CREIDU

Centre for Research Excellence into Injecting Drug Use

Improving responses to opioid overdose through naloxone

Professor Paul Dietze[*] & Professor Simon Lenton [#]

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Key messages

- **Opioid overdose remains a significant harm in Australia, with around one person dying every day as a result of injecting opioids such as heroin.**
- **Naloxone is a cheap, safe and effective overdose-reversal drug that is used widely in emergency response to overdose.**
- **Naloxone has been distributed to peers and family of people who inject drugs (PWID) in a range of developing and developed countries with research showing that:**
  - **Peers and family members of PWID can be trained to recognise and respond to opioid overdoses effectively; and**
  - **Naloxone can be used by peers and family members to reverse the effects of opioid overdose.**
- **There is evidence to show that areas with naloxone distribution programs in place have lower rates of fatal overdose.**
- **An Australian-first overdose response program involving naloxone distribution commenced in 2012 in the ACT and needs to be replicated in all jurisdictions.**
- **Policy makers need to examine ways in which naloxone can be distributed within their jurisdiction and find ways to remove legislative and practical barriers to the wider distribution of naloxone in Australia.**

What is the issue?

Heroin and other opioid overdose is a major cause of death and disability among people who inject drugs (PWID).[1] Around one Australian dies from such overdoses every day and there are many more non-fatal overdoses; over 100 per month in the Melbourne metropolitan area alone.[2] Naloxone is a safe and effective opioid antagonist drug that has been used in medicine for over 40 years to quickly reverse the effects of opioids.[3]

* Paul Dietze is Head of Alcohol and other Drug Research, Centre for Population Health: Burnet Institute, Melbourne and a CREIDU Chief Investigator.

[#] Simon Lenton is Deputy Director of the National Drug Research Institute: Curtin University Perth, WA.

In Australia naloxone is used in combination with airway management for post-overdose resuscitation by most ambulance services and emergency departments. [4 5]

In the 1990s calls were made to make the drug more widely available so that people who come into contact with people who overdose would be able to respond quickly and effectively.[6 7] These recommendations were made in the context of increasing numbers of heroin deaths and research that showed that responses to heroin overdose (including those by witnesses such as peers) were often inadequate.[8 9]

By the year 2000 a number of naloxone distribution programs had been implemented outside Australia.[10] These programs showed that peers of PWID can:

- Be trained to recognise the signs and symptoms of overdose, and discriminate between overdoses on different types of drugs.
- Be trained to administer naloxone
- Successfully resuscitate people who are experiencing opioid overdose.

Subsequent work with families of PWID has shown similar outcomes.

The impact of naloxone programs however has proven difficult to assess. Ethical and administrative barriers preclude the possibility of controlled trials.[3] However, a decline in the number of overdose deaths in some of the places where programs have been implemented suggest that these programs are having impact.[3 11 12] Recent evidence also suggests that areas with more people trained have reduced overdose deaths compared with areas with fewer people trained.[13] This observational evidence is regarded by most as sufficient to expand the availability of naloxone, especially given that it has been so widely used in clinical practice settings.

The Australian context

The evidence from overseas suggests that wider distribution of naloxone is a feasible and viable option for improving our responses to opioid overdose. A controlled trial, argued for in early 2000, now appears unnecessary as this new evidence has emerged. Instead, an approach to distribute the drug and monitor its impact appears most appropriate.

The Canberra Alliance for Harm Minimisation and Advocacy (CAHMA) has led the push to expand the availability of naloxone in the ACT. The I-ENAACT (Implementing Expanded Naloxone Availability in the ACT) Committee is currently overseeing Australia's first wider distribution program. The program is aimed at providing participants with training in recognising and responding to overdose, as well as providing prescription take-home naloxone to those who complete the training so that it can be used for them by others trained in the administration of the drug. The I-ENAACT Committee is comprised of representatives from the ACT Government, service providers, drug users and NSW and Victorian universities and research institutes. The program targets peers of PWID as well as their family members and is being externally evaluated by researchers from the University of New South Wales, Social Research and Evaluation P/L, the Burnet Institute and the National Drug Research Institute.

What future steps should be taken?

Available evidence suggests that options for naloxone distribution should be explored and implemented in all Australian jurisdictions.

There are, however, programmatic issues that need to be explored further. Priorities include:

The legislative environment: some jurisdictions have clear protection for people responding to medical emergencies that provide indemnity against prosecution – these provisions should be enacted in all jurisdictions.

Naloxone scheduling: Naloxone is available over-the-counter in some countries; options to reschedule need to be pursued in Australia.

Delivery devices: Most naloxone is administered intramuscularly, but there is evidence to suggest that intranasal administration is as effective. Intranasal delivery is easily undertaken and removes the risk of blood borne virus transmission.

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Useful resources

References [14-16] above

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