

Protecting the health of the community

The contribution of sterile needles and syringes to the prevention of harm to drug injectors

Dr Roger Garsia

Director HIV Clinical Services SLHD

Chair – NSW Ministry Advisory Committee on HIV /AIDS and STI

Success of harm reduction strategies in HIV prevention

- The risk of HIV is real - the disease is serious
- Still almost every day in NSW someone becomes infected with HIV !

- The risk of Hepatitis C infection is even greater
- There are NO vaccines for HIV or hepatitis C
- HIV is for life once acquired
- Once HIV reaches a moderate level in an injecting “community” anything much less than 100% sterile needles/syringes becomes ineffective
- We MUST keep HIV at low level now to protect the future



Places where failure to have adequate sterile needle distribution has led to a spreading epidemic of HIV in IVDU

- Western Europe (*before they knew better*)
- East coast USA (Miami, New York, Baltimore, Washington DC) - *they acted too slowly*
- Eastern Europe – *an emerging epidemic NOW*
- SE Asia - *till action was taken to roll out NSP and methadone ; too late to stop heterosexual epidemic in their partners*
- Indonesia – *marginalised IVDU populations in Jakarta now spreading into CSW*
- Athens , Greece – *as a result of cutbacks due to GFC and a rapid emergence of an inner city epidemic*

Malliori M, Terzidou M, Paraskevis D, and Hatzakis A. *HIV/AIDS among IDUs in Greece: report of a recent outbreak and initial response policies.*

Indonesian experience

DOI: 10.1258/ijisa.2009.009445. *International Journal of STD & AIDS* 2011; **22**: 505–511

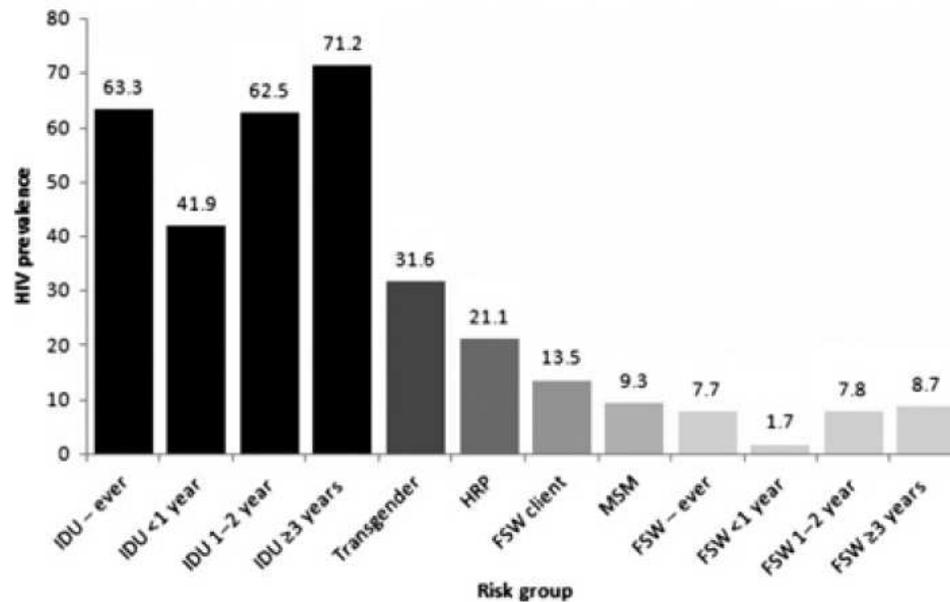


Figure 1 HIV prevalence among *new clients* without ‘possible HIV symptoms’ by risk group and risk behaviour at VCT sites, November 2006 to January 2008^{*,†}. IDU = injecting drug use; MSM = men who have sex with men; FSW = female sex worker; HRP = person with high-risk partner/s; VCT = voluntary counselling and testing

Aggregated data from testing sites in Jakarta and Bali in 2007

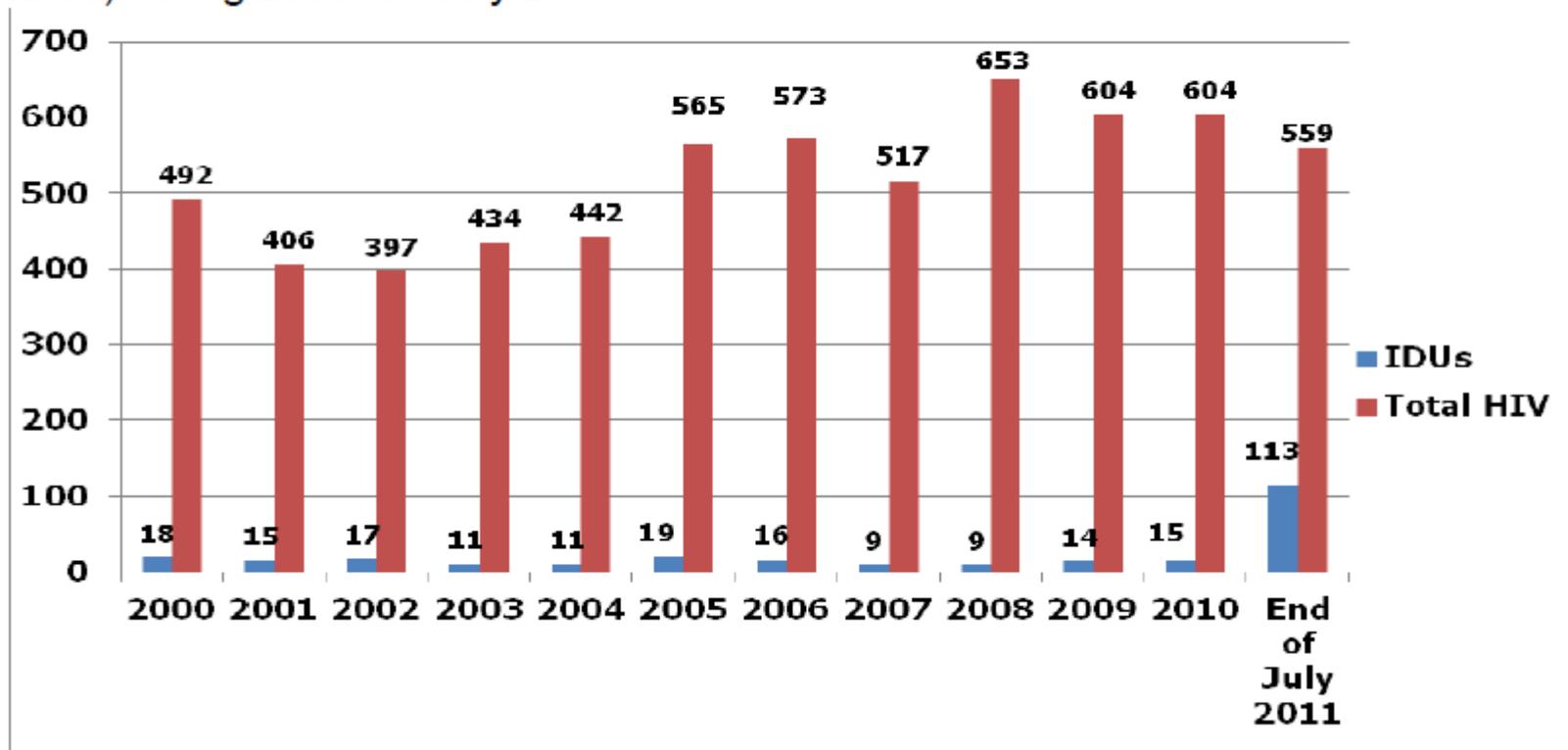
Voluntary counselling and testing sites as a source of sentinel information on HIV prevalence in a concentrated epidemic: a pilot project from Indonesia

R Guy BAppSc MAppEpid PhD^{*}, D E Mustikawati DD MPH[†], D B Wijaksono BPH[†], N Nugraihini MEpid[†], S Prihutomo MD MPH[†], N Silitonga MD MM[†] and J M Kaldor PhD[§]

^{*}Centre for Population Health, Burnet Institute, Melbourne, Australia; [†]Sub Directorate AIDS & STI, Directorate for Communicable Disease Control and Environmental Health, Ministry of Health, Jakarta, Indonesia; [§]Australasian Agency for International Development, Indonesia HIV Prevention and Care Program, Jakarta, Indonesia; [§]National Centre in HIV Epidemiology and Clinical Research, University of New South Wales, Sydney, Australia

IVDU HIV in Greece - the 2011 data

Figure 1: Number of newly reported HIV/AIDS cases by year in Greece (total and IDUs) during 2000–31 July 2011



Why inner city NSP programs are so important in containing HIV in NSW

- Drug related hepatitis C prevalence in the community is a surrogate for unsafe injecting and is high in the inner city
- Rates of HIV and Hepatitis C in IDU are highest in inner city residents pro rata
- Outer urban, rural and remote all also need access to sterile NSP but on a more decentralised scale
- Many recreational and social activities (particularly after dark and weekends) are in the inner city
- Most illicit injectable drugs are destined for the inner city drug market
- Injecting drug use is high in MSM who are concentrated in the inner city ; HIV is high in MSM who inject drugs
- There is movement from the city to the fringes and throughout the state - work/ family / festivals / travel etc

NSW NSP strategy

- Increase coverage of injecting episodes with sterile equipment - aim for 100%
 - i.e. Sterile needle every time
- Facilitate access to sterile equipment
 - Pharmacy Guild fitpack scheme (subsidised) expansion to more pharmacies
 - Increase client coverage from primary outlets
 - Increase secondary outlet access points
- Aim approx 25% increase in equipment coverage over three years

Why Redfern is an important component of the NSW NSP program

- High need area (over many years and not diminishing)
- High density welfare housing and on the other hand increasing affluence ; young experimenters
- High rates of movement to outer Sydney and vice versa
- Both long term and transient populations (including students)
- Transport hub



Inner city needs are changing

- Closure of drug “houses” in Redfern has reduced need for a mobile service
- Dispersal of injectors (policing and housing initiatives) more easterly
- Increase in higher density housing and density of light industrial, creative industry, educational and retail brings more youth to the area
- High levels of episodic stimulant use / party venues / clubs in the inner city

Why automated dispensing machines?

- Additional to the “in hours” counter service within the Community Health Service
- Access at times of the clock that many people buy their illicit drugs
- Provides anonymity for those who might otherwise not access a NSP site with staff
- Community acceptance
- Cost-effective
- Track record of success throughout NSW, Australia



People who inject drugs ...

- Are a wide cross section of the community but concentrated in marginalised demographics
- Are on a journey At some stage most want to stop using injectable drugs (sometimes after one exposure)
- Are variably receptive to offers of health advice
- Often become more accepting of HCW intervention when they have developed trust in a service and recognise it is serving their need for health ...
- May or may not be ready for opiate and other drug substitution at any time point
- May relapse into IVDU with intermittent or cyclical patterns ... if they do they need to be kept safe !

What happens if NSW allows a rise in HIV in IVDU to occur ?

- Spread rapidly in injecting “circles” initially in inner urban areas then later in outer urban and regional areas
- Spread to sexual partners will occur
- Transmissions to infants at birth
- Increased risk from any single “unsafe” episode of injecting i.e. first timers and those who inject and discard will begin to show up with HIV
- The rates of hepatitis C will translate to even higher rates and increasing rates of HIV / Hepatitis C co-infection which makes management less effective

What communities will be most affected by a rise in HIV in IVDU

- First those with high rates of
 - MSM or
 - Youth injecting or
 - Older injectors
 - Sexual Partnering of injectors
- Then marginalised, low socioeconomic demographic, typically those requiring high rates of welfare housing
- Young people in inner Sydney
- Most levels of our community in Sydney
- Sydney Local Health District and the neighbouring district SESLHD and the catchment of the St Vincent's network



Can we legitimately walk away from our responsibility for containing HIV & Hepatitis C ?

- SIMPLY - No we can't
- Not at SLHD level, or NSW government level or National government level

Protecting the health of the community

The contribution of sterile needles and syringes to the
prevention of harm to drug injectors

Cost-effectiveness of NSP

Cost-effectiveness of Australian NSPs

Summary of investment

- The number of needles and syringes distributed in Australia increased during the past decade (from ~27 million to ~31 million).
- Expenditure on NSPs increased by 36% (adjusted for inflation) over this time period, mostly associated with personnel and not principally for equipment (Table a); a significant portion of the increased investment has been the Illicit Diversion Supporting Measures for NSPs to increase referrals to drug treatment and other services.
- Over the last decade there has been
 - Increases in funding for primary sites.
 - Increases in the number of secondary sites.
 - Increases (by 15%) in the numbers of units of equipment provided.
 - Stable spending on sterile injection equipment.
 - At the time of writing there were 85 primary sites, 737 secondary sites, 20 enhanced secondary sites, and 118 vending machines.

Effectiveness of NSPs

It was estimated that over the last decade (2000-2009) NSPs have directly averted:

- 32,050 new HIV infections;
- 96,667 new HCV infections.

Table b summarises the epidemiological benefits of NSPs over the last decade. When secondary transmissions (sexual or mother-to-child transmission from infected IDUs) are considered, the epidemiological benefits are even greater. The cumulative benefits of NSPs are further pronounced if long-term projections are considered, as the preventative effects of NSPs flow through to influence the incidence of long-term clinical complications.

Economic analysis of NSPs during 2000-2009

During 2000-2009, gross funding for NSP services was \$243m. This investment yielded:

- Healthcare costs saved of \$1.28 billion (\$1.12bn-\$1.45bn, IQR).
- Approximately 140,000 DALYs gained.
- Net financial cost-saving of \$1.03 billion (\$876m-\$1.98bn, IQR).

The net present value of NSPs (in 2000) is \$896m (disc 3%)(Table c) and \$817m (disc 5%).



Return on investment 2:
Evaluating the cost-effectiveness of
needle and syringe programs in Australia
2009



Australian Government
Department of Health and Ageing



National Centre in HIV
Epidemiology and Clinical Research



UNSW
THE UNIVERSITY OF NEW SOUTH WALES

Other information sources



**Needle and Syringe Program:
MAPPING SERVICES PROVISION IN ABORIGINAL COMMUNITY
CONTROL HEALTH SERVICES
REPORT**

Local NSP access



Newtown Neighbourhood Centre Incorporated

1 Bedford St, Newtown 2042 PO Box 19 Newtown NSW 2042
 Ph: 9516 4755 Fax: 9519 2509
 Email: admin@newtowncentre.org Website: www.newtowncentre.org
 ABN: 96 884 462 833

Needle + Syringe Programs (January 2011)

Auburn Community Health Centre 9 Northumberland Road Auburn	Needle and syringe program, where you can access new equipment for injecting and safer sex supplies. You can also get advice, information and referral for your health needs. Only Wednesday 1.30pm-5pm & Friday 9am - 12.30pm	Phone: 9646 2233 After Hours Phone: 0408 445 753
ACON's Needle & Syringe Program Surry Hills 9 Commonwealth St, Surry Hills	Mon - Fri 10am - 6pm	Tel: 9206 2052 Free Call: 1800 063 060 Hearing Impaired: 9283 2088
Kings Cross Kirketon Road Centre Fire Station Building- above Darlinghurst fire station, entrance in Victoria St, Kings Cross K2 38 Darlinghurst Road, Kings Cross 2011	Needle and syringe program, where you can access new equipment for injecting and safer sex supplies. You can also get advice, information and referral for your health needs. KINGS CROSS OUTREACH BUS provides medical, counselling and social welfare services as well as safe sex and injecting equipment 7 nights a week at the following locations. 8pm - 9.30pm, Forbes Street, Woolloomooloo 9.45pm - 10.30pm, Green Park Darlinghurst 10.40pm - 11.30pm, Forbes Street, Woolloomooloo	Ph: 9360 2766 Monday/Tuesday/Wednesday/ Friday : 10am - 6pm Thursdays : 10am - 3pm K2 Ph: 9357 1299 Monday - Wednesday/Friday 1.30pm - 10pm Thursdays 1.30 - 2.45pm + 6.15 - 10pm Saturdays 1.45 pm - 10pm Sundays 1.45pm - 5.30pm + 6 - 8pm
Redfern Harm Minimisation Program 103 - 105 Redfern St Redfern (entrance via Turner St)	Mon-Fri 9am-5:30pm Sat/Sun/ Pub hol 12pm-2:30pm HIV & Hep C Prevention NSP, Primary Health Clinic, Referrals, Outreach (Sat/Sun/Public holiday)	Phone: 9395 0400 After Hours Phone: 0419 801 997

A just community that includes and acts

Surry Hills - Albion St Centre 150 Albion Street, Surry Hills	Needle and syringe program, where you can access new equipment for injecting and safer sex supplies. You can also get advice, information and referral for your health needs. Mon - Thurs 8.30am - 5.30pm Friday 8am - 2pm	Phone: 9332 1090
Surry Hills - NUA 345 Crown St, Surry Hills	Needle and syringe program, where you can access new equipment for injecting and safer sex supplies. You can also get advice, information and referral for your health needs. Provides resources, education and support for people who use illicit drugs. Mon, Wed, Thurs, Fri 11-4.30	Phone: 8354 7300
Sydney CBD NSP Level 3, Nightingale Building, Sydney Hospital	Needle and syringe program, where you can access new equipment for injecting and safer sex supplies. You can also get advice, information and referral for your health needs. Mon - Fri 9.30 - 5.30	Phone: 9382 7440
Canterbury (REPIDU) 63 Tudor Street, Belmore	Mon, Tues, Thurs 10-6pm Wed, Fri 10-10pm Sat, Sun 10 - 3pm	Ph: 9718 2636
Parramatta 162 Marsden Street, Parramatta	Mon - Fri 9am - 5pm	Ph: 9687 53 26
St George 2 South St Kogarah	Mon - Fri, 8am - 4.40pm	Ph: 9113 2943
Bob The Chemist 308 King St Newtown 2042 just up King St from train station on right hand side	\$4 for the Black Box Mon - Fri 8.30am - 9pm Sat 9am - 8pm Sun 10am - 8pm	Ph: 9557 1636
Chemist on King 205 King St Newtown 2042	\$3 for the Black Box Mon - Sun 9am - 7pm	Ph: 9557 2646
Rainbow Pharmacy 324 King St Newtown NSW	\$4 Mon - Fri 9am - 7pm Sat 9am - 5.30pm	Ph: 9557 1110

A just community that includes and acts