



European Monitoring Centre
for Drugs and Drug Addiction

Codification practices of DRD following the WHO revision of guidelines of 2002-2003 (to be implemented in 2006)

Results from the 2015 survey & the way forward

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Rational (1)

- DRD definition unchanged since 2002 (DRD protocol 3.0)
It includes deaths directly caused by the use of illegal drugs (“poisonings” or “overdoses”)
- In **2002**, WHO adopted revised ICD-10 coding rules for codification of acute poisonings to be implemented in **2006**
- The ICD-10 updates were discussed and communicated to EMCDDA national experts in ad-hoc documents and the protocol was thoroughly updated in **2010** (V3.2 – <http://www.emcdda.europa.eu/activities/drd>)
- The protocol (in its Annex 7) integrates the adaptation to the WHO revision

Rational (2)

- Main change in the ICD-10 revision: **priority to codes X and Y over F** when there was a poisoning
- In 2003 a priority rule was established for identification of the most dangerous substance (and respective T code), in case the certifying person did not specify it)
- This leads, among other things, to the inclusion of DRD cases codified as **X44, X64 and Y14** (poisoning and exposure to other and unspecified drugs medicaments and biological substances) *if they have also a relevant T code* (Annex 8)

Rational (3)

The adoption of the ICD-10 updates in DRD often is not uniform; quick/systematic in some; partial or not done in others

For this reason EMCDDA protocol still includes both F codes and X/Y codes, in order to capture all relevant cases even if codified under different codes (F or X/Y)

Few countries report a significant number of cases coded X44, X64 and Y14, some report a limited number and others report no cases with these codes

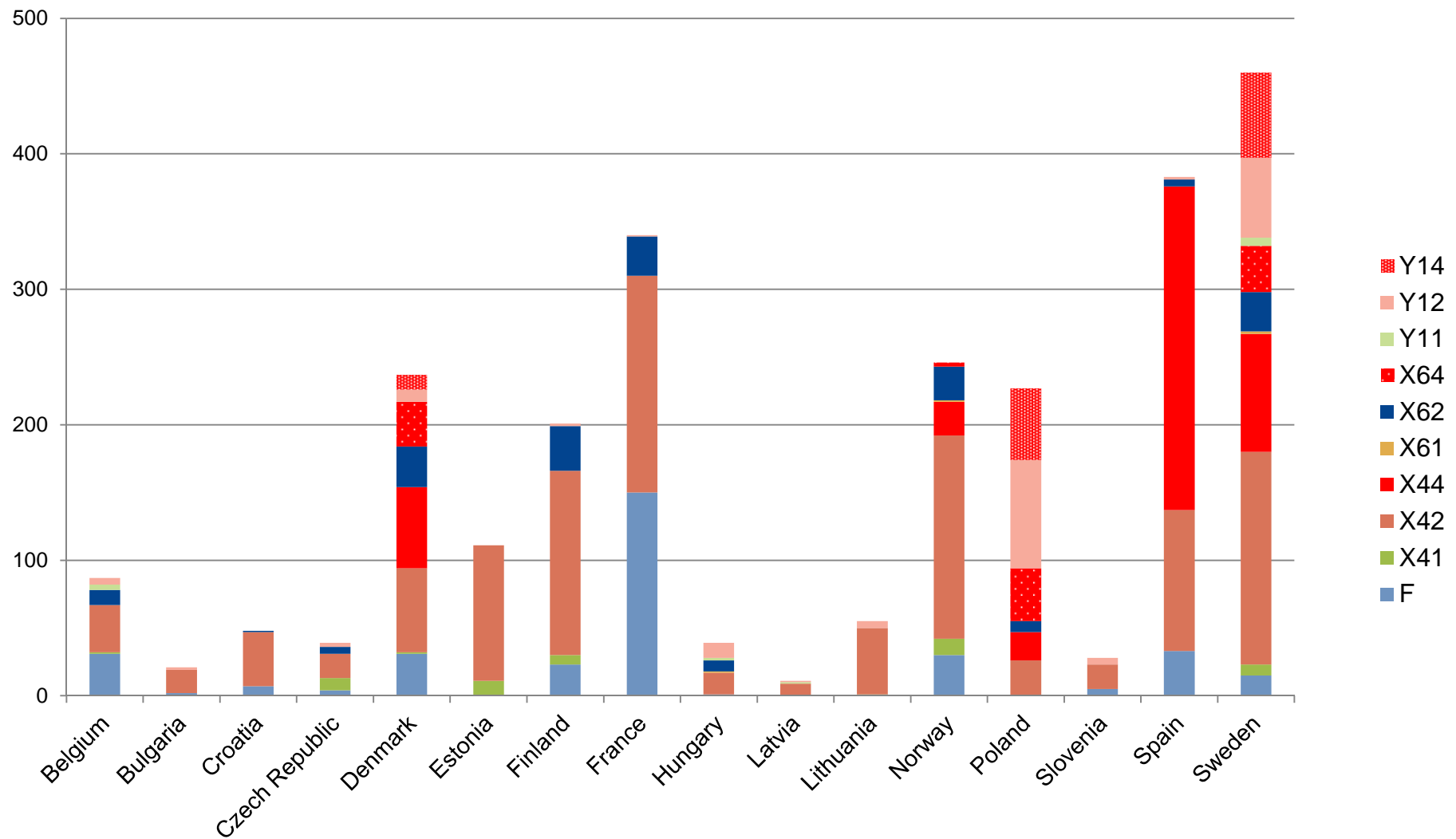
There could be several explanations including national codification practices (e.g. use or not of T-Codes)

Methods

1. Review of the national data reported (Fonte) for statistical bulletin 2015
2. Questionnaire sent to 30 country experts and NFP in April 2015, aiming to:
 - investigate how the ICD-10 revision has been implemented in Europe and in particular the effect of its implementation in reports of cases with codes X44, X64 and Y14
 - clarify how the DRD protocol is applied and to analyse and address any comparability issues

Results (1) – analyse of the current DRD data

Breakdown of the ICD codes of the DRD reported figures, where available (17 countries). 2013 or most recent data – (UK not represented for readability of the graph)



Results (2)

Summary points on the current DRD data

- 17/23 countries who report GMR DRD data, report the ICD codes breakdown of the cases in the FONTE template
- Most cases are captured by the poisoning code X42, X62 and Y12. Typically from 60% to more than 90% - (poisoning whatever the intent)
- F codes (harmful use, dependence and other mental and behavioural disorders due to drugs) is the other large group – highest shares in FR in particular and to a lesser extent DN and BE
- X41, X61 and Y11 poisoning codes (psycho stimulant) are far less frequent;
- Cases coded X44, X64 or Y14, (in combination with T codes) are reported in a relevant number of cases in few countries: DN, SE, UK, NO (see table). The UK reports only a few (24/1946)
- Other countries report also DRD cases coded with X44, X64 or Y14 codes, although they do not report data strictly through Selection B: SP, PL (see table);
- Some countries have reported cases with these codes in 2013: MT, DE
- For some countries the General Mortality Registry - GMR (and consequently Selection B) is not used/no more used as the primary source of data and national definition: AT, CZ, DE, HU, IE, LU, PT. The reason can be that the GMR data has a longer delay or that their GMR are unfit to capture the DRD cases through Selection B)

Results (3) - Questionnaire

- Questionnaire sent to 30 countries- 22 responded

Is your GMR your main source of drug-induced deaths statistics?

In 17 countries: yes while in the other 5 (Ireland, Austria, Italy, Czech Republic and Spain) they either combine sources or have a different source.

Do you report DRD data from GMR?

Most countries report DRD from GMR even if not their main source, although in a few countries it is not reported as a source on its own.

Do you think your drug-induced deaths data from the GMR are accurate or underestimated, overestimated?

64% (or 14 countries) think that drug induced death data are underestimated. Countries which report accurate DRDs data often use multiple sources of information

Results (3) - Questionnaire

Do you have complementary sources of data to assess indirectly the possible under or overestimation of the GMR?

17 countries reported complementary sources of data which include police registers, cohort studies, specific drug registers and forensic registers

Are you able to apply the current DRD protocol to your GMR? fully/partially/not at all?

Most countries (15 countries) reported they are fully compliant with current DRD protocol and 6 countries are partially compliant due to the absence of T codes but.....



Of those 15 reportedly fully compliant with DRD protocol and using filter B

ICD updates	YES	NO	unknown
Priority of X and Y over F	13	2	0
Priority of T codes	11	3	1
Use of X 44 for combinations of X41-X43 with no chosen cause	5	10	0

In some countries in cases where the certifier did not specify clearly what substance was most important, they use since 2006 the priority list of the update to decide about the external code (X-Y)



Results (5)

- **What X44* means in your country?**
- In many countries X44 is used for either substances listed under X44, unknown toxicology, no specific X code is available;
- **Describe the process undertaken to extract cases with X44, X64, Y14 codes**
- Most countries (16 countries), extract cases with these codes in combination with the relevant T codes as per protocol. However in some countries this is not done either because they do not collect T codes or do not assign DRDs to these codes.
- **If this is done and you extract zero X44, X64 and Y14 cases, please give your interpretation**
- Reasons include that coders coded it to a more specific code or this code is used more for medicaments etc.

*X44: Accidental poisoning by and exposure to other and unspecified drugs, medicaments and biological substances

T codes

- **Does your GMR use T-codes? Do you always use T-codes in case of DRD?**
- 20 countries use T codes to some extent while 2 countries do not either because the drug is rarely specified on death certificate or because the GMR does not include toxicological information
- 16/20 reported that they always do so except in the deaths coded to 'F' category.
- **How many different T-codes can your GMR include? (1 – so the coders are forced to select one- or more)**
- 11 countries reported that multiple T-codes are entered. Though some countries collect more than one, due to their database they are forced to choose just one.
- **Does your GMR record the names of the substances**
- 6 countries record the name of substance.
- **Do you face difficulties with drugs for which no T code is available? To which extent does this affect your data?**
- Main difficulty: no T code exists, however most countries feel that this does not have a large impact. Some countries have created their own codes.



Special issues brought up by countries:

- A number of DRDs are coded as X42/T43.9 and are therefore not included in EMCDDA definition (Belgium).
- For drugs for which no T code is available, we use “other” (often .8) or “other and unspecified”(often .9) T codes, depending on the information available (ex T50.9). These T codes are not part of the Sel. B (Belgium).
- In some countries (e.g. CZ, Ireland,) though a number of T codes can be entered in practice the DRD is chosen based on one T code.
- T-codes are not available, there is no possible combination with them. Accordingly, cases coded X41, X61, Y11 are not reported (France, Spain).



Special issues brought up by countries:

- T42.6 Other antiepileptic drugs, sedatives and hypnotics, for example Pregabalin as a prescription drug of new relevance for DRD may be difficult for classification; also new synthetic substances (Germany)
- Problems with new substances. Substances not applicable to any specific T-code are coded as T43.6. Validity in T43.6 may be affected (Sweden)
- X44 it is a code frequently used in Spain. This code includes accidental poisonings due to exposure to drugs and is very commonly used in Spain to codify deaths due to “overdose.”
- In England and Wales, there are a large number of X44/X64/Y14 cases historically. Also, ONS currently refer only to the secondary cause of death to identify a T code. In poly drug cases the secondary cause would be T50.9. Revision of the data is on-going to reflect ICD 10 updates.



Under-reporting starts at certification.....

Some countries and local authorities have underestimates of DRDs starting at certification level especially when autopsies & toxicologies are not done routinely;

Also some forensic physicians/local authorities don't transmit data from legal investigation on grounds of confidentiality of legal investigations. In these cases, death is coded "unknown or poorly defined causes".



Discussion (1)

Main points

- Underestimation of DRDs remains an important problem in some countries (in particular in GMR) and begins at certification
- National coding practices vary: X and Y over F; choice and use of T-codes; number of codes that are retrievable
- Only few countries can be fully compliant with the revised protocol however this is mostly in relation to X44
- Many countries do use T codes, however better coding practices could improve quality of DRD data

Conclusion and way forward (1)

Implications at national level

Value of 'national working group' on DRD, including GMR, SR and cohort studies

Special register is an indispensable complementary source

Mortality cohort studies should be urgently dynamised in countries with poor DRD data in particular

At EMCDDA level

Inter country comparison need to be very cautious

Good examples of collaboration between GMR and SR exist – lessons to be shared between experts and NFP

Set up a small 'advisory group' - focused meetings with groups of countries, at least 2 people per countries.

Conclusion and way forward (2)

For the DRD protocol?

A new priority list will be added to volume II of ICD 10, 2016 version.
Implications of ICD (ICD 11) for EMCDDA and collection of DRDs?
Shall we **work with WHO?**

For the 2016 work with experts/NFP

a specific **survey on X44 cases**

A joint '**audit**' of the **full extracted datasets of DRD** cases for the 2016 reporting? i.e. including in particular the T-codes but also age gender and other causes if possible

More capture recapture studies? e.g. as in FR

More audit of the GMR data against SR data? e.g. as in EE



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Thank you for your attention

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