European Monitoring Centre
for Drugs and Drug Addiction

REPORT

MAPPING TREATMENT DEMAND INDICATOR (TDI)
NATIONAL DATA COLLECTION FORMS
AND ASSESS HARMONISATION WITH EMCDDA GUIDELINES

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ASI - Addiction Severity Index
EMCDDA – European Monitoring Centre for Drugs and Drug Addiction
GBL - Gamma-Butyrolactone
GHB - Gamma-Hydroxybutyric acid
GP – General Practitioner
HCl - Hydrochloride
HCV - Hepatitis C virus
HIV - Human Immunodeficiency Virus
ICD-10 - International Classification of Diseases, tenth revision
ISCED – International Standard Classification of Education
LSD - lysergic acid
MATE - Measurements in the Addictions for Triage and Evaluation
MDMA - Methylenedioxymethamphetamine
NHII - The Belgian National Health Insurance Institute
OST – opioid substitution treatment
TC – treatment centre
TDI - Treatment demand indicator
YP – Young Person

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INTRODUCTION

The objective of this analysis is to map the existing data collection forms in the European countries and assess their level of comparability and harmonisation with the European guidelines (TDI ver. 3.0).

The need to have in depth assessment is related to the implementation of the revised Protocol. TDI data have been collected at the EMCDDA for more than 10 years and it is currently necessary to make the state of progress of methodological tools utilized at country level and see where it is necessary to make modifications or changes. Also the comparison for the national tools with the European guidelines can provide a good overview of what is available in most countries and may be introduced in the analysis of TDI data at European level.

The treatment demand indicator (TDI) is one of the five key epidemiological indicators that contribute to the EMCDDA objective of providing objective, reliable and comparable information at a European level concerning drugs, drug addiction and their consequences.
Treatment demand indicator provides information on the profile and drug use patterns of those entering specialised drug treatment in Europe, specially on the number, prevalence and incidence, sociodemographic characteristics of people entering drug treatment and patterns of drug use.

Updated methodological guidelines for data reporting are included in a new version of protocol (TDI protocol 3.0) in consequence of the revision of the indicator.

Among modifications are the revised definition of case, drug treatment and treatment centres. Approximation to international standards was made in socio-demographic information (e.g. labour status and education). New items concerning polydrug use, opioid substitution treatment, infectious diseases and risk behaviour (sharing of needles or syringes) were added. The list of primary and secondary drug was updated given the new drugs that appeared in the meanwhile.

1. METHODOLOGY

Collect national instruments
The first step was to collect the national instruments of data collection concerning treatment demand data after the request for national questionnaire, form, protocol, cobebook and computations of TDI variables had been sent to the National Focal Points. There was available documentation for all the thirty countries that kindly provided the files.
Several countries kindly provided translations, and other translations were provided in EMCDDA.

Create a database
After having the documents compilled was created a database in Excel format where model variables were put side by side with country's variables in order to do the

comparison. Each file contains country's denomination, question number, question text, categories and notes.

Extract information and include in the database
The next step was to do the extraction of information from each national instrument of data collection and insert into the database.
Two perspectives of analysis are possible because one file contains one tab for each variable. One is analysis by variable, which allow to compare the group of countries according to each model variable separately.
The other file has one tab for each country, listing the TDI model variables in the left side and national questions and answers that correspond to EMCDDA standards in the right side.
This file includes one section in the final part with the variables not included in TDI protocol, so the full national questionnaire or form is accessible here (separate file only for additional variables was also created).

Analyze the data
A compilled file was made with model questions in the left (rows) and countries in columns, and the formula applied was counts of existent category or not.
Two types of graphs were created, one with the total number of countries fulfilling each category for a variable, the other with the total number of correspondent categories of each country for that variable.
The twenty four model variables were analysied according to this two perspectives.
Besides the categories, which correspond, in general, to answers in a questionnaire, it was important as well to have an idea of the variability of the questions that provide guidance for the answers. Models of questions were created for each variable.

Summarize results
For each variable was made an assessment of the compatibility with EMCDDA standards, by the number of countries that have categories that can be converted.
A scale was then created for classification, having five levels (figure 1), that ranges from the lowest level for variables with no more than 6 countries, the medium level is for variables with between 13 and 18 countries, and the highest level for variables with more than 25 countries.
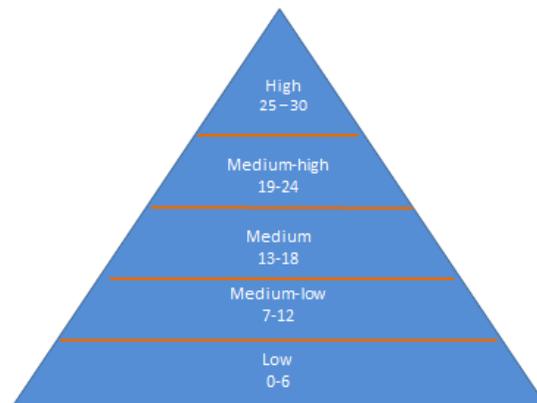
Figure 1 - scale of the level of compatibility

<u>Limitations</u>

Several countries have not a single instrument of drug data collection, but several. Belgium has three different TDI questionnaires (hospitals, treatment centres without convention with the Belgian National Health Insurance Institution – NHII and other questionnaire for treatment centres with convention with NHII), ASI - Addiction Severity Index and MATE - Measurements in the Addictions for Triage and Evaluation, are used in The Netherlands, two different sources of TDI data was found in Malta (First Contact Sheet and Caritas Institution list of variables), and four in The United Kingdom.

Where questionnaires are similar but with more or less information, the solution was to choose for the questionnaire with more information as was the case of questionnaire used in hospitals in Belgium. Concerning the other situations, the decision was to choose for one of the instruments in order to assure comparability between the countries, although all the questionnaires and forms of each country are included in the database. Therefore, for what the comparison analysis concerns, ASI interview form for The Netherlands was used, Caritas Institution list of variables from Malta, and drug related documentation for England was included.

This matching exercise found some obstacles, for instance when countries have one category that fits two or more EMCDDA categories, e.g model category is more detailed than national level.

2. OVERVIEW OF THE MAPPING AND ASSESSMENT OF THE NATIONAL INSTRUMENTS

Considering all the countries that include categories of model variables, was made the following table with correspondent classification for each variable:

	VARIABLE DENOMINATION	N.º COUNTRIES	CLASSIFICATION
1	Treatment centre type	26	high
2	Year of treatment	30	high
3	Ever previously treated	29	high
4	Source of referral	28	high
5	Sex	29	high
6	Age at treatment start (in years)	29	high
7	Living status (with whom)	29	high
8	Drug clients with children	28	high
9	Living status (where)	30	high
10	Labour status	29	high
11	Highest educational level completed	27	high
12	Primary drug	29	high
13	Usual route of administration of primary drug	30	high
14	Frequency of use of primary drug	28	high
15	Age at first use of primary drug (in years)	30	high
16	Secondary drugs	30	high
17	Polydrug use problem existing	10	medium-low
18	Opioid substitution treatment (OST)	27	high
19	Age at first opioid substitution treatment (OST) (in years)	3	low
20	Ever injected or currently injecting any drug	30	high
21	Age at first injection (in years)	17	medium
22	HIV testing	19	medium-high
23	HCV testing	19	medium-high
24	Needle/syringe sharing	19	medium-high

From the table above is possible conclude that for eighteen variables the classification is high because there are 25 till 30 countries that have categories matching.

Three variables have medium-high classification because nineteen countries provide correspondent categories. One variable has medium-low and other low classification as only ten and three countries respectively fulfill any of the categories of those variables.

3. DETAILED ANALYSIS

1. Treatment centre type

Definition
"A drug treatment centre/programme is any facility that provides drug treatment […] to people with drug problems. Treatment centres can be specialised centres, focusing on the treatment of drug users, or included in bigger centres targeting different client groups (e.g. mental health patients, alcohol users, etc.). They can also be based within centres that are medical or non-medical, governmental or non-governmental, public or private." TDI protocol 3.0

Treatment centre type
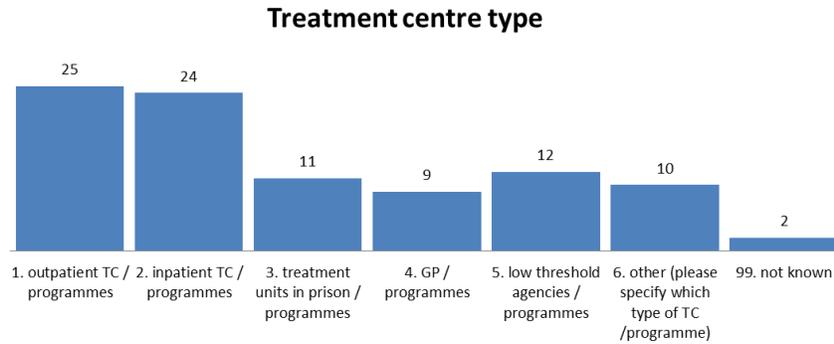
Figure 2 - Bar graph of treatment centre type

This graph shows that the categories of treatment centre type most collected by the countries are outpatient and inpatient treatment centre type, and that less than half of the countries collect the other four types of treatment centre type. Not known treatment centre type was present at two countries.

Treatment centre type by country
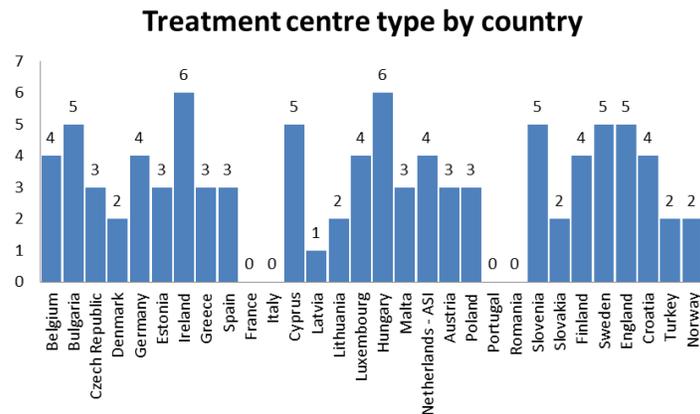
Figure 3 - Bar graph of treatment centre type - by country

Results

From the results of this graph, Ireland and Hungary are the countries that collect more types of treatment centres (6 categories from a total of 7). ten countries collect 5 or 4 categories, forteen countries collect three categories or less.

This variable is collected by 4 countries for who was not possible to obtain the respective categories.

Information regarding treatment centre type is not available in the questionnaire or form for a large number of countries, instead it is asked to provide the treatment centre code or name which means that the information provided above was extracted from protocols or codebooks in those situations.

Models of the question for treatment centre type:
N. ° of countries
15   treatment centre type
12   code of treatment centre
2   treatment centre type & code
1   name of the institution

Compatibility with EMCDDA guidelines
The level of compatibility between national definition of treatment centre type and EMCDDA definition of treatment centre type is high, for the following reasons:
In 26 countries the categories can be converted to the EMCDDA categories.

2. Year of treatment

Definition
 "The starting date of treatment is essential for creating trend analyses over time and for separating time periods (treatment episodes) for reporting. This enables a dynamic analysis of the treatment data.
The month of treatment should not be reported to the EMCDDA, but must be recorded at national and treatment centre level in order to avoid the risk of counting the same person twice in the same reporting period."

Definition of start of treatment:
"Start of treatment is considered as the earliest formalised face-to-face contact(s) between the client and the centre. During this (these) contact(s) it should be possible to identify the client (avoidance of double counting) and to assess the client's characteristics and needs related to drug problem"

Results
From the data that we have received from the countries, 30 countries report the variable in their national questionnaires or other form.

Models of the question for ever previously treated:
27   day, month and year
3   month and year and not day

Compatibility with EMCDDA guidelines
The level of compatibility between national definition of year of treatment and EMCDDA definition of year of treatment is high, for the following reasons:
In 30 countries the categories can be converted to the EMCDDA categories.

3. Ever previously treated

Definition
 "See also definition of 'first treatment' […]. If a client is entering treatment more than once in the same reporting year, only the first treatment episode should be recorded. Other previous treatments may refer to treatment undergone because of the use of any drug, which might be different from the current primary drug. Double counting should be avoided within the same country as much as possible according to the possibilities of each country." TDI protocol 3.0

Definition of first treatment
"the first treatment is defined as the very first time during his or her life that a person starts treatment for drug problems."

Ever previously treated
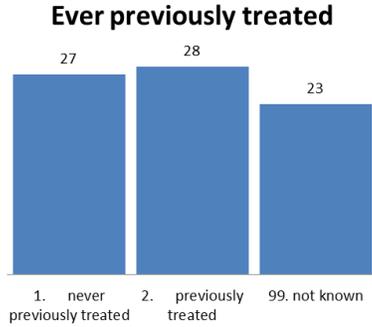

Ever previously treated by country

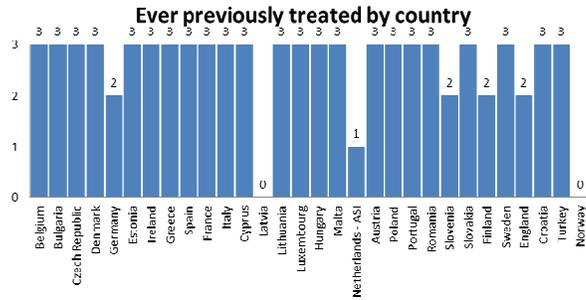Figure 4 - Bar graph of ever previously treated

Figure 5 - Bar graph of ever previously treated - by country

Results

The graph 3 shows that almost all countries collect the three categories of the variable ever previously treated (about 80%).

From the graph 4 it is possible to conclude that there was no information regarding this variable for 2 countries (Latvia and Norway), and that 4 countries (England, Slovenia, Germany and Finland) don't have the category '99. Not known' ever previously treated.

Regarding the questionnaire ASI (European Addiction Severity Index), used in The Netherlands, it was possible to match only the category '2. Previously treated'.

It is important to notice that the question about if it is the first time the client is doing treatment in a specific treatment centre, e.g., if he is new patient for an institution or not, may be used together with this variable of ever previously treated.

Models of the question for ever previously treated:

16   previously treated regarding treatment which includes:
1   treatment at least 2 weeks
1   any type of treatment
1   first demand in the current institution
12   previously treated regarding substance which includes:
5   previously treated for drug
6   previously treated for substance
1   previously treated for the same drug as the current one

Compatibility with EMCDDA guidelines

The level of compatibility between national definition of ever previously treated and EMCDDA definition of ever previously treated is high, for the following reasons:

In 29 countries the categories are different but can be converted to the EMCDDA categories.

4. Source of referral

Definition

"pathway by which the client has reached drug treatment.[…] The objective of this variable is to understand the level of involvement of other agencies, health, social services and institutions in referring the client to treatment. Data on source of referral is also important to estimate the extent of treatment which is due to a legal obligation. The 'Source of referral' refers to the source that was most instrumental in referring the client to treatment." TDI protocol 3.0
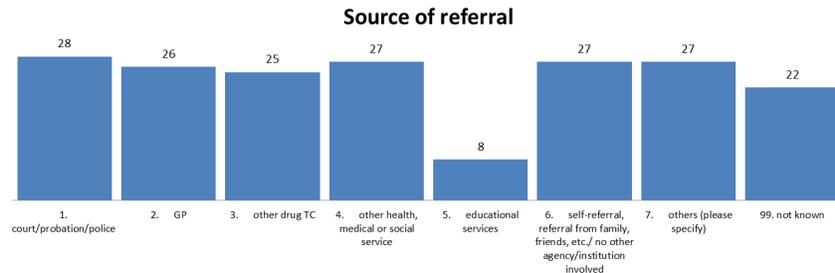
Source of referral

Figure 6 - Bar graph of source of referral

From the graph above is possible to conclude that the categories of this variable are collected by the majority of the countries (more than 70% of the countries), except for the category 5. Educational services, which is a new category introduced in consequence of the revision process of the indicator. Still, eight countries include information regarding source of referral from educational services, although included in other categories.

The 'court/probation/police' is the category with more representativity, followed by categories number 4, 5 and 6. General practitioner category follows with 26 countries. The category with less representativeness in the countries collection system of this variable is '99. not known' source of referral.

Because of recent modifications introduced by the revision process of the indicator, categories 4. Other health, medical or social service and 6. Self-referral, referral from family, friends, etc./no other agency/institution involved, result in the merging of previous categories, and category 5. Educational services is new. This operation was reflected in this mapping exercise in order to provide support to the revision process of TDI.

Source of referral by country

Figure 7 - Bar graph of source of referral - by country

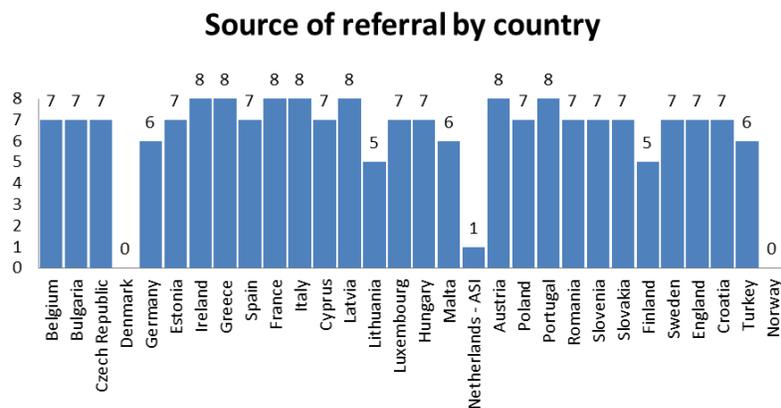<u>Definition</u>
Regarding the graph above that displays the differences between the countries in the correspondence of the eight categories of this TDI variable, it is possible to conclude that 2 countries (Norway and Denmark) don't collect this variable, only one category (1. court/probation/police) of the variable 'source of referral' found correspondence in the ASI interview form used in The Netherlands.

Models of the question for source of referral:
20   referral
2   first referral to current treatment
2   motivation for treatment
4   referral to current treatment centre
2   missing

<u>Compatibility with EMCDDA guidelines</u>
The level of compatibility between national definition of source of referral and EMCDDA definition of source of referral is high, for the following reasons:
In 28 countries the categories are different but can be converted to the EMCDDA categories

5. Sex

<u>Definition</u>
Basic epidemiological information
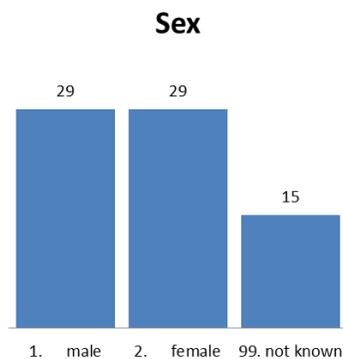
Figure 8 - Bar graph of sex   Figure 9 - Bar graph of sex - by country
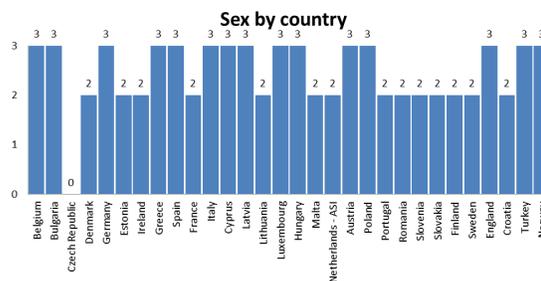
<u>Results</u>
From the graphs presented above, is possible conclude that all the countries collect male and female category, except for Czech Republic, although this information might be available in the other documentation this country provided for this project, but that was not translated.
Half of the countries collect the category 99. Not known, one of which includes 'unknown/ unclear'.
15 countries collect the three categories of sex, and 14 countries collect two.

Models of the question for sex variable:

25	sex or gender
4	part of identificator number
1	sex (biological)

Compatibility with EMCDDA guidelines
The level of compatibility between national definition of sex variable and EMCDDA definition of sex is high, for the following reasons:
In 29 countries the categories are different but can be converted to the EMCDDA categories

6. Age at treatment start (in years)

Definition
Basic epidemiological information

Results
From the data that we have received from the countries, 29 countries report the variable in their national questionnaires or other forms, and one country (Norway) does not have information available regarding age at treatment start.
Three countries collect the category 99. Not known.

Models of the question for age at treatment start (in years):
4	year of birth
1	year of birth - identificator
3	date of birth - identificator
9	date of Birth
5	age (years)
7	age & birth

In the situations where 'age at treatment start' is not recorded at treatment centre level but instead is asked the year or date of birth of the person, the age must be calculated throw the date of treatment start in order to obtain age at treatment start (in years).

Compatibility with EMCDDA guidelines
The level of compatibility between national definition of year of treatment and EMCDDA definition of year of treatment is high, for the following reasons:
In 29 countries the categories are different but can be converted to the EMCDDA categories

7. Living status (with whom)

Definition
 "Methodological specifications
The primary purpose of the 'with whom' aspect of the living status is to indirectly assess the relational status of the clients. The situation refers to the prevailing

situation of the client, if he/she is living in more than one context in the same period. The living status refers to the current situation: *It refers to the 30 days before entering treatment.*"
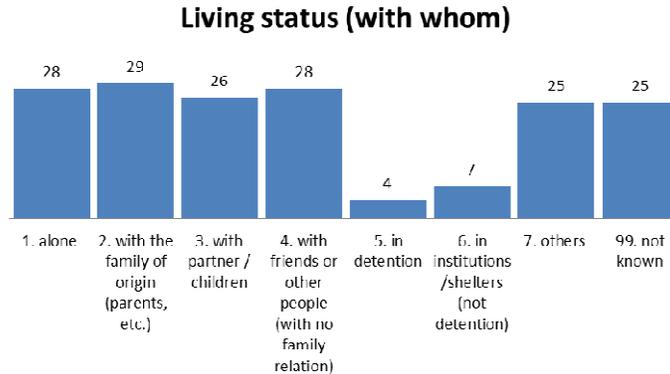
Living status (with whom)

Figure 10 - Bar graph of living status (with whom)

From the graph 9 is possible conclude that the categories of this variable are collected by almost all the countries (more than 83% of the countries), except for the categories 5. In detention and 6. In institutions/shelters (not detention), which are new categories introduced in consequence of the revision process of the indicator.

However, it was possible to do a correspondence for four and seven countries for categories 5 and 6 respectively.

It is important to have in consideration as well that category 3. With partner / children is substantially different from previous version of TDI protocol, and current definition might be achieved by merging previous three categories '3. Alone with child', '4. With partner (alone)' and '5. With partner and children' into one.

The same merging operation is necessary for other categories in order to achieve correspondence between countries and TDI categories.

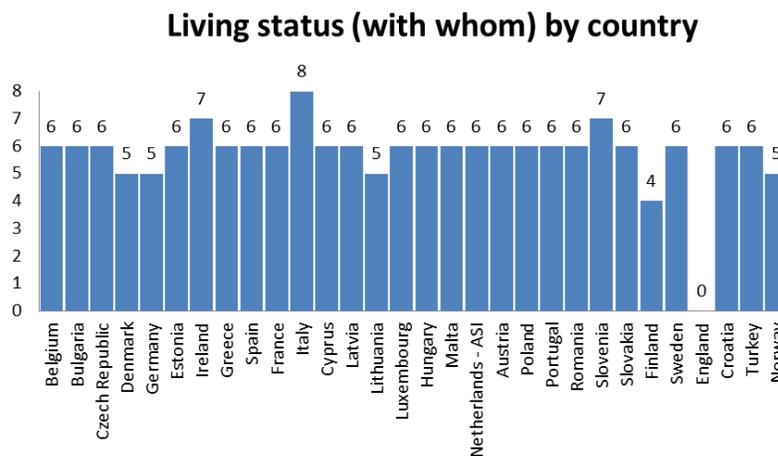## Living status (with whom) by country

Figure 11 - Bar graph of living status (with whom) by country

Results

The graph 10 presented above shows that one country fulfill all the eight categories of the variable living status (with whom), followed by two countries that collect seven categories and 21 countries collecting six categories.

14

Four countries collect five categories, one collects four and was not possible to extract correspondent information for England.

Models of the question for living status (with whom):
23   equivalent question
4   respondent might pick all categories that apply
1   family composition at household
1   past 3 years timeframe

Compatibility with EMCDDA guidelines
The level of compatibility between national definition of living status (with whom) and EMCDDA definition of living status (with whom) is high, for the following reasons:
In 29 countries the categories are different but can be converted to the EMCDDA categories

8. Drug clients with children

Definition
 "Methodological specifications
The item wants to assess if the clients have children and what is the living condition of drug users and children. Children include all age children, both biological and not biological."

Drug clients with children

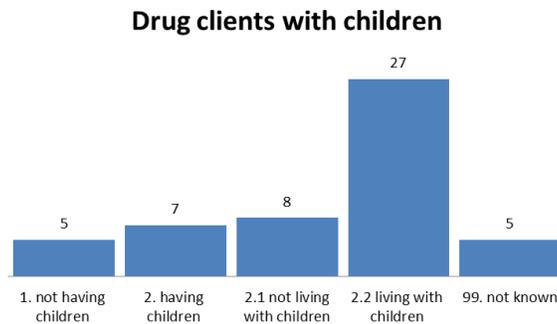Figure 12 - Bar graph of drug clients with children

This is one of the variables not included in previous version of protocol, so there was few correspondence in the collection system of the countries. Regarding the graph above, the category 2.2 living with children found more correspondence in 27 countries (90%). The other four categories have correspondence in aproximately 15% of the countries.
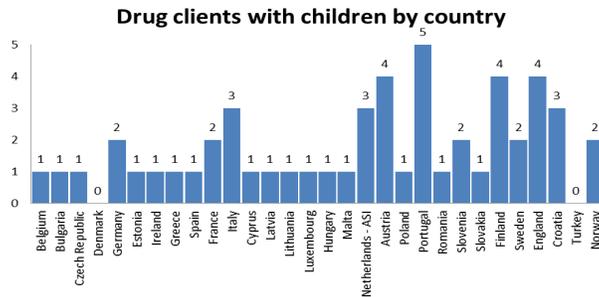
Figure 13 - Bar graph of drug clients with children - by country

Results

The country that collects more matching categories regarding children of drug clients is Portugal for which is possible to match all five categories. It is possible to do a correspondence with four categories in three countries (Austria, Finland and England) and three categories for Italy, ASI interview form used in The Netherlands and Croatia. Five countries collect two categories and sixteen countries collect one category. For two countries there was no related correspondence (Denmark and Turkey).

Models of the question for drug clients with children:
19   same as previous variable 'Living status (with whom)'
1   how many/(own or not)/ living with
2   existence/ living with or not
1   live with child/legal care
2   existence/ living with whom or where
1   existence/how many children in the family
1   how many (own or not) living with/number and age of child living anywhere
1   age of all children, living with whom/where

Compatibility with EMCDDA guidelines

The level of compatibility between national definition of drug clients with children and EMCDDA definition of drug clients with children is low, for the following reasons:

In 28 countries the categories are different but can be converted to the EMCDDA categories

9. Living status (where)

Definition

"Methodological specifications

The 'where' aspect of living status stresses the stability of the living situation. Clients in unstable accommodation are clients who have lived in different places (friends' home, street, shelters, etc.), moving from one place to another in the period prior to treatment entry. If a client is living in an institution, he/she should be reported in category 4 'others' and the institution specified. The situation refers to the prevailing situation of the client, if he/she is living in more than one context in the same period.

The living status refers to the current situation: *it refers to the 30 days before entering treatment*."
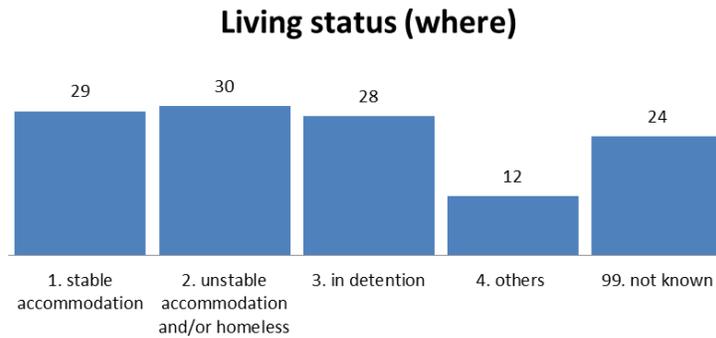
Living status (where)

Figure 14 - Bar graph of living status (where)

From the graph 13 is possible conclude that the categories of this variable are collected by almost all the countries (80% of the total of countries), except for the category 4. Others for which twelve countries have correspondent category.

However, it is important to keep in mind that categories 3. In detention and 4. others changed since previous version of the indicator, being before only one category '3. Institutions (prison, clinic)', which means that information regarding client being in detention is still merged with being in institutions or it's not possible to separate them according to current wording. This situation was observed in seventeen countries.

Living status (where) by country
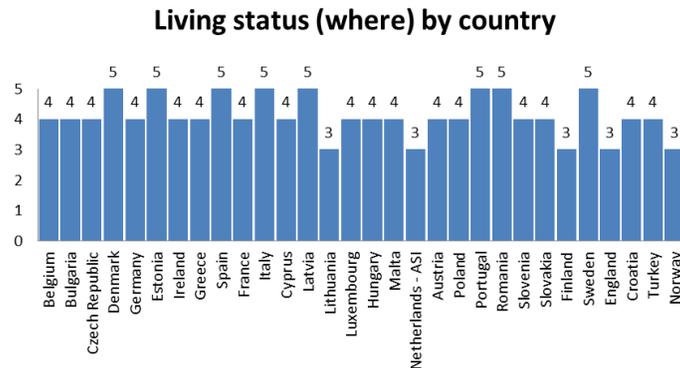
Figure 15 - Bar graph of living status (where) - by country

Results

The graph 14 above shows that eight countries have correspondence for all the categories of this variable. Seventeen countries fullfil four of these categories, and five countries three categories.

Models of the question for living status (where):

16	living where
7	residencial situation
1	housing risk
1	own house/detention/homeless where
1	existence of stable accomodation
1	housing situation in 6 months timeframe

17

2 type of housing
1 permanent place of residence

Compatibility with EMCDDA guidelines
The level of compatibility between national definition of living status (where) and EMCDDA definition of living status (where) is medium, for the following reasons:
In 30 countries the categories are different but can be converted to the EMCDDA categories

10. Labour status

Definition
"Methodological specifications: Labour status provides central information about the client's economic and social integration and his or her daily life. The protocol follows the Eurostat's standards as much as possible to enable comparison with the statistics for the general population and to avoid overlapping categories (e.g. unemployed and inactive)."
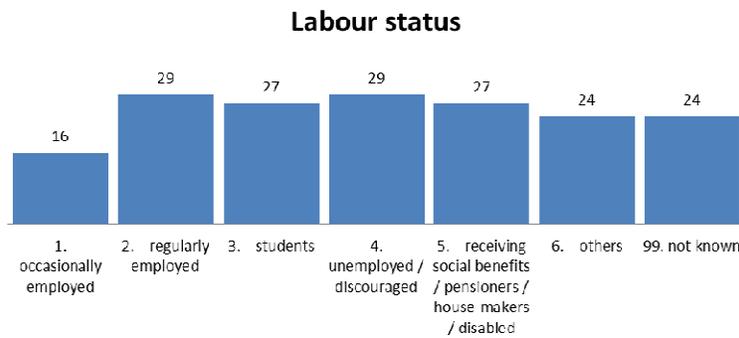
Labour status

Figure 16 - Bar graph of labour status

From the graph 15 is possible conclude that the categories of this variable are collected by almost all the countries (80% of the total of countries), except for new category 1. Occasionally employed for which more than half of the countries have correspondent category. Only one country does not have category 2. regularly employed and 4. Unemployed/discouraged, three countries don't have correspondence for categories 3. students and 5. Receiving social benefits/pensioners/house-makers/disabled. Categories 6. Others and 99. Not known don't find correspondence in six countries.

Labour status by country

Figure 17 - Bar graph of labour status - by country

Results

From the observation of graph 16 is possible notice that there was no information available in documentation of Norway regarding the variable of labour status. The interview form of ASI used in The Netherlands include 4 categories matching model categories. Four countries collect 5 categories, sixteen countries collect six categories and eight countries fullfil all categories of this variable.
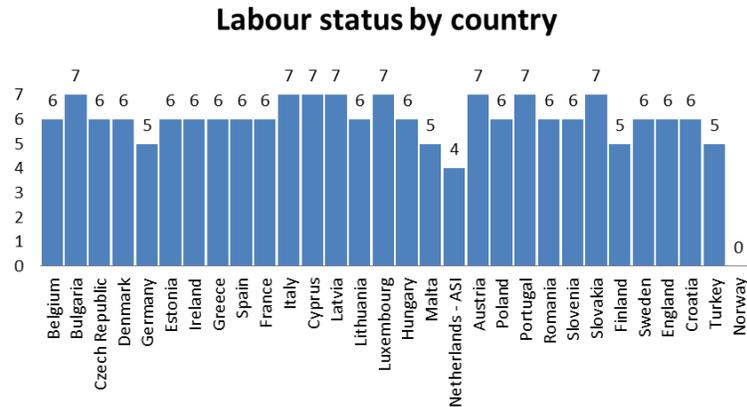
Models of the question for labour status:
25   labour / employment status
1   source of income
2   employment status 6 months timeframe
1   number of days working/number of days sick

Compatibility with EMCDDA guidelines

The level of compatibility between national definition of labour status and EMCDDA definition of labour status is high, for the following reasons:
In 29 countries the categories are different but can be converted to the EMCDDA categories

11. Highest educational level completed

Definition

 "Methodological specifications

Education is an important socio-economic data category. A stricter compliance to ISCED (International Standard Classification of Education) classification are recommended as well as the adoption of the country-specific conversion rules that are already implemented for providing education statistics at international level."
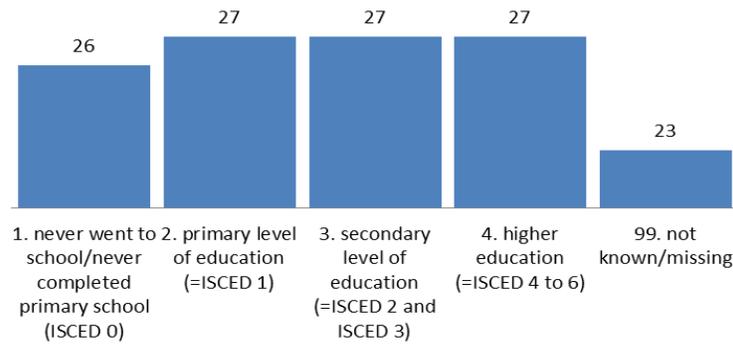
Highest educational level completed

Figure 18 - Bar graph of highest educational level completed

By the observation of the graph above it is possible conclude that categories 2. Primary level of education (ISCED 1), 3. Secondary level of education (ISCED 2 and 3) and 4. Higher education (ISCED 4 to 6) are the best represented by the countries (90%) followed by category 1. Never went to school/never completed primary school (ISCED 0) with neerly 85% of the countries. Finally, category 99. Not known/missing found correspondence for neerly 75% of all the thirty countries.

Differences between the countries can be observed in the graph below.

Highest educational level completed by country
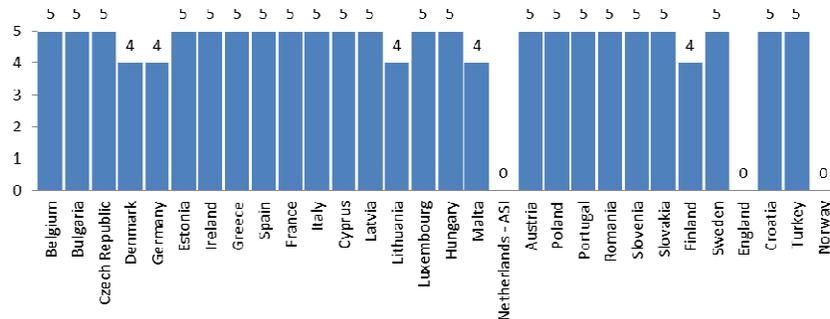
Figure 19 - Bar graph of highest educational level completed - by country

Results

From the observation of graph 18 is possible notice that there was no information available regarding categories of the variable of level of education completed for three countries (The Netherlands – ASI, England and Norway). Although there are no categories for this variable of Netherlands, this question is included in ASI interview form.

Five countries have categories matching 4 model categories and the rest of the countries achieve full correspondence with all the model categories.

Models of the question for highest educational level completed:
17   Highest education level completed
7   Highest Education

4   Education

Compatibility with EMCDDA guidelines
The level of compatibility between national definition of highest educational level and EMCDDA definition of highest educational level is medium, for the following reasons:
In 27 countries the categories are different but can be converted to the EMCDDA categories

12. Primary drug

Definition
 "Primary drug is the drug that causes the most problems for the client, as defined according to the client's request and (or) the professional's assessment.
Inclusion criteria
- The primary drug is the drug that leads to the most serious problems (health, mental, social problems, etc.) for the client
- The primary drug is the main reason the client has entered treatment
- The primary drug may include any drug misused by the client but not used in accordance with a medical prescription
- The primary drug includes any drug specified in the item list of the primary drugs"
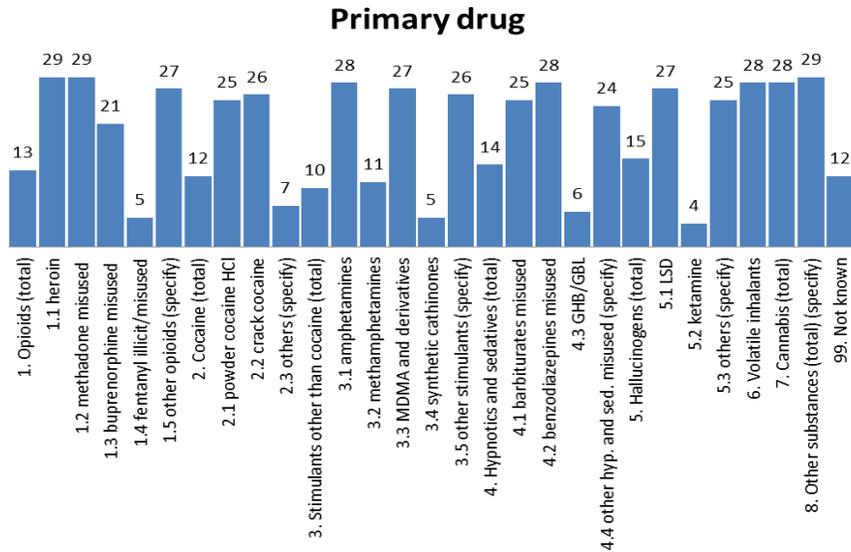

Figure 20 - Bar graph of primary drug

From the bar graph of primary drug is possible conclude that the categories with less countries are new categories regarding protocol 2.0. In detail, five countries (above 15%) have correspondence for 1.4 fentanyl illicit/misused, seven countries for 2.3

others [cocaine] (specify), five countries (above 15%) for 3.4 synthetic cathinones, six countries for 4.3 GHB/GBL (20%) and four countries (approximately 12%) for 5.2 Ketamine.

The other new categories had better representativeness from the countries collection system, twenty one countries (70%) are collecting buprenorfine misused information (category 1.3) and eleven countries (above 35%) of methamphetamine use (category 3.2).

One remark related to categories 1.2 methadone misused and 1.3 buprenorphine misused is that is not possible to separate them for two countries, e.g they have only one category for both of these model categories.

Other situation concerns the recording of heroin and cocaine when are consumed simultaneously, and it was possible identifying that two countries are recording these as primary drug for heroin and secondary drug for cocaine.

The number of countries in the categories with totals is not much expressive, however countries can easily obtain that numbers by adding the correspondent categories. The five categories with hierarchy (totals) are 1. Opioids, 2. Cocaine, 3. Stimulants other than cocaine, 4. Hypnotics and sedatives and 5. Hallucinogens, and are collected by less than half of the countries.

The other seventeen categories are collected by more than 75% of the countries (seven categories are collected by more than 85% of the countries), except for 99. Not known which only twelve countries include in their national questionnaire or form.

Regarding the new option included in 'other' substances categories, e.g 'specify', two countries ask respondents to provide which other substances they are referring to.

Primary drug by country
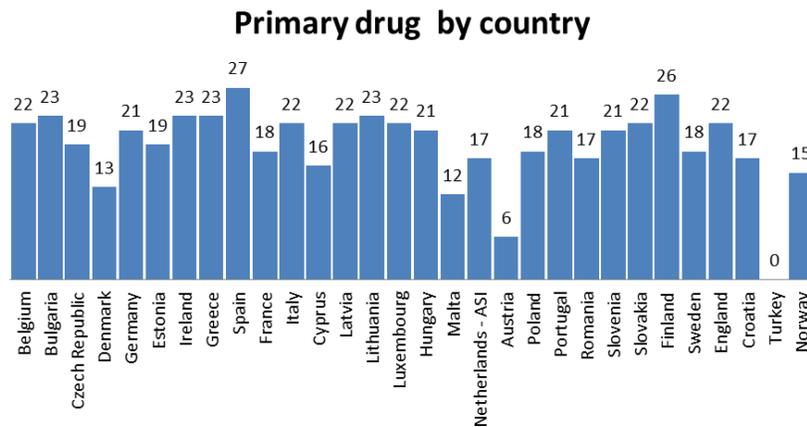
Figure 21 - Bar graph of primary drug - by country

Results

The variable primary drug has 29 categories, and the graph 20 shows how many categories each country is collecting in their national instruments of data collection regarding treatment demand data.

Despite having this question for primary drug, there is one country for which was no avaliable list of substances collected (Turkey). Three countries collect less than half of the categories (Denmark, Malta and Austria).

Spain and Finland are the countries for which was possible to match the biggest number of categories (27 and 26 categories respectively), followed by Ireland, Greece and Lithuania with 23 categories. Six countries collect 22 categories (more than 75% of the total of the categories) and other five countries collect 21 categories. Ten countries have between 15 and 19 categories.

Models of the question for primary drug:
19   primary drug
6   main substance /main drug / major problem substance / problem substance
1   substance that led to the current treatment
3   substance /psychoactive substance / product
1   most used substance - 6 months timeframe

One remark concerns whether the list of drugs is included or not in national questionnaire or form and it was observed that for seven countries to access the list of drugs the interviewer must consult other document which is, in general, the national protocol or guidelines.

Compatibility with EMCDDA guidelines
The level of compatibility between national definition of primary drug and EMCDDA definition of primary drug is medium-high, for the following reasons:
In 29 countries the categories are different but can be converted to the EMCDDA categories

13. Usual route of administration of primary drug

Definition
 "The 'Usual Route of Administration' refers to the route of administration of the primary drug."
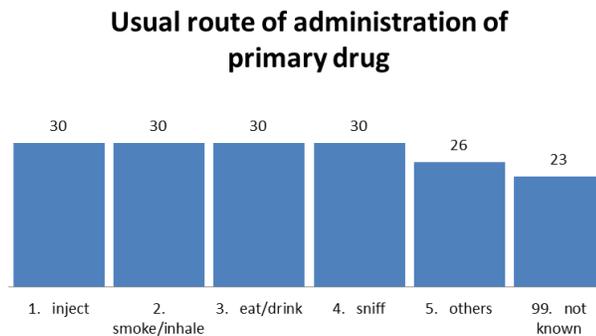

Figure 22 - Bar graph of usual route of administration of primary drug

From the observation of the graph 21 is possible afirme that all the countries complete the first four categories of the variable usual route of administration of primary drug. More than 85% of the countries match model category 5. Others and more than 75% of the countries have category 99. Not known.
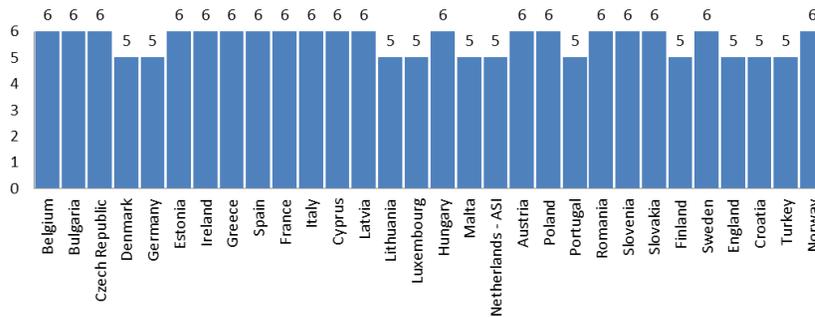
Figure 23 - Bar graph of usual route of administration of primary drug - by country

Results

The graph above shows the eleven countries that miss one of the categories referred above (5. Others and 99. Not known).

Models of the question for usual route of administration of primary drug:

15	route of administration
11	usual (and also typical, main, preferred, most frequent) route of administration
1	usual method of use
1	predominant consumption pattern
1	means of drug taking
1	Intake method

Compatibility with EMCDDA guidelines

The level of compatibility between national definition of usual route of administration of primary drug and EMCDDA definition of usual route of administration of primary drug is high, for the following reasons:

In 30 countries the categories are different but can be converted to the EMCDDA categories

14. Frequency of use of primary drug

Definition

"Methodological specifications The frequency of use of the primary drug is an indicator of the severity of the drug use."
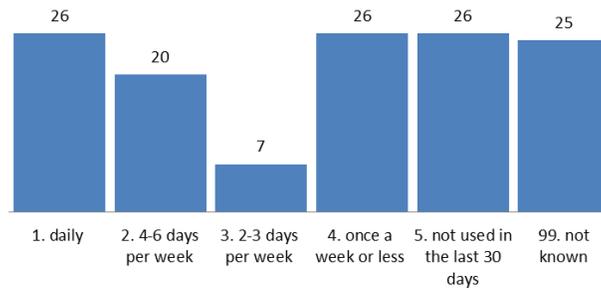
Frequency of use of primary drug

Figure 24 - Bar graph of frequency of use of primary drug

More than 80% of the countries are able to provide categories 1. Daily, 4. Once a week or less, 5. Not used in the last 30 days and 99. Not known.

Categories 2. 4-6 days per week and 3. 2-3 days per week were changed since previous version of protocol, being before only one category 'used 2-6 days per week'. The nineteen countries that we can see in the graph 23 in category 2. 4-6 days per week don't collect that category according to EMCDDA new standards (e.g. TDI protocol 3.0) but according to previous version e.g. 2-6 days per week (those countries were not included in category 3. 2-3 days per week for current analysis), except for Italy.

Seven countries have correspondent category for 3. 2-3 days per week, although one of them collects '2-4 days per week'.

Frequency of use of primary drug by country
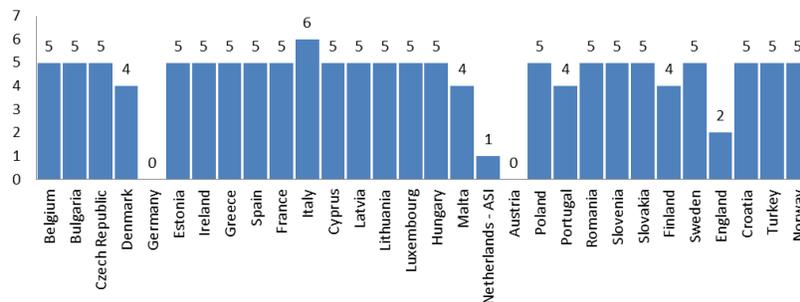
Figure 25 - Bar graph of frequency of use of primary drug - by country

Results

According to graph 24 two countries don't have categories for this variable (Austria and Germany), notwithstanding are collecting the variable by asking the number of days person had used the primary drug.

There is correspondence for only one category of ASI interview form regarding The Netherlands (not used in the past 30 days), the same category for England which also includes category not known.

Four countries have four categories matching model categories, and the remaning countries can provide five categories. One country (Italy) can provide full correspondence with all model categories.

Models of the question for frequency of use of primary drug:

5	frequency of use
4	frequency of use of primary drug
4	frequency of use last month
2	frequency of use last 30 days (days per week) /last 4 weeks
3	frequency of use last 30 days
2	number of days of consumption last 30 days
3	frequency of use of primary drug in last month
1	intake frequency of primary drug times per week
6	frequency of use of primary drug in 30 days

Compatibility with EMCDDA guidelines
The level of compatibility between national definition of frequency of use of primary drug and EMCDDA definition of frequency of use of primary drug is high, for the following reasons:
In 28 countries the categories are different but can be converted to the EMCDDA categories

15. Age at first use of primary drug (in years)

Definition
"Methodological specifications
The negative effects of drug use often increase over time. The duration of drug-use can be calculated on the basis of age of first use and age at the start of treatment. Epidemiologically, age of first use is an indicator of age when risk of drug use starting is greatest. Tracking long-term trends may aid in the development of preventive activities"

Results
From the data that we have received from the countries, all the countries report the variable in their national questionnaires or other forms.
Seven countries collect the category 99. Not known.

Models of the question for age at first use of primary drug (in years):

20	age at first use of primary drug
8	age first use
1	age first use any drug
1	year of onset of the use of main drug

Regarding this last situation, although it is not asked the age directly, the age can be obtained with the year of birth.

Compatibility with EMCDDA guidelines
The level of compatibility between national definition of age at first use of primary drug (in years) and EMCDDA definition of age at first use of primary drug (in years) is high, for the following reasons:
In 30 countries the categories are different but can be converted to the EMCDDA categories

16. Secondary drug

<u>Definition</u>
"<u>Methodological specifications</u>
The substances included are only those that create problems to the client according to the client's request and to the professional's assessment."
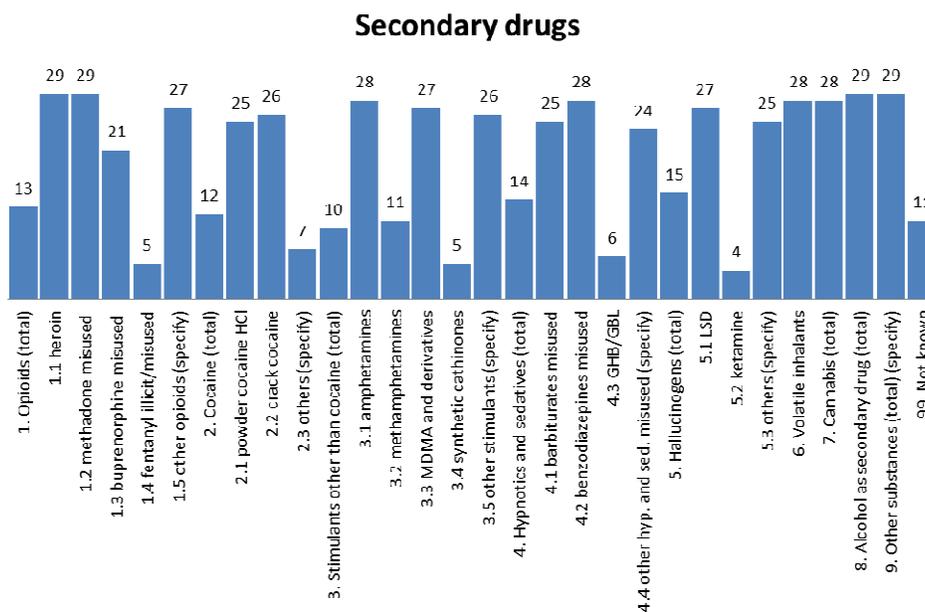
Secondary drugs

Figure 26 - Bar graph of secondary drugs

Categories used for secondary drugs are the same as used for primary drug, except for category 8. Alcohol as secondary drug, so the analysis of this graph is restricted to that category, as the other categories were already analysed in the graph 19.

These two variables are based in the same list of drugs that countries use in order to identify with accuracy each substance.

Concerning category 8. Alcohol as secondary drug, there is one country for whom was not possible to identify explicitly that substance in the national questionnaire or other document provided.

There was information for category 99. Not known secondary drug only for eleven countries (above 35%).
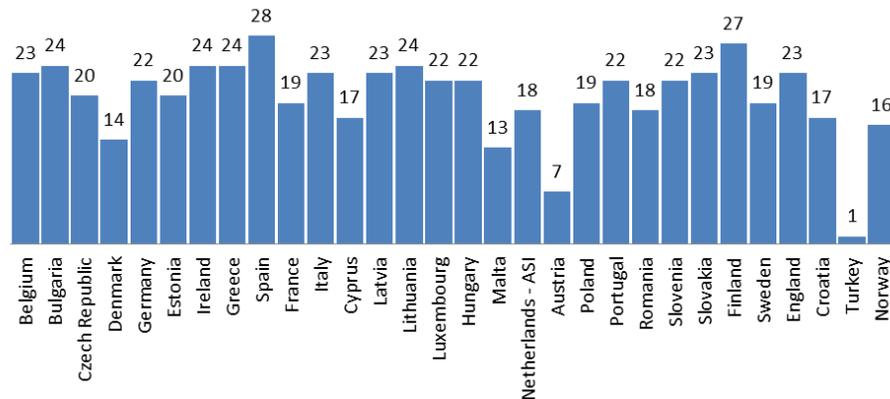
Secondary drugs by country

Figure 27 - Bar graph of secondary drugs - by country

<u>Results</u>

All the countries collect this variable, nevertheless for Turkey there is no list of substances available in the questionnaire apart from alcohol.

Category 8. Alcohol as secondary drug appears in all national questionnaires, forms or related documents, except for Croatia whose Pompidou Form used in the country does not include this substance.

Models of the question for secondary drug:

4	no information
1	one secondary drug
6	two secondary drugs
4	three secondary drugs
2	three secondary drugs - 6 months /12 months timeframe
9	four secondary drugs
4	no limit

<u>Compatibility with EMCDDA guidelines</u>

The level of compatibility between national definion of treatment centre type and EMCDDA definition of treatment centre type is high, for the following reasons:

In 30 countries the categories are different but can be converted to the EMCDDA categories

17. Polydrug use problem existing

<u>Definition</u>

"<u>Methodological considerations</u>

Polydrug use problem refers to when two or more drugs are involved in the drug problem to the client, at the same time and it is very difficult to assess which was the primary drug that caused the treatment entry. This concept will be used in a very restricted approach as in the ICD-10"
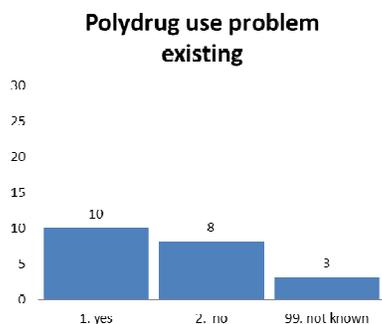
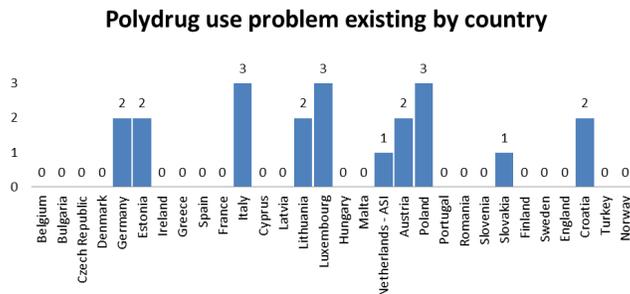Figure 29 - Bar graph of polydrug use problem existing

Figure 28 - Bar graph of polydrug use problem existing - by country

Results

This variable was included in new version of protocol, did not exist before and countries were not reporting this variable through TDI reporting system. In order to have an idea of the countries' compatibility with EMCDDA guidelines, was made an extraction of information regarding polydrug use problem from the countries questionnaires or other documents which could best correspond to EMCDDA standards for this variable. In particular, search was made for questions of ICD-10 codes or specific information related to polydrug use.

The variable polydrug use problem existing is compatible to EMCDDA guidelines in ten countries (more than 30%) (graph 28).

Concerning graph 27, there are ten countries that are able to provide category 1.yes, eight (above 25%) have correspondent category for 2. no and three countries (10%) category 99. Not known.

According to graph 28, Italy, Luxembourg and Poland are the countries that are able to fulfill the three categories of this variable. It was possible to identify two correspondent categories for five countries and one category for two countries.

Models of the question for polydrug use problem existing:

6   ICD-10
1   combined drugs
1   is polydrug use the major problem?
1   use of several illicit substances (at the same time or in sequence)
1   primary drug, secondary drug or multiple drug-taking

Compatibility with EMCDDA guidelines

The level of compatibility between national definition of polydrug use problem existing and EMCDDA definition of polydrug use problem existing is low, for the following reasons:

In 10 countries the categories are different but can be converted to the EMCDDA categories

18. Opioid substitution treatment (OST)

"OST is commonly referred to as 'substitution treatment'. A substitution treatment is defined as 'the administration of thoroughly evaluated **opioid agonists**; this is done by experienced or accredited professionals, in the framework of recognised medical practice, for achieving defined treatment aims'. This treatment is often provided in combination with psychosocial assistance. This variable will help to better determine the level of accessibility of substitution treatment and provide information about lifetime opioid substitution treatments among those entering treatment for another problematic substance use.

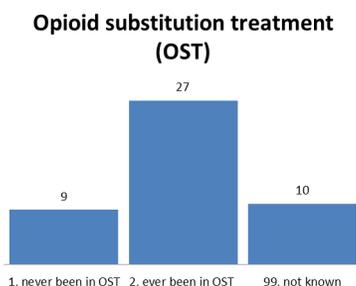Only clients who have been previously treated should be included."

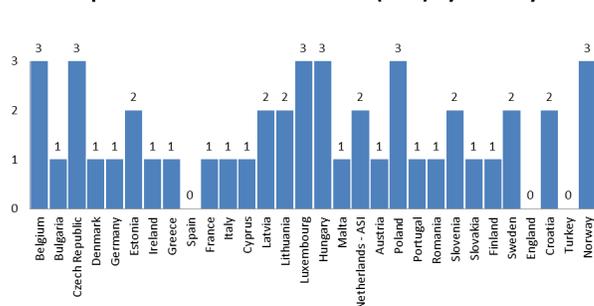Figure 30 - Bar graph of opioid substitution treatment (OST)

Figure 31 - Bar graph of opioid substitution treatment (OST) - by country

Results

Graphs 29 and 30 represent the number of countries in the fulfillment of the new TDI variable opioid substitution treatment. 90% of the countries (twenty seven) are able to fulfill category 2. Ever been OST, 30% or nine countries provide correspondence for 1. Never been in OST and ten countries for 99. Not known.

Six countries (20%) complete all three model categories existing, seven countries have two similar categories, fourteen have one and three countries don't have none of model categories.

Models of the question for opioid substitution treatment (OST):

1	substitution treatment - 6 months timeframe
5	substitution treatment
2	OST
5	current OST
1	if current OST, is there previous substitution treatment
1	if current treatment at other TC, is it OST
5	Already receiving substitutional treatment
1	prior OST
4	prior substitution treatment
2	date OST

Compatibility with EMCDDA guidelines

The level of compatibility between national definition of opioid substitution treatment (OST) and EMCDDA definition of opioid substitution treatment (OST) is high, for the following reasons:
In 27 countries the categories are different but can be converted to the EMCDDA categories

19. Age at first opioid substitution treatment (OST) (in years)

<u>Definition</u>
 "<u>Methodological specifications</u>
This variable in combination with data on age at first primary drug, age at first injection will contribute to provide information about lifetime opioid substitution treatments among those entering treatment for a problematic substance use other than opioids. The item should be filled in only by people who have been in OST before the current treatment entry"

<u>Results</u>
There are only three countries that are recording information related to this new variable of age at first opioid substitution treatment (OST) (in years), Ireland (start date of OST), France (start date of current substitution treatment) and Portugal (start year of previous treatments).
First two record day, month and year when substitution treatment started and Portugal records only the year, although the age at first OST can be obtained having client's birth date.

<u>Compatibility with EMCDDA guidelines</u>
The level of compatibility between national definition of opioid substitution treatment (OST) (in years) and EMCDDA definition of opioid substitution treatment (OST) (in years) is low, for the following reasons:
In 3 country the categories are different but can be converted to the EMCDDA categories

20. Ever injected or currently injecting any drug

<u>Definition</u>
 "<u>Methodological specifications</u>
This variable refers to injection behaviour regarding all drugs, not just the primary drug. This item identifies the injection of any drug; it gives a good indication of risk behaviour. This is of particular importance with regard to the transmission of infectious diseases (hepatitis, HIV) as well as other diseases and injuries and issues of harm reduction. Injection for medical purposes should be excluded (diabetes, etc.)."

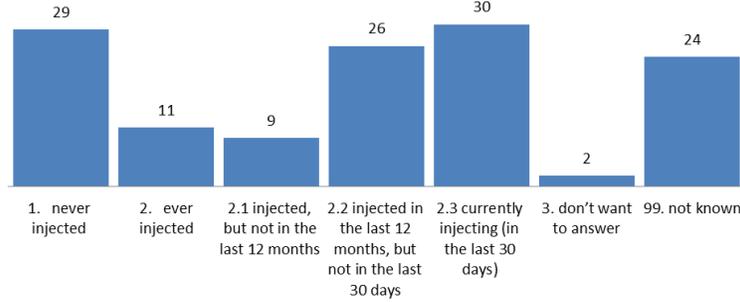## Ever injected or currently injecting any drug

Figure 32 - Bar graph of ever injected or currently injecting any drug

From the observation of the graph above, twenty nine countries are recording category 1. Never injected and all collect 2.3 currently injecting (in the last 30 days). Both categories existed in previous version of TDI protocol. Category 99. Not known did not suffer any modifications and is collected by 80% of the countries.

Categories 2.1. injected but not in the last 12 months and 2.2. injected in the last 12 months, but not in the last 30 days correspond to previous category ever injected but not currently, which were separated because new timeframe of 12 months was introduced. From the 26 countries that provide category 2.2, seven actually refer to a period of time of last 12 months, in other country is refered a period of six months; the correspondent categories for the remaining eighteen countries are equivalent to that of previous protocol 'ever injected but not currently'.

Concerning category 2.1, which nine countries record, four countries specifically relates to a injection drug behaviour which took place more than one year ago, the other six countries refer to the number of years that client had injected during lifetime. Eleven countries provide correspondent category 2. Ever injected, however this number can be raised if included categories (2.1, 2.2 and 2.3) are added.

Category 3. Don't want to answer is recent, nevertheless two countries already can provide compatibility with model categories.
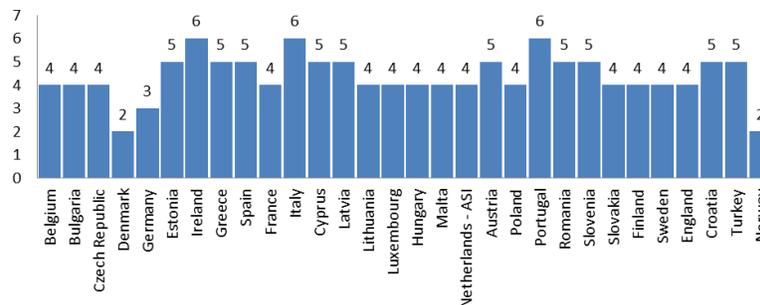

Figure 33 - Bar graph of ever injected or currently injecting any drug - by country

Results

By the observation of the graph above, the three countries that better correspond to model categories are Ireland, Italy and Portugal (have six categories in total of seven),

other ten countries provide five categories, fourteen countries have four categories. Countries that have less categories are Denmark and Norway (two categories) and Germany (three categories).

Models of the question for ever injected or currently injecting any drug:
7   Ever injected or currently injecting any drug
4   Injecting use
5   injecting drug use
9   Ever injected or currently injecting
2   Time from the last injection of any drug
2   risk behaviour
1   Ever injected past 4 weeks

Compatibility with EMCDDA guidelines
The level of compatibility between national definition of ever injected or currently injecting any drug and EMCDDA definition of ever injected or currently injecting any drug is high, for the following reasons:
In 30 countries the categories are different but can be converted to the EMCDDA categories

21. Age at first injection (in years)

Definition
"Methodological considerations
This variable should only be filled in for people who have ever injected. If people never injected any drug, it should be left empty."

Results
Seventeen countries (above 55%) record this variable in their national questionnaire or forms and thirteen countries don't have correspodent information. From those having the variable, all countries ask for person's age when occurred first injection of drug, e.g interviewer or person filling in questionnaire or form should enter the exact age, except for one country (Denmark) where interval dates are choice options with five year each, starting in less than 15 and ending in more than 40 year's old.
Six countries (20%) provide category 99. Not known category.
One country asks for age at first injection (in years) only for those situations in which the first intravenous drug use was more than three years ago.

Compatibility with EMCDDA guidelines
The level of compatibility between national definition of age at first injection (in years) and EMCDDA definition of age at first injection (in years) is high, for the following reasons:
In 17 countries the categories are different but can be converted to the EMCDDA categories

22. HIV testing

Definition

"<u>Methodological considerations</u>

The item concerns testing activities and can be useful information to be crossed with drug use behaviours (injecting, needle sharing). It is strongly advisable to verify the testing history as far as possible'"
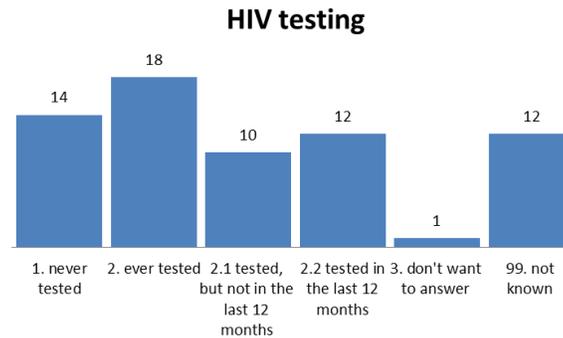
HIV testing

Figure 34 - Bar graph of HIV testing

From the observation of bar graph of HIV testing (new variable), more than 30% of the countries have correspondent categories for all except for category 3. Don't want to answer which is only included in ASI interview form in The Netherlands.

Almost half of the countries (fourteen) are capable of providing category 1. Never tested, 60% of the countries (eighteen) provide category 2. Ever tested, ten countries have correspondent category 2.1 tested, but not in the last 12 months, 40% (twelve countries) for 2.2 tested but not in the last 12 months and 40% (twelve countries) for category 99. Not known.

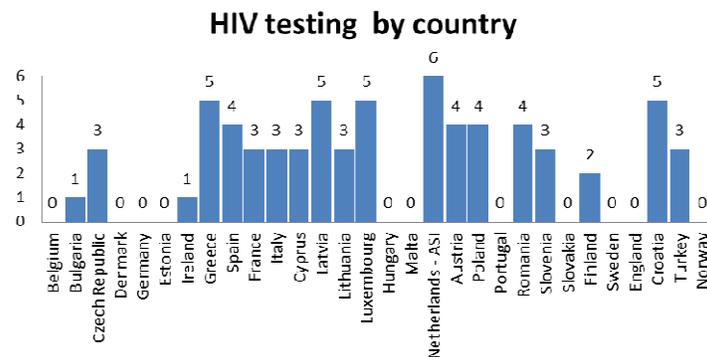**HIV testing by country**

Figure 35 - Bar graph of HIV testing - by country

<u>Results</u>

Nineteen countries (more than 60%) are able to provide at least one of the categories of this variable, and eleven don't have any of the correspondent categories of this new variable of HIV testing.

Concerning differences between the countries it is possible to conclude that The Netherlands is the unique country providing all correspondent categories. Four

countries have four correspondent categories, seven countries have three, Finland accomplish two categories and two countries have one correspondent category.

Models of the question for HIV testing:

7   HIV test - ever /more than 12 months /last 12 months /last 6 months
3   HIV test - ever, when
1   HIV test & anamnesis - ever, when
2   HIV test - ever, last 12 months
1   HIV test - ever, last 12 months, last 30 days
2   HIV test - when
1   HIV test - at current TC
1   HIV & HCV tests
1   HIV test - ever, if not HIV positive

Compatibility with EMCDDA guidelines

The level of compatibility between national definition of HIV testing and EMCDDA definition of HIV testing is low, for the following reasons:

In 19 countries the categories are different but can be converted to the EMCDDA categories

23. HCV testing

Definition
"Methodological considerations

The item concerns testing activities and can be useful information to be crossed with drug use behaviours (injecting, needle sharing)."
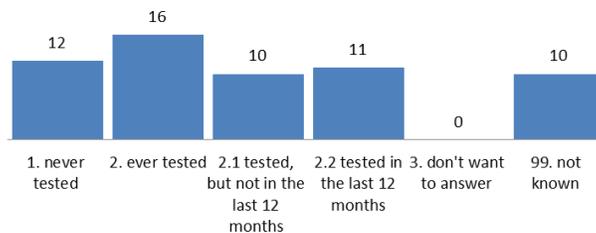
HCV testing

Figure 36 - Bar graph of HCV testing

The graph above presents similar distribution of the countries in each of the six categories of new variable Hepatitis C testing, except for category 3. Don't want to answer for which no country have correspondent information.

More than half of the thirty countries reporting to TDI have conditions to provide information related to 2. ever tested (HCV). The other categories can be provided by between 30% and 40% of the countries, respectively, ten and twelve countries, except for category three.
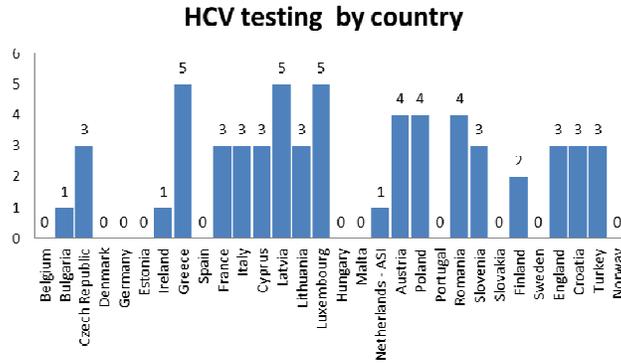
Figure 37 - Bar graph of HCV testing - by country

Results

The same number of countries that can provide variable HIV testing also can provide variable HCV testing, e.g. ninteen countries, however in Spain there is HIV and not HCV question, and in England the opposite situation was found, e.g. HCV information is being collected and not HIV.

HIV testing and HCV testing variables have equal categories. The number of categories that each country dispose for HIV testing also provide for HCV testing, except for Netherlands that provide all the categories for HIV testing but only one category (2. Ever tested) for HCV testing and Croatia that have five categories for HIV testing but only three categories for HCV testing.

Models of the question for HCV testing:
7   HCV test - ever /more than 12 months /last 12 months
3   HIV test - when / ever, when
2   HCV test & anamnesis - ever / ever, when
2   HCV test - ever, last 12 months
1   HCV test - ever, last 12 months, last 30 days
1   HCV test - at current TC
1   HIV & HCV tests
1   HCV test - ever, if not HCV positive
1   HCV positive

Compatibility with EMCDDA guidelines

The level of compatibility between national definition of HCV testing and EMCDDA definition HCV testing is low, for the following reasons:

In 19 countries the categories are different but can be converted to the EMCDDA categories

24. Needle/syringe sharing

Definition

"Methodological considerations

Information to be asked only if the client has ever injected. If the clients has never injected the variable should be left empty."
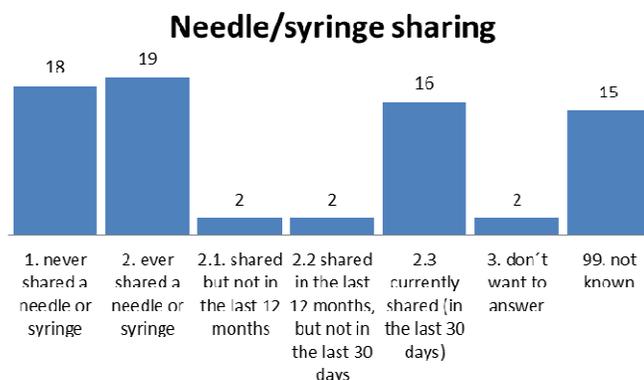
Needle/syringe sharing

Figure 38 - Bar graph of needle/syringe sharing

Variable needle / syringe sharing is one of the new variables included in version 3.0 of TDI protocol.

From the observation of the graph 37 is possible conclude that four of the seven categories of this variable have more than 50% correspondence with countrie's categories. Respectively, category 1. Never shared a needle or syringe is collected by eighteen countries (60%), category 2. Ever shared a needle or syringe is recorded by nineteen countries, category 2.3 currently shared (in the last 30 days) is recorded by sixteen countries (above 50%) and category 99. Not known by 50% of the countries.

The other three categories of this variable (2.1 shared but not in the last 12 months, 2.2 shared in the last 12 months, but not in the last 30 days and category 3. Don't want to anwer) have less representativity, with two countries in each.
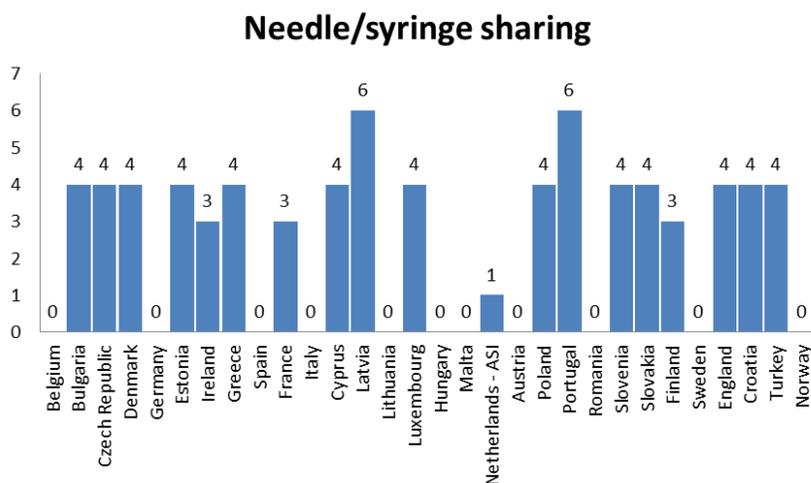
Needle/syringe sharing

Figure 39 - Bar graph of needle/syringe sharing - by country

Results

Nineteen countries (above 60%) have any of the categories of this variable and there was no information related for eleven countries.

According to graph presented above is possible afirme that the two countries that best represent this variable are Latvia and Portugal with only one category missing. Thirteen countries have four correspondent categories, three countries can provide three categories each and one country has one category of this variable.

Models of the question for Needle /syringe sharing:
2   shared - ever
5   shared - ever, last 30 days
5   shared - ever, last month
3   shared - ever, currently / last 28 days
2   shared - ever, last 12 months, last 30 days
1   shared, if injected last 6 months
1   risk behaviour - ever, last month

Compatibility with EMCDDA guidelines
The level of compatibility between national definition of treatment centre type and EMCDDA definition of treatment centre type is high, for the following reasons:
In 19 countries the categories are different but can be converted to the EMCDDA categories

CONCLUSIONS

Mapping national drug treatment demand data allowed to observe the variety of data existing in each country and the diversity of data between European Union Member States and candidate countries and EMCDDA standards.
The harmonisation of drug treatment demand data is very important to improve quality in data.
Variables introduced in new version of TDI protocol 3.0 have less correspondence in the countries drug treatment demand national data reporting systems, then the variables that are being collected by the countries for several years.

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