

RECOMMENDATIONS ON THE USE OF INSTRUMENTS FOR ESTIMATING SUBSTANCE USE DISORDERS IN LOW PREVALENCE SETTINGS

COMPONENT 1 CONSOLIDATION OF THE NATIONAL DRUGS OBSERVATORIES
WG 1.4 STUDIES TO EVALUATE AND VALIDATE SCALES AND INDICATORS OF PROBLEMATIC DRUG USE



This project is funded by
the European Union



Recommendations on the use of instruments for estimating substance use disorders in low prevalence settings

Cooperation Programme between Latin America, the Caribbean
and the European Union on Drugs Policies (COPOLAD II)

Credits

This document was developed out within the framework of the Cooperation Programme between Latin America, the Caribbean and the European Union on Drugs Policies (COPOLAD II); Component 1: Institutional Strengthening of National Drug Observatories; Activity 1.4: Design of studies to evaluate and validate scales and indicators of "Problematic Drug Use".

LEADING COUNTRIES

Spanish-speaking group: Chile

English-speaking group: Jamaica

European reference countries: Romania and Cyprus

EXPERT GROUP

Coordination: Francisco Cumsille (Chile)

Editor: Francisco Cumsille (Chile), Alvaro Castillo-Carniglia (Chile), Esteban Pizarro Muñoz (Chile)

Review: Julián Vicente (EMCDDA), Marya Hynes (OID/CICAD/OEA), Novie Younger-Coleman (Jamaica), Colette Cunningham-Myrie (Jamaica), María Elena Alvarado (Chile), José Marín (Chile), Esteban Pizarro Muñoz (Chile), Nicolás Rodríguez (Chile), Ioanna Yiasemi (Cyprus), and Graciela Ahumada (Coordinator of Component 1 of COPOLAD II).

Edit

Execution and Coordination Body (ECB) of the Cooperation Programme between Latin America, the Caribbean and the European Union on Drugs Policies (COPOLAD II), FIIAPP.

Acknowledgements

The ECB would like to thank those who have participated in the Expert Group; and to specially thank the *European Monitoring Centre for Drugs and Drug Addiction* (EMCDDA) and the Inter-American Drug Abuse Control Commission (CICAD-OAS).

FIIAPP ©

C. Beatriz de Bobadilla, 18. 28040 Madrid, Spain. February 2019.

AD CAUTELAM CLAUSES, CLARIFICATIONS AND WAIVERS

Introduction

Over the past few years an important debate has taken place on the best criteria and tools to estimate the prevalence of substance use disorders (SUDs) through epidemiological studies in the general population, and on what are the methodological considerations that should be considered for their proper application.

The document on *"Designing Studies to Evaluate and Validate Scales and Indicators of Problematic Drug Use"* also prepared within the framework of the COPOLAD Programme describes the strategies followed by countries to estimate what has been called "Problematic Drug Use" (hereinafter substance use disorder or SUD), as well as those that have been developed in recent years. In addition, and in line with the objective of that document, proposals are presented about methodological strategies to study the options for classification that are currently available. The document, therefore, seeks to provide an answer to the first question raised in the preceding paragraph.

The second question that has been presented in the technical discussions concerns the relevance of the use of instruments: in other words, will their use always be possible? This is what this document is trying to answer, especially in those cases where we find a low prevalence of use. More specifically, ***is it advisable to use criteria to classify people with SUDs of any specific substance in studies where past year prevalence of use of the substance is low?***

Traditionally, in **general population studies**, DSM-IV and ICD-10 criteria (the first for abuse and the second for dependence) have been used to classify people with SUD in marijuana users, cocaine and coca paste¹². Also, AUDIT has been used for alcohol in the general population, and in some countries the same criteria as those used for illegal substances have been used. Similar DSM-5 and ICD-11 criteria are also currently available and fully used in other surveys.

It is important to draw a distinction between the substances for which the above classification criteria have usually been used, and for this we will form two subgroups: alcohol and marijuana on the one hand, and cocaine and coca paste on the other. From the point of view of the epidemiological research, such as general population surveys that draw their samples from households, the main objective is in the number of users, i.e., in the prevalence of use of these substances. In the vast majority of countries in the region, past year prevalence of alcohol and marijuana use is much higher than cocaine and coca paste, which is normally less than 1%. Thus, what happens is that the population to be evaluated, regarding

¹ From now on we will refer to cocaine hydrochloride that is snorted as "cocaine".

² Depending on the country it receives other names such as *basuco* or *paco*.

substance use-related problems, is that subpopulation which **has** used the respective drug **sometime over the course of the past year**.

In virtually all countries, past year prevalence of alcohol use exceeds 50%, and past month prevalence exceeds 30%. The sample size taken through general population studies would allow sufficiently robust estimates for the prevalence of alcohol use disorders (which is clearer when specific cases are discussed later). The case of marijuana is much more variable, which may be sufficiently high in some countries, or similar to cocaine or coca paste in others; for example, according to the ODC/CICAD's 2019 drug use³ report, in some countries in the region the prevalence of past year marijuana use exceeds 10%, but there are also several countries in the range from 5% to 10%, and others with prevalence of less than 2%, including some of them with less than 1%. According to the same report, some countries have a prevalence of past year cocaine use in the range of 1% to 2%, but the vast majority are below 1%, and even below 0.5%. Something similar occurs in the case of coca base.

General considerations

In order to determine whether it is methodologically reasonable to use instruments to estimate the percentage of people with SUD, there are several elements that should be taken into account: the **sample size of the study combined with the complex sample design used** (and therefore with the design effect⁴ of the study), the **past year prevalence of use** of the substance in question, and the **percentage of people who could meet the criteria for SUD**, among those past year users.

- *As for the sample size used in general population studies, both in Latin American and Caribbean countries, these are quite variable and depend on the objectives defined by each country⁵, and of course the size of their population. For example in Colombia (2013) the sample size for the general population study was just over 32,000 cases, in Chile (2016) just over 19,000, in Uruguay (2014) about 4,000, in Jamaica (2016) about 5,000 and in Guyana (2016) and the Bahamas (2017) about 2,500.*
- *General population surveys require complex sampling methods in order to produce nationally representative samples. This raises the issues of design effects. A design effect is an adjustment made to find a survey sample size due to a complex sampling method such as stratified sampling, which results in larger sample sizes than you would expect with simple random sampling. The design effect is the ratio of the actual*

3

<http://www.cicad.oas.org/oid/Informe%20sobre%20el%20consumo%20de%20drogas%20en%20las%20Am%C3%A9ricas%202019.pdf>

⁴ Design effect is the ratio between the variance of the sample design used, and the variance of a simple random sampling

⁵ In some countries the objective is to make inferences only at a general level, and in other countries the objective is to obtain estimates also at the regional or local level

variance to the variance with simple random sampling. The design effect should be taken into account when assessing whether or not to attempt to estimate the percentage of people with "problematic use" of substances. The expected design effect should be taken into consideration during the study planning process (based on previous studies in the same country or in similar contexts), which allows to define the sample size of the study.

- Finally, the **past year prevalence of use of the substance under study and the percentage of people who may have a SUD among past year users of the substance being evaluated**. For both indicators, information from previous studies in the country, or data from other countries with similar characteristics, can be used as a **reference**.

It is important to stress that the objective is focused on **estimating the percentage of people with a SUD**; however, that same indicator is being used to determine the sample size, which might seem a contradiction. This is a fairly common and necessary situation in the field of sampling. To estimate a particular indicator, it is necessary to have some prior information of it, either from previous studies in the same country, indicators obtained by other countries of similar conditions or from the recommendation of expert groups. But it is always necessary to have some a priori value.

Tables 2 to 5 present the results of a simulation process, which combines different aspects of a population study. First of all, different **sample sizes** are considered for the survey (30,000; 15,000; 6,000 and 3,000 cases), then different **prevalence of past year use** of the substance for which we want to estimate the percentage of people with use disorders of that substance are considered (50%, 10%, 5%, 1% and 0.5%), and as the third element of the simulation we consider different percentages of people with SUDs among those who reported use in the past year (50%, 25% and 10%).

As a criterion for making a decision on the relevance of the use of instruments to estimate the percentage of people with SUDs, we will define a combination of two indicators:

- The **absolute error⁶ (AE)** of the estimate (of the % of people with SUDs), which is defined as **AE=1.96*standard error**, and
- The **relative error (RE)** which corresponds to the ratio between the AE and **the estimate** of the percentage of people with SUDs (usually the RE is multiplied by 100 to report it as a percentage), i.e. **RE=(100*AE)/p** where **p** is the **percentage** estimate.

Let's suppose that for a study with a given size, the percentage of people with a SUD is 20%, and the standard error for that estimate is 10%; this means that the absolute error will be $1.96 \cdot 10$ i.e. **AE=19.6**, so that the **RE** = $\frac{19.6}{20} \cong 1$ (100%) In this example, the confidence

⁶ Assuming normal distribution and for estimation with 95% confidence

interval⁷ for that estimate will be approximately between **0.4% and 39.6%** (20%-19.6%; 20%+19.6%), which is rather uninformative. In other words, in this specific example, the absolute error of the estimate takes the same value as the estimate.

There is no rule for determining when AEs and REs are acceptable or not; ideally it should be "small", but what "small" means is not well defined either. In general, tolerable maximum levels remain at the researcher's discretion, in the conditions in which they will be used. **For the purposes of this document we will consider acceptable a RE of less than 40%, as long as the AE does not exceed 10 percentage points.**

Some examples:

- Estimation of a proportion of 50% with an AE=12.65 and RE=25.30; in this case the 95% confidence interval would be 37.35%-62.65%, which is quite wide and therefore uninformative. In this example the RE is less than 40% but with an AE greater than 10%, which is not recommended.
- Estimation of a proportion of 10% with an AE=4.8 and RE=48.01; **in this case the** 95% confidence interval would be 5.20%-14.8%; although the AE is low (4.8), but since the proportion is also low (10%), then the RE is very high (48.0) so the confidence interval is also proportionally wide and therefore uninformative, so it would not be advisable.

Table 1. Conditions to report SUDs in general population surveys according to absolute (AR) and relative error (RE)

AE	RE	
	< 40%	≥40%
< 10 percentage points	Recommended	Not recommended
≥ 10 percentage points	Not recommended	Not recommended

It is important to note that values near the indicated cut-off points should be carefully analysed and a final decision should be taken also considering other elements.

What to do in a specific situation in a country?

Proposal

The following four tables show the results obtained through a simulation process, which, as we have mentioned, considers the following; Table 2 shows the results obtained in a study of

⁷ A 95% confidence interval corresponds to the estimate ± 1.96 *standard error based on normal distribution, i.e. absolute error estimate

30,000 cases, Table 3 for one of 15,000, Table 4 for one of 6,000 and finally Table 5 corresponds to one of 3,000 people. Each table includes variants according to the **year prevalence of the substance under study** with 5 different values, 50%, 10%, 5%, 1% and 0.5%, and depending on the **possible proportion of cases with SUD** among those who declared past year use; in this case 3 options, 50%, 25% and 10% were considered. Ultimately we will have 15 possible combinations and in each case the results are presented under three possible **design effects**: 1.5, 3 and 5. This configures 45 options in each table and each one delivers the results for absolute **error (AE)**, **relative error (RE)**, and **lower (LL)** and **upper (UL)** limits for 95% confidence intervals.

Let's look at each case:

- Table 2 presents the results for a study with a **sample of 30,000 people**. Based on the defined design effects (1.5 to 5), if the past year prevalence is at least 5%, with a maximum design effect of 5, then there are no obstacles to estimating the proportion of SUDs. On the other hand, if the prevalence is 1% or less, then the size of the design effect and the proportion of SUDs should be taken into consideration. For example, if the design effect was 5, the use of substance-use research criteria for past year prevalence of 1% or less (highlighted in yellow in the table) is not recommended. However, if the design effect was 3, it is possible when the past year prevalence is 1% and the prevalence of disorder is 25% or more, but not if it was 10%.
- Table 3 worked with a sample size of **15,000** cases. As would be expected, the situation is less favourable than the previous one. First, it is not advisable to estimate a SUD if the past year prevalence is 0.5%. For a prevalence of 1% it is not recommended if the design effect is 3 or more, nor would it be recommended for a design effect of 1.5 with a prevalence of substance use of 10% or less. On the other hand, in all scenarios it is possible to estimate SUD when the past year prevalence is at least 10%, and in the vast majority of cases if the prevalence is 5%.
- The simulation results for a sample size of **6,000 people** are presented in Table 4. It is advisable to estimate SUD in any scenario if the prevalence of past year use is 50%, and in almost all cases for a prevalence of 10%, except if the design effect is 5 and the percentage of people with use disorders is 10%. On the other hand, if the past year prevalence is 5%, there will be no problems if the design effect is 1.5 and in most cases for a design effect of 3, but it is not recommended if the design effect is 5. It is definitely not advisable to use criteria for estimation of SUDs based on a sample of 6,000 cases with past year prevalence of 1% or less.
- Finally, Table 5 shows the results for a study based on a sample of **3,000 people**. On the one hand, there are no restrictions on estimating the percentage of people with drug use disorders if the past year prevalence is 50%. On the other end, there are no conditions for that estimate if past year prevalence is 1% or less. It is also not recommended when the design effect is 5, except when the past year prevalence is 50%, as mentioned above. For prevalence between 5% and 10% the decision depends on the size of the design effect and the expected proportion of people with a SUD.

- In summary, regardless of the sample size, design effect and percentage of SUD, it will always be possible to estimate that percentage if the prevalence of past year use of the substance is 50% or similar, which would apply to most countries in the case of alcohol. By contrast, if the prevalence of **past year use** is 10% or less, the decision is determined by the sample size, the size of the design effect and the a priori estimate available on the percentage of people with a SUD. Particular care should be taken with a past year prevalence of 1% or less, which can occur in most countries for cocaine and coca paste: according to the results of the simulation, it would not be recommended in studies with sample sizes of 6,000 cases or less, and would only be applicable in some cases in studies with a sample size of 15,000, and even in large studies with samples of 30,000 people, particularly if the past year prevalence is around 0.5%, with a design effect of 3 or more.

Table 2: Errors (AE and RE) and 95% confidence limits for scenarios of prevalence of past year prevalence and % of people with SUD, for a study sample size of 30,000 people.

Study sample size=30,000														
Past year prevalence %	Sample for analysis problematic use	% SUD*	Design Effect=1.5				Design Effect=3.0				Design Effect=5.0			
			Absolute error	Relative error	95% Confidence interval		Absolute error	Relative error	95% Confidence interval		Absolute error	Relative error	95% Confidence interval	
					LL	UL			LL	UL			LL	UL
50.0	15,000	50	0.88	1.75	49.12	50.88	1.39	2.77	48.61	51.39	1.79	3.58	48.21	51.79
50.0	15,000	25	0.76	3.04	24.24	25.76	1.20	4.80	23.80	26.20	1.55	6.20	23.45	26.55
50.0	15,000	10	0.53	5.26	9.47	10.53	0.83	8.32	9.17	10.83	1.07	10.74	8.93	11.07
10.0	3,000	50	1.96	3.92	48.04	51.96	3.10	6.20	46.90	53.10	4.00	8.00	46.00	54.00
10.0	3,000	25	1.70	6.79	23.30	26.70	2.68	10.74	22.32	27.68	3.46	13.86	21.54	28.47
10.0	3,000	10	1.18	11.76	8.82	11.18	1.86	18.59	8.14	11.86	2.40	24.01	7.60	12.40
5.0	1,500	50	2.77	5.54	47.23	52.77	4.38	8.77	45.62	54.38	5.66	11.32	44.34	55.66
5.0	1,500	25	2.40	9.60	22.60	27.40	3.80	15.18	21.20	28.80	4.90	19.60	20.10	29.90
5.0	1,500	10	1.66	16.63	8.34	11.66	2.63	26.30	7.37	12.63	3.39	33.95	6.61	13.40
1.0	300	50	6.20	12.40	43.80	56.20	9.80	19.60	40.20	59.80	12.65	25.30	37.35	62.65
1.0	300	25	5.37	21.47	19.63	30.37	8.49	33.95	16.51	33.49	10.96	43.83	14.04	35.96
1.0	300	10	3.72	37.19	6.28	13.72	5.88	58.80	4.12	15.88	7.59	75.91	2.41	17.59
0.5	150	50	8.77	17.53	41.23	58.77	13.86	27.72	36.14	63.86	17.89	35.79	32.11	67.89
0.5	150	25	7.59	30.36	17.41	32.59	12.00	48.01	13.00	37.00	15.50	61.98	9.50	40.50
0.5	150	10	5.26	52.59	4.74	15.26	8.32	83.16	1.68	18.32	10.74	107.35	-0.74	20.74

*% among past year users. LL and UL correspond to the lower and upper limit, respectively, of the 95% confidence intervals

Table 3: Errors (AE and RE) and 95% confidence limits for scenarios of prevalence of past year use and % of people with SUD, for sample size of the study of 15,000 people.

Study sample size=15,000														
Past year prevalence %	Sample for analysis problematic use	% SUD *	Design Effect=1.5				Design Effect=3.0				Design Effect=5.0			
			Absolute error	Relative error	95% Confidence interval		Absolute error	Relative error	95% Confidence interval		Absolute error	Relative error	95% Confidence interval	
					LL	UL			LL	UL			LL	UL
50.0	7,500	50	1.24	2.48	48.76	51.24	1.96	3.92	48.04	51.96	2.53	5.06	47.47	52.53
50.0	7,500	25	1.07	4.29	23.93	26.07	1.70	6.79	23.30	26.70	2.19	8.77	22.81	27.19
50.0	7,500	10	0.74	7.44	9.26	10.74	1.18	11.76	8.82	11.18	1.52	15.18	8.48	11.52
10.0	1,500	50	2.77	5.54	47.23	52.77	4.38	8.77	45.62	54.38	5.66	11.32	44.34	55.66
10.0	1,500	25	2.40	9.60	22.60	27.40	3.80	15.18	21.20	28.80	4.90	19.60	20.10	29.90
10.0	1,500	10	1.66	16.63	8.34	11.66	2.63	26.30	7.37	12.63	3.39	33.95	6.61	13.40
5.0	750	50	3.92	7.84	46.08	53.92	6.20	12.40	43.80	56.20	8.00	16.00	42.00	58.00
5.0	750	25	3.39	13.58	21.61	28.39	5.37	21.47	19.63	30.37	6.93	27.72	18.07	31.93
5.0	750	10	2.35	23.52	7.65	12.35	3.72	37.19	6.28	13.72	4.80	48.01	5.20	14.80
1.0	150	50	8.77	17.53	41.23	58.77	13.86	27.72	36.14	63.86	17.89	35.79	32.11	67.89
1.0	150	25	7.59	30.36	17.41	32.59	12.00	48.01	13.00	37.00	15.50	61.98	9.50	40.50
1.0	150	10	5.26	52.59	4.74	15.26	8.32	83.16	1.68	18.32	10.74	107.35	-0.74	20.74
0.5	75	50	12.40	24.79	37.60	62.40	19.60	39.20	30.40	69.60	25.30	50.61	24.70	75.30
0.5	75	25	10.74	42.94	14.26	35.74	16.97	67.90	8.03	41.97	21.91	87.65	3.09	46.91
0.5	75	10	7.44	74.38	2.56	17.44	11.76	117.60	-1.76	21.76	15.18	151.82	-5.18	25.18

*% among past year users. LL and UL correspond to the lower and upper limit, respectively, of the 95% confidence intervals

Table 4: Errors (AE and RE) and 95% confidence limits for scenarios of prevalence of past year use and % of people with SUD, for sample size of 6,000 people.

Study sample size=6,000														
Past year prevalence %	Sample for analysis problematic use	% SUD*	Design Effect=1.5				Design Effect=3.0				Design Effect=5.0			
			Absolute error	Relative error	95% Confidence interval		Absolute error	Relative error	95% Confidence interval		Absolute error	Relative error	95% Confidence interval	
					LL	UL				UL			LL	UL
50.0	3,000	50	1.96	3.92	48.04	51.96	3.10	6.20	46.90	53.10	4.00	8.00	46.00	54.00
50.0	3,000	25	1.70	6.79	23.30	26.70	2.68	10.74	22.32	27.68	3.46	13.86	21.54	28.47
50.0	3,000	10	1.18	11.76	8.82	11.18	1.86	18.59	8.14	11.86	2.40	24.01	7.60	12.40
10.0	600	50	4.38	8.77	45.62	54.38	6.93	13.86	43.07	56.93	8.95	17.89	41.05	58.95
10.0	600	25	3.80	15.18	21.20	28.80	6.00	24.01	19.00	31.00	7.75	30.99	17.25	32.75
10.0	600	10	2.63	26.30	7.37	12.63	4.16	41.58	5.84	14.16	5.37	53.68	4.63	15.37
5.0	300	50	6.20	12.40	43.80	56.20	9.80	19.60	40.20	59.80	12.65	25.30	37.35	62.65
5.0	300	25	5.37	21.47	19.63	30.37	8.49	33.95	16.51	33.49	10.96	43.83	14.04	35.96
5.0	300	10	3.72	37.19	6.28	13.72	5.88	58.80	4.12	15.88	7.59	75.91	2.41	17.59
1.0	60	50	13.86	27.72	36.14	63.86	21.91	43.83	28.09	71.91	28.29	56.58	21.71	78.29
1.0	60	25	12.00	48.01	13.00	37.00	18.98	75.91	6.02	43.98	24.50	98.00	0.50	49.50
1.0	60	10	8.32	83.16	1.68	18.32	13.15	131.48	-3.15	23.15	16.97	169.74	-6.97	26.97
0.5	30	50	19.60	39.20	30.40	69.60	30.99	61.98	19.01	80.99	40.01	80.02	9.99	90.01
0.5	30	25	16.97	67.90	8.03	41.97	26.84	107.35	-1.84	51.84	34.65	138.59	-9.65	59.65
0.5	30	10	11.76	117.60	-1.76	21.76	18.59	185.94	-8.59	28.59	24.01	240.05	-14.01	34.01

*% among past year users. LL and UL correspond to the lower and upper limit, respectively, of the 95% confidence intervals

Table 5: Errors (AE and RE) and 95% confidence limits for scenarios of prevalence of past year use and % of people with SUD, for study sample size of 3,000 people.

Study sample size 3,000														
Past year prevalence %	Sample for analysis problematic use	% SUD*	Design Effect=1.5				Design Effect=3.0				Design Effect=5.0			
			Absolute error	Relative error	95% Confidence interval		Absolute error	Relative error	95% Confidence interval		Absolute error	Relative error	95% Confidence interval	
					LL	UL			LL	UL			LL	UL
50.0	1,500	50	2.77	5.54	47.23	52.77	4.38	8.77	45.62	54.38	5.66	11.32	44.34	55.66
50.0	1,500	25	2.40	9.60	22.60	27.40	3.80	15.18	21.20	28.80	4.90	19.60	20.10	29.90
50.0	1,500	10	1.66	16.63	8.34	11.66	2.63	26.30	7.37	12.63	3.39	33.95	6.61	13.40
10.0	300	50	6.20	12.40	43.80	56.20	9.80	19.60	40.20	59.80	12.65	25.30	37.35	62.65
10.0	300	25	5.37	21.47	19.63	30.37	8.49	33.95	16.51	33.49	10.96	43.83	14.04	35.96
10.0	300	10	3.72	37.19	6.28	13.72	5.88	58.80	4.12	15.88	7.59	75.91	2.41	17.59
5.0	150	50	8.77	17.53	41.23	58.77	13.86	27.72	36.14	63.86	17.89	35.79	32.11	67.89
5.0	150	25	7.59	30.36	17.41	32.59	12.00	48.01	13.00	37.00	15.50	61.98	9.50	40.50
5.0	150	10	5.26	52.59	4.74	15.26	8.32	83.16	1.68	18.32	10.74	107.35	-0.74	20.74
1.0	30	50	19.60	39.20	30.40	69.60	30.99	61.98	19.01	80.99	40.01	80.02	9.99	90.01
1.0	30	25	16.97	67.90	8.03	41.97	26.84	107.35	-1.84	51.84	34.65	138.59	-9.65	59.65
1.0	30	10	11.76	117.60	-1.76	21.76	18.59	185.94	-8.59	28.59	24.01	240.05	-14.01	34.01
0.5	15	50	27.72	55.44	22.28	77.72	43.83	87.65	6.17	93.83	56.58	113.16	-6.58	106.58
0.5	15	25	24.01	96.02	1.00	49.01	37.96	151.82	-12.96	62.96	49.00	196.00	-24.00	74.00
0.5	15	10	16.63	166.31	-6.63	26.63	26.30	262.96	-16.30	36.30	33.95	339.48	-23.95	43.95

*% among past year users. LL and UL correspond to the lower and upper limit, respectively, of the 95% confidence intervals

Alcohol use prevalence is high enough that most countries could use the above criteria to classify people with an alcohol use disorder, and similarly so in the case of marijuana. However, for the vast majority of countries in the region, prevalence for cocaine and coca paste are low enough that it would not be advisable to attempt to estimate drug use disorders for these substances in general population surveys.

It is important to comment a little more on sample sizes. Indeed, when we mention this, we are referring not only to the overall sample size, but to the subgroups for which we may want to estimate the SUDs. For example, if a sample of 15,000 cases with a prevalence of 5% and design effect of 3, meet the acceptable criteria for estimating SUDs in the general population, these criteria may not hold if we disaggregate to estimate SUDs by age group. In fact, if any specific age group had an effective sample of 3,000 cases then the AE and RE values would not make it advisable to estimate a SUD in that age group. Therefore, the tables presented should not only be used for decisions regarding the overall sample size of the study, **but also for any disaggregation into subgroups drawn from that overall sample size, i.e. for gender estimates and age groups. In some cases, the estimates may only be valid for the total (overall) data.**

Reports from general population studies are usually focused in the following indicators, both globally and for some partitions of interest:

- **Lifetime use**
- **Age of onset**
- **Use in the past 12 months**
- **Use in the past 30 days**

However, there are some other questions that may be included in the study questionnaire and are not always discussed in depth, and other questions that may not be included:

- **When was the first time you used NAME OF DRUG?** This question, which allows an estimate of the **INCIDENCE**, is usually in the questionnaires, but has not yet received the attention it deserves, especially the impact that preventive interventions might have on this question.
- **Among those who declare past year use: How often have you used NAME OF DRUG?.**⁸
 1. Only once
 2. Sometime in the past 12 months
 3. Sometime in the past month
 4. Sometime in the past week
 5. Daily

⁸ A possible interpretation would be: response 1=experimental use, responses 2 or 3=occasional use, responses 4 or 5=use

- Among those who declare use in the past month: How many days have you used NAME OF DRUG during the past 30 days?
- Quantity used in a month:
 - For cocaine, how many grams of cocaine do you use in a month?
 - For coca paste, how many *balls/wraps* (or the designation of the minimum dose in the country) do you use in a month?
- Generate and/or adapt questions that account for behaviours associated with the use of these substances, as well as the pattern of use of these substances.

While the most comprehensive possible analysis of the questions included in the questionnaire is desirable in any scenario, it is particularly important to do so in situations where it is not possible to advance on estimating of the proportion of people with SUD. As an example, we can mention the following aspects that may require more in-depth analysis in these cases:

- Description of past year users of cocaine and coca paste, considering demographic and socioeconomic variables (if available): sex, age, schooling, etc....
- Use of other drugs during the same period (past year): alcohol, marijuana and other drugs available in the questionnaire.
- Independently analyse (only for those who have used these drugs) questions related to supply, access, and risk perception. Eventually compare with the same results among those who have not used those drugs.

Final remarks

In short, of the results obtained from the implementation of what has been discussed in the document *"Designing Studies to Evaluate and Validate Scales and Indicators of Problematic Drug Use"*, there should be no methodological limitations in almost all countries to estimate the proportion of people with alcohol use disorder, nor in most countries in the case of marijuana. However, there would be in most countries with regard to cocaine and coca paste, as well as in some cases for marijuana. **In situations like these it is suggested not to include in the questionnaire the relevant questions to estimate the proportion of people with use disorder, and instead facilitate more in-depth characterization and analysis through questions such as those described above, or consideration of others that may be included for the purpose of having a better understanding about the users of these drugs.**



Clauses *ad cautelam*, clarifications and exemptions

COPOLAD is a programme funded by the European Union through the Commission's Directorate-General for International Cooperation and Development (DG DEVCO / EuropeAid).

The opinions or positions expressed in this document are the sole responsibility of the authors and editors; in all cases, they do not reflect or represent the views or positions of the COPOLAD Consortium, neither the ones of the European Commission.

Considering that respect for the environment is one of the framework values of COPOLAD, the Consortium is committed to organize its activities taking into account its impact on the environment, particularly CO₂ emissions. Therefore, virtual communication techniques are prioritized and the use of recyclable material is recommended along the implementation of the Programme.



COPOLAD Executive & Coordination Body (ECB)

✉ FIIAPP, C. Beatriz de Bobadilla 18 Madrid-28040 (Spain)

☎ +34 911 442 766 🐦 @programacopolad 📘 /programacopolad

www.copolad.eu

COPOLAD CONSORTIUM

LEADER



COUNTRIES

SEDRONAR (Argentina) • **SENAD** (Brazil) • **SENDA** (Chile)
MINJUSTICIA (Colombia) • **ICD** (Costa Rica) • **CND** (Cuba)
VLADA (Czech Republic) • **CND** (Dominican Republic) • **MREMH** (Ecuador)
CNA (El Salvador) • **GIZ** (Germany) • **DNII** (Honduras) • **CONADIC** (Mexico)
CONAPRED (Panama) • **DEVIDA** (Peru) • **NBDP** (Poland) • **SICAD** (Portugal)
NAA (Romania) • **DGPNSD** (Spain) • **NDC** (Trinidad and Tobago)
JND (Uruguay) • **ONA** (Venezuela)

EUROPEAN AGENCY

EMCDDA

MULTILATERAL AGENCIES

CICAD – OAS • **PAHO – WHO**

BI-REGIONAL NETWORKS

AIAMP • **IDPC** • **RIOD**



This project is funded by
the European Union