



## **CONTRIBUTIONS TO THINKING ABOUT DRUG-RELATED ISSUES**

### ***Discussing the drug issue: Some contributions***

We hope that this series of articles, essays and monographs will be of interest and will contribute to thoughtful debate on drug policy. The views expressed in these documents do not necessarily reflect the opinions or positions of the Executive Secretariat of CICAD or of the OAS.

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### **Number 2**

# **THE PUBLIC HEALTH APPROACH AS THE BASIS FOR SCIENTIFIC EVIDENCE IN DRUG POLICIES**

## THE PUBLIC HEALTH APPROACH AS THE BASIS FOR SCIENTIFIC EVIDENCE IN DRUG POLICIES

### Abstract

A clear change has taken place in recent years in the way we look at how to address drug-related problems. In the past, policies were focused basically on controlling drugs, from production to sales. This resulted in a significant imbalance between efforts to reduce the supply of drugs and efforts to reduce the demand. This has been changing, however, and a people-centered approach has gained momentum, as have policies designed to limit and reduce substance use. It is in this new scenario that the public health approach has emerged as a valid strategy for formulating drug policies. But it is also true that unless this approach is properly understood and applied, the changes advocated in political discourse will have been for nothing. This paper seeks to contribute to an understanding of what a public health approach is, and what it is based on. We will discuss how it is closely linked to knowledge produced through scientific methods, and how to find the synergy with policymakers that is needed to develop public policies that identify problems correctly, develop effective strategies for dealing with them, and then evaluate the policies and make the necessary corrections.

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## THE PUBLIC HEALTH APPROACH AS THE BASIS FOR SCIENTIFIC EVIDENCE IN DRUG POLICIES

Ideas about the “*use of scientific evidence in the development of drug policy*” and the “*public health approach*” as the cornerstone of drug policy are often to be found in policy declarations, both in the member states, and in international organizations, nongovernmental organizations, and elsewhere. In the particular case of CICAD/OAS, these ideas are made explicit in the 2010 Hemispheric Drug Strategy,<sup>1</sup> and in the new Hemispheric Plan of Action on Drugs, 2016-2020,<sup>2</sup> in the sections on Institutional Strengthening and Demand Reduction:

- **Formulate, implement, evaluate, and update national drug policies** and/or strategies that will be comprehensive and balanced, **based on evidence** that include a cross-cutting human rights perspective, consistent with obligations of parties under international law with a focus on gender and emphasizing development with social inclusion.
- Establish demand reduction policies with a **public health focus that are evidence-based, multidisciplinary**, multisectoral and respectful of human rights, considering the guidelines and/or recommendations of specialized international organizations.

We find similar ideas in the 2013 OAS Drug Report,<sup>3</sup> the 2013 Declaration of Antigua, the 2014 Resolution of Guatemala, the Outcome Document of the 2016 UN General Assembly Special Session on the World Drug Problem,<sup>4</sup> and elsewhere.

All of these declarations are based on three points:

- **Public policies** on drugs,
- **Scientific evidence** as underpinning for such policies, and
- **The public health approach** as the means of addressing public policy.

These three ideas are (or should be) closely interrelated; together they form a good basis for addressing a problem—in this case, the drug problem. Hence, the goal of this paper is to give practical meaning to drug policies based on scientific evidence and on a public health approach. The paper will discuss the meaning of each of these concepts and their implications for policy decisions, starting from the hypothesis that the best decision is the one that is based on the best information. We begin, therefore with some questions, which we shall attempt to answer below:

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<sup>1</sup> [http://cicad.oas.org/Main/Template.asp?File=/main/aboutcicad/basicdocuments/strategy\\_2010\\_eng.asp](http://cicad.oas.org/Main/Template.asp?File=/main/aboutcicad/basicdocuments/strategy_2010_eng.asp)

<sup>2</sup> [http://cicad.oas.org/mem/Activities/PoA/PoA-Version\\_Final-ENG.pdf](http://cicad.oas.org/mem/Activities/PoA/PoA-Version_Final-ENG.pdf)

<sup>3</sup> <http://www.oas.org/docs/publications/LayoutPubgAGDrogas-ENG-29-9.pdf>

<sup>4</sup> <https://www.unodc.org/documents/postungass2016/outcome/V1603301-E.pdf>

## **Why is scientific evidence needed, and for what purpose? How does it contribute to public policies?**

### **What is a public health approach, and how is it related to scientific evidence?**

Given that our concern here is *drug policy*, let us begin with an operational definition of public policy, and then go on to discuss how to respond to the questions.

In certain contexts, such as drugs, public policies are actions or interventions that are designed and managed by governments in order to address a problem that has been identified by citizens or by the government itself and thus satisfy people's needs.

Thus, **what precedes** any policy is identification of a problem. In other words, before taking action or intervening in a matter, it is necessary to be clear about what the problem is, the size of the problem, the determining factors, and the people who are the most vulnerable. But also, and perhaps more importantly, it must always be borne in mind that the interventions that will be carried out will have an **impact on people**, either individually or collectively. And it is this that requires us to find strategies and procedures that will lead to the best decisions that will minimize costs and maximize benefits for the people.

To underline these ideas, let us take the analogy of illness, something that many of us have probably faced more than once in our lives, that is, dealing with an acute or chronic health event that forces us to have recourse to the national health care system, whether public or private. And what we all hope is that someone will take the "best" decision for us. But this "best" decision is not taken out of thin air, nor does it depend on the goodwill of the person taking the decision. Rather, it should be based on a body of knowledge that, together with experience and good judgment, will enable us to reach this "best" decision. This existing knowledge comes from many sources, such as different phases of clinical research, case studies, epidemiological investigation, process and impact evaluation, specialized publications, and so on. And it is this knowledge that will be the **underpinnings** of a good decision.

Based on these ideas, let us come back to our questions.

## **Why is scientific evidence needed, and for what purpose? How does it contribute to public policies?**

What we referred to in the previous example from the health field is what is known today as Evidence-Based Medicine (EBM). While this approach is not new, it began to gather momentum in clinical practice at the beginning of the 1990s: "*Evidence-based medicine is the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients.*"<sup>5</sup> Here, the impact of the decision is on the individual, but what happens if in the definition of EBM, we change "medicine" for "public policies",

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<sup>5</sup> Sackett DL, Rosenberg WM, Gray JA, Haynes RB, Richardson WS. Evidence based medicine: what it is and what it isn't. *BMJ*. 1996 Jan 13; 312 (7023):71-2.

and “patients” to “people”? That is the challenge when we say that we need public policies based on scientific evidence.

The Spanish Royal Academy dictionary defines evidence as a *clear and manifest certainty that cannot be cast into doubt*,<sup>6</sup> and according to the Oxford Dictionaries, evidence is defined as *“the available body of facts or information indicating whether a belief or proposition is valid.”*<sup>7</sup> But we also produce “evidence” based on our own experience and the experience of others, and on the information that is widely available on the Internet, or personal opinions or what we find in books or in the press. But do these constitute the “clear and manifest certainty” of the definition above? In some cases, probably yes, and in others, probably no.

A distinction must be drawn between “evidence” and “scientific evidence.” The latter is characterized by the use of objective, validated methods that also include measurable levels of certainty (using the scientific method as the basic approach). In other words, we may say that “evidence” refers to existing available information, regardless of the method used to obtain it. “Evidence” may include a purposeful or deliberate selection of findings, either for ideological reasons or because of political or economic interests. This is fairly clear in today’s discussions about the regulatory framework for medical marijuana. In the case of “evidence”, it is fairly common to set more store by **who** makes a statement rather than the **content** of the statement (the messenger is more important than the message). By contrast, when we refer to “scientific evidence”, as we said earlier, we are talking about knowledge obtained using objective methods. Thus, **who** supports a piece of evidence is replaced by **transparency of method**, which includes the possibility of opening up the questions themselves to **being critiqued**<sup>8</sup> (here, the message is more important than the messenger).

We have no doubt that the use of knowledge produced by means of objective methods will make for a better discussion of public policies on drugs on the one hand, and on the other, a better decision at the time the policies are adopted, so that the risks inherent in decision-making can be reduced. Public policy formulation can perfectly well be linked to decision theory, which may be defined as the logical, quantitative analysis of all of the factors that affect the outcomes of a decision in an uncertain world, that is, choosing the “best” from among what is “possible”. And in the end, that is the issue: choosing the “best” decision in the real world that places restrictions on us.

For all these reasons, in the search for the “best” decision, it is scientific evidence that plays a fundamental role.

A final thought about scientific evidence and public policies. It is likely that what we have said thus far will convince us that evidence is needed in decision-making. But what happens in actual fact? It seems that there is an estrangement between science and

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<sup>6</sup> <http://dle.rae.es/?id=H9WZ6YF>

<sup>7</sup> <https://en.oxforddictionaries.com/definition/evidence>

<sup>8</sup> Comas, Domingo: ¿Qué es la evidencia científica y cómo utilizarla? Una propuesta para profesionales de la intervención. Madrid, Fundación Atenea, 2014, [ISBN 978-84-935891-1-0](https://www.fundacionatenea.com/)

policy (and probably in other areas also) to which we need to pay much more attention. Generally speaking, knowledge produced by reliable methods is a **necessary** condition for formulating good public policy, but is **not**, in and of itself, **sufficient**. Political considerations (from which decisions are derived, priorities defined, and budgets decided) are also necessary conditions but, as before, are not sufficient on their own for a good decision. It is in this area that efforts should be directed so as to make it possible for science and policy to come together for a higher good, that is, taking good decisions and making good public policy that benefits people and their environment. This is no small problem: unless there is awareness of this twofold need, it will be very difficult to achieve. Among other things, it presupposes sufficient funding for the production of knowledge, including training specialized human resources, and then, just as important, this knowledge must be used correctly.

There is another variable in this estrangement between science and policy that must be considered: time. By this we mean that the time needed to produce evidence tends to be longer than the time needed for policy decisions, which are generally more immediate. But the one is not dependent on the other. The production of knowledge should not be spontaneous, but should rather be ongoing, and should monitor the changing states that occur in society and thus provide timely input to decision-makers. Hence the importance of encouraging academia and research centers to promote lines of research on drug-related topics and providing the necessary financing for that research.

Let us go back to the second question we raised: **What is a public health approach, and how is it related to scientific evidence?**

A public health approach is a way of thinking or a strategy for dealing with a particular situation. There is no better way of explaining this strategy than by using the description of what the Pan American Health Organization (PAHO) defined as Essential Public Health Functions (EPHFs),<sup>9</sup> *“EPHFs have been defined as the conditions that make for better public health practice.”*

After lengthy discussions, a group of experts defined 11 Essential Public Health Functions (EPHFs), but for the purposes of this paper, we shall concentrate on the five listed below. It is important to remember that the EPHFs were developed in the context of the countries' health systems and their health administrations. This should be borne in mind when we move these ideas into the area of interest to us, in other words, to discuss how the drug authorities are organized:

- **Essential Function No. 1:** *Monitoring, Evaluation, and Analysis of Health Status.* The emphasis here is on conducting an “up-to-date evaluation of the country's health situation and trends including their determinants with special emphasis on identifying inequities in risks, threats and access to services,” and also on generating “useful information for the assessment of the performance of health services.”

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<sup>9</sup> [http://www1.paho.org/hq/dmdocuments/2010/EPHF\\_Public\\_Health\\_in\\_the\\_Americas-Book.pdf](http://www1.paho.org/hq/dmdocuments/2010/EPHF_Public_Health_in_the_Americas-Book.pdf), pp. 65-69.

- **Essential Function No. 2:** *Public Health Surveillance, Research, and Control of Risks and Threats to Public Health*: This function stresses the need for countries to have the capacity to conduct research and epidemiological surveillance, and the capability of developing links with international networks that permit better management of health problems and activate rapid response systems to control health problems or specific risks.
- **Essential Function No. 3:** *Health Promotion*: Basically to conduct “health promotion activities in the community, and develop programs to reduce risks and harm to health that include active participation by the people.”
- **Essential Function No. 5:** *Development of Policies and Institutional Capacity for Planning and Management in Public Health*. Essentially, this function promotes the “development...of policy decisions in public health through a participatory process that is consistent with the political and economic context in which the decisions are made.”
- **Essential Function No. 10:** *Research in Public Health*. This function focuses on the conduct of research (basic and applied) as a means of promoting changes in public health practices, and also fostering the “establishment of partnerships with research centers and academic institutions from within and outside the health sector to conduct timely studies that support decision-making of the National Health Authority at all its levels and in all its fields of action.”

Before correlating the EPHFs with the issue with which we are concerned here, that is, the public health approach as it relates to drug policy NOTE: THE CENTRAL PURPOSE OF THIS ARTICLE IS TO EXPLAIN WHAT THE PUBLIC HEALTH APPROACH IS AND WHAT IT CONSISTS OF, SINCE THE CONCEPT HAS BEEN DISTORTED, we should note that the EPHFs described above are clearly and absolutely consistent with those that have described the stages of the public health paradigm,<sup>10</sup> most notably, the following:

- Define the problem
- Measure its magnitude
- Understand the key determinants
- Develop intervention/prevention strategies
- Set policies and priorities
- Implement and evaluate the policies

We can therefore identify three central elements that are the basis for what we know as the public health approach (as well as other strategies and paradigms) to formulating public policy: **situational analysis, interventions, and evaluation.**

When thinking about the public health approach, the first big challenge we face is ***understanding the problem*** we want to address. We cannot think about solutions without being clear about the problem. This is, it seems to us, of vital importance since the public health approach has often been confused with interventions, basically with substance use prevention and treatment of the addictions. However, as we said earlier, while

<sup>10</sup> Sukon Kanchanaraksa, Marie Diener-West: <http://ocw.jhsph.edu/courses/FundEpi/PDFs/Lecture1.pdf>

interventions are an important part of a public health approach, they are not the public health approach. Before thinking about solutions, the great task is to understand, understand, understand (when faced with a health problem, we believe that nobody would be willing to receive treatment unless the problem had been identified as precisely as possible).

Thus, research, whether quantitative or qualitative, becomes a basic and indispensable ally. Research is the means of conducting the assessment that will identify the problem, estimate its magnitude, and identify its principal determinants and the uneven distribution of risks.

It is often thought that a nation-wide survey of a specific group of people (for example, high school students, or the general population) is sufficient to produce an accurate assessment of the drug situation in a country. That is not the case, however. The information derived from this type of investigation is very necessary, but it is not sufficient to provide full knowledge of the situation. It must be supplemented by information from other sources, including information from the drug supply side, and, very importantly, from **the local level**. The OAS Drug Report of 2013 pointed out that what is characteristic of our Hemisphere is how much problems tend to vary among countries, and that each country experiences the problem in different ways. Similarly, significant variation can be found within a specific country. This means that different regions or provinces or cities within a country have different situations that require approaches and interventions that are also different: some examples are found in studies in Argentina,<sup>11</sup> Colombia,<sup>12</sup> Chile,<sup>13</sup> United States,<sup>14</sup> and Uruguay.<sup>15</sup> But there are also interesting studies that show important differences between areas within a single location, as shown in the study in Bogotá.<sup>16</sup>

Thus, although cross-sectional studies in specific populations are very necessary and must be replicated over time in order to look at trends, we find that their greatest value lies in estimating the extent or size of the issue under study, and in the fact that they help identify the most vulnerable population groups, thus enabling us to develop hypotheses that must be tested using other research methodologies, including qualitative methods.

In short, the first question to be resolved in a public health approach is to have an **assessment** or **diagnosis** of the situation in which we wish to intervene that is as complete and up-to-date as possible. As discussed earlier, this assessment should include an estimate of the extent of drug use in different population groups, with emphasis on the number of problem users, so as to describe that group and determine the potential demand for services. It should also identify the key determinants to which interventions

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<sup>11</sup> <http://www.observatorio.gov.ar/media/k2/attachments/PrincipalesIndicadoresRelativosAlConsumoDeZ SustanciasPsicoactivasZAnoZ2014.pdf> (Spanish only).

<sup>12</sup> <http://www.odc.gov.co/Portals/1/publicaciones/pdf/consumo/estudios/nacionales/CO031052014-estudio-consumosustancias-psicoactivas2013.pdf> (Spanish only).

<sup>13</sup> [http://www.senda.gob.cl/media/estudios/PG/2014\\_EstudioDrogas\\_Poblacion\\_General.pdf](http://www.senda.gob.cl/media/estudios/PG/2014_EstudioDrogas_Poblacion_General.pdf) (Spanish only).

<sup>14</sup> <https://www.samhsa.gov/data/sites/default/files/NSDUHsaePercents2015.pdf>

<sup>15</sup> [http://www.infodrogas.gub.uy/images/stories/pdf/201609\\_VI\\_encuesta\\_hogares\\_OUD\\_ultima\\_rev.pdf](http://www.infodrogas.gub.uy/images/stories/pdf/201609_VI_encuesta_hogares_OUD_ultima_rev.pdf) (Spanish only).

<sup>16</sup> <http://www.odc.gov.co/Portals/1/publicaciones/pdf/consumo/estudios/locales/CO031052016-estudio-consumo-sustancias-psicoactivas-bogota-2016.pdf> (Spanish only).



should be directed, and determine the availability of services and the need to satisfy the demand for services, among other points.

A second issue has to do with **interventions**. Only with a good assessment in hand will it be possible to think about the most appropriate interventions, which must take into account different population groups,<sup>17</sup> ranging from people who do not use drugs to those who are in recovery. But it is not a question of simply deciding that selective prevention, for example, is needed; rather, the challenge is to find out what type of prevention is needed as a function of the characteristics of the particular population group and the contexts identified in the assessment. As stated in a number of international declarations such as CICAD/OAS,<sup>18</sup> UNODC<sup>19</sup> and EMCCDA,<sup>20</sup> evidence-based interventions built on rigorous scientific research must be developed and implemented. This is key to ensuring that the interventions produce good outcomes.

A third challenge posed by the public health approach lies in the **evaluation** of the interventions, plans, and programs. Clearly, this has been the area of drug policy that has been the most neglected. It is important to make it clear that the public health approach to drug policy is not complete unless it incorporates an evaluation of the interventions. **Evaluation** (including monitoring) **must be an integral** and essential part of public policies. Of course, a decision must be made about what type of evaluation is needed, what the indicators will be, and what measurement strategy will be adopted. The interventions are intended to change the status of a situation, and to move the situation from one point to another. Therefore, procedures are needed to enable us to find out whether this change of state occurred or not, what difficulties arose that must be corrected, and so forth. Again, research has a fundamental role to play here. And it is fundamental not only for the specific points being evaluated, but also because the research findings provide valuable information about successful interventions (if shown to have been successful) that may be useful for other countries or settings. And if the interventions were not successful, that information is also important in understanding the reasons for such an outcome: were there problems with the initial assessment, or with implementation, and so on.

In short, the underpinning of a public health approach is scientific evidence, which is at the base of its thought process. We have also seen how scientific evidence may support more solid and sustainable public policies. NOTE: ADD SOMETHING AT THE BEGINNING For despite the progress that has been made in this area, there is still some way to go, and one of the first areas is an awareness of the role of scientific evidence in public policy. **Science and policy should work together to benefit the people.**

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<sup>17</sup> <http://www.oas.org/docs/publications/LayoutPubgAGDrogas-ENG-29-9.pdf>

<sup>18</sup> [http://cicad.oas.org/mem/Activities/PoA/PoA-Version\\_Final-ENG.pdf](http://cicad.oas.org/mem/Activities/PoA/PoA-Version_Final-ENG.pdf)

<sup>19</sup> <http://www.un.org/es/comun/docs/index.asp?symbol=A%2FRES%2FS-30%2F1&Submit=Buscar&Lang=e>

<sup>20</sup> [http://www.emccda.europa.eu/system/files/publications/4273/2017.1998\\_EMCCDA\\_STRATEGY\\_2025\\_web-1.pdf](http://www.emccda.europa.eu/system/files/publications/4273/2017.1998_EMCCDA_STRATEGY_2025_web-1.pdf)