Addictions specialist Professor John Strang first promoted the idea of ‘take-home’ naloxone — a single injection that could be given by friends and family to revive someone suspected of heroin overdose — in 1996. Since then, researchers at our National Addiction Centre (NAC) have put together a portfolio of evidence showing that 80 per cent of drug overdoses are witnessed, 80 per cent involve heroin or opiates and 80 per cent happen at home.

They found that friends and family members want to learn how to help in an emergency. The NAC team designed and pioneered training for peers, relatives and health professionals about what to do if they encounter an overdose, and how to inject naloxone intramuscularly.

‘Most overdoses occur in the presence of other people, and these are people who show commitment and who could potentially prevent death if only they were properly trained and had access to naloxone,’ says Professor Strang.

Naloxone is a fast-acting heroin overdose antidote used by the medical profession for over 40 years. It restores consciousness and allows crucial extra time in which to seek or dispense medical treatment.

After several pilot schemes led by the NAC, take-home naloxone pilot programmes were launched in Scotland (2010) and Wales (2011) and are both measuring lives saved.

Following this, the NAC team showed that prisoners with a history of heroin use have a staggeringly high risk of dying from overdose in the first few weeks after release from custody.

A study led by Professors Michael Farrell and John Marsden found that one in every 200 released prisoners in England who previously had a heroin habit died within a month of leaving prison.

Professor Strang is now co-leading N-ALIVE, a major randomised controlled trial which has already recruited 1,500 former heroin users as they are released from prisons in England, to assess the number of lives saved when a take-home emergency dose of naloxone is given to prisoners at the end of their sentence.

Naloxone is carried by every ambulance and administered by paramedics for emergency resuscitation when opiate overdose is suspected. Although still a prescription-only medicine, UK law was changed in 2005 to allow naloxone to be given by injection by anyone in order to save someone’s life. In 2012, the UK Government’s Advisory Council on the Misuse of Drugs recommended that naloxone, and associated training, be made more widely available to prevent more than 2,000 fatal opioid overdoses that happen annually in the UK.

In the USA, the Food and Drug Administration and other national agencies are now making naloxone more widely available through take-home schemes. In 2012, the UN’s Commission on Narcotic Drugs passed a resolution encouraging all UN member states to include the provision of take-home naloxone programmes in their national drugs policies.

In November 2014, the World Health Organisation launched new international guidelines, with input from staff at NAC, to stimulate wider international provision. Naloxone is currently only licensed for use as an injection but Professor Strang and colleagues are exploring other possible routes to administer the drug effectively including as a nasal spray and other non-injection routes.

Research led by Professors John Strang, Michael Farrell & John Marsden

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