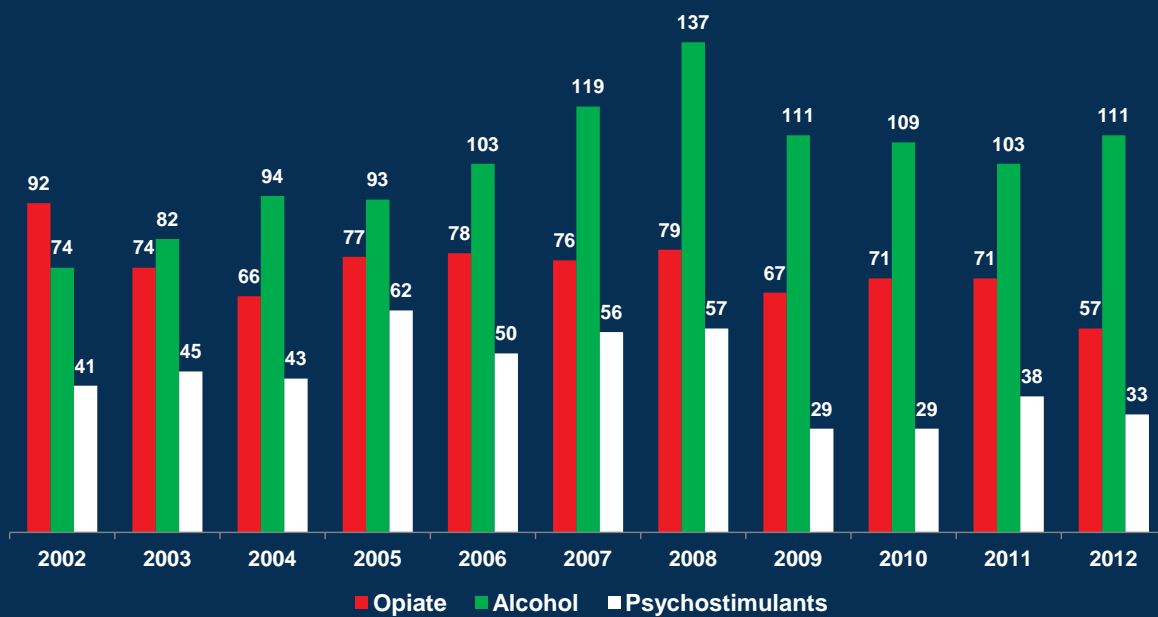
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## Cochrane Drugs and Alcohol Group

### The editors

Robert Ali (Australia)
Fabrizio Faggiano (Italy)
Michael Farrell (Australia)
David Foxcroft (UK)
Linda Gowing (Australia)
Mattew Hickman (UK)
Walter Ling (USA)
PierPaolo Pani (Italy)
Min Zhao (China)

# CDAG Reviews and protocols published per year



# Reports of studies published per year (Register CDAG)
## 2327 studies/about 6000

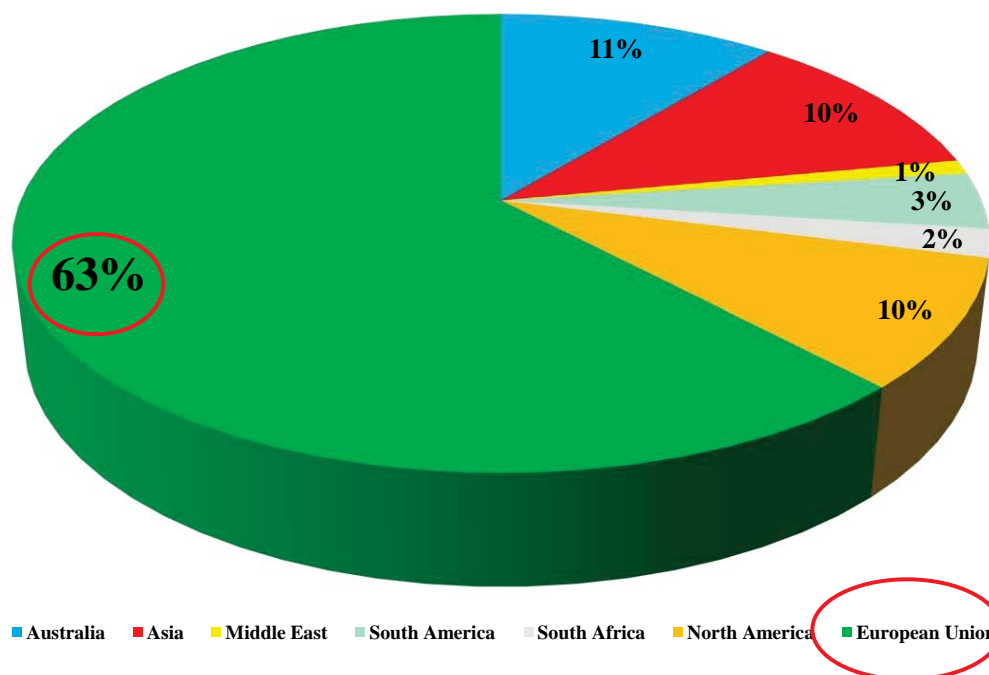# State of the art CDAG publications (CLIB 08.2012)
## http://www.cdag.cochrane.org

| Substance of abuse | N° reviews | Total studies considered | N° Excluded studies | N° Included studies | % of Included studies | N° Participants |
|---|---|---|---|---|---|---|
| Opiate | 24 | 975 | 701 | 274 | 28% | 44869 |
| Alcohol | 15 | 657 | 413 | 244 | 37% | 38409 |
| Psychostimulants | 11 | 309 | 177 | 132 | 43% | 12073 |
| Other | 4 | 82 | 63 | 14 | 17% | 1791 |
| Poly drug | 5 | 356 | 253 | 103 | 29% | 33193 |
| Prevention | 8 | 704 | 543 | 161 | 23% | 396580 |
| Total adjusted* | 67 | 3061 | 2150 | 906 | 30% | 522336 |

*22 studies in common

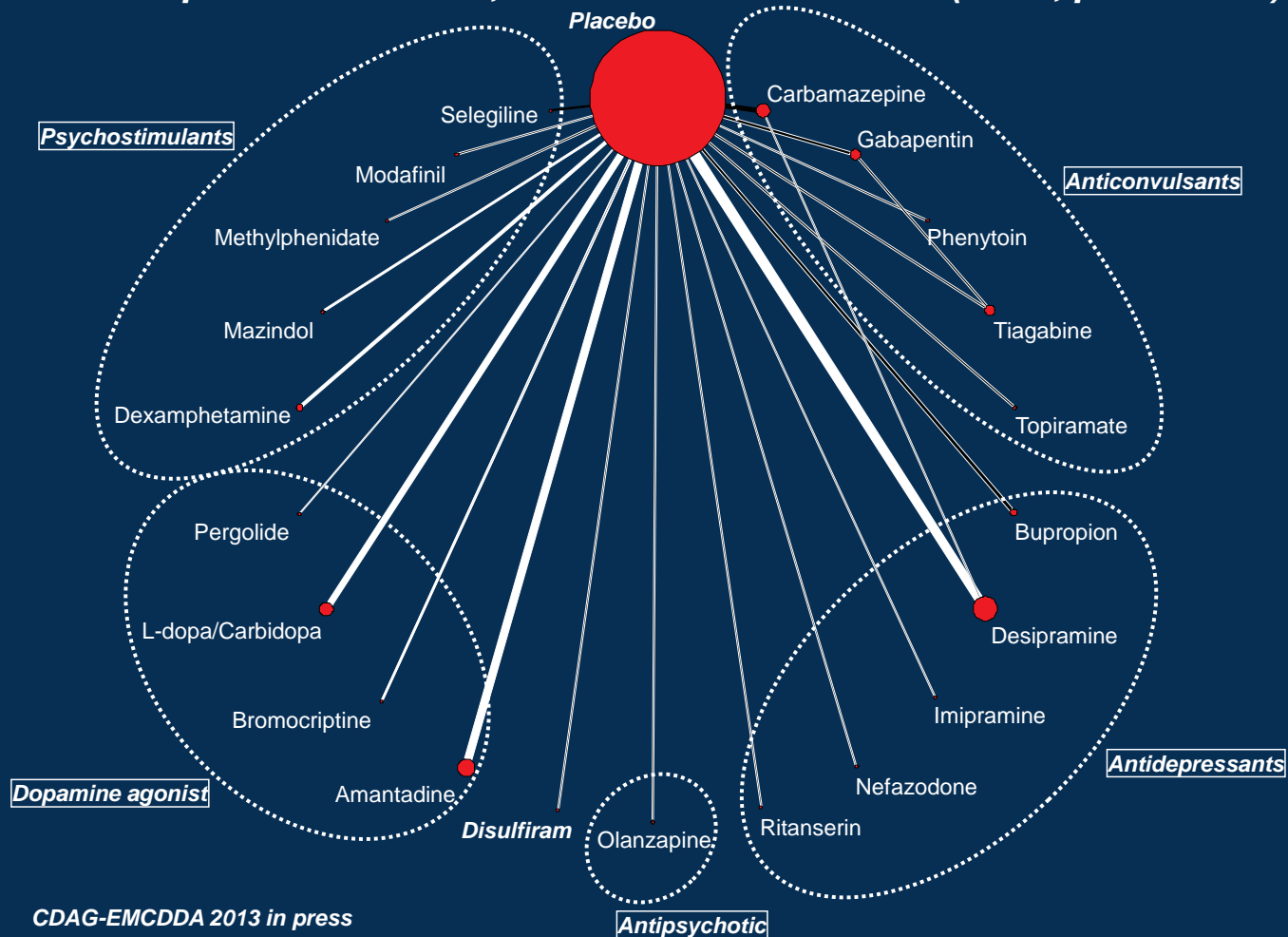## Country of origin of Authors (N=376) of Cochrane Reviews published with CDAG



11%
10%
1%
3%
2%
10%
63%

■ Australia  ■ Asia  ■ Middle East  ■ South America  ■ South Africa  ■ North America  ■ European Union

# Country of origin of included studies
## N= 906



Legend: Asia, Australia, Europe, Middle East, North America, South America, South Africa

Percentages shown: 1%, 1%, 3%, 5%, 23%, 1%, 66%



**Opiate**: 40%, 30%, 30%

**Alcohol**: 46%, 46%, 8%

**Psychostimulants**: 20%, 10%, 70%

**Polydrugs**: 40%, 60%

**Other**: 50%, 50%

Legend: to do, not to do, only in research

*http://clinicalevidence.bmj.com/x/set/static/cms/efficacy-categorisations.html*
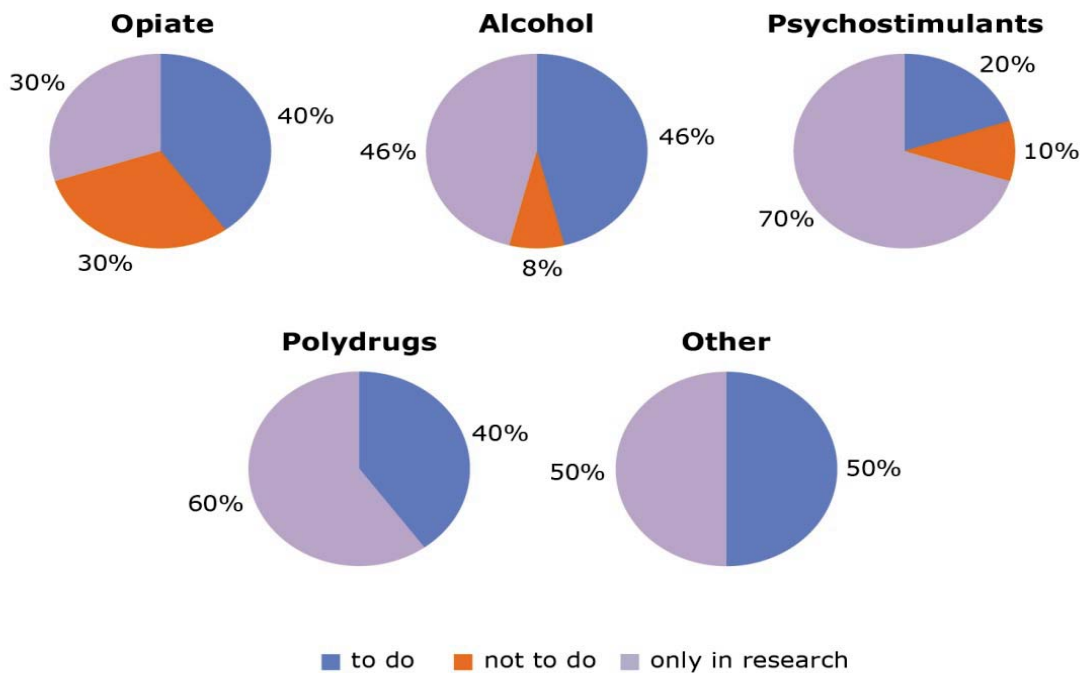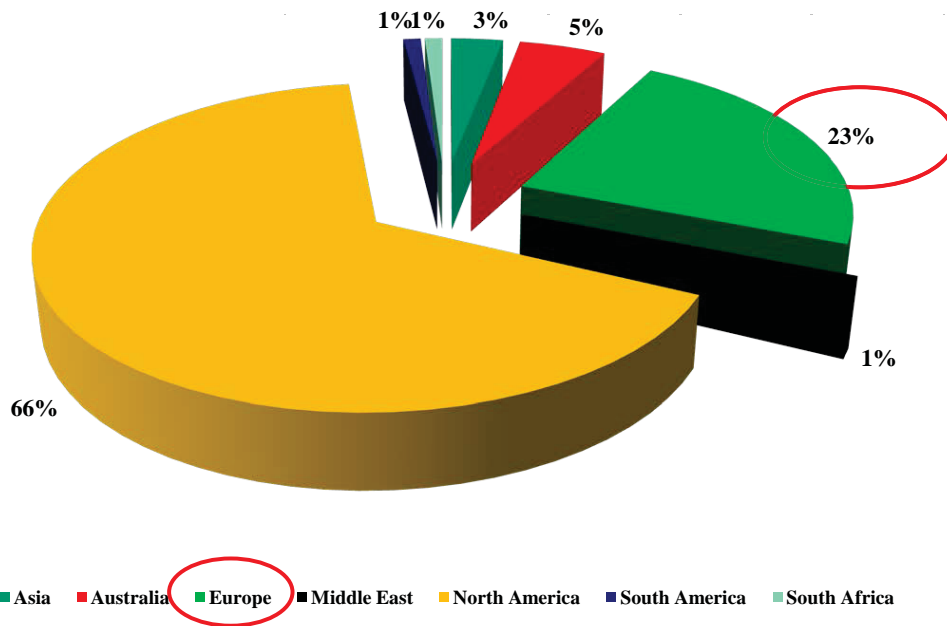
Cocaine – pharm. treatment; outcome use of cocaine (N=41, part = 3099)

CDAG-EMCDDA 2013 in press

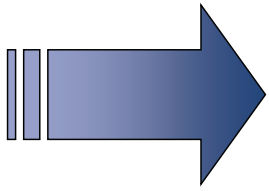European Monitoring Centre for Drugs and Drug Addiction

## Gap analysis in drug demand reduction research: protocol for a pilot study on treatment

Marica Ferri, Marina Davoli, Alessandra Bo, Laura Amato and Sandy Oliver

Lisbon, 11th May 2012

## Gap analysis in drug demand reduction research

**An overview of the available evidence allows**

1. **to assess the state of the art**
2. **to identify gaps and needs for further research**

**This supports the EMCDDA commitment to develop a Research Priority Framework**

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## Gap analysis in drug demand reduction research

**Key points of the study**

- **it is a pilot project**
- **focus on treatment**
  - *an area where more experimental evidence exists*
  - *an area where there is a perceived need for wider consideration of non experimental evidence and patients' needs*
  - *to benefit from the experience of the James Lind Alliance in neutrally facilitating identification of research priority*

- **building on the state of the art of research capacity in Europe** - *Comparative Analysis of Research into Illicit Drugs in the European Union, EC 2009*

## Gap analysis in drug demand reduction research

## Methods

*1) To identify the state of the art*

- *information contained in the EMCDDA Best Practice Portal*

- *Analysis of the "implication for research" section of Cochrane Reviews*

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## Gap analysis in drug demand reduction research

*2) To identify the relevant research gaps*

- *building on the experience of the James Lind Alliance we interviewed a sample of privileged witnesses from different European countries*

  *~~ The sample is not intended to be representative but rather to enable us collecting ideas and needs ~~*

- *the interview was based on semi-structured questionnaires and will be administered via email*

Tab.1 Synthesis of the implication for research sections in a sub-sample of the systematic reviews on treatment of drug addiction published by The Cochrane Group on Drugs and Alcohol.

| Target group | Summary of available evidence | "implications for research" as highlighted by the reviewers (when available) i.e. areas or topics for which specific studies are needed | Sources |
|---|---|---|---|
| Therapeutic communities | There is insufficient evidence to establish whether TCs are more effective at reducing drug use and health and social outcomes associated with drug use in comparison with an alternative treatment. | • studies should retain everyone in the analysis to help to answer clinically relevant questions (e.g. if someone is assigned to a TC, what proportion are for example, drug free or crime free not just during treatment but also after discharge)<br>• studies on cost-effectiveness of TC<br>• systematic reviews of observational research in this area | 1 SR |
| Amphetamine users | According to the current evidence, there are no data supporting a single treatment approach that is able to tackle the multidimensional facets of amphetamine addiction patterns. | • the consideration of outcomes such as: stages of motivation and readiness to change, patient satisfaction, functioning, and health-related quality of life<br>• psychosocial interventions for treating psychostimulants dependence<br>• the clarification of optimal dose and duration of any psychosocial treatment and minimum intensity of treatment<br>• specific interactions between patient characteristics and treatment modalities<br>• therapist effects<br>• neurotoxicity of amphetamines<br>• continued or episode regimens of antipsychotic medications following resolution of acute amphetamine psychosis<br>• spontaneous remission | 5 SR |

## Gap analysis in drug demand reduction research: preliminary results
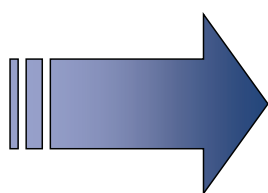


**Surveyed N=174 (practitioners, decision makers, researchers, individuals from patients'organization); Respondents=56 (33%)**

## Gap analysis in drug demand reduction research: preliminary results

### POPULATION

1. people dependent on individual drugs (i.e. cannabis, cocaine, amphetamines, ghb, *opioid users*);

    > aging drug users

    > occasional users, young people using in recreational settings

    > people who use multiple drugs;

2. people with mental health comorbidity

3. **health professionals**

4. **others, i.e. familiy, policy makers**

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## Gap analysis in drug demand reduction research: preliminary results

**Insight - Population**

**health professional / carers**: *what type of questions raised?*

- effects of training;

- effects of education on treatment of dual diagnosis;

- effects of introduction of standards;

- impact of carers' individual believes in the choice of treatment for their patients;

- how to identify "predictors" of success

## Gap analysis in drug demand reduction research: preliminary results

### INTERVENTIONS:

1. Interventions for management of treatment, *eg.*

- service provision
- matching of treatment and clients
- protocols for prompt referrals

2. Treatment interventions, *eg.*

- co-morbidity and dual diagnosis interventions
- long term after-treatment strategies to support recovery
- interventions for parents and children

3. Treatment setting, *eg*

- theraputic communities
- residential treatment long and short term

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## Gap analysis in drug demand reduction research: preliminary results

*Points for discussion:*

*The answers are consistent across different respondents.*

*The general feeling is that*

- *Components and predictors of OST success (long term trajectories, quality of life measures, social inclusion interventions)*
- *know more on "non-opioid problems";*

*Co-morbidity and young people dependence are often mentioned;*

*The long list of "proposed questions for research" will be made available in a internet section*

## Conclusions

- **To select priorities, gap analysis should be the preferred method**

- **How to promote more gap analysis?**

- **Promote a systematic review "research" programme in other relevant areas of intervention to identify gaps**
  - ✓ **Liase with Campbell Collaboration**
  - ✓ **Other ….**

- **Promote a wider consultation (more inclusiveness)**

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# A wishful process to define the research agenda

- **Research is planned:**
  - considering sistematically what is already known

  - focussing on relevant uncertanties for patients/people, their carers and policy makers

  - taking applicability and generalizability into account

RESEARCH AND REPORTING METHODS

Figure. Cycle and effect of new research.
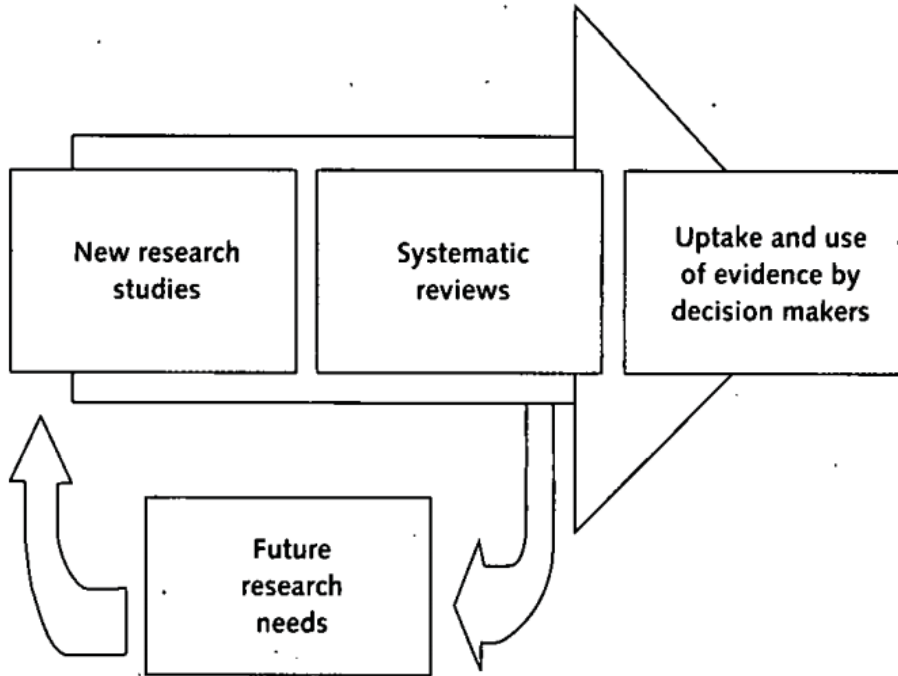


Chang SM et al. Ann Int Med 2012

let's invest in research, maybe we are lucky enough to find something