European Monitoring Centre
for Drugs and Drug Addiction

Annual Expert Meeting

'Drug-related deaths and mortality among drug users' key indicator

Day 1 -DRD-

Minutes

16 October 2013

EMCDDA – Lisbon

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Recipients: DRD experts and other participants to the first day of 2013 DRD/DRID annual expert meeting; heads of national focal points.

- These minutes include a 'Summary and action points' box (Pages 2 and 3) and references to the presentations and discussions
- Presentations are available from the DRD restricted access area (for participants in the expert meeting and national focal points) http://projects.emcdda.europa.eu/alias.cfm/areaDRD

- The contact details of all speakers and participants are available from the above-mentioned link and persons interested in a particular presentation are invited to liaise directly with the speakers or with the EMCDDA for further information[1].

Appendices available from the DRD restricted access area

- Agenda
- List of participants
- A compilation of the DRD 2013 national abstracts available at the time of writing
- Papers and documents on the topics discussed, sent to the experts to prepare and to follow up after the meeting

[1] The EMCDDA public website will be updated and the power point presentations given during the 2012 and 2013 DRD Expert Meetings will be available on the public pages, for a wider public. This aims to increase both the visibility and the value of your work and the Drug-related Deaths Indicator Expert Network. The presentations are available from pages http://www.emcdda.europa.eu/themes/key-indicators/drd

Summary

- The expert meeting took place on 16-18 October 2013 in the EMCDDA's premises. On the 16th, the DRD meeting included plenaries and workshops. On the 17, the DRD and DRID meetings were combined for plenary sessions. On the 18, the HIV risk assessment was discussed
- These are the minutes of the 1st day, i.e. ''DRD only' day and of the 2nd day (joint sessions DRD/DRID and prevention of DRD).

- The main aims of the expert meeting were to share and discuss the analysis of the recent European data and of the new developments. It aimed to discuss current activities and steps forward, to encourage cross-indicator analysis and to get input and suggestions from the national experts on some projects of the 2014 EMCDDA Work Programme.

- The meeting aimed as well to discuss the state of progress of the indicator 'Drug-related deaths and mortality among drug users', and to discuss specific national data and projects.

- The meeting on 16 October focused on the following areas presented and discussed in plenary sessions:
  - Recent European DRD data (based on preliminary analyses of data just reported by the Member states in 2013) – new developments and concerns)
  - Overall and cause-specific mortality among drug users based on longitudinal cohort studies of nine countries pooled for joint analyses
  - A detailed presentation of the DRD situation in Ireland, Norway and Austria presented by national experts
  - Issue of toxico-vigilance and enhanced monitoring of deaths related to new drugs

- The experts commented and contributed with their data and analyses to four workshops on[2]:
  - Mortality cohort studies[3]: with a focus on the pooled studies and among amphetamine users
  - Medicine-related deaths, with a focus on increasing tramadol and fentanyls-related deaths
  - Enhanced monitoring of acute emergencies based on national reports with focus on cannabis/cannabinoids
  - Underestimation and cross-validation of drug-induced deaths data

- The meeting on 17 October focused on the following topics, presented and discussed with the mixed group of DRD and DRID national experts:
  - Mortality cohort studies among drug users (insight into all causes of death, beyond overdoses) Mortality related to infection – HIV, anthrax: service provision and guidelines
  - Hepatitis C infection in PWID
  - Harm related to new psychoactive drugs and methamphetamine
  - Prevention of overdose and infection: discussing various prevention strategies and attempts in various countries, including implementation of naloxone programmes

[2] See next pages the objectives, main findings, conclusions and the links to the presentations

[3] See the 2012 cohort guidelines available from http://www.emcdda.europa.eu/themes/key-indicators/drd, under the 'Key Documents' section

Next steps and main action points

- Usefulness of data from Hospital emergency rooms to monitor drug-related harm **Action**: interested experts and EMCDDA
  - Following the workshop on cannabis-related emergencies, a more in-depth analysis of the 2013 national reports (when received) will be conducted and some findings may be integrated into the 2013 European Drug Report (EDR).
  - A more in-depth review could be conducted (EMCDDA work Programme 2014), as was done for cocaine-related emergencies.
  - An EMCDDA strategy paper on options for monitoring drug-related emergencies is in preparation.
  - Euro-DEN EU-funded project (on acute toxicity of recreational and NPS) on-going in 2014, in liaison with EMCDDA for synergy and exchange of information.

- Multisite analyses of Mortality cohort studies **Action**: EMCDDA and contributing experts:
  - Interested national experts to provide, where national regulation allows, and if not done yet, their datasets following the format of the 2012 EMCDDA cohort guidelines[4] to append them to the pooled EMCDDA dataset (>31000 patients so far, from nine countries).
  - A draft EMCDDA Thematic paper will be circulated in November to participating experts for comments.
  - Draft papers for submission to peer-reviewed journals to be finalised by lead EMCDDA and national authors.
  - Interested participating experts are again invited to suggest additional research questions (so far, age, inequalities, causes of deaths).

- Medicine-related deaths **Action**: EMCDDA to further elaborate a conceptual framework for enhancement of the monitoring of misuse of medicine and to further review the strengths and limitations of the DRD indicator (among others) for collecting medicine-related data. Interested national experts to be consulted.

- New psychoactive substances (NPS)-related deaths **Action**: EMCDDA to integrate comments received on the draft tool for enhanced data collection of the fatal cases. EMCDDA to further elaborate how this might be integrated in/connected with the overhauled European Database on New Drugs (EDND), and to which extent it might help in any future data collection for joint reports.

- Next meeting: ~October 2014, likely back to back with the DRID or other expert meeting again but exact dates and format to be confirmed.

[4] As requested in the EMCDDA cohort guidelines, all individual case data sent to the EMCDDA should be fully anonymised (i.e. only a study ID number should be used and all identifiers, direct or indirect, should be deleted in the dataset shared with EMCDDA). All participating experts are requested to fully comply with their national regulations, in particular to ensure the complete respect of data confidentiality and data protection for the persons enrolled in the cohort studies or linkage studies.

Welcome speeches

Chair: Julian Vicente & Alexis Goosdeel, EMCDDA

Julian Vicente (JV), EMCDDA

JV introduced the meeting welcoming the focal point (FP) representatives, the nominated and invited national experts, EMCDDA colleagues, ECDC and other organisations. He highlighted that the annual expert meetings of the EMCDDA serve several purposes and that the EMCDDA's main aim is to enhance the utility and relevance of the key epidemiological indicators including cross-indicator work. The new format of the present meeting (combining the DRID and DRD meetings) aims at reinforcing cross-area cooperation and work inside and outside EMCDDA. It offers greater opportunity of synergy between the two areas which is hopefully reflected in the presentations and discussions that will take place. More than 20 plenary and parallel sessions as well as technical workshops will be held over three days. This will maximise the opportunities for the participating epidemiologists and other experts to discuss some technical issues related to monitoring drug-related harms, and to present and discuss the new developments in their countries as well as their implications for public health.

Alexis Goosdeel (AG), Head of Reitox coordination Unit, EMCDDA

AG stressed some important points of the background on which this combined meeting takes place: the collaboration with the national focal points and their nominated experts constitute the basis of the EMCDDA work, enabling it to provide Europe with relevant data on monitoring the drug situation in Europe. After more than 15 years of building and consolidating the key epidemiological indicators in particular, the Reitox network and EMCDDA ensure that sound, robust and comparable data are more and more available to inform policy making. AG referred to the evaluation and revision process for the annual key indicator expert meetings resulting in the introduction of this new format, in line with the recommendations of the evaluation conducted by Alan Lodwick. This DRD/DRID joint meeting is special because of its 3 days duration, its complementary themes, and the involvement of many experts and organisations. AG stressed that the continuous challenge is to produce information which meet a purpose, to allow evidence based decisions to be made and to link decisions with the responses that have an added value. This is particularly important these days, with the economic pressure for organisations to deliver cost-effective outputs with evident European added-value. Another challenge is to feed-back and communicate effectively information to policy makers and to other stakeholders. Added-value and effective communication will help much towards the sustainability of the European and national monitoring systems. AG also referred to upcoming (EMCDDA and ECDC) expert meetings in Serajevo, Talinn and Bucharest which will follow on the present meeting in Lisbon, in particular on the issue of HIV outbreaks.

Open speeches

Luis Mendão (LM), Civil Society Forum on HIV/AIDS

Brief civil society address

LM thanked EMCDDA and ECDC for putting attention to the issues of infections, economic crisis and responses. He stressed the importance of discussing the adverse health effects of the economic and social crisis in Europe and the increasing socio-economic disparities in many member states that affect mainly the most vulnerable groups. He commented on a Europe that concentrates on an ageing population and the general well-being of its population, but does not give much attention to transmissible diseases or those population groups most affected by poverty and social exclusion. LM stressed the need to put these issues higher on the agenda. This is not an easy task as the vast majority of the population is less affected by the phenomenon of drug use and transmissible diseases related to sex and drug use. The situation requires close collaboration

between all actors in this area. The challenge is to deliver the right information at the right level. According to LM, apart from the key responses related to needle and syringe programs (NSP) and opioid substitution treatment (OST), the drivers of drug use and infection related risks in many countries are rather social determinants that are not directly addressed by these interventions. Finally, LM urged to look more often from the viewpoint of the drug users, in order to understand these phenomena better.

DRD Workshop 1: Mortality cohort studies – EU pooled analyses and other longitudinal studies

Chair: Janusz Sieroslawski - Room CDS106

Background

- There is evidence of high mortality among opioid drug users in Europe and other parts of the world, and of considerable excess mortality among opioid drug users in Europe compared to the general population.
- Our ST data collection and Selected issue in 2012 showed that while many European countries conduct mortality studies many of these have not been published.
- We have built upon the previous EMCDDA pooled cohort study (COSMO group – published in 2008) and repeated the exercise with nine countries, including countries from Eastern Europe and Norway, with cohorts followed up to the end of 2011.

Purpose of the workshop and expected output

- Discuss and agree with the national contributors on the interpretation of the main findings of our pooled analyses and on their public health implications.
- Discuss the feedback received on working versions of the paper. Discuss the content of the 2013 EMCDDA Thematic paper on mortality cohort studies.
- Discuss preliminary analyses conducted by national experts on age, deaths due to HIV and to HCV.
- Discuss and compare the mortality among the pooled cohorts of opioid users with a cohort of amphetamine users.
- Progress and agree on the main points in our interpretation of the main findings and plans for outputs.

Main discussion points and conclusions

- The main findings of the pooled analysis (high mortality rates, high excess risk, distribution of deaths by cause, differences between countries) are commented on by the contributors and other experts. These findings will be presented in plenary on Day 2, overall, and with a focus on age differences.
- Overall comments: the cohorts differ which challenges the analyses and the interpretation of the results but provides opportunities as well. Mortality changes overall and by cause in particular can be explored now, including in countries where little cohort data was available so far.
- CZ and DN experts to explore if they can add their dataset for further analysis in 2014
- Effect of being in or out of treatment could be further explored (as was done by Thomas Clausen). This might be done for some countries were 'day by day' in or out of treatment data is available. Could be LV, RO, SP. Lead author(s?) to volunteer.
- Thematic Paper outline and draft paper were circulated before the meeting and comments were received (SP, NL, SI, EE, PL). To be revised now based on these and the workshop discussions on the limitations (comparability and interpretation), survival curves, different time, dynamic cohort or not, and potential of the pooled analyses.
- More analyses could be done on viral (HCV) and other liver diseases, and well as on HIV-related deaths, to continue the work started in 2013 by experts in SP and MT
- On amphetamine cohort (MarcisTrapencieris, Latvia): discussion on the changes in causes of deaths over time (suicide, ODs and other external causes in the first years compared to more somatic causes later). Issue of unspecific coding of overdoses as was observed in the opioid cohort from Latvia.

DRD Workshop 2: Medicine-related deaths – a focus on tramadol and fentanyls

Chair: Klaudia Palczak& João Matias- Room CDS107

Background

- The EMCDDA work programme stresses the importance of monitoring harm related to polydrug use, including the misuse of medicines.
- There is increasing concern and interest in Europe about the misuse of prescription opioids and painkillers mirroring the situation in the United States.
- Reports of tramadol-related deaths in the United Kingdom have increased dramatically in the last few years.
- There are signals of harm related to medicines in particular in some countries (e.g. Denmark and Finland, with high dosage buprenorphine; Estonia with fentanyls; Germany and Sweden with diverted fentanyls; Croatia and Scotland with methadone).
- A 'trendspotter' exercise in 2012 revealed the complexity and multifaceted nature of the fentanyl problem across Europe, as well as worrying trends in fentanyl-related deaths and intoxications.

Purpose of the workshop and expected output

- Discuss the findings and the added value of the fentanyl 'trendspotter' multidisciplinary approach; share and discuss updated national data on fentanyl-related deaths.
- Discuss the monitoring of medicines-related harm in Europe, the extent of the problem and its implications for the monitoring of DRD. Discuss the strengths and limitations of the data currently available.
- Discuss the findings of the survey among DRD experts on tramadol-related deaths.
- Get an updated overview of deaths related to tramadol and fentanyl in the countries participating in this workshop, and discuss more generally the implications of medicines in drug-related mortality.

Main findings and conclusions

- The main findings of the 'cross-indicator' trend spotter meeting are presented to introduce the topic and the 2013 updates provided by the experts Fentanyl: trendspotting overview and focus on deaths *(Jane Mounteney, EMCDDA)*
- Increase of fentanyls-related deaths was reported in the UK, SE and particularly in EE. FI informed that fentanyl is available and comes and goes from the market. There is no need for local and home production of fentanyl as the patches' concentration is high (explaining the high overdose potential) In IE information on fentanyls related deaths is not available.
- On tramadol: In the UK, the number of cases has been increasing from ~40 in 2001 to ~250 in 2012, along with significant increase in prescription from 1.8 million items prescribed in 2001 to 7.5 million in 2010.Situation in the United Kingdom *(Jonh Corkery, United Kingdom)*.
- For the additional countries submitting data, few cases have been reported Tramadol-related deaths: results of the 2013 survey *for discussion (João Matias, EMCDDA)* The data reported in October 2013 by the national experts show that in FI tramadol deaths are always linked with other substances and tramadol does not appear alone. In the cases on which tramadol was found alone, it was mentioned that possibly this was the case just because there was no screening for other substances. .Erkki Vuori, Finland No information is available in CY and DE. All tramadol related deaths in the CZ were intentional.
- Some countries have pointed out an issue of benzodiazepines, which is very relevant in terms of polydrug use, but not always reported through the DRD system. The limitations and challenges of the current monitoring are discussed. Risk of bias in vital statistics *(Erkki Vuori)* and Medicines in the context of the Early Warning System (EWS) *(Michael Evans-Brown, EMCDDA)*

- Some limitations of the DRD KI, in collecting information on medicines-related deaths are mentioned. The data collection is currently limited to misuse of medicine in the context of polydrug/illicit drug use and therefore excludes other risk groups e.g. middle-aged women).

DRD Workshop 3: Enhanced monitoring of acute emergencies – focus on cannabis/cannabinoids

Chair: Isabelle Giraudon – invited experts Antonia Domingo-Salvany and Paul Dargan - Room CDS107

Background

- The EMCDDA work programme stresses the importance of enhancing the use of acute emergency data to improve the monitoring of drug-related harm.
- One line of work is the monitoring of the implication of recreational drugs – and of new psychoactive substances in particular – in acute emergency settings. It relies on case-based surveillance (like the Euro-DEN EU-funded survey).
- Another line of work focuses on more 'established' drugs of abuse, and relies on surveillance of aggregated data. It aims to improve the data reporting system for monitoring purposes and to complement other indicators (TDI, PDU, deaths, seizures, and markets) in a timely and reactive way. It can rely on sentinel, ad hoc or 'routine' national data sources. The analysis of emergency data (number, demographics and trends) was conducted last year on cocaine-related emergencies, leading to a publication which highlighted the high public health burden of cocaine-related emergencies on emergency services.
- Priority is given this year to cannabis, due to its high prevalence of use, the occurrence of acute intoxications, and emerging concerns and interest about synthetic cannabinoids in some countries.

Purpose of the workshop and expected output

- Discuss the recent trends in cannabis-related emergencies in some countries, in particular the Czech Republic, Denmark, Spain and the Netherlands.
- Discuss the systems in place for the monitoring and reporting on acute intoxications in countries (Spain and the Netherlands in particular, as complex and ad hoc systems are in place). Discuss the possible involvement of poison centres, where they contribute to the monitoring. Discuss the limitations of the data currently available.
- Discuss the possible way forward for a useful European monitoring of acute drug poisonings, based on the reporting of aggregated data.
- Discuss links, differences and complementarity with case-based studies like Euro-DEN.
- Get an initial mapping of the data available and gaps and of recent trends on cannabis-related acute poisoning, building upon the analyses conducted with the DRD experts on cocaine.

Main findings and conclusions

- Introductory note to clarify that there is no plan up to now for setting up a new data collection through standard table, but rather a reflexion, on how to improve the use of national data on acute intoxication with recreational drugs at emergency settings in general and hospital emergency rooms in particular.
- Overview of the national situation on cannabis given by the experts:
- Noelia Llorens, Spain: the triangulation of Spanish data is presented and shows the consistence of the cannabis-related emergency data with other drug indicators like admission to treatment for cannabis (TDI), estimates of problematic cannabis use (CAST), perceived risk and availability. Trend: **increasing** numbers of cannabis-related episodes (1597 in 2011). Represent 16% of all drug-related episodes. 4/5 males, median age 24 years (compared to 34 years for cocaine and 38 years for heroin), 8/10 medical discharge. 1/3 cases with cannabis only, the others in a context of poly intoxication, mainly with alcohol and cocaine. When admited: for psychosis mainly.
- Eva Januševičienė, Lithuania: Small numbers but on the **increase** compared to 2008 (representing now 16/126; 13% of the drug related emergencies), unlike episodes related to opium, heroin and methadone. Most cases relate to very young male teenagers.

- Henrik Saelen, Denmark: High prevalence of cannabis use like in Spain. **Increase** in the number of cases from 2009 (~70) to 2012 (~110 cases), accounted for mainly by teenagers and males in their 20s males.
- Viktor Mravčík, Czech Republic: **Increase** in the number of cases between 2008 (~110) to 2012 (125 cases). Represents 12% of all drug related episodes. Intoxication for 2/3 of the cases. Other causes include injuries and behavioural and mental disorders. Number of admissions quite stable overtime (57 in 2012). Findings on a survey among frequent cannabis users: 6/10 report rare health problems and 1/10 frequent problems, including lack of motivation, amnesia, sickness, hallucination, disorientation.
- Esther Croes, The Netherlands: Monitor (MDI) based on 8 sentinel regions and 4 medical sources (ambulances, first aid, police and large events). Does not provide national estimates, only EWS. With regards to cannabis, age late 40s, often tourists, 6 to 8 /10 males, light level of intoxication compared to level with other drugs, co-intoxication with alcohol in half of the cases. Comment: lots of pre-hospital management therefore some drugs are missed at hospital.
- Barcelona experience (Antonia Domingo-Salvany, Spain): Discussion on the set up, changes, strength, potential and limitations of hospital based monitoring. With regards to cannabis, **increase** since 2004-2005, later than GPS incidence data (while concordance of the indicators was noted for cocaine, with an increase in the late nineties). Factor influencing monitoring: Problem awareness (e.g. Cannabis and psychosis) which influences the recording in medical notes; Specific studies in a given hospital; Area covered; Discontinued participation of some centres; Hospital in specific areas related to leisure drug consumption activities. Strength: Potential use of the emergency room data for capture recapture and for triangulation with other indicators of trends.
- Discussion with Paul Dargan, Euro-DEN principal investigator on the limitations of some hospital monitoring system, and in particular on the **reasons for underestimation and bias**: ICD codes used to extract hospital data are not fit to identify the acute intoxications with recreational drugs and even less so with NPS (no codes). Cases are likely to be coded with simply the symptoms (e.g. chest pain, psychosis) and the information on implication of drug is not recorded or not retrieved. No or limited reason for doing systematic toxicology analysis in emergency room cases as there is no or limited clinical added value (the management of the cases is symptomatic). Recording depends on staff awareness (e.g. self-declared mephedrone recorded as methadone by the staff). Added value to rely on sentinel centres with special interests and resources for toxicology confirmation. Added value as well from poison centres in the monitoring of drug-related harm
- Additional points discussed: only the tip of the iceberg is visible through routine data from emergency rooms due to coding issues and unsystematic toxicology confirmation. Therefore this source is commonly unfit to measure the real burden of acute poisoning with recreational drugs. This source is **valuable though to follow the trends** if the collection systems are unchanged overtime on 'classical' recreational drugs like cocaine or cannabis. Findings often match survey data and other indicators and can be used for **triangulation**. **Complementarity with other designs** such as Euro-DEN, based on sentinel centres.

DRD Workshop 4: Underestimation and cross-validation of drug-induced deaths data

Chair: Danica Thanki - Room CDS106

Background

- The EMCDDA protocol on DRD recommends that, where possible, several sources of data are used to analyse and report drug-induced deaths. Data from other sources such as forensic reports, police and coroners can complement the data from the general mortality registers. They allow cross-checking of the numbers and trends in reported drug-induced deaths.
- Some countries signal problems of underestimation, under-ascertainment, under-reporting, or non-national coverage of the data sources.
- Most of the 30 countries base their report on several sources and are able to conduct these cross-validations and analyses. Several countries have already done so.

Purpose of the workshop and expected output

- Discuss the experiences, studies and validations done in several countries, using the experiences in France, Slovakia and Turkey.
- Discuss some of the main limitations and challenges, including confidentiality, coding of the causes of deaths, death certificates uncompleted, decreasing level of autopsies, cases under investigation, changes in the surveillance systems where participation is voluntary.
- Get an insight into the possibilities to question and improve the monitoring of drug-induced death data. Share good practices and innovative approaches among national experts.

Main findings and conclusions

- Turkey Monitoring drug-induced deaths in Turkey *(Bulent Sam, Turkey)* reports low numbers of drug induced deaths but could not detect possible areas for underreporting. Selection D in Turkey 162 (autopsies based), most cases between 20 and 29. 3/4 with opioids, deaths mainly in Istanbul. 6-MAM in 41% of the cases, but codeine 59%, alcohol 13%. Background: heroin route through Turkey. Cannabis main drug found in indirect cases. Increase (14%) in DRD in Turkey from 2011 to 2012.
- Slovakia reports low DRD numbers as well Monitoring drug-induced deaths in Slovakia *(Jozef Sidlo, Slovakia)* Since 2006 continuous data collection, since 2009 electronic 53 000 deaths a year, and 47000 autopsies. =13% autopsy rate. No suspected underreporting in the data although pretty low death rates
- France DRD underestimation, overestimation, biases in reporting? *(Anne-Claire Brisacier, France)* conducted a cross-sectional of SR and GMR study in 2007 on DRD underreporting and found that numbers should be at least 30% higher, which would still lead to a relatively low rate compared to e.g. the UK (7x) and Germany (3x). Problems in France: confidentiality and some 'forensic obstacle' by physician when deaths go through legal investigation before final death certificates informs the GMR. Many physicians don't tick „forensic obstacle" (could be due to pressure of the family, sometimes unknown, confidentiality as excuse for not sending data). T codes are not available. Constant increase in DRD but stabilised within the age range 10-65. Overdose deaths are in older persons than treatment data would suggest. Limitation of the SR: based on the cases where toxicological analysis was requested (i.e. not systematic). Substances mentioned are mainly methadone 38%, buprenorphine 12%, heroin 16%. Possible other factors contributing to the relatively low DRD mortality are discussed: Buprenorphine over Methadone; better initial and continuous training of physicians; prevalence rates? Route of Administration (not really known in France).
- An interesting Finish interesting study was presented by Erkki Vuori on 'Risk of Bias in vital statistics'. It showed that 'we only see what we look for', e.g. in car accidents often no

toxicology is performed' (leading to higher DUI numbers in Finland than for example in DN). In Finland and Sweden 90% of traffic accidents undergo toxicological examination, (Norway, Iceland); in DN only 8 %. Not all positive drug finding are entered into the death certificate and official statistics (only relevant for death causes, e.g. passenger in car accidents not included): in particular cannabis is often missing (only 51% of the positives are mentioned in death certificates). Opioids (98%) and amphetamines (81%) are much likely to be reported. Alcohol is often missing, therefore the death certificates provide a limited and biased account of the presence of drugs.

- Causes of death: 1% under representation in Finland, 10% underreporting in Estonia… . Problem with aspiration: aspiration due to intoxication is poisonous death in ICD10 (was different in ICD9).
- In other countries: Latvia: 15% signed wrong ICD10 codes to cause of death and mentioned the launch of a study linking patients' histories and death certificates. Norway: analysis of the DRD needs to bear in mind the different prevalence of drug use in Europe and different route of administration or habits. UK mentioned that inevitably through GMR there is an underestimation of NPS deaths because of the lack of ICD codes

DRD Plenary afternoon

Objectives of this session:

- **To present the agenda, the objectives of this meeting, the progresses and work in progress since the 2012 DRD meeting.**
- **To present the EMCDDA preliminary analysis of the mortality data reported in September 2013, and to get some feed-back from the experts and suggestions for further analyses.**
- **To discuss in detail in 3 countries the recent DRD developments, concerns, and their analyses**

Key Epidemiological Indicator: Drug-related deaths and mortality among drug users.
Introduction to the expert meeting
(Isabelle Giraudon, João Matias, Julian Vicente, EMCDDA)

The main aim of the meeting is to share information and to discuss the state of progress of the indicator, the recent European data and new developments (based on the annual report and statistical bulletin), and to discuss current activities and steps forward. In particular, we aim to ensure continuity with previous analytical work, to encourage cross-indicator and transversal analyses, and to further analyse data related to new or increasing public health concerns.

The new format of the indicator meeting (this year back to back with DRID) aims to provide more opportunities for mixing expertise, sharing and discussing health-related data. We will ask for your feed-back on the added value, opportunities and possible problems related to this change. Specific national data and projects will be presented. Progress made in 2012–2013 is reviewed.

The aim and rationale for the four workshops is briefly presented, to introduce the feed-back to be done by the rapporteurs in the afternoon (see previous pages where the main discussion points and findings are summarised).

Some 2013 products/reports of the DRD indicators are mentioned: the POD (Perspective of drugs) on cocaine related emergencies as well as the 2013 literature review and report on this topic (continuation of the 2012 EAR paper on the topic and of the 2012 report on cocaine-related deaths); the enlarged pooled study with more countries (9 now, and 31000 patients enrolled); the draft Thematic paper on Cohort studies; the contribution of some of the DRD experts to the trend spotter meeting on methamphetamine; and of some others in the implementation of the DRD indicator in some IPA countries (Serbia, Kosovo, FYROM,…); the planned 2013 strategy paper on the use of data from emergency settings; and the updated analyses of HIV mortality attributable to IDU.

More information: Overview of progress with the Key Indicator

Drug-induced deaths reported in 2013: preliminary results for discussion
(João Matias, EMCDDA)

Since the early nineties, between 6 300 and 8 500 drug-induced deaths were reported each year in Europe. Following an overall falling trend in drug-induced deaths between 2000 and 2003, subsequent data show an increase. Peak was reached in 2008. Recent data (2013 reports, 2012/2011 data) suggest a slight increase with ~6400 cases (6300 last year[5]). Increasing proportion of women (now 23% compared to ~17 in 2007) is reported. Last year data is available for 26 countries of which more than 2/3 (18) report increased numbers. Overall number of DRD quite

[5] Note the that UK has changed the national definition this year, and retrospectively, which decreases the European numbers reported previously.

stable though as compensated by a decrease in several 'large countries' such as the UK, SP, DE, DN and AT.

Opioids, mainly heroin, are present in the majority of reported cases, typically in around 85%. The type of opioids mentioned varies across countries but is largely dominated by heroin (and HDB in Finland, as well as methadone in some countries like DN, IE, SP, RO). In most cases, heroin and methadone are mentioned with other drugs. The importance of detailed toxicological data for analyses of polydrug use is highlighted. Some countries with special registries report detailed data through their national report but this is hard to analyse as the data are not reported in a standardised way. Different hypotheses to explain the still high numbers in DRD and high mortality rates related to overdoses in some countries have to be further explored. Depending on the countries, they can include an increase in polydrug use, injection, relapsing opioid users leaving prison or treatment, an ageing population of chronic users; age and co-morbidities of drug users, availability of OD prevention, treatment and emergency services, quality of the data collection and reporting. These factors were discussed during the meeting.

More information: Results of DRD and mortality among drug users

What is causing the increase in DRDs in Ireland?
(Suzi Lyons, Ireland)

The National Drug-Related Death Index (NDRDI) Irish Special register is a complete census using 4 data sources: the coronial files, the General mortality register, Hospital deaths and Methadone register (Central Treatment List). Match across all sources to have complete profile of cases. Preliminary data (data still under validation and analysis) show an increase in the 2011 total number of cases. More than 2/3 cases (68%) are due to 'Polysubstances (including opiates such as heroin, methadone)'. In particular, the cases for which methadone, diazepam and other benzodiazepine were mentioned have ~ doubled compared to 2010. The number of cases were heroin is mentioned has ~halved compared to 2009. Some possible factors influencing the changes are presented and discussed including change in methodology, increase in treatment places for methadone, heroin drought (late 2010/early 2011), increased use of benzodiazepines, market forces e.g. lower purity of heroin. Similar trends are reported in Scotland and England. Further analysis is needed to explain the findings.

Enhancing the toxicovigilance of new drugs (including reporting of deaths)
(Michael Evans- Brown, EMCDDA)

Context: 293 new drugs notified 2005–2013 and unprecedented growth in number, type and availability of these drugs. The types of users are also broadening out…including recreational, psychonauts, early adopters (dance music fans), broader population, different 'Lifestyle users': gym-goers, users wanting weight loss, other enhancement reasons; problematic users: IV opioid injectors switching to stimulants, such as mephedrone and MDPV; and users using self-medication. Some of these drugs might spread beyond small groups of experienced users with diffusion facilitated by availability, attractiveness and no sanctions if testing (e.g. driving). There is little or no information on effects, harms, patterns of use and prevalence, and yet some reports of non-fatal intoxications and deaths associated with new drugs. There is a perceived need to enhance the toxicovigilance (i.e. the reporting on non-fatal intoxications and deaths), to detect signals and to prioritise them. A more standardised national reporting to the EMCDDA might facilitate this.

More information: Enhancing toxicovigilance of new drugs (including reporting of deaths)

(Isabelle Giraudon, EMCDDA, with input from experts in HU, IT, UK, and AT)

The EMCDDA aims to enhance the surveillance of NPS related-harms in Europe, and in particular to identify early signals of emerging toxicological problems related to new drugs. Such signals will be used to speed up responses and prevent further harms at both EU and national level. In

particular, the prospective, systematic, case-based enhanced surveillance aims to identify with minimal delay clusters of cases, increases in the numbers of cases related to specific substances and emergence of new substances causing deaths or non-fatal intoxications.
The present draft (an .xls core dataset to be filled in for each case) was compiled using the fields drawn from three reporting forms used by the spontaneous reporting systems as part of the pharmacovigilance system: MedWatch (the FDA Safety Information and Adverse Event reporting Program); the Yellow Card from the UK; and the Council for International Organizations of Medical Sciences (CIOMS) form. This draft was submitted for comments to DRD experts of five countries in October 2013 and a revised version should be elaborated and submitted to a larger group of experts, including EWS experts, for further comment/pilot. It is planned that this should be done in conjunction with the revamping of the EDND.
The draft simple tool for prospective monitoring of NPS-related deaths has been used to collate the data on 4-MA and 5-IT-related deaths. The descriptive epidemiology of the ~21 and 28 fatalities ever reported is presented including age pyramid, epidemic curves, distribution of the cases according to dosage and to other drugs identified.

Prevalence Estimates, Treatment Data and Drug Related Deaths. Composing the Puzzle Part II: Adherence Rate to OST
(Charlotte Klein, Martin Busch, Austria)

Several sources of information are used: TDI-data of good quality (all treatments, first treatments, all clients in treatment) since 2006; Data on direct drug related deaths of good quality since 1989; Substitution treatment database – good data quality since 2011; Drug related notifications by the police and ICD-10 codes at hospital discharge (NEW). All indicators for the drug users aged <25 are consistent. Findings of the 'Survival' analysis with drop out the outcome (i.e. not prescription within 32 days - could be death or abstinence) are discussed: 60% of those in OST in 2003 are still in treatment, as are 79% of those in treatment in 2012. Survival in treatment is better in females and better in those aged 30 years or older; better with slow release morphine, followed by buprenorphine, methadone, levomethadone, and buprenorphine-naloxone; better in Vienna than in other parts of Austria. Some conclusions: the comprehensive analysis (including a new source of data) shows a continuation of the very consistent picture; very high long term adherence rates in OST. Importance for definition and estimation of problem opioid use, and discussion of the meaning of this outcome (whether this is „good" or „bad"). Different two years adherence rate by gender, age and substance used. Comparison with other countries would be interesting.

More information: Adherence Rate to OST

Developments in the Norwegian overdose situation
(Thomas Clausen, Norway)

Norway is one of the countries with the highest overdose-related mortality rates among the 30 European countries reporting to the EMCDDA. OMT was introduced in 1998, and was followed by an increase in the number of DRD until 2001 (~400), slowly down to ~262 in 2011 (80% opioids, no cocaine, 17% suicides (within definition); 9/10 overdose deaths undergo an autopsy). Possible reasons for so many DRD: Heroin dominates, Injection of heroin (85-90%), Polydrug use (Heroin-Benzodiazepines), Old and ageing user-population, Suboptimal treatment delivery?, High case-detection rate (Autopsy), Low levels of competing risks? And Binge drinking and "drug taking" culture? Discussion on a comprehensive model of drug treatment (from compulsory to voluntary; from stable and abstinent to stabilising and with harm reduction).
History of OMT in Norway: rapid expansion from no OST patients in 1998, gradual liberalisation from high threshold to more liberal with local evaluations, research, guidelines, ~6500 OST patients in 2011, and estimated coverage 50 to 60%, decrease in waiting list from ~800 persons in 2000 to ~100 in 2011. Profile of the patients: 1/3 women, 20 yrs of age when first starting heroin, age at OMT initiation 37yrs, 64% retention in treatment, (31.12.2003), 50% Methadone, Mean dose; 110

mg Methadone and & 16 mg Buprenorphine. Evidence that the prevalence of heroin use drops and is correlated to the increased methadone dose - heroin use stops when dose is 60mg/day[6]. Treatment contacts: Previous 30 days (2008): 50% meeting with multidisciplinary team; 60% contact with social service centre; 50% contact with OMT-centre and less than 10% contact with psychiatric treatment. Review of cohort findings[7] on Treatment effect on mortality, morbidity and crime, before, during and after OMT: all outcomes improved during treatment, compared to periods before and after treatment.Higher risk at initiation and termination of OMT; Long-term OMT. a way to gain overall benefits; In general; Poor outcomes for those who terminated treatment

More information: Developments in the Norwegian overdose situation

Feed-back from the four workshops:

The feed-back from the workshops were presented in plenary session for further discussion by

- Thomas Clausen (Cohort studies),
- João Matias (Medicine related deaths),
- Antonia Domingo-Salvany (Drug-related emergencies)
- Charlotte Klein (Cross validation of drug-related deaths data).

The points made by the rapporteurs on behalf of the working groups, and further feed-back from the other experts have been integrated under the respective workshops's summaries.

[6] J. C. Ball, 1988
[7] Clausen T. et al. Drug and Alcohol Dependence, 2008; I. Skeie et al, BMJ Open 2011; A. Bukten et al. Addiction 2011