



'Targeted' primary health care - a foundation to reduce injecting-related harms

Conjoint Associate Professor Ingrid van Beek AM
MBBS MBA FAFPHM FChAM MD
Director, KRC

Injecting-related harms - background

- the hypodermic syringe was invented in 1853, initially used mostly to administer morphia subcutaneously for pain relief in battlefield situations
- concerns about a rise in self-administration first documented in 1870; morphia addiction in 1878
- but it was not until 20th century that injecting drugs for pleasure became prevalent, coming to mainstream consciousness in western countries in 1960s; increasing massively during 1980s, also extending to developing country settings

Injecting-related harms - background

- there are about 15.9 million (range: 11.0 – 21.2 million) people who inject drugs across 148 countries worldwide where injecting has been identified (2012)
- The median estimate of current heroin users in Australia was 48 200 (range: 41 800 - 61 000) in 1999 and decreased to 19 900 (range: 17 800 - 41 900) in 2002 probably reflecting changes in heroin availability.
- More recent IDU population size data unavailable.

Injecting-related harms - background

- As a population IDUs are at higher risk of a wide range of injecting-related health issues and premature death compared to those who do not inject drugs ([Degenhardt & Hall, 2012](#)) contributing to a disproportionate burden of disease.
- For these reasons they are a 'population of interest' from a public health perspective.
- Aboriginal, sex working, homeless and young IDUs are examples of IDU sub populations with additional health and social issues, requiring additional targeted approaches.

Injecting-related harms – overview

1. Overdose

- Arguably the most immediate harm
- Assoc with significant mortality and morbidity
- Also note psychostimulant 'toxicity'
- No comprehensive surveillance system to monitor overdose cases in Australia, although annual rates of 'heroin-related deaths' are routinely reported by the AIHW, albeit with a time lag of several years
- Recent indications that opioid overdose is increasing again (pharmaceutical opioids)

Injecting-related harms cont

2. Drug dependence (both opioid and psychostimulants)

- is a risk factor for transition to injecting
- injecting is also associated with more rapid development of dependence, probably due to the (more rapid and intense) pleasurable effects being more 'reinforcing' compared to other modes of drug administration

3. Blood borne infections: HIV, hepatitis B & C

Other injecting related diseases and injury (IRID)

1. Dermatological complications
2. Vascular and pulmonary complications
3. Systemic infections
4. Health risks of social disadvantage

Dermatological complications

- 'Track marks' (needle-track scars that occur along the course of veins)
- Contact dermatitis (from local allergic reactions)
- Ulcers (particularly common with cocaine injecting due to its vaso-constricting and local anaesthetic action, and association with high frequency injection due to its short duration of action)
- Abscesses and superficial cellulitis (skin flora)

Vascular and pulmonary complications

- Veins themselves can become inflamed and infected = septic thrombophlebitis which can lead to thrombosis (clot) formation, swelling of the distal limbs.
- Such thrombi can break off and travel to other more central parts of the cardiovascular system and the pulmonary circulation in particular, leading to septic pulmonary embolus and pneumonia.
- Undissolved particulate matter such as talc (used to cut powder drugs) and cotton fibres (from drug filters) can lead to pulmonary granulomatosis and in turn pulmonary hypertension (irreversible lung damage).
- Also complicates other respiratory conditions common among IDU populations (chronic bronchitis)

Vascular and pulmonary complications cont

- Accidental intra-arterial injection is also not uncommon particularly among groin injectors (into the femoral artery instead of the vein), usually due to poor injecting technique and or poor venous access necessitating injection into deeper, less visible palpable veins.
- This can lead to blockages in the more peripheral circulation resulting in distal limb ischaemia.
- This may in turn lead to 'gangrene' necessitating limb amputation if left untreated.

Systemic infections

- Non-sterile injecting procedures also heighten the risk of systemic bacterial infections
- Bacteraemia may lead to septic osteomyelitis and arthritis
- Subacute bacterial endocarditis (SBE)
- Septicaemia.

Injecting drug-related injury

- At higher risk of serious injuries from falls, violence, motor vehicle accidents and burns.
- Pressure injuries from lying in the one position for too long as a result of excessive sedation and or overdose.
- This may cause 'compartment syndrome' due to acute fasciitis.
- This may lead to rhabdomyolysis and renal failure, which can be fatal.

Health risks of social disadvantage

- Injecting drug use is often associated with being socioeconomically disadvantaged
- Such disadvantage is associated with a range of morbidities such as scabies, asthma, diabetes, tuberculosis and nutritional deficiencies
- Other co-morbidities include various mental health conditions with borderline personality disorder, serious depression and other psychoses occurring at higher rates in IDU populations

Compounded by there being barriers to accessing appropriate health care

- Despite having a significant range of health issues, vulnerable populations have traditionally had poor access to mainstream health services
- Commonly experience stigmatisation and discrimination when they do access health services
- Many of the health issues are preventable, but require contact, early diagnosis and intervention
- Hence the need for accessible integrated 'targeted' primary health care models

Kirketon Road Centre (KRC)

Established in April 1987 in response to a recommendation of the NSW Select Committee of the Legislative Assembly Upon Prostitution that: "...the NSW Government fund a multi-purpose health centre in the Kings Cross area."

The Committee recognised that existing STD clinics and health care centres were "...not well adapted to the needs of [sex workers] and may in fact be avoided" and suggested that "...these problems could be overcome by establishing a centre with a more flexible outreach and drop-in services that would be fully accessible and acceptable to [sex workers].

This Centre would not be solely identified with an STD clinic, and would instead also offer general health care, counselling and a range of other relevant services." Rogan Report 1986



Service Aim

To prevent, treat and care for HIV/AIDS and other transmissible infections among:

- "at risk" young people
- sex workers &
- people who inject drugs

- 95% AIDS-program funded
- 5% Drug-program funded
- Initial staff profile: 7.0, now approx 40.0 FTE



'Primary health care' philosophy

- » Acceptable
- » Accessible
- » Affordable
- » Equitable

WHO, Alma Ata 1978



Harm reduction approach

- Operating along the 'continuum' from harm reduction to abstinence
- Eclectic and flexible approach
- Non-judgemental, respectful of people's chosen lifestyles, but a strong emphasis on ensuring that these choices are fully informed
- Client-focused
- Committed to principles of health promotion and community development in accordance with the Ottawa Charter.



KRC service model

- Population (v's disease) focused, consistent with public health approach to public health issues
- Holistic, recognising that 'health' encompasses physical, emotional and social wellbeing
- Anonymous and confidential
- Free-of-charge (including pharmacy)
- Drop-in (or appointment) with extended hours
- Provided by a multi-disciplinary team of doctors, nurses, counsellors, outreach workers and health educators with extension of roles



KRC services: 2013

- General medical care;
- HIV, hepatitis A, B, and C testing;
- Hepatitis A and B vaccination;
- Hepatitis C Specialist Clinic (monthly);
- Health Liver Clinics (weekly);
- HIV/AIDS treatment and care;
- STI screening/treatment;
- Sex worker 'check ups';
- Pap smears, contraception, pregnancy testing, advice
- Mental health clinic;
- D&A counselling, assessment and referral;

KRC services cont.

- Methadone Access Program: 'low threshold' with intensive case management approach – has proven acceptable to 'high risk' PWID;
- Client support and activity groups; health promotion and community development activities
- Housing, social security and welfare assistance;
- Needle syringe program; needle clean-up service: 2 primary NSP sites and 9 secondary sites; 7 vending machines, 3 dispensing chutes;



Clinic 180 @ 180 Victoria St Potts Point

- Nurse-led L8 clinics, 1.30 – 9pm Mon – Fri
 - General health assessment, advice and referrals to medical specialist and other relevant services
 - STI testing and treatment
 - HIV and hepatitis testing and vaccination
 - women's health checks including Pap smears and family planning advice
 - first aid and wound dressings
 - social welfare assistance and crisis counselling
 - drug and alcohol assessment, counselling and referral to drug treatment and rehabilitation, and
 - NSP, condoms

Outreach program: a bus (first in the world!) and on-foot, 7 nights a week – including joint outreach with peer organisations e.g. NUAA, Gender Centre and SWOP

- Youth outreach clinics using a clinic van: Wayside, Oasis, Mott, East Sydney High. the Shack - weekly
- Special projects e.g. Aboriginal, drug overdose, POTTI
- Training: NSP & outreach for healthcare workers, as well as sharps management for commercial organisations
- Sentinel surveillance (drug trends and HCV) and public health research enabling an evidence based approach to the evolution of services in a timely way



Wider influence

- Publications including articles in peer-reviewed journals, text book chapters, monographs and commentaries, mostly focused on harm reduction, primary health care model, HCV epidemiology, prevention and treatment, opioid and psycho-stimulant substitution therapy, and HBV vaccination
- KRC staff have been advisors to WHO, AusAID, USAID and other international development organisations re STI/HIV prevention & treatment models among PWID and CSWs in Indonesia, China, the Philippines, Laos, Malaysia, Vietnam, and Central Asia
- KRC has also been represented on UN, national state ministerial and local community committees & NGO boards and management committees

Advantages of the community-based integrated 'one-stop-shop', targeted primary health care model

- Has proven acceptable to vulnerable populations
- Able to comprehensively address complex needs
- Humane and compassionate in approach
- Less vulnerable to service stigmatisation
- Politically robust and versatile
- Readily adaptable to emerging needs (eg. sex workers to drug use issues, methadone, HCV, cocaine, temazepam)
- Professionally challenging and satisfying
- Efficient and effective

Special thanks to:

- The dedicated staff of KRC
- its socially marginalised clients for whom the service was established &
- The SESLHD executive, the Ministry of Health and the NSW Government, which have continued to support KRC over the past 26 years despite this area of work being potentially controversial...

Thank YOU for listening!

