forum movimento per i diritti contro la proibizione droghe

Expert Seminar

Rome, May 20th 2014

Global Experiences with Harm Reduction for Stimulants and New Psychoactive Substances

The Expert Seminar on the Global Experiences with Harm Reduction for Stimulants and New Psychoactive Substances (NPS), an initiative of the Transnational Institute (TNI) and Forum Droghe, took place in Rome on May 20, 2014 at Università Pontificia Lateranense. The seminar was held under the Chatham House rule to ensure confidentiality and to allow participants a free exchange of ideas. A total of 23 people attended the meeting, representing research and academic institutions as well as non-governmental organizations working in the field. The seminar was organised with financial support of the EC Drug Prevention and Information Programme and the Open Society Foundation.

Aims of the seminars and participant introduction

Three themes were covered over the course of the day:

- Self-regulation and drug use;
- Experiences with harm reduction measures for stimulants in the America's, Asia, Oceania and Europe;
- Conclusions - achieving a comprehensive package of harm reduction for stimulants.

A brief round table participant introduction followed.

Each theme was prefaced by introductory remarks by key participants, in order to stimulate reflection and dialogue, followed by frank discussion. This report conveys the highlights of the discussion, although no individuals are quoted, in keeping with the anonymity stipulated by the Chatham House rule. The ideas expressed were those of individuals in their capacity as experts in the field of harm reduction for stimulants and NPS, and should not be interpreted as reflecting consensus among the group, or endorsement by the organizers.

Self-regulation and drug use

By taking cues from users' self-regulation strategies, it is possible to design innovative operational models for drug services as well as drug policies, strengthening Harm Reduction as an alternative approach to the disease model. The reason for most controlled use lies in a wide set of self-regulation rules users tend to apply to keep drug use at bay and prevent the disruption of everyday life. This perspective is noticeably at odds with the point of view of drug addiction professionals, who tend to focus on addiction as a disease, resulting from the chemical properties of drugs combined with biological, psychological and social deficits of users. It also challenges the social representation of drugs as intrinsically out-of-control substances and of drug users as helpless under the influence of drugs.

This input is based on the outcomes of the Expert Seminar held in Florence (20-22 June 2013) of the project *Innovative cocaine and polydrug abuse prevention programme* from the project New Approaches in Drug Policy & Interventions, with the financial support of the Drug Prevention and Information Programme of the European Union and La Società della Ragione.

According to Grund et al (2013)[1] more attention had been given to specifying cocaine-related harms than to developing interventions to reduce them. Harm Reduction (HR) interventions targeting powder cocaine users in recreational settings focus mainly on offering information on risks. According to the EMCDDA Annual Report 2012, specific outreach programs are usually implemented in nightlife settings for powder cocaine users, while provision of specific HR programs for crack cocaine smokers in Europe is limited, and for injecting cocaine users constitute a new developing area of work.

As far as cocaine treatments are concerned, there is a quite wide offer of psychosocial interventions, including motivational interviewing, cognitive behavioural therapies, relapse prevention etc. Nevertheless, the treatment demand is low, considering that users attending drug services treatment in Europe are 48,4% for opioid use, 25,4% for cannabis and only 15% for cocaine, though these figures only refer to public institutions and may not give the full picture.

In a qualitative research, conducted in Tuscany (**Italy**) among young adults (2012), 26% have been enrolled in programmes at some point, half of them as an alternative to sanctions for drug use. Though many (if not most) of them go through periods of heavy - less controlled or uncontrolled- use, they are unwilling to contact drug services. They prefer to rely on their own "control" strategies (with a good chance of success as the general trend of trajectories is towards moderation). They seem to agree with P. Cohen[2]: *people enrolled in drug services are made more powerless to manage their life than other clients of the Health Service*. The operational model in most drug services stems from a vision on addiction that makes the concerned person incapable of self-management. As a result, interventions in the field of drug addiction are not in line with the most innovative trends: in facts, Self-management programs (developed in the framework of the Health promotion Model), are leading in innovation in many other fields of Health Service.

In the context of the EU project NADPI, a specific work stream ("Innovative cocaine and poly drug abuse prevention programme) has been run to develop new approaches to prevent or reduce the risks of harmful use and dependence among regular cocaine/poly-drug users. The aim of the work stream has been to link findings from research in natural settings to models of intervention in drug services, so as to innovate them. Consistently with the HR bottom up approach (based on consumer input and demand), studies aimed at realizing users' world as they see it, have been considered. These studies focus on "controls" over drug use. From users' point of view, the concept of control is crucial. Keeping drug use under control appears as the main concern in order to avoid disruption of everyday life.

According to findings from this kind of studies, drug users apply control by setting "rules" regarding the drug (the amount, the frequency of use), the set (using when feeling well), the setting (using with friends, using in the weekends only, not using at work). Stepping down and temporary abstinence are the most frequent users' strategies when they perceive a diminished control over drug use. Anyway, the ability to self-regulate drug use is in relationship to environmental factors: a solid "life structure" is a crucial determinant for control.

The disease model, which is dominant in drug addiction services, is based on the dichotomy "either abstinent or addict", "either controlled or uncontrolled user": under this perspective, control is supposed to be an individual property, related to (largely immutable) biological and psychological individual characteristics. In opposition to the supposed "linear and escalating trajectories" drawn by the medical model – from use to dependence – qualitative studies on controls show that drug use careers are dynamic and patterns of use vary with transitions and with changes in life circumstances and life engagements. Drug use patterns fluctuate along a continuum, from diminished control to increased control and vice versa.

This disease model seems to be in contrast with the continuum in drug use patterns and in control over drug use, as shown by the large variability of most cocaine use careers. Such variability can be only explained by

[1]JP Grund, S Ronconi, G Zuffa, Operating Guidelines "Beyond the disease model, new perspectives in HR: towards a self-regulation and control model".

[2] Cohen, P. (1999), Shifting the main purposes of drug control: From suppression to regulation of use. Reduction of risks as the new focus for drug policy. International Journal of Drug Policy, 10 (1999), 223-234.http://www.cedro-uva.org/lib/cohen.shifting.html

considering environmental factors (life events, changes in relationships) and the *learning* process from one's own experience. The latter factor can explain the general trend towards moderation. It also explains the "natural recovery" (i.e. remission from addiction without treatment) which is much more widespread than generally believed.

The main shortcoming of the disease model is that it denies users' abilities, undercutting users' self-efficacy: in contrast with findings from psychological research which have shown the value of beliefs and of treatments that convey for clients grater power and self-control.

The self-regulation model[3] shifts from help to powerless drug users to support to client's competencies; from the *reactive* nature of treatment for specific diagnostic categories to the *proactive* approach: interventions may occur in many points of the drug use continuum and life circumstances with *a wide range of different goals* (Di Clemente, 1999). According to this model, much attention must be paid on environmental factors, social context and setting of use.

The self-regulation model offers an opportunity to widen the offer of programs (from online self-management -web 2.0-, brief counselling and moderation management up to HR psychotherapy). The theoretical assumption of "continuum" in control can widen the target of clients, as well as the goals of interventions: "any positive change" can be a valid goal, in the continuum of drug use as well as in user's entire life experience.

In this perspective, a "balanced" relationship between client and professional is required, in order to build a partnership and recognize reciprocal competencies and expertise. Fostering user based controls is consistent with the HR bottom up approach, as well as the focus on setting to create supportive and enabling environmental conditions

This perspective can strengthen HR as the leading approach in the whole network of services, beyond the HR "pillar"; the control perspective is a way of looking at drug use and its evolution over time. It is an empowering perspective, in contrast with the social image of "helpless addicts" as promoted by the disease model. It relies on social competencies to *regulate* drug use, consistently with the comprehensive HR objective to regulate, rather than eliminate, drug use.

The focus on users' informal controls and environmental conditions allows highlighting the link between informal controls and "formal" controls (drug legislations and policies). Many drug control systems aim at destroying conditions for individual self-regulation strategies through incarceration, stigmatization, and marginalization.

It has been discussed if the control strategies can be applied to problematic drug users or it is more suitable for recreational users only. It has been argued that control is a dynamic process concerning all users (though at different levels) under the influence of multiple interacting factors (drug, set, setting); rather than an individual property of a group of "controlled" users in opposition to "uncontrolled" users.

Experiences with harm reduction measures for stimulants in Latin America and the Caribbean

In Latin America and the Caribbean the problematic use of smokable cocaine (crack, paco, pasta base, bazuco) is causing significant health and social problems. Measures to solve problematic cocaine base paste consumption are the subject of great concern in Brazil, Colombia, Uruguay and Argentina. The mayor of Bogota has recently proposed a pilot scheme with crack cocaine addicts to explore the substitution of crack made of cocaine base paste (or bazuco as it is called in Colombia) by marijuana, while in Brazil, in the city of São Paulo in particular, there are significant experience with treatment and harm reduction programmes. In Saint Lucia in the Caribbean there are some experiences with substitution of crack with cannabis as well.

Even though the predominate route of administration of stimulants is not intravenous, in the **Caribbean** area crack cocaine use is an important driver of the HIV and STI epidemic in the region. In facts, to support their

[3]Cocaine: towards a self-regulation model. New developments in Harm Reduction, by Grazia Zuffa, Series on Legislative Reform of Drug Policies Nr. 24, February 2014

addiction, the vast majority of crack addicts become involved in street prostitution and in sexual practices at higher risk of STI infections. This relation is not sufficiently recognized by national and international bodies defining policies. Some studies show that a high proportion of drug users suffer from mental problems, suggesting that there is an association among drug use and self-medication. It is a population that has no fixed address and a lifestyle that is adverse to treatment regimes. In addition, this population of homeless crack users has a high prevalence of co-occurring psychiatric illness that makes it even more difficult to address their needs.

In few words, it is a multi-problematic population living in multiple marginality and with trauma conditions, and the HR intervention should offer a multi-disciplinary and multi-speciality service, guiding users into the most appropriate services, such as housing or employment agencies, providing food. Special attention to unsafe sex should be a priority for HR intervention. Peer and outreach workers should be used to facilitate access contact to those drug users who are not enrolled in treatment centres, and to contribute to education and information.

Drug treatment services should take a more holistic approach to drug treatment and continue to develop and implement other treatment options, which better meet the client needs. A suggestion is given by a Brazilian research that studied the experience of several male patients in a treatment program who had used cannabis to reduce their craving for crack, helping them to overcome their addiction[4].

In Uruguay a RCT (randomized clinical trial) is going to take place in order to assess cannabis as a treatment for cocaine and paco withdrawal syndrome. This trial is controversial, because of the fear that cannabis could be “legitimized” as pharmaceutical drug. This trial is inspired by practical issue, since cannabis is commonly applied by users themselves to contrast the side effect of stimulants. Although there is a debate on the feasibility of this kind of trial (how can the effect of cannabis go unperceived?), it has a political meaning also for its implications for decision makers.

A trial should be designed taking into account the setting of cocaine use, not only to the chemical aspects.

A recent study by the Federal University of Sao Paulo found that **Brazil** is now the world's largest consumer of both cocaine and its crack derivative. Partly because of the proximity to producing countries (Colombia, Bolivia and Peru), cocaine and crack are quite cheap. They are mostly used by low income people. There is comparatively little use of injectable opioids such as heroin.

An interesting experimental intervention has taken place in an area of Sao Paulo, a *favela* where crack users live in hovels in very bad health conditions, suffering from malnutrition; most of them are unemployed. The initiative is called Braços Abertos[5] (Open Arms) and is a many-pronged effort to house to feed and to employ crack users, aiming to end their social exclusion. The intervention offers primary care, food, registration to social programs, a work: people are employed four hours a day in social utility jobs, such as sweeping sidewalks, pruning public gardens. An innovative way to approach clients is given by using a clown, who does not scare them but makes people curious in a fancy way.

After one year, this intervention has made the difference in this area of Sao Paulo, not only in terms of improving health and life conditions of target population, but also in terms of public opinion.

Experiences with harm reduction measures for stimulants in Southeast Asia and the Pacific

[4] Therapeutic Use of Cannabis by Crack Addicts in Brazil, Eliseu Labigalini Jr, Lucio Ribeiro Rodrigues and Dartiu Xavier Da Silveira, Journal of Psychoactive Drugs 31 (4), October-December 1999

[5] Recommended reading: Crack cocaine is king in Brazil: What Sao Paulo is doing about it, The Globe and Mail, April 26, 2014; Brazil state launches crack rehabilitation program, The Associated Press, May 9, 2013

Problematic use of methamphetamine has become a significant health and social problem in East and Southeast Asia and the Pacific. There are strong indications that the situation is deteriorating: the substances are becoming stronger (from pills – also known as yama or yaba – to crystal methamphetamine or 'ice') and methods of use are becoming more harmful (from swallowing pills to injecting). Prevention, treatment as well as harm reduction strategies in the region are in their initial phases. Services are still focused on injecting heroin users as the main problem and have little to offer for methamphetamine users. They rarely use harm reduction services, largely because they do not identify with opioid users, who often belong to different user networks. The needs of ATS users are usually neglected and few services are geared to their special needs. In contrast, harm reduction programmes have shown positive results in Australia.

Australia has one of the highest rates of illicit methamphetamine use in the world and the highest use among English-speaking countries.

Stimulant users generally suffer from a high level of morbidity and a low level of mortality. Harms from stimulants use are mostly related to mental rather than to physical health. Physical health problems include sleep disturbances, cardiac arrhythmias, and strokes. Mental health effects include acute effects such anxiety or aggressive behaviours, with typical after-effects of fatigue and depressed mood. Use of methamphetamine is of particular relevance in Western Australia in general, and in the Perth metropolitan area specifically. The HR target populations are widely dispersed geographically; many people come from rural areas, as well as from the capital city.

The experience of harm reduction intervention in Western Australia is a good starting point to define feasible interventions. Harm reduction interventions are targeted to problematic users, that inject methamphetamines, aiming to reduce blood infections

The HR interventions for stimulants users are based on the operational models of HR for IDUs, targeted to clients who are not willing to enter treatment in drug addiction services (mostly residential for heroin and alcohol users). The HR programs for IDUs provide them needle exchange programs. Since there are no significant open drug scenes, clients reach out is by word of mouth among drug users themselves, including dealers (that in most cases are also users), in order to access hidden populations that have little or no contact with the Health care system.

HR interventions focus on medical issues, hygiene conditions, handling with psychotic episodes, nutrition, and resting, sleeping disorders.

Given the hot and dry climate in West Australia, water provisions and fresh fruits (i.e. bananas, full of minerals and potassium) are offered to clients. Very simple interventions make the real difference.

A specific peer education program is currently ongoing in the Perth area. Users are recruited as a primary target group and trained on chemical properties of methamphetamines, their physical harmful effects(cardiac problems, strokes, infarction, etc.) and psychological ones (anxiety, paranoia etc.). An appropriate and familiar language is used to make everything more comprehensible, effective and to enhance knowledge and awareness. A secondary target group consists in the drug-using social and casual contacts of each of these peer educators, or the significant others of drug using contacts. The program targets users/dealers in the Perth metropolitan region. This program is granted by Government of Western Australia as a peer education project, based on lessons learned in conducting Project AMPED, focusing primarily on opiate users.

The project demonstrates the advantages of this model of peer education, including the empowerment of users who not consider themselves only as "junkies" but as educators as well. Also, educators report a decreasing use. The information they disseminate among their peers are immediately relevant to the target's needs, realistic and achievable, understandable and appropriate to the audience, and credible. Peer education strategies have a number of advantages in engaging "hard-to-reach" individuals who do not

typically access mainstream health services, and peers have further advantages in delivering information effectively.

Problematic use of amphetamine-type stimulants (ATS) has become a significant health and social problem in East and Southeast Asia, in particular the use of methamphetamine, the most potent amphetamine derivative and most widely used substance in the region. ***Myanmar*** remains a major source of methamphetamine pills and opiates in East and South East Asia (the Golden Triangle), most of which are manufactured in Shan State, eastern part of country. Law enforcement and supply reduction approaches currently dominate the response to ATS use in the region. These approaches frequently result in unintended negative consequences. Thailand's 2003 war on drugs led to increased border surveillance and a move of direct trafficking routes from Burma to Thailand to more indirect routes over the Mekong river via Laos and Cambodia, resulting in an increase of Meth use in those countries.

The most popular ATS are crystal meth (ice), ecstasy pills and other methamphetamine pills. They are illegally produced and sold in tablets, capsules, powder and chunks (ice) forms. Because of high volatility, high thermal stability, they can be smoked, sniffed, inhaled, ingested or injected but ways to take the drug vary widely across the region. The Philippines and Viet Nam are also reporting signs that injecting methamphetamine is increasing while in Thailand; the number of methamphetamine users now represents the majority of all new drug treatment cases.

While there was a decrease in opiate crops, passing from 828 tons in 2002 to 315 in 2006, the number of meth related arrests increased.

ATS problematic use has become a significant health and social problem in East and Southeast Asia. ATS use is associated with potentially life-threatening communicable diseases, in particular among vulnerable groups such as female sex workers, youth and migrants. Incarceration of ATS users in compulsory drug treatment/detention centers is ineffective. There is evidence of serious human rights abuses and relapse rates are extremely high upon release. Community-based interventions based on prevention, early intervention, harm reduction and treatment offer a more effective and humane alternative. Prevention, treatment and harm reduction strategies are in their initial phases. There is a lack of professional expertise and counselling training, and little experience in dealing with the psychosocial and mental health problems.

There is a need to develop effective prevention, treatment and harm reduction measures that fit the cultural and socio-economic circumstances in the region. There is an urgent need for donors and governments to introduce harm reduction measures to counter the effects of rising methamphetamine use. Services are still focused on injecting heroin users as the main problem and have little to offer for ATS users. The earlier a comprehensive package of harm reduction measures for methamphetamine is introduced the better is. More research is needed to understand ATS market and user trends, the negative impacts of law enforcement interventions on levels and patterns of use, as well as the chemical composition of the substances.

Moreover, there are strong indications that the situation is deteriorating: the substances are becoming stronger (from pills to crystal methamphetamine) and methods of use are becoming more harmful (from swallowing pills to injecting).

Recent researches suggest that ATS use is increasing in Myanmar, especially among sex workers, night club/casino goers, students and people who use them to socialize, to lose weight, to withstand fatigue of hard jobs (truck divers), to increase sexual pleasure. This is one of the major concern, since using drugs before having sex reduces inhibition and increases unprotected and uninhibited sex; also, it prolongs sexual intercourse with the risk of wounds and transmission of blood-borne diseases like HIV and Hepatitis C.

ATS use is associated with a range of communicable diseases such as HIV, hepatitis B and C infections and other sexually transmitted infections (STI), tuberculosis and mental health problems, in particular among vulnerable groups such as female sex workers and other workers in the entertainment industry (clubs and casinos); youth (specifically among homeless, unemployed and incarcerated youth), and migrants.

Tuberculosis is spreading in Myanmar, mostly among PWUD. In an assessment conducted among 2050 suspected cases screened for TB, 19,8 % were shown to be drug users, while IDUs were 2%. TB is spreading widely due to the habit of smoking/sharing smoking drugs/equipment. Less importance is given to food because of chaotic/problematic drug use, living in place with poor ventilation (overcrowding) or staying in prison (where the ventilation is bad)

There is an urgent need to scale up prevention, treatment and harm reduction services in the region to avoid the further spread of these potentially life-threatening infections.

Other problems occurring among drug using population are psychosis, mental health problems, dehydration, malnutrition, dental caries, cardiac problems, heart attack, stroke, overdose, as well as increasing of violence and ATS related crimes, social, occupational and educational problems.

Currently, the HR measures in Myanmar are outreach interventions, providing harm reduction tools such as condom with lubricant; clients are offered routine STI screening and treatment, regular screening for TB and treatment, HIV testing and counselling, ART referral. In addition, specific targeted information, education and communication for people who use ATS are also provided..

Recently new activities are performed, such as isoniazid prophylactic therapy for TB, Hepatitis B screening and vaccination.

Even though something has been done in recent years, it would be recommended more exchange of best practice and working for capacity building to strengthen the prevention, treatment and harm reduction strategies on stimulants among outreach workers and health and harm reduction associations. There is also an urgent need for donors and governments to introduce harm reduction measures to counter the effects of rising methamphetamine use.

Awareness raising among drug users on safer use is necessary. Sex workers in particular urgently need self-help strategies and harm reduction information for ATS use .More research is needed to understand ATS chemical composition, user trends and harmful effects, current drug policies and the impact of ill –designed law enforcement. Traditional law enforcement and supply reduction approaches and zero tolerance attitudes have not succeeded to reduce both supply and demand for ATS. ATS users need treatment, not punishment.

In ***Iran***, several studies have noticed an increase in the use of stimulants among different groups of people including individuals entering psychiatric hospital emergency rooms, the youth population, patients presenting for opiate treatment. In 2010, a study was designed, aimed to estimate the prevalence of stimulant use in Tehran and to realize the differences between ATS users and opiate users. As of 5,956 participants, 252 people (4.2%) were stimulants (ecstasy, methamphetamine, Ritalin tablet, or cocaine) users and 147 people (2.4%) were opiate users; among stimulant users, 93 people (36%) used opiate drugs concurrently. The study showed that the majority of stimulant users were single young men who lived with their parents; interviewed people said that the stimulants have positive effects and most of them believed that stimulants abuse, in any form, is treatable.

In Iran, the current responses consist in outpatient treatments, based on Matrix Model, and inpatient treatment centers. Medical detoxification units, ATS substitution treatments (buprenorphine), therapeutic communities (TC), residential rehabilitation centres, self-help groups such as Narcotic Anonymous (NA)) are also available.

Stimulant users are at high risk for unsafe sexual behaviours because of their younger age, which can contribute to the spread of HIV/AIDS and other sexually transmitted diseases. Their compliance to treatment is harder.

Many false beliefs are common among amphetamine users: for example, they believe that stimulants have positive physical and psychological effects and that stimulants abuse is treatable.

More surveys and researches should be conducted, both to estimate the prevalence of ATS use and its health implications. Having a comprehensive overview of the prevalence of amphetamine use and its health implications could contribute to identifying the priorities related to prevention, treatment and harm reduction, even though the priority should be to remove stigma and religious misconceptions from amphetamine use.

Moreover, in order to design strategies in harm reduction, identifying target populations, motivations, risk factors, and demographics are crucial. A meaningful involvement of the ATS users in harm reduction planning would be also recommended.

ATS use started from Teheran and spread to the whole Iran at the end of the Iran war, when heroin was less available: home laboratories began to produce ATS at low prices. The treatment demand is quite high: many users' parents and relatives ask for treatment because they are afraid of users' paranoia crises and aggressive behaviours, the negative side effects of ATS. Also, they are afraid of the consequences of the penal law, since in Iran death penalty is provided for possession of an amount of drug exceeding 30 gr.

Among treatment options, some are non-ethical and in contrast to human rights, such as "campuses" were "patients" are forced to treatment that simply consisted of being chained to a tree and beaten.

A media campaign is on-going and it focuses on some harm reduction measures, such as: informing people to ask for certification before entering some health centers in order not to be abused as patients; providing correct information to contrast false beliefs, as methamphetamines are useful to clean up by morphine addiction; to warn about methamphetamine impurity, that is cause of many deaths among users.

Experiences with harm reduction measures for stimulants in North America and Europe

In North America and Europe there are some experiences with harm reduction programmes for stimulant users. What have been the results? What is the offer of HR programs in regions of the world with fewer resources? Are "traditional" stimulants being replaced by new psychoactive substances and does harm reduction for the "traditional" have anything to offer for the new substances? Dexamphetamine and Ritalin substitute treatment for amphetamine dependence shows promising results and appears to be effective and safe in particular in preventing relapse. But research for stimulants use has been much more limited than for heroin use and methadone treatment.

Methamphetamine use is a very significant problem in Czech Republic. Before 1989, psychoactive substances were not available behind the "Iron Curtain": as a result, people started to produce their own drugs by themselves. In the nineties, chemists made recipes with available substances and only drinkable methamphetamines were produced. There was no transition to cocaine and the culture of "homemade drugs" spread among users by word of mouth. The production is mainly based on ephedrine and pseudoephedrine and takes place in small scale, the so-called kitchen laboratories. The output is destined primarily for distribution within the country.

Differently from other European countries, drug using population is composed by 1/3 opiate users and 2/3 meth users. An increase in the number of buprenorphine (diverted) users seeking help has also been noted in recent years.

In terms of harm reduction interventions, there are no specific programs but needle exchange and social support. So far, introduction of substitution treatment for NPS is considered harmful because of the potential diversion from legal to illegal market, as it happens for buprenorphine. Contingency management programs are planned to be introduced. Taking into account the high proportion of Pervitin users among the problem drug use population, HR programs also distribute gelatin capsules as an oral alternative to injected Pervitin.

In **Poland**, in 2010, the Polish Government closed down and sealed almost 1400 retail smart shops specialized in off sales of psychoactive substances. Many retailers moved to Czech Republic, mostly in bigger cities, such as Prague, where many "smart shops" were opened, selling substances with Dutch

sounding names to make them more appealing. After 6 months, the Czech police closed them and a new list of 33 illegal drugs was drawn. Nevertheless, products were replaced as well as the vending channel, shifting from real to virtual (on line) shops, whose customers are mostly young experimental users.

Problematic drug users, who are not internet surfers, are provided with drugs through the officially legal smart shops that sell drugs underneath the counter, with the mediation of brokers. These brokers are available over the phone and arrange meetings with users, who receive sealed packets (as a warranty of non-adulteration).

Data from a surveillance system, collecting data in low threshold services from 5 different cities, offer a clearer perspective over the phenomenon of NPS use: 50% of the sample used last year, 25% last month and 5% on a daily basis as a substitute to methamphetamines. The challenge is to plan new types of HR interventions. Anyway, the first step is to learn about the chemistry of the substances, their characteristics and their risks. Drug checking could be the response but so far it is not allowed in Czech Republic, neither is collecting samples of the drugs.

An effort to obtain information from the Early Warning System (on a scientific base) has been done. An on line forum has been posted on the available substances and their risks, as a kind of harm reduction intervention. In a ”Wikipedia” format, the circulating substances are put on line and described on a scientific basis: this has resulted in useful information for drug users as well as HR professionals.

In **Spain**, a change in the drug market has occurred in recent years, mainly because of the economic crisis. As a result, many cocaine users shifted to amphetamine, mainly because of its lower prices. Although the use of new psychoactive substances is limited, a specially worrying phenomena observed is the adulteration of classic drugs like MDMA or amphetamine with these new psychoactive substances[6]; therefore drug checking and pill testing have become crucial.

The Spanish experience of harm reduction for recreational drug users is quite effective. The aim of this intervention is to get in touch with recreational drug users according to a preventive action model: the aim is to offer clear, objective and useful information about drugs in a friendly setting. In order to improve the effectiveness of the information, peers are activated

Peer education, outreach work in nightlife and virtual settings are the main tools, but the most innovative intervention consists in drug checking. Drug Checking Service is available in the whole country by postal mail, and it is also performed on demand at festivals and free parties. The aim is to support risk reduction behaviours through the opportunity to check the adulteration of substances (such as ecstasy, cocaine, speed or ketamine) so as to prevent overdoses. Over 12,000 samples of different substances have been analysed. Peer support was fundamental for the success of the intervention

Recently a new model of outreach has been launched over internet, as an implementation of HR measures.

Whether drug checking is legal according to Spanish legislation, it is still controversial. Nevertheless, this intervention is not only to understand what kind of substances are circulating, but also to share information and offer advice to users and help them to minimize the adverse effects of drugs. Moreover, it allows monitoring both legal and illegal markets.

During the parties and entertainment events, users can deliver their pills to the dedicated staff to have them analysed, or they can go to the headquarters of the Energy Control team.

So far, the most frequent samples were found to be MDMA, usually bought as “crystal”, while the rest were tablets. With the TLC technique, it is possible to identify the majority of adulterants in the samples. The kind of adulterants and their frequency in the analysed samples varied depending on the presumed substance that was delivered (MDMA, cocaine, speed, etc.). For example, in the case of crystal MDMA, the main adulterant is caffeine while other substances are used as adulterants more anecdotally (e.g.,

[6] See Vidal, C.; Fornís, I., y Ventura, M. (in press). **New psychoactive substances as adulterants of controlled drugs. A worrying phenomenon?** *Drug Testing and Analysis.*

dextrometorphan or methylone). In the case of tablets, the main adulterant is mCPP, a substance which is only used in neurological and psychiatric research and is associated to adverse health effects in some users. Paramethoxyamphetamine (PMA) and paramethoxymethylamphetamine (PMMA) are two of the substances sold as MDMA and are responsible of several deaths across Europe. As for MDMA, the most common adulterant was caffeine. Although the "crystal" form of MDMA facilitates its adulteration, more adulterants were detected in MDMA pills and tablets. The most frequent adulterant found in the MDMA pills was m-CPP, a legal substance which is only used in neurological and psychiatric research. Also some 2C-B pills have been found to be sold as MDMA. Amphetamine and methamphetamine turned out as the most adulterated substances among those analysed with TLC technique. HR in nightlife and in party settings is an excellent opportunity to identify guide lines for risk reduction. As for the evaluation of HR interventions, a valid model is to be developed to evaluate the outcome, not only the process.

Substitution Treatment Options

As previously observed, crack cocaine is used in poverty stricken urban areas of the USA and in the favelas of Brazilian cities, while methamphetamine are quite spread in Asia, Australia and Eastern Europe. Although it is a major health issue, few evidence based treatments are available for this marginalized population.

As a consequence, there is a tremendous flaw in drug policies that exclude a huge number of drug users from drug addiction treatment. Also, such policies reduce these users' likelihood of being in touch with other services such as HIV/HCV prevention, testing and treatment.

Lack of evidence based effective treatments and of consequent experience of drug addiction services to deal with amphetamine-related problems might well reinforce users' perceptions that treatment has little to offer, or worse, that amphetamine use is not a serious problem.

The initial objective of substitution therapies for substance dependence is to replace harmful illicit drug use with a safer, licit pharmaceutical drug to achieve a stable dose, where possible, to avoid contaminants, to reduce the frequency of use, to improve physical and psychological health, to benefit from a less hazardous route of administration. Substitution therapy aims to stabilize patients on a dose that prevents withdrawal and cravings and reduces substantially the risk of serious adverse consequences. Substitution therapies are recognized as highly effective for drugs such as heroin, where drug use is frequent (usually daily), associated with a hazardous route of administration (injecting), and potential complications are severe (cancer, cardiovascular, HIV/hepatitis B and C, overdose). The basis of Opioid Substitution Therapy (OST) is to replace heroin with a legal much longer acting drug, with similar effects, like methadone or buprenorphine. OST has become the cornerstone of harm reduction and great effort is being made to ensure it is made as available and accessible as possible.

The question is: if replacing or complementing heroin with methadone, or providing medical heroine are considered good harm reduction options, why there is not yet available replacement of methamphetamine or crack cocaine with a long acting drug in the same family? Why are there so little examination of the potential benefits of Stimulant Substitution Therapy ("SST") - used in a similar way to OST? Actually some efforts have been done, and a good example is given by dextroamphetamine, as reported in double blind randomized clinical trial comparing dextroamphetamine v/s placebo for cocaine-dependence treatment, showing improving in retention and in reducing illicit drug use in the experimental group (Grabowski et al, 2001)[7].

At the beginning of the new millennium, stimulants use is more prevalent and less easily controlled than ever before. Technological, cultural, social and economic change has driven a recent relentless worldwide expansion of amphetamine use. An incomplete understanding of the "natural history" of problematic amphetamine use and the more obvious short-term harms associated with heroin use may have delayed a comprehensive public health response to widespread stimulant use. Although some studies have been

[7] Grabowski J, Rhoades H, Schmitz JM, et al. Dextroamphetamine for cocaine-dependence treatment: a double blind
randomized clinical trial. J Clin Psychopharmacol 2001; 21:522± 26.

conducted, further research is recommended and other factors must be taken into account. Socio-economic factors (wealth inequalities) are determinant, since the most problematic use of stimulants occurs among marginalized population. Moreover, clinical trial could not easily transfer to real life situation.

Conclusion: towards a comprehensive package of harm reduction for stimulants?

Given the different experiences with treatment and harm reduction for stimulant users worldwide is there a need to gather data, exchange data and joint research? If mild herbal stimulants were allowed to legally circulate in the market, could this possibly have a preventive effect and reduce the prevalence of more harmful concentrated stimulants?

Negative reports on amphetamine prescribing discouraged consideration of stimulant substitution treatment: only modest benefits were found to balance severe adverse consequences including psychosis, continued injecting use and diversion.

The stimulants use, often related with sexual behaviours, requires attention to the setting and the purpose of use, as key points for an effective harm reduction intervention. Similarly, poly drug use is often addressed to balance/mitigate the effect of other drugs: for example, cannabis helps to relax so as to counteract the adverse effects of cocaine and other stimulants.

Stimulants are also used for recreational purposes and the desired effects vary depending on the setting of use. Therefore it becomes difficult to figure out a mere substitute, while, in terms of harm reduction it would be more effective to promote consumers' own strategies to use the natural milder substances (such as cannabis, coca leaf and Kratom) and allow these to be readily available in order to mitigate the adverse effects of stimulants.

So far, no robust evidence is shown about the effectiveness of substitute prescription for stimulants. RCT can only partially be useful in suggesting the appropriate interventions; however they can be sources of systematic data collection and contribute to a better acceptance of harm reduction interventions in the name of "science", in the framework of evidence based drug policies. Observational studies are also recommended, involving professionals and users: drug users "natural" practices to reduce harm, such as stepping down to more moderate patterns of use, can suggest innovative Harm Reduction strategies. Self-regulation practices are an example of natural strategies to better manage drug use.

Employment of peer educators (trained by professionals) is a key issue. It can empower the peer educators themselves, reducing their isolation while reinforcing their own risk reduction efforts.

Effective community development drives harm reduction outside the clinical field and beyond the actions of mere information. It is intended to empower individuals and groups so as to prompt change in their own communities. Empowered users are able to appreciate professionals' skills and knowledge as well as the value of their own expertise on drug use. The empowering process can also create opportunities to gain new skills in a supportive, enabling environment. By increasing self-confidence and self-efficacy, users will be able to sustain change in their own communities, to advocate for their own rights and to maintain their independence from donors and other stakeholders, who may not always act in their best interests. Evidence shows that peer education is the most effective way to share new knowledge and skills with drug users, allowing them to become engaged in harm reduction activities in a supportive non-stigmatizing and non-discriminating environment. Peers can provide clear, honest and meaningful drug education because they are able to share norms, experiences and values with their target audience. They speak the same language and use the same slang. Because of this, peer educators are more likely to build a meaningful relationship so as to gain the trust of other drug users. Peer educators can also be extremely effective in identifying and addressing the myths and misinformation that can circulate within the drug scene as well as in identifying changing trends and in reacting to them quickly.

Social interventions, such as housing, employment and food provision, are strongly recommended. As harm reduction includes a set of public health interventions addressed to drug users as well as to the whole community, their effectiveness is influenced by environmental and living conditions. They need to be taken into consideration when planning a new strategy.

The need for both process and outcome evaluation programmes have also been stressed, as well as for experimental interventions: in particular experiments with natural drugs as substitution treatment, so as to evaluate the feasibility and the effectiveness of this kind of treatment.

Anyway, a unique worldwide model of Harm reduction is not feasible and desirable, considering the differences in social, religious, educational and cultural conditions among countries, in addition to the differences in drug policies and legislations. Similarly, “horizontal” “one fits all” interventions for any kind of drugs and any kind of users are not expected to be effective. On the contrary, interventions should be targeted to specific drugs, groups of users (either problem or recreational users) and cultures of drug use.

A major issue regards the impurity of circulating drugs and the lack of knowledge of the compound sold as stimulants. Drug checking and pill testing are a good opportunity to increase knowledge, to identify effective interventions and to learn about the illegal markets. Clearly, the more repressive drug laws are, the stronger drugs become. NPS can be considered as a functional response to law enforcement. In recent years, more and more new psychoactive substances have been created and produced, to avoid prohibition and law enforcement. In order to identify an effective response to the drug problem, it is necessary to keep in mind the market dynamics and the market response to prohibitionist legislations and policies. Drug control should not aim to reduce the volume of illegal substances, but the harm of illegal markets so as to provide responses that do not exacerbate the problem and increase the harm by prompting the production of new and more risky substances.

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