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Switzerland, HIV and the power of pragmatism: Lessons for drug policy development

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ABSTRACT

Switzerland in the 1980s was an epicentre of HIV as open drug injection became part of the urban scene, especially in Zurich. Cracks appeared in Switzerland's long commitment to policing as the main drug-control strategy as law enforcement was unable to contain the health and social consequences of the rapid spread of drug injection. In the early stages of the epidemic, the pioneering health care providers who brought technically illegal harm reduction services into the open drug scene in Zurich helped open the exploration at the federal level of more balanced drug policy. Carefully evaluated pilot experiences in low-threshold methadone, needle exchange, and eventually heroin-assisted therapy yielded evidence of significant HIV prevention and crime reduction that was convincing not only to policy-makers but also to a skeptical Swiss public. Whilst not all countries have Switzerland's resource base, the Swiss experience still holds many useful lessons for establishing evidence-based policy on illicit drugs.

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Introduction

Some 25 years ago, Platzspitz Park in the city of Zurich, Switzerland, was home to a scene of open drug use, including drug injection, that would astound visitors to today's orderly and placid Zurich. Switzerland, which had been known both for its rigorous drug policing and for its effective public health services, became the centre of a fast-growing drug-related HIV epidemic. In the 1990s, however, through a series of policy measures supportive to a range of new services, the Swiss authorities effectively turned around the HIV epidemic, eliminated open drug scenes, and established a public health-centred national drug policy. Both the process leading to these changes and the practical results of the changes hold many lessons for countries still struggling with HIV linked to drug use and with the balance between public health and security measures in drug policy.

Those lessons and the process by which policies were revisited and reformed are the subjects of this article. As has been well documented in a 2009 German-language book with details not previously available on the Platzspitz experience (Grob, 2009), the response of public authorities and private actors to growing drug use in the 1980s and the threat of HIV would shape Swiss drug policy for years. This account draws on that book and on a subsequent related policy analysis (Csete, 2010).

Methods

This policy analysis draws on structured interviews with current and former federal and municipal officials, academic experts, health professionals, programme practitioners and representatives of civil society organizations in Switzerland in March 2010 with a few subsequent updates. Informants were selected to include officials from the Federal Office of Public Health and the Swiss Federal Council (the highest executive body of the Swiss confederation) to whom cantonal and municipal authorities turned for assistance at the prospect of an uncontrolled HIV epidemic as the open drug scenes thrived. They also included health professionals from Zurich, Bern and Geneva who were amongst the first to offer or advocate for needle exchange and low-threshold methadone services in Swiss cities. Members and former members of parliament and representatives of civil society organizations active in drug policy advocacy were also interviewed.

An overt crisis as a spur to action

Like much of Europe, Switzerland in the mid-1970s had a drug law that criminalised individual drug possession and use with the goal of a drug-free society. The law had as a central element the requirement that all public programmes for people who used

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illicit drugs be abstinence-based (Grob, 1995). Although heroin was widely used, medically assisted treatment of opioid dependency was largely unavailable. Federal regulations required that government permission be sought for every person treated with methadone, and few physicians were inclined go through this procedure (Uchtenhagen, 2009).

Heroin use increased across much of Western Europe in the late 1960s and 1970s linked to counter-culture movements, but the increase was more dramatic in Switzerland compared to that experienced by its neighbours (Nordt & Stohler, 2009; Reuband, 1998). There does not appear to be a clear consensus in published literature or opinions of expert observers on the reason for this difference. Some experts posit that organised criminal networks established effective operations in Swiss cities that led to a high number of drug transactions (Haemmig, 1995; Brehmer & Iten, 2001). Others emphasise that, especially in German-speaking Switzerland, a "youth revolution" movement that explicitly included solidarity with people who use illicit drugs survived into the 1980s, outlasting such movements in other parts of Europe (Klingemann, 1996).

In any case, and in spite of a strict drug law and rigorous drug policing, drug use grew and was a visible social concern in some Swiss cities in the1980s. By 1985, there were an estimated 10,000 people who injected drugs in Switzerland, which rose to about 20,000 in 1988 and 30,000 by 1992 (Grob, 2009). Zurich, Switzerland's largest city, had the most significant and visible problem as people injected drugs in public toilets and on sidewalks and other public thoroughfares, becoming, to put it mildly, a "public sore point" (Seidenberg, 1999). In 1985, under pressure from residents tired of open drug use and frustrated by the ineffective chasing of drug users from place to place, the Zurich city council (the executive body of city government) decided to try to contain and tolerate - drug use in the Platzspitz, one of the city's important recreational parks near the central train station. At the height of the open scene at the Platzspitz, which became known as the "needle park," up to 2000 drug users a day gathered there (Grob, 1995).

Switzerland was estimated to have the highest HIV prevalence amongst the European countries monitored in the 1980s (EuroHIV, 1999), partly due to efficient transmission by drug injection. With the availability of HIV testing, the Federal Office of Public Health first reported HIV prevalence amongst injecting drug users in 1985 at 38 percent (Hamers, Batter, & Downs, 1997). In the same year, the federal authorities estimated that 68 percent of new HIV infections were amongst people who injected drugs (Böni, Pyra, & Beghardt, 1999). In the absence of treatment for HIV, the open drug scenes included persons in later stages of AIDS. By 1990, about 22 percent of the people gathered in the Platzspitz were estimated to be HIVpositive, with prevalence of about 40 percent amongst those who reported having used drugs for at least 10 years (Savary, Hallam, & Bewley-Taylor, 2009).

Some medical doctors had long advocated for liberalised access to methadone and for sterile syringe programmes for HIV prevention, which were interpreted by authorities in the canton of Zurich to be prohibited under national law. (The Swiss Confederation is divided into 26 sub-national districts called cantons, which generally have authority for health and social programmes, sometimes shared with municipal authorities in larger cities.) As the open drug scene grew, the cantonal health authorities in Zurich in the mid-1980s reiterated their opposition to needle exchange and any form of provision of sterile syringes, but, remarkably, the police stopped enforcing this order (Kübler, 2001). In an act of civil disobedience, some 300 medical doctors in Zurich declared their commitment to distributing syringes and needles to people injecting drugs (Ibid.).

In 1988, a ground-breaking intervention called ZIPP-AIDS (Zürich Intervention Pilot Project - AIDS, or *Aids für Drogenge*- fahrdete und Drogenabshangige), initiated by Grob and colleagues, brought badly needed HIV and hepatitis prevention services to persons gathered in the Platzspitz. By this time, the Federal Office of Public Health and the Zurich city authorities were ready to support this work, which also enjoyed the cooperation of the Swiss Red Cross (Grob, 2009, p. 41). In its first three years, ZIPP-AIDS' needle and syringe exchange provided over 7 million syringe and needle sets (sterile needles and syringes exchanged for used ones), 2.8 million additional needles, about 8 million alcohol pads, and 1.3 million sachets of ointment for vein protection (Ibid.: 46). Its volunteers intervened in 6700 cases of overdose, saving many lives, and undertook over 26,000 medical consultations. ZIPP-AIDS also complemented the work of an earlier effort in Zurich to reach drug users in the streets and public toilets with hepatitis B vaccinations; together the efforts vaccinated about 1500 at-risk persons (Grob, 2009).

In addition to its medical services, ZIPP-AIDS undertook research to understand better the highly vilified group of persons who gathered in the Platzspitz. Whereas the public perception was that the open scene was populated mostly by unemployed drifters, ZIPP-AIDS' surveys showed that about one third of those who frequented the site were persons with jobs and families whose drug use was hidden from the social circles into which they were well integrated (Grob, 1995). Another third were estimated to be episodically employed and socially integrated, and only one third were characterised as not socially integrated. In other words, the people seen by many at the time to be young and socially unconnected turned out to include many who were part of mainstream society.

Pioneering services also appeared in other cities, again thanks largely to visionary health professionals. In Bern, where a significant open drug scene was close to the federal parliament building, a drug injection room (*Fixerstuebli* in German) was opened in 1986, one of the first of its kind in Europe (Haemmig, 1992, 1995). It offered hygienic conditions for injecting without police interference, counselling and referral to health services, showers and meals, and was heavily used (Ibid.). Though this service changed location at various times, it continues to the present.

Informing national policy-making

The medical initiatives in the Platzspitz and other cities coincided with a growing national debate on drug policy and helped to inform new thinking on approaches to drug use that did not start and end with law enforcement. Whilst health services in Switzerland are generally under the authority of the cantons, cantonal and city authorities in the late 1980s early 1990s turned to the national ruling executive body, the Federal Council, for assistance in grappling with the twin problems of HIV and drug use.

Harm reduction services began appearing in some cities as health professionals, civil society organizations and some policymakers urged that new approaches be tried. In the early 1990s following Bern's experience, supervised injection rooms were considered but rejected in public referendums in the cantons of Zurich and Saint Gallen, but a number of injection rooms were established in Swiss cities in the 1990s as the public and policy-makers became more familiar with the early experiences (Hedrich, 2004). Doctors and civil society organizations in some cities also continued to protest regulatory barriers to methadone provision. In 1991, the NGO ARUD (Arbeitsgemeinschaft für Risikoarmen Umgang mit Drogen or Association for Reducing the Risk of Drug Use) started a low-threshold methadone programme that drew 800 patients in the first year (Klingemann, 1996, p. 727). That it was allowed to go forward by the city authorities in Zurich enabled its results to inform emerging national policy.

The federal government began to be open to a much stronger orientation to public health measures as a central element of drug policy than was the case in the past. The voices of the medical doctors who had pushed for broader HIV prevention and treatment services for drug users in their own communities were brought to the federal table in a number of national drug policy conferences, beginning in 1991 (T. Zeltner, personal communication). The urgency of HIV pushed even the police, whose enforcement approaches had proved inadequate to the task, to be part of discussions about new approaches to HIV and drug use.

In the early 1990s, building on the experience of organisations like ARUD and some practitioners, the Federal Office of Public Health supported the development of low-threshold methadone programmes, both by eliminating the previous onerous regulations and by offering financial and technical support (Rihs-Middel & Hämmig, 2005). In 1987 there were under 2000 methadone patients; by 1999, there were over 18,000 nationwide (Federal Office of Public Health, 2008). With sustained advocacy from medical and public health professionals and policy-makers pushing for evidence-based programmes, including both low-threshold methadone and needle exchange, harm-reduction approaches became a leading edge in Swiss drug policy (Uchtenhagen, 2009; Rihs-Middel & Hämmig, 2005).

Beginning in 1994, the Swiss undertook an extensive pilot programme in heroin-assisted therapy (HAT) – that is, heroin prescribed and administered under highly controlled conditions for those with long-standing opiate dependence who were not helped by methadone programmes (Uchtenhagen, 2009). With respect to HAT as well as to the rapidly expanding low-threshold methadone programmes of the 1980s and 1990s, the Swiss authorities were careful to document the programme's impact on crime, social outcomes for patients such as being able to hold down jobs, and clinical outcomes, including reduced injection and reduction of unsafe injection (Rihs-Middel & Hämmig, 2005).

Switzerland has a well known system of national referendums whereby gathering a certain number of signatures can bring national policy decisions to a popular vote. It was to be expected that persons attached to drug policy based exclusively on law enforcement would challenge low-threshold methadone, HAT and other harm-reduction measures at the ballot box. A popular movement in favour of drug prohibition with links to the conservative Swiss People's Party (Schweizerische Volkspartei or SVP in German, Union démocratique du centre or UDC in French) forced a first referendum in 1997 that, if successful, would have made needle exchange, low-threshold methadone and HAT virtually impossible (Csete, 2010). The anti-harm reduction proposal was rejected by 70 percent of the electorate, The following year, the Federal Council by executive order gave solid legal grounding to HAT, which provoked another referendum with a similar political genesis. The Swiss people in 1999 endorsed HAT with a 54 percent majority, enabling the government to normalise the programme (Ibid.). In 2008, the parliament revised the national narcotics law to formalise the legal and regulatory basis for the "four-pillar" drug policy that included harm reduction (along with policing, prevention of new drug use, and treatment of drug dependence). Once again, an SVP-led coalition forced a referendum. In spite of an active campaign in favour of a return to prohibitionism, a hearty 68 percent of the voters approved the new policy (Savary et al., 2009)

In addition to needing to convince the Swiss people of the public health and social importance of the new policies, the Swiss authorities had to face down pressure from the US and some European countries that feared the spread of these new programmes, as well as consistent criticism by the International Narcotics Control Board (INCB) (Csete, 2010). The INCB is a UN-sponsored body of experts serving in their personal capacities to oversee the implementation of the UN drug control conventions of 1963, 1971 and 1988. The INCB was particularly critical of the HAT trials and urged Switzerland to allow WHO to review the trials, which was welcomed by the Swiss authorities (INCB, 1997, para 366). The INCB has continued to oppose HAT in a number of countries, but the Swiss evidence on the benefits of the programme is extensive and has been reviewed by many independent bodies (Rihs-Middel & Hämmig, 2005).

The INCB notwithstanding, well-supported harm reduction programmes in Switzerland were put in place at a moment when they could inspire discussion and innovations that were emerging elsewhere in Europe. The European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) of the European Union credits the Swiss experience with opening serious consideration of drug policies not based exclusively on policing in nearly all countries of the EU (EMCDDA 1998). The Swiss government also put a priority on including experts from elsewhere in Europe and beyond in its evaluations and symposia on drug policy and programme issues (see, e.g., contributors to Riihs-Middel et al, 2005).

Amongst the many indicators that might be used to evaluate the effectiveness of Swiss drug policy and its transformation since the early 1990s, the public health outcomes that have been explicit policy goals are telling. As noted above, in 1985, an estimated 68 percent of new HIV infections in Switzerland were linked to drug injection; in 1997, the figure was about 15 percent, and in 2009 about 5 percent (Kouyos, von Wyl, & Yerly, 2010; Federal Office of Public Health, 2010). People who injected drugs accounted for about 51 percent of new cases of hepatitis B in 1989–1991 and less than 10 percent in 2010 (Grob, 2009).

Is the Swiss experience replicable or relevant?

Whilst no country in 2011 may be dealing with drug problems as dramatic and overt as those faced by Switzerland 25 years ago, many countries face similar frustrations over the failure of drug-control policies centred on policing. Switzerland is a wealthy country with a functioning democracy, a well-resourced health system and respect for medical doctors and medical evidence in policy-making. Does its experience really hold lessons for other countries without the same political decision-making space and the same level of public and private-sector resources?

In our view, several important lessons emerge that make the Swiss experience relevant to a range of countries, including the following:

Gathering and relying on evidence. From the remarkably well monitored services in the "needle park" to the extensive documentation of the results of HAT and low-threshold methadone, the Swiss experience is exemplary in its amassing of hard data to make the case for the public health impact of harm reduction. The evidence on factors such as crime reduction and the reintegration of methadone patients into the workforce were apparently convincing to a wide range of Swiss voters as well as experts from multilateral bodies and other countries. Switzerland also admirably held its own, fortified by extensive data on its public health measures, against the INCB, a valuable lesson for other countries that have been rebuked by the INCB for making harm reduction services more accessible. Whilst even the legal office of the UN International Drug Control Programme asserted that measures such as syringe exchange, medically assisted therapy with methadone and drug injection rooms were consistent with the principles of the UN drug conventions (UNDCP, 2002), the INCB has continued to question evidence-based harm reduction measures (Csete & Wolfe, 2007). Countries receiving this kind of criticism from the INCB would do well to learn from the Swiss example of collecting and standing behind firm data.

Pilots at reasonable scale. In a number of countries where opiate dependence is a public health challenge, medically assisted treatment with methadone or buprenorphine is offered only in small pilots to a very limited number of patients. The problem of being "stuck in a pilot" when there is little political will to expand access has been noted in a number of countries in eastern Europe and central Asia, for example (Latypov, 2010). The Swiss authorities allowed the introduction of new programmes at a significant level both to allow meaningful data collection on their impact and to be able to expand quickly to meet the need.

Politics of drug policy change. If one had to characterise the politics of Switzerland in a word, that word would not be "leftist". Switzerland's political conservatism is deep-seated, and an ultraconservative party has been a fast-growing political force in recent years on the strength of anti-immigration policies (Cumming-Bruce, 2010). The Swiss experience with drug policy change demonstrates that the pragmatic good sense of harm reduction policies can be understood and embraced by persons with a wide range of political views. It shows that it is possible to persuade people concerned about public order and security that harsher policing is not the only sensible approach to drug control.

Ruth Dreifuss, the former Swiss president during whose term in office many drug policy changes were made, described the situation to which pragmatism seemed the best response:

[In the early 1990s] the drug problem became one of the greatest population concerns, according to public opinion polls. Not only because teenagers and young adults-our kids-"dropped out," got ill or died, but because the whole society felt exposed to high risks: on one side an urgent public health threat through prostitution and promiscuity, on the other side a safety problem caused by robbery and street violence. The cities, the police and the judicial system felt helpless in addressing the situation. All this created a general malaise about the failure of the current drug policy. The readiness to explore new approaches was growing. (Dreifuss, 2009)

Dreifuss credited the openness of experts in the Federal Office of Public Health with gathering extensive evidence and sustaining evidence-based directions in all of the drug policy changes. She noted that the desire above all to solve the problem carried over even into discussions with the correctional authorities. It was a breakthrough when officials could admit that no matter what they did, they could not completely prevent drug injection in prison (Dreifuss, personal communication), a step that led to sterile syringe programmes that have dramatically reduced HIV transmission in Swiss prisons (Dolan, Rutter, & Wodak, 2003). This level of motivation to find pragmatic solutions to difficult problems, even with the awareness that new measures would be politically unpopular, at least at first, is a hallmark of the Swiss experience.

Some observers have suggested that Switzerland's approach to drug use has veered excessively towards medical solutions with too little attention to the social service needs and rights of drug users beyond access to medical care (Savary et al., 2009). The Swiss experience remains nonetheless exemplary for the very many countries in the world still trying to rely centrally on policing to address the complexities of drug dependence. The open drug scenes of the early years of HIV in Switzerland are only too analogous to the lost opportunities of today in countries where drug users live lives of fear and marginalisation, far from the comprehensive and affordable services that are justified by public health and human rights principles. The pioneering health professionals who went into the "needle park" and the political leaders who helped transform Swiss drug policy had a vision that too many health authorities still lack.

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References

- Böni, J., Pyra, H., Beghardt, M., et al. (1999). High frequency of non-B subtypes in newly diagnosed HIV-1 infections in Switzerland. *Journal of Acquired Immune Deficiency Syndromes*, 22, 174–179.
- Brehmer, D., & Iten, P. X. (2001). Medical prescription of heroin to chronic heroin addicts in Switzerland. A review. Forensic Science International, 121, 23– 26.
- Csete, J. (2010). From the Mountaintops: What the World Can Learn from Drug Policy Change in Switzerland. Budapest: Open Society Institutes. (Retrieved 2 July 2011 from http://www.soros.org/initiatives/drugpolicy/articles_publications/ publications/csete-mountaintops-20101021/from-the-mountaintops-english-20110524.pdf).
- Csete, J., & Wolfe, D. (2007). Closed to reason: The International Narcotics Control Board and HIV/AIDS. Toronto: Canadian HIV/AIDS Legal Network and Open Society.
- Cumming-Bruce, N. (2010). Swiss right wins vote on deportation of criminals. New York Times, 28 November. Retrieved 4 March 2011 from http://www.nytimes.com/2010/11/29/world/europe/29iht-swiss.html.
- Dolan, K., Rutter, S., & Wodak, A. (2003). Prison-based syringe exchange programmes: A review of international research and development. Addiction, 98, 153–158.
- Dreifuss, R. (2009). Swiss drug policy (speech delivered in Washington, DC at New Directions in Drug Policy event), 11 December. (Text provided to the authors).
- European Centre for the Epidemiological Monitoring of AIDS (EuroHIV) (1999). HIV/AIDS surveillance in Europe. Saint-Maurice, France. Retrieved 3 March 2011 from http://www.eurohiv.org/reports/report_61/pdf/report_eurohiv_61.pdf.
- Federal Office of Public Health, Government of Switzerland (2008). National substitution therapy statistics (methadone). Bern. Retrieved 2 July 2011 from http://www.nasuko.ch/nms/db/index.cfm.
- Federal Office of Public Health, Government of Switzerland (2010). Rapport de situation nationale à l'intention de l'UNGASS (Country report on progress on UNGASS indicators, submitted to UNAIDS). Bern, 2010. Retrieved 2 July 2011 from http://www.unaids.org/en/dataanalysis/monitoringcountryprogress /2010progressreportssubmittedbycountries/switzerland_2010 _country_progress_report_en.pdf.
- Grob, P. J. (1995). The needle park in Zurich: The story and the lessons to be learned. European Journal on Criminal Policy and Research, 1, 48–60.
- Grob, P. J. (2009). Zürcher needle-park: ein Stück Drogengenschichte und -politik 1968–2008. Zürich: Chronos Verlag. (With English summary provided by the author).
- Haemmig, R. B. (1992). The streetcorner agency with the shooting room ('Fixerstuebli'). In P. A. O'Hare, R. Newcombe, A. Matthews, E. C. Buning, & E. Drucker (Eds.), *The reduction of drug-related harm* (pp. 181–185). London & New York: Routledge.
- Haemmig, R. B. (1995). Harm reduction in Bern: From outreach to heroin maintenance. Bulletin of the New York Academy of Medicine, 72, 371–379.
- Hamers, F. F., Batter, V., Downs, A. M., et al. (1997). The HIV epidemic associated with injecting drug use in Europe: Geographic and time trends. AIDS, 11, 1365–1374.
- Hedrich, D. (2004). European report on drug consumption rooms. Lisbon: European Monitoring Centre for Drugs and Drug Addiction. (Retrieved 2 July 2011 from http://www.emcdda.europa.eu/attachements.cfm/att_2944_EN_consumption _rooms_report.pdf).
- International Narcotics Control Board (INCB) (1998). Annual report 1997. Vienna: United Nations. Retrieved 8 March 2011 from http://www.incb.org/incb/en/annual_report_1997.html.
- Klingemann, H. K. H. (1996). Drug treatment in Switzerland: Harm reduction, decentralization and community response. Addiction, 91, 723–736.
- Kouyos, R. D., von Wyl, V., Yerly, S., et al. (2010). Molecular epidemiology reveals long-term changes in HIV type 1 subtype B transmission in Switzerland. *Journal* of Infectious Diseases, 201, 1488–1497.
- Kübler, D. (2001). Understanding policy change with the advocacy coalition framework: An application to Swiss drug policy. *Journal of European Public Policy*, 8, 623–641.
- Latypov, A. (2010). Opioid substitution therapy in Tajikistan: Another perpetual pilot? International Journal of Drug Policy, 21, 407–410.
- Nordt, C., & Stohler, R. (2009). Low-threshold methadone treatment, heroin price, police activity and incidence of heroin use: The Zurich experience. *International Journal of Drug Policy*, 20, 497–501.
- Reuband, K.-H. (1998). Drug policies and drug prevalence: The role of demand and supply. European Journal on Criminal Policy and Research, 6, 321– 336.
- Rihs-Middel, M., & Hämmig, R. (2005). Heroin-assisted treatment in Switzerland: An interactive learning process combining research, politics and everyday practice. In M. Rihs-Middel, R. Hämmig, & N. Jacobshagen (Eds.), *Heroin-assisted*

treatment: Work in progress (pp. 11–22). Bern: Swiss Federal Office of Public Health.

- Rihs-Middel, M., Hämmig, R., & Jacobshagen, N. (Eds.). (2005). Heroin-assisted treatment: Work in progress. Bern: Swiss Federal Office of Public Health.
- Savary, J.-F., Hallam, C., & Bewley-Taylor, D. (2009). The Swiss four pillars policy: an evolution from local experimentation to federal law (Briefing Paper no. 18). London: Beckley Foundation Drug Policy Programme (Retrieved on 3 March 2011 from http://www.great-aria.ch/pdf/Infos/Beckley.Briefing.2009.pdf).
- Seidenberg, A. (1999). What tells us Switzerland's drug policy? Switzerland: Drug policy of mountain dwellers? *Heroin Addiction and Related Clinical Problems*, 1, 15–18.
- Uchtenhagen, A. (2009). Heroin-assisted treatment in Switzerland: A case study in policy change. *Addiction*, 105, 29–37.
- United Nations Drug Control Programme (UNDCP), Legal Affairs Section (2002). Flexibility of treaty provisions as regards harm reduction approaches, UN doc. no. E/INCB/2002/W.13/SS.5.