

Australia commemorates 20 years of needle syringe programs

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Today marks the 20th anniversary of the first public needle and syringe program (NSP) in Australia.

Established at the Alcohol and Drug Service, St. Vincent's Hospital in Darlinghurst on the 13th of November 1986, Australia's first NSP was illegal - an act of reluctant civil disobedience as a result of numerous failed attempts to obtain government approval for a legal needle syringe pilot program throughout 1986.

Advocates argued that HIV had already spread extensively among gay men in Eastern Sydney and, unless effective prevention measures were introduced quickly and rapidly expanded, HIV would soon spread rapidly among and from injecting drug users to the general community. Critics however, argued that needle syringe programs would 'send the wrong message' and only exacerbate injecting drug use in Australia.

Many people, from both within and outside government, from all political parties, and from a variety of professions and backgrounds, had worked very hard for some years to accelerate the adoption of needle syringe programs in Australia. Fortunately, the then Prime Minister, six Premiers and Chief Minister had approved harm minimisation as Australia's national, official drug policy in April, 1985 thereby paving the way for them to later adopt and implement NSPs.

The then NSW State Government decided to not prosecute the health staff involved in the pilot needle syringe program, but rather to review the results of the program and then establish a state-wide NSP system based in pharmacies and the community within a few months. All other states and territories followed promptly. By 1988, a NSP system had been implemented across Australia.

According to a study commissioned by the Commonwealth Department of Health, NSPs in Australia had prevented by the year 2000 an estimated 25,000 HIV infections and 21,000 hepatitis C infections and saved between \$2.4 and \$7.7 billion. The study estimated that by the year 2010, 4,500 deaths from AIDS and 90 deaths from hepatitis C will have been prevented. Much needless suffering has also been avoided.

Dr Alex Wodak, Director of St Vincent's Hospital Drug and Alcohol Service said: "It is important to celebrate this success and to commemorate the many people who made it possible, including the senior police who worked closely with their health colleagues to make this a reality. We still need new harm reduction initiatives for new and emerging challenges. The threat of an HIV epidemic among and from injecting drug users in Australia still exists. It has not — and will not — disappear.

This initiative on 13 November 1986 enabled drug users throughout the country to have the means to reduce their risk of acquiring and transmitting HIV. The success of NSPs in Australia has also greatly helped other countries in Asia respond to HIV more effectively with NSPs now being established and expanded rapidly in most countries in our region."

Mr Gino Vumbaca, Executive Officer of the Australian National Council on Drugs added: "As the World Health

Organisations have recently noted it is also important for the public to understand that the evidence is very clear - NSPs do not increase drug use and they get injecting drug users into treatment earlier. Indeed nearly all drug users stop using drugs at some point, particularly when treatment is readily available, and NSPs have ensured that when people reach this point they are not also burdened with being HIV positive. This has immeasurable benefits for the families and loved ones of drug users.”

Dr Alex Wodak, concluded: “Today’s celebration is designed to strengthen public resolve and the political goodwill needed for our continuing battle to contain HIV and other blood borne viruses.”

Media welcome

Sydney Town Hall Event (12:30pm – 2:00pm)

Marconi Room – Druitt Street Entrance

Speakers Involved

Lord Mayor Clover Moore (Opening Address)

Senator Marise Payne (Rep Hon Tony Abbott)

Dr Neal Blewett (former Federal Health Minister)

The Hon Peter Collins (former NSW Health Minister)

Supt Frank Hansen (NSW Police)

Ms Ita Buttrose (former Chair of the National Advisory Committee on AIDS)

Prof Ron Penny (former Chair of the AIDS Task Force)

Ms Annie Madden (CEO, Australian Injecting and Illicit Drug Users League)

Ms Amanda Milledge (President, Anex)

Dr John Herron (Chair, Australian National Council on Drugs)

Dr Bob Batey (Ministerial Advisory Committee on AIDS, Sexual Health & Hepatitis Chair’s Representative)

Dr Christian Kroll (Global Coordinator on HIV/AIDS, United Nations Office of Drugs & Crime)

Ms Annmaree O’Keeffe (Australian Ambassador for HIV/AIDS)

Dr Alex Wodak (Director, Alcohol & Drug Services, St Vincent’s Hospital)

Mr Chris Puplick (former Chair of Australian National Council on AIDS, Hepatitis & Related Diseases)

Light lunch provided

Background paper on needle and syringe programs

Introduction

Needle and Syringe Programs¹ (NSP) are a public health measure, consistent with the National Drug Strategy's harm minimisation framework, to reduce the spread of infections such as HIV and hepatitis C among people who inject drugs and the broader community. They provide a range of services that include provision of sterile injecting equipment, education on reducing drug use and preventing drug harms, health information, and referral to drug treatment, medical care and legal and social services. They also provide a safe place for the appropriate disposal of used needles and syringes, thereby minimising the impact of syringe litter on the broader community.

History

The first Australian NSP began in Darlinghurst, Sydney in 1986 as a trial project. The testing of syringes returned to this outlet detected an increase in HIV prevalence over time, suggesting that HIV was spreading among the clients. In the following year, the New South Wales Government adopted NSPs as part of its health policy.

Since then, NSPs have been acknowledged as part of the health policy of federal, state and territory governments in Australia. By recognising NSPs, governments do not condone illicit drug use. Instead, many governments acknowledge that these behaviours occur and that they have a responsibility to develop and implement public health and law-enforcement measures designed to reduce the harm that such behaviours can cause.

Status

With bi-partisan support at all levels of government, NSPs have been established in all Australian states and territories. There are more than 3,000 NSP outlets in Australia located in a range of settings including hospitals, pharmacies, community health centres, and drug treatment agencies. With an estimated 1.2 million contacts with people who inject drugs each year, NSPs provide the broadest interface between the health service system and a vulnerable segment of the community. Staff at NSPs provide services in a non-judgmental manner and develop rapport with individuals who may otherwise be hard to reach.

Several different types of NSPs are in operation in Australia.

- **Primary outlets** are stand-alone agencies that are specifically established to provide the full range of NSP services including dispensing sterile injecting equipment and collecting of used needles and syringes, sometimes along with primary medical care, education and counseling and referral services.
- **Secondary outlets** offer needle and syringe distribution and disposal as one of a range of other health or community services. They may provide additional equipment, education and referral services as part of their commitment to the prevention of blood-borne virus transmission.
- **Mobile and outreach services** visit hard to reach people who inject drugs who are unable or unwilling to attend other outlets. They provide NSP services, often out of hours, by vehicle or on foot. The benefits of NSPs are maximized if isolated, disadvantaged and vulnerable groups of people who inject drugs are

able to access NSP services.

- **Pharmacy programs** are another important way to maximize access to sterile injecting equipment. Many pharmacies across Australia provide sterile injecting equipment, needle and syringe disposal services, health information and sometimes referral services. Some pharmacy programs operate on a commercial/retail basis and others are supported by government schemes.
- **Dispensing machines** ensure that preventative equipment is available 24 hours. Injecting drug use occurs during all hours and is usually not confined to the hours services are open. Difficulties in accessing sterile injecting equipment have been cited as a factor contributing to sharing of injecting equipment which increases the risk of HIV and hepatitis C infection.

Effectiveness

HIV prevention strategies such as NSPs have resulted in an AIDS incidence in Australia of 1.5 per 100,000 population by 2003, similar to that recorded in Canada and the United Kingdom and considerably lower than in France (2.2), Spain (3.3) and the United States (15.0 in 2002).

The estimated HIV prevalence in Australia was substantially lower than that recorded in North America, Europe and most other countries within the Asia-Pacific region in 2003.

Over the past 15 years, NSPs have been subject to extensive scientific evaluation. These studies have confirmed that NSPs substantially reduce the number of HIV infections. Studies in the United States have found that providing needles and syringes can decrease HIV-risk injecting behaviour by up to 74%.

The World Health Organisation commissioned a review of evidence of the effectiveness of NSPs to reduce HIV which concluded that there is compelling evidence that increasing the availability and utilization of sterile injecting equipment for both out-of-treatment and in-treatment injecting drug users contributes substantially to reductions in the rate of HIV transmission.

A 2002 review of HIV and hepatitis C prevalence in 103 cities around the world before and after NSPs found that NSPs were very cost-effective.

Australian governments invested \$130 million in NSPs between 1991 and 2000. This resulted in:

- An estimated 25,000 cases of HIV infection being prevented.
- An estimated 21,000 cases of hepatitis C infection being prevented.
- An estimated 4,590 lives being saved by 2010.
- An estimated saving to the health system in avoided treatment costs over a lifetime of between \$2.4 and \$7.7 billion.

Other international studies confirm that:

- NSPs do not encourage more frequent injection of drugs.
- NSPs do not increase crime or violence.
- NSPs do not increase the number of used needles and syringes discarded in public areas.
- NSPs can act as “gateways” to more traditional medical treatment for drug dependence for many clients. One study found that drug users attending NSPs were five times more likely to enter drug treatment than injectors who did not attend NSP.

Fact sheet

Needle and syringe programs: a proven public health initiative.

Summary

Australia's Needle and Syringe Program (NSP) has been proven to be an effective and cost efficient public health initiative. With high numbers of HIV and hepatitis C infections prevented, the Program has saved taxpayers up to \$7.7 billion in treatment costs for an initial investment of close to \$150 million. That is more than \$50 saved for each \$1 spent on NSP.

If non-financial benefits such as the quantity of life years gained and quality of life were to be allocated a monetary value, the returns on investment in NSP in Australia will be considerably higher.

Financial return on investment

From 1991 to 2000, a total of \$130 million was spent on NSP for a return on investment between \$2.4 billion to \$7.7 billion.

This represents the cost of treatment for HIV and hepatitis C which were avoided due to prevention efforts like NSP (with and without adjustments for government discounting at 3% and 5%).

During this ten-year period, NSP contributed to the prevention of:

- 25,000 HIV infections
- 4,500 HIV deaths by 2010
- 21,000 hepatitis C infections
- 650 cases of liver cirrhosis among injecting drug users by 2010
- 90 hepatitis C related deaths by 2010

Non-financial return on investment

Apart from the measurable financial benefits accruing from the introduction of NSP, the study also examined quality of life effects of NSP. To do this, it utilised an approach known as the "quality adjusted life year" (QALY). Therefore, if NSP reduces the probability of infection, or increases the average time to infection, fewer injecting drug users will progress to the later stages of the disease during their lifetime resulting in QALY gains.

QALY gains incorporate the quantity of life gained (number of life years), and the quality of life gained by avoiding HIV and hepatitis C infection.

The study estimated there were 588,000 life years (about 23 years per person) gained for HIV infection avoided, and 1200 life years gained for hepatitis C infection avoided. The difference in these outcomes is due to the different mortality rates associated with each disease and their rates of progression.

The number of QALYs gained was as high as 715,245 for HIV and 119,992 for hepatitis C.

About the report

The Commonwealth Report (*Return on Investment in Needle and Syringe Programs in Australia*) was released on 23 October 2002. The specific aims of the study were to:

- Estimate the effectiveness of NSP in relation to preventing transmission of HIV as well as hepatitis B and C;
- Calculate the return on investment in NSP from 1991 to 2000; and
- Provide contemporary research on the effectiveness and efficiency of NSP in order to assist stakeholders and governments to demonstrate the role of NSP as a core population health activity, and to support further investment in NSP if necessary.

Methodology

The study arrived at its conclusions through a comparison of cities with and without NSP. HIV data from 103 cities, and hepatitis C data from 101 cities were compared. Referred to as "an ecological study design" the comparison assisted in determining the overall beneficial effect of the introduction of NSP in preventing HIV and hepatitis C infection.

Limitations of the study

There are a number of limitations associated with the ecological study design that should be considered. These include:

- Different protocols for the collection of seroprevalence data in diverse populations used in the analyses may underestimate the effectiveness of NSP;
- Data on NSP used in the analyses were based on presence or absence of NSP rather than the extent and uptake of these services which may underestimate the effectiveness of NSP;
- It is not possible to separate NSP from the implementation of other prevention strategies.

The reported financial return on investment however only represents the direct costs associated with treatment of illness.

It does not include indirect costs such as productivity losses brought about by illness. Similarly, indirect benefits such as increased productivity due to lives saved and extended employment were excluded from the analysis.

It is possible that in taking these factors into account, the return on investment in NSP in Australia would have been considerably higher.

Conclusion

The study concluded that the NSP has been demonstrated to be effective in reducing the incidence of HIV and hepatitis C and that they represent an effective financial investment by government.

If a monetary value could be placed against each of these outcomes, it is clear that the financial gains calculated thus far would again be significantly increased.

13 November 2006

¹Also known as Clean Needle Program in South Australia, and Needle Availability Program in Tasmania

The ANCD is the principal advisory body to Government on drug and alcohol issues.

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