Unsafe Injecting Drug Use, a Growing Source of HIV Transmission in the Philippines: Implications to Policy

POLICY BRIEF

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This report was developed with support from the Open Society Institute (OSI) Global Drug Policy program (GDPp) and with technical support of the Joint United Nations Programme on HIV/AIDS (UNAIDS) Secretariat and World Health Organization (WHO).

The information contained in this report is drawn from multiple sources including key informant interviews, focus group discussions and extensive literature review. The views expressed in this publication are those of the authors and do not necessarily represent those of the United Nations, including UNDP, UNAIDS and WHO, or UN Member States, OSI, UST, RCCESI and LGA.

December 2012
Manila, Philippines

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Context

In 2006, the unsafe practice of needle sharing among People Who Inject Drugs (PWID) has been highlighted in a report stating, "the sharing of contaminated injecting equipment has become a major driving force of the global AIDS [Acquired Immune Deficiency Syndrome] pandemic" (National Research Council, 2006). This phenomenon has been observed in New York (De Jarlais, et al., 1996), Indonesia (Morineau, Bollen, Syafitri, Nurjannah, Mustikawati, & Magnani, 2012), and India (Chakrapani, Newman, Shunmugam, & Dubrow, 2011).

In the Philippines, the incidence of HIV infection through needle sharing has been relatively fewer in comparison to some Asian countries. A cited reason for this is the small population of PWID in the country (Farr & Wilson, 2010). However, the statistics covering the last two decades show a notable increase of Human Immunodeficiency Virus (HIV) transmission among PWID.

From January 1984 to October 2012, a total of 11, 125 cases of HIV transmission was reported. Of these, 433 were reported to be related to injecting drug use (IDU). Although this is a marginal 3.8% of the entire population of accounted transmissions, it must be noted that from January 2012 to October 2012, the percentage of IDU reached 6.0% wherein, out of 2761 cases, 168 were related to IDU (Department of Health National Epedimiology Center, 2012). In some areas like Cebu, the HIV prevalence among PWID has been observed to reach 77%. From 1989 to 2012, a cumulative total of 565 cases of HIV transmission were recorded in the province, of which 419 were related to IDU, specifically in the practice of sharing needles and syringes among PWID (Cebu City Multisectoral HIV-AIDS Council, 2012).

Another factor to consider is the growing use and popularity of amphetamine-type stimulants (ATS). Increase in the use of ATS in Southeast Asia (SEA), including the Philippines, has been observed (Ahmad, 2003). The use of ATS has been associated with increased prevalence of IDU (Devaney, Reid, & Baldwin, 2007). Furthermore, methamphetamine injection, aside from being associated with unsafe injecting practices, has been shown to potentiate HIV transmission through sexual risk behavior (Torok, Darke, Kaye, Ross, & McKetin, 2008). This is supported by the report of USA's Center for Disease Control (USA-CDC) which stated that

> *assessments show that MSM [men having sex with men] who use methamphetamine may increase their sexual risk factors (for example, they may use condoms less often, have more sex partners, and may engage in practices that elevate their risk for HIV infection, such as unprotected receptive anal sex) and perhaps their HIV-related drug-use risk factors (for example, injecting methamphetamine instead of smoking or snorting it)* (Department of Health and Human Services, 2007)

The Philippine AIDS Prevention and Control Act of 1998 (Republic Act 8504) recognizes drug dependency to be among the aggravating factors for the spread of HIV, which the State seeks to eliminate, so that the goal of "protecting non-infected persons from contracting HIV" (Section 3.g) could be realized. In its provisions, it states:

> *The State shall positively address and seek to eradicate conditions that aggravate the spread of HIV infection, including but not limited to, poverty, gender inequality, prostitution, marginalization,* ***drug abuse,*** *and ignorance* (Section 2.d, emphasis supplied).

Among the measures that have been put in place in many countries to address the HIV transmission among PWID is the Needle Exchange Program (NEP), sometimes referred to as Needle and Syringe Program (NSP). The goal of this program is to increase access to sterile needles and to remove contaminated syringes from circulation in drug injecting communities. By providing PWID with sterile needles and uncontaminated syringes, the risk of an HIV-infected PWID transmitting the virus to a non-infected person is minimized.

Countries like China (Sullivan & Wu, 2007), Australia (Loxley, 2000), Europe and Central Asia (Sarang, Stuikyte, & Bykov, 2007), Brazil, Bangladesh, Belarus, Ukraine, and Russian Federation (Burrows, 2006) have been observed to have strengthened their campaign towards the implementation of the NSP as a form of harm reduction. In the 2010 Harm Reduction Global Update, it was cited that eighty two countries are already implementing NEPs. In Asia, it was identified that out of the 24 countries with reported cases of IDU, 15 have made available services relating to NEP/NSP. The rest of the countries in the region have a small-scale implementation, if totally none, of NEP and its allied services. The Philippines is among the countries in Asia with very limited NEP services having a ratio of less than 10 needles and syringes per person per year (Barrett, Cook, Lines, Stimson, & Bridge, 2010).

R.A. 9165 and NEP

One of the recognized impediments to the adoption of NEP is the so-called "paraphernalia provision" common in most prohibition-based drug laws. In the case of the Philippines, such provision is contained in Section 12 of the Comprehensive Drugs Act of 2002 which states:

> *The penalty of imprisonment … shall be imposed upon any person, who, unless authorized by law, shall possess or have under his/her control any equipment, instrument, apparatus and other paraphernalia fit or intended for smoking, consuming, administering, injecting, ingesting, or introducing any dangerous drug into the body … The possession of such equipment, instrument, apparatus and other paraphernalia fit or intended for any of the purposes enumerated in the preceding paragraph shall be prima facie evidence that the possessor has smoked, consumed, administered to himself/herself, injected, ingested or used a dangerous drug and shall be presumed to have violated Section 15 of this Act.*

Under this section, needles and syringes are considered as "drug paraphernalia" the mere possession of which, unless with prescription, is regarded as a criminal offense punishable by imprisonment.

Studies have noted that effective implementation of the NEP is only possible within a legal environment in which drug users are not prosecuted but are allowed to enter services without fear of arrest or criminal association (Canadian HIV/AIDS Legal Network , 2012; Erickson, Riley, Cheung, & O'Hare, 1997).

Vlahov & Junge (1998) observed that "When legal restrictions on both purchase and possession of syringes are removed, IDUs will change their syringe-sharing behaviors in ways that can reduce HIV transmission".

Thus, one of the proposals being put forward by NEP proponents is to decriminalize the possession and use of syringes and needles. It is argued that if needles and syringes were delisted from the catalog of "drug paraphernalia", the policy barriers to the implementation of NEP would be removed (Woddak, et al., 2012; O'Hare, Newcombe, Matthews, Buning, & Drucker, 1992; Des Jarlais, 1995).

Arguments against NEP

NEP is opposed for a variety of reasons. Some argue against it for symbolic values: that it could give the wrong message. Some fear that harm reduction programs will encourage intravenous drug use instead of discouraging it. Others maintain that NEP does not address the very root cause of the problem, which is the drug addiction (Voth & Kraus, 2012). As Kubi (2012) cited Tempalski (2006), the arguments on the implementation of the NEP in the US hinges on the "struggle […] between law enforcement and medical providers as to whether drug users should be defined as criminals or medical patients." This was also observed during the consultation meetings with stakeholders held in Manila and Cebu for this project.

Research on NEP/NSP

Most research on NEP/NSP revolve around two issues: (1) does needle exchange lead to increased illicit drug use; and (2) does needle exchange lead to a reduction in HIV transmission? (Voth & Kraus, 2012; De Jarlais, et al., 1996; Des Jarlais, 2000; Erickson, Riley, Cheung, & O'Hare, 1997)

Considerable number of evaluation studies had been conducted around these two questions. Most studies had been done in Europe (Bowen, 2012) , the birthplace of the NEP, and in the United States (Burris, Strathdee, & Vernick, 2002) where the program, operational in a good number of states, is still a controversial policy issue. A few studies had been undertaken in Asia, most of them in China (Sarang, Stuikyte, & Bykov, 2007; Sullivan & Wu, 2007). The findings of these evaluative studies had been summarized in several reviews. These findings are congruent on four main areas which are also highlighted in the report of released as early as 1998 by the Center for AIDS Prevention Studies (Lurie & De Carlo, 1998):

1. that making clean syringes and needles more accessible to injecting drug users have a positive effect in terms of reducing the incidence of HIV transmission associated with injecting drug use.
2. that the program does not lead to an increase in drug use in general, nor to intravenous injection, in particular.
3. that the NEP has the other positive effect of bringing the drug dependent into contact with helping agencies, often resulting in better monitoring, care, and treatment.
4. that NEP is most effective when operated in conjunction with other preventive measures such as information, education, communication (IEC).

In general, then, the scientific evidence does not support the common arguments against the NEP. Why, then, is there little support for it in our drug policy? The Laniel's (1999) observation is instructive: "Public policy on drugs has been largely immune from the influence of research. Instead, conventional wisdom appears to have been a major shaping force".

NEP, a Complementing Strategy

One of the objections against the NEP is that it does not attack the very root cause of the PWID's problem, which is drug addiction. It is argued that rather than assisting the injecting drug user towards "safer" mode of injecting, the aim should be to help him/her to stop using drugs altogether.

In fact, the NEP, properly understood and operated, does not contradict the goal of treatment. Research has shown that NEPs, aside from being preventive to HIV transmission, is also an effective conduit to treatment programs and other health services (Geffray, Schiray, Fabre, & Guilhem, 2002). Satcher (2000), summarizing the findings of researches conducted since 1998 on syringe exchange programs (SEP) noted that "syringe exchange programs play a unique role in facilitating the engagement of these populations in meaningful prevention interventions and treatment opportunities, when implemented as part of a comprehensive HIV prevention and substance abuse strategy." This was supported by the report released by the National Institute of Health (1997) stating that "individuals in areas with needle exchange programs have an increased likelihood of entering drug treatment programs." Jelsma (2010), drawing from a body of evidence, also noted that NEP brings "problematic users in touch with treatment options they would otherwise stay away from." Schechter et al. (1999) says that "NEP may furnish a valuable opportunity to provide additional preventive/support services to these difficult-to-reach individuals". Hence, we have it on good evidence that the NEP, in its actual working, does serve the goal of treatment.

The NEP approach accepts that the goal should be to encourage the injecting drugs user to stop using drugs altogether. However, it does recognize the reality that not all injecting drug users, owing to their addiction, can or are willing to stop using drugs (Bowen, 2012). When abstinence is not a realistic option, other approaches that assist the addict towards "safer" and "managed" use of drugs are needed (Zur Institute, 2012). The NEP is one such approach.

Reforming R.A. 9165

The overall Philippine policy stance towards the drug problem has traditionally tilted towards the prohibitionist approach. From the Revised Penal Code of the Philippines which became operative in the Philippines in 1930, to The Dangerous Drugs Act of 1972 (RA 6425), to the present Comprehensive Dangerous Drugs Act of 2002 (R.A. 9165) the national policy has relied on the twin strategy of criminalization and punishment as the main mechanisms of drug control.

The advent of the HIV and AIDS threat provides a challenge as well as an invitation for a re-examination of our present paradigms, policies, and programs on drugs and for a consideration of alternative ways to address the problem of drugs in the country, bearing in mind that the "fundamental objective of drug policy should be to maximize human security, health and development" (International Drug Policy Consortium, 2010).

Amending Section 12 of R.A. 9165 and decriminalizing the possession of needles and syringes would remove a major barrier to the implementation of NEP. However, we have to understand that Section 12 is merely an articulation of a framework underlying the entirety of R.A. 9165. It is this framework that has to be reassessed if R.A. 9165 is to be brought into alignment with the new realities, such as the HIV-AIDS epidemic.

The overarching philosophy framing R.A. 9165 is the prohibitionist idea. The major characteristic of a "prohibition-oriented policy is its emphasis on penalties as a control policy" (McBride, Terry-Mcelrath, Harwood, Inciardi, & Leukefeld, 2009). A material scanning of the contents of R.A. 9165 reveals its bias towards punitive action as primary drug control strategy. Of the 73 sections dedicated to intervention strategies, thirty-two sections (42%) are devoted to issues of enforcement and criminal justice.

The prohibitionist approach derives from the reasoning that people take to drugs because they are available and drugs are available because there is a demand for them. To break the cycle, the prohibitionist answer is: choke the supply and diminish demand. The typical instruments for advancing supply and demand reduction are the criminalization of drug use and other activities and instruments associated with it and the imposition of heavy penalties against violators.

Increasingly, the various sectors are recognizing that the model of drug policy, which focuses on laws and enforcement operations, promoted by the United Nations drug control conventions since 1961 has not proven to be as effective as it was hoped it would be. There is a building consensus that, given the changing nature and complexity of the drug problem, what is needed is a more integrated approach (Zur Institute, 2012; Barrett, Cook, Lines, Stimson, & Bridge, 2010; Office of National Drug Control Policy, 2012).

An integrated approach is one which is open to acknowledging the problem of drug use from a multiple perspective, recognizing it as complex issue which no one single approach can fully address. An integrated approach is one that, while using the deterrent force of the law, is not averse to employ other strategies: preventive action to preclude future use, treatment measures for those who want to be cured, and harm reduction schemes for those who are unable to extricate themselves from their dependence.

In March 2010, the International Drug Policy Consortium (IDPC) published a Drug Policy Guide, a source book of principles that can be used to conduct reviews of the national drug policies and programmes. The Guide proposed the following five high-level principles for an effective drug policy.

1. Drug policies should be developed through a structured and objective assessment of priorities and evidence.
2. All activities should be undertaken in full compliance with international human rights law.
3. Drug policies should focus on reducing the harmful consequences rather than the scale of drug use and markets.
4. Policy and activities should seek to promote the social inclusion of marginalized groups.
5. Governments should build open and constructive relationships with civil society in the discussion and delivery of their strategies (International Drug Policy Consortium, 2010).

A Final Word

The Philippines is one of the 192 countries that, in June 2011, committed to "reviewing legislation and creating enabling legal and social environments that support effective and efficient HIV responses" (Global Commission on HIV and the Law, 2012) . The Philippines is also a signatory to the November 7, 2011 "ASEAN Declaration of Commitment: Getting to Zero New HIV Infections, Zero Discrimination, and Zero AIDS-Related Deaths" (UNAIDS, 2011) which pledged, among others, to the following propositions (United Nations, 2012):

1. "Reducing transmission of HIV among people who inject drugs by 50 per cent by 2015" (16.b);

2. Ensure that national prevention strategies comprehensively target populations at higher risk, such as people who use drugs, sex workers, and men having sex with men, including transgender people (17.b); and

3. Implement and expand risk and harm reduction programmes, where appropriate and applicable, for people who use drugs (17.d)".

The Global Commission on HIV and the Law, an independent body established at the request of the Programme Coordinating Board of the Joint United Nations Programme on HIV/AIDS (UNAIDS), released the conclusions of an 18 months of research, consultation, analysis and deliberation which it undertook. The said report decries that many countries still continue to uphold punitive laws and discriminatory practices that undermine progress against HIV. Among such laws are those

> *that fail to protect women and girls from violence, deepen gender inequalities and increase their vulnerability to HIV, … are not consistent with international human rights law and impede access to lifesaving treatment and prevention, … that criminalize and dehumanize populations at highest risk of HIV … (that) drive people underground, away from essential health services and heighten their risk of HIV… that criminalize HIV transmission, exposure or non-disclosure of HIV status (that) discourage people from getting tested and treated* (Global Commission on HIV and the Law, 2012).

The Philippines is cited in the report as among the countries that "criminalize some aspects of proven harm reduction services for injecting drug users" (Global Commission on HIV and the Law, 2012).

Recommendation

The overarching conclusion of the present review is that there is a need to introduce reforms in our existing drug policies in order to make them attuned to the present concrete realities in the country. Some of these realities are the increasing incidence of HIV and AIDS cases in the country (Department of Health National Epedimiology Center, 2012), the large number of drug dependents who have no access to treatment (Cebu City Multisectoral HIV-AIDS Council, 2012), the inadequacy of our prison system to handle drug-related cases (Farr & Wilson, 2010). There is a need to review the contextual and conceptual drivers of the policy. Cohen (1993) stressed that "effective alternatives are impossible to

design if we do not first re-design both our historical perspective on present drug control ideology and our conceptual tools for thinking about drug use."

The following concrete proposals are recommended:

1. Although there are scores of studies giving evidence to the effectiveness of NEP as a strategy against spread of HIV infection, there is need to undertake local assessment studies on NEP and other harm reduction programs in order to gather locally generated scientific data;

2. Establish pilot NEP sites in high risk areas, the program to be operated by an inter-sectoral task force made up of individuals coming from law enforcement, health, academe, etc.

1. Carry out the operations research project which is now in the pipe line;

3. Conduct awareness-raising discussions using the facilities of the tri-media, in order to encourage public reflection on the issue of drugs and HIV-AIDS and to clarify misunderstanding about the NEP.

4. Work for legislative review of R.A. 9165 and R.A. 8504 to remove policy gaps between the two laws.

5. Majority of the ordinances were passed in compliance to legislative requirements rather than as a response to homegrown needs. There is a need to localize the provisions so that they reflect the real needs and situation on the ground.

Thus with the Philippines experiencing a mounting incidence of HIV transmission among PWID, the NEP/NSP is a potentially effective strategy for lessening the burden of disease in this subpopulation.

Works Cited

Canadian HIV/AIDS Legal Network . (2012). *Prison needle and syringe programs: policy brief.* Vancouver: Canadian HIV/AIDS Legal Network.

Zur Institute. (2012). *Harm Reduction A Growing Alternative Paradigm in Substance Abuse Treatment.* Retrieved November 7, 2012, from Zur Institute Innovative Resources and Online Continuing Education: http://www.zurinstitute.com/harmreduction_clinicalupdate.html

Ahmad, K. (2003). Asia grapples with spreading amphetamine abuse. *The Lancet* , 361-379.

Barrett, D., Cook, C., Lines, R., Stimson, G., & Bridge, J. (2010). *Harm Reduction and Human Rights The Global Response to Drug-Related HIV Epidemics.* London: International Harm Reduction Association.

Bowen, E. (2012). Clean Needles and Bad Blood:Needle Exchange as Morality Policy. *Journal of Sociology and Social Welfare* , 121-141.

Burris, S., Strathdee, S., & Vernick, J. (2002, August 30). *Syringe Access Law in the United States State of the Art Assessment of Law and Policy.* Retrieved November 7, 2012, from Center For Law and Public Health John Hopkins and Georgetown Universities: http://www.publichealthlaw.net/Research/PDF/syringe.pdf

Burrows, D. (2006). *Advocacy and coverage of needle exchange programs: results of a comparative study of harm reduction programs in Brazil, Bangladesh, Belarus, Ukraine, Russian Federation, and China.* Retrieved October 30, 2012, from Cadernos de Saúde Pública: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0102-311X2006000400025&lng=en&tlng=en. http://dx.doi.org/10.1590/S0102-311X2006000400025.

Cebu City Multisectoral HIV-AIDS Council. (2012, October 7). HIV AIDS Cases by Modes of Transmission. Cebu, Cebu, Philippines.

Chakrapani, V., Newman, P., Shunmugam, M., & Dubrow, R. (2011). Social-structural contexts of needle and syringe sharing behaviours of HIV-positive injecting drug users in Manipur, India: a mixed methods investigation. *The Lancet* , 1-10.

Cohen, P. (7-8 July 1993,). Re-thinking drug control policy Historical perspectives and conceptual tools. *Paper presented at the United Nations Research Institute for Social Development (UNRISD)* (p. 15). Geneva: Centrum voor drugsonderzoek.

De Jarlais, D., Marmor, M., Paone, D., Titus, S., Shi, Q., Perlis, T., et al. (1996). HIV incidence among injecting drug users in New York City syringe-exchange programmes. *The Lancet , 348* (9003), 987-991.

Department of Health and Human Services. (2007, May 3). *Methamphetamine Use and Risk for HIV/AIDS.* Retrieved November 7, 2012, from Center for Disease Control and Prevention: http://www.cdc.gov/hiv/resources/factsheets/meth.htm

Department of Health National Epedimiology Center. (2012, October 30). *Newly Diagnosed HIV Cases in the Philippines.* Retrieved November 5, 2012, from Philippine National AIDS Council: http://www.pnac.org.ph/uploads/documents/publications/NEC_HIV_Oct-AIDSreg2012.pdf

Des Jarlais, D. (1995). Harm reduction--a framework for incorporating science into drug policy. *American Journal of Public Health* , 10-12.

Des Jarlais, D. (2000). Research, Politics, and Needle Exchange. *American Journal of Public Health* .

Devaney, M., Reid, G., & Baldwin, S. (2007). Prevalence of illicit drug use in Asia and the Pacific. *Drug Alcohol Review* , 97-102.

Erickson, P., Riley, D., Cheung, Y., & O'Hare, P. (1997). *Harm Reduction: A New Direction for Drug Policies and Programs.* Toronto: University of Toronto Press.

Farr, A., & Wilson, D. (2010). An HIV epidemic is ready to emerge in the Philippines. *Journal of the International AIDS Society* , 1-16.

Geffray, C., Schiray, M., Fabre, & Guilhem. (2002). *Globalisation, Drugs, and Crminalisation.* Retrieved November 7, 2012, from United Nations Educational, Scientific, and Cultural Organization : http://www.unesco.org/most/globalisation/drugs_vol1.pdf

Global Commission on HIV and the Law. (2012). *HIV and the Law Risks, Rights, and Health.* NY: Global Commission on HIV and the Law.

International Drug Policy Consortium. (2010, March). *Drug Policy Guide.* Retrieved November 7, 2012, from International Drug Policy Consortium: http://apps.who.int/medicinedocs/documents/s18040en/s18040en.pdf

Jelsma, M. (2010, July). *Reviewing Drug Policy Options Drug Policy Innovation: Guidelines and Promising trends.* Retrieved November 7, 2012, from Beckley Foundation: http://www.beckleyfoundation.org/pdf/Reviewing%20International%20Drug%20Policy%20Options.pdf

Kubi, R. (2012, May 21). *Syringe Exchange: Policy and Politics.* Retrieved November 7, 2012, from The Yale Journal of Medicine and Law. Vol. VIII, Issue 2: http://www.yalemedlaw.com/2012/05/syringe-exchange-policy-and-politics/

Laniel, L. (1999). *The Relationship between Research and Drug Policy.* Retrieved November 7, 2012, from Management of Social Transformations: http://www.unesco.org/most/dplaniel.htm

Loxley, W. (2000). Doing the possible: harm reduction, injecting drug use and blood borne viral infections in Australia. *International Journal of Drug Policy* , 407-416.

Lurie, P., & De Carlo, P. (1998, December 30). *Does Needle Exchange Work?* Retrieved November 7, 2012, from Center for AIDS Prevention Studies: http://caps.ucsf.edu/uploads/pubs/FS/pdf/nepFS.pdf

McBride, D., Terry-Mcelrath, Y., Harwood, H., Inciardi, J. A., & Leukefeld, C. (2009). Reflections on Drug Policy. *Journal of Drug Issues* , 71-88.

Morineau, G., Bollen, L. J., Syafitri, R. I., Nurjannah, N., Mustikawati, D. E., & Magnani, R. (2012). HIV prevalence and risk behaviours among injecting drug users in six indonesian cities implications for future HIV prevention programs. *Harm Reduction Journal* , 1-7.

National Institute of Health. (1997). *Interventions to Prevent HIV Risk Behaviors.* Kensington, MD: NIH Consensus Program Information Center.

National Research Council. (2006). *Preventing HIV Infection among Injecting Drug Users in High Risk Countries: An Assessment of the Evidence.* Washington: The National Academies Press.

Office of National Drug Control Policy. (2012). *National Drug Control Strategy.* Washington: Executive Office of the President of the United States .

O'Hare, P., Newcombe, R., Matthews, A., Buning, E., & Drucker, E. (1992). *Reduction of Drug-Related Harm.* London: Routledge.

Sarang, A., Stuikyte, R., & Bykov, R. (2007). Implementation of harm reduction in Central and Eastern Europe and Central Asia. *International Journal of Drug Policy* , 129-135.

Satcher, D. (2000). *Evidence-based findings on the efficacy of syringe exchange programs: an analysis of the scientific research completed since April 1998.* Washington: U.S. Department of Health and Human Services.

Schechter, M., Strathdee, S., Cornelisse, P., Currie, S., Patrick, D., Rekart, M., et al. (1999). Do needle exchange programmes increase the spread of HIV among injection drug users?: an investigation of the Vancouver outbreak. *AIDS* , 45-51.

Sullivan, S., & Wu, Z. (2007). Rapid scale up of harm reduction in China. *International Journal on Drug Policy* , 188-128.

Tempalski, B., Flom, P., Friedman, S., Des Jarlais, D., Friedman, J., Mcknight, C., et al. (2007). Social and Political Factors Predicting the Presence of Syringe Exchange Programs in 96 US Metropolitan Areas. *American Journal of Public Health* , 437-447.

Torok, M., Darke, S., Kaye, S., Ross, J., & McKetin, R. (2008). *Comparative rates of violent crime amongst methamphetamine and opioid users: Victimisation and offending.* Tasmania: National Drug Law Enforcement Research Fund (NDLERF).

UNAIDS. (2011, November 23). *ASEAN leaders commit to "getting to Zero" .* Retrieved November 7, 2012, from UNAIDS: http://www.unaids.org/en/resources/presscentre/featurestories/2011/november/20111123asean/

United Nations. (2012, June 11). *In General Assembly, Secretary-General Describes 'Cause for Hope' in Fight against HIV/AIDS, But Warns Redoubled Effort Needed to 'Win the Race' against Epidemic.* Retrieved November 7, 2012, from United Nations General Assembly: http://www.un.org/News/Press/docs/2012/ga11254.doc.htm

Vlahov, D., & Junge, B. (1998). The Role of Needle Exchange Programs in HIV Prevention. *Public Health Reports* , 75-80.

Voth, E., & Kraus, M. (2012, January). *Needle Exchanges Further Challenged.* Retrieved October 20, 2012, from The Journal of Global Drug Policy and Practice: http://www.globaldrugpolicy.com/Issues/Vol%201%20Issue%203/Needle%20Exchange-1.pdf

Woddak, A., Ryan, J., Griffiths, P., Van Beek, I., Barratt, M., Lenton, S., et al. (2012). Policy and Practice in Harm Reduction in Australia. In R. Pates, & D. Riley, *Harm Reduction in Substance Use and High-Risk Behaviour* (p. 488). UK: Blackwell Publishing.