Reviewing six years of a peer-driven naloxone training program in Western Australia

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Key findings:

- Three quarters or more of the WA IDRS sample were aware of naloxone. The vast majority of these were generally able to describe its function.
- Over 60% of respondents since 2013 were aware that programs to train people in the use of naloxone were available.
- In 2018 over a quarter of all those responding had been through a naloxone training program. Among those whose primary drug of choice was heroin, this figure rose to 36%.
- In 2018, 18% of those responding reported having ever been resuscitated from an overdose with naloxone by someone who had been through these training courses compared with 9% in 2013. Similarly, 12% who had been through the course reported that they had ever resuscitated someone else with naloxone compared with 5% in 2013.
- The maximum number of people respondents had resuscitated with naloxone since completing the course rose from four in 2013 to 20 in 2018.
- In the 2013 survey, 96% of those responding (n=75) indicated that they would either '*strongly support*' or '*support*' a program to expand the availability of naloxone. When naloxone became available without prescription in 2016, 24% of the WA sample said they were aware of this, and this had risen to 40% in 2018 and to 48% among primary heroin users.
- Respondents in 2016 and 2018 were asked how much OTC naloxone should cost. In both years an absolute majority thought it should be free of charge.
- Despite high levels of support expressed for expanding the availability of naloxone, the numbers of the sample making use of this increased availability of OTC naloxone was surprisingly low.
- Regardless of this finding, support for training programs in the use of naloxone, its accessibility and issues surrounding its administration was universally positive among those respondents who had either not completed a training course or had not obtained naloxone as an OTC.

Introduction

Provision of naloxone (Narcan®) has been known for over 40 years as a means of prevention of fatal opiate overdose as it purges opioids from the relevant receptors in the brain. Until recently however, this medication has been available only by prescription. This has rendered it legally difficult to administer to those experiencing overdoses who, by definition, are unable to administer the drug to themselves.

Funded by the Australian Government Department of Health under the Drug and Alcohol Program

In 2012 a take-home naloxone program commenced in the ACT through which naloxone was made available to peers and family members of people who inject drugs for the reversal of opioid overdose as part of a comprehensive overdose response package [1]. This program was shortly followed by similar programs in NSW, VIC, and WA [2]. In early 2016, the Australian Therapeutic Goods Administration (TGA) effectively placed 'naloxone when used for the treatment of opioid overdose' on a dual listing of Schedule 3 and Schedule 4, meaning naloxone can be purchased over-the-counter (OTC) at pharmacies without a prescription [3]. In addition, since 2013 there have been peer-led education programs in how to administer naloxone in the event of an opioid overdose.

In this bulletin we use the Perth IDRS data from 2013 to 2018 to explore evidence of impact of both peer-led naloxone programs since 2013, and the results of increased availability of naloxone OTC through community pharmacies since 2016.

Method

Between 2013 and 2018, 519 respondents who injected illicit drugs on at least a monthly basis were interviewed as part of the Illicit Drug Reporting System (IDRS) in Western Australia. Of these, a total of 447 completed the naloxone section included in the survey. Full details of the methods for the annual interviews are available for download. It should be considered that in viewing trends across years that some individual respondents have repeatedly participated in the survey on an annual basis. For the naloxone module in 2016 and 2018, respondents were shown a flash card bearing a range of suggested prices for OTC naloxone. There were two versions of this flash card that displayed the suggested prices in different orders; one from lowest to highest, and the other from highest to lowest. To control for the potential order effect, respondents were randomised into two separate groups determining which flash card they would be shown.

Results

Across years since 2013, it was apparent that three quarters or more of the WA IDRS sample were aware of naloxone. The vast majority of these were generally able to describe the function of naloxone with responses of "*it reverses the effects of heroin*" or "*to re-establish consciousness*" being most typical. Similarly, between 61% and 73% of respondents since 2013 were aware that programs to train people who inject drugs (PWID) in the use of naloxone in the event of being present at another individual's opiate overdose were available.
From 2013 to 2015 between 15-20% of respondents reported having undertaken a peer-driven course in naloxone provision. After 2016 this figure rose to be consistently just over one quarter of the sample although this may be a function of cumulative numbers having completed the training since it commenced in 2013 or of increased discussion on naloxone in the media and the community.

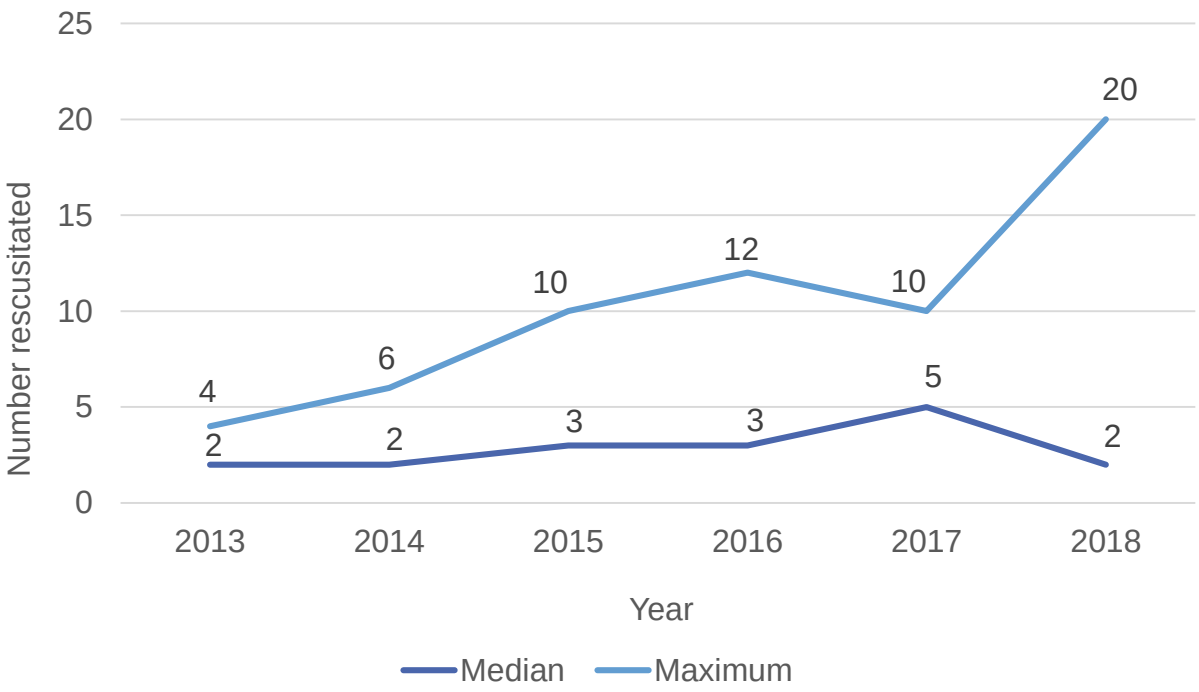
The percentage of respondents reporting having ever been resuscitated with naloxone by a person who had been through the training course remained relatively stable from 2013-1016, but following an unexplained fall to 3% in 2017 rose steeply to 18% in 2018.
Those respondents who had completed a naloxone training course were asked if they had ever used naloxone to resuscitate another person. The percent who reported having done so remained relatively low from 2013-2015 but peaked to 17% in 2016 and dropped to 7% in 2017 and increased to12% in 2018. Once again the reason for decline in numbers reporting this in 2017 is unclear. These data are displayed in Table 1 below. It should be noted that in general, these figures increased when only respondents whose primary drug of choice was heroin were included in the analysis.

Table 1: Awareness of naloxone and training programs in its administration, WA IDRS sample 2013-2018

	2013	2014	2015	2016	2017	2018
Have heard of naloxone						
All respondents	91%	85%	92%	91%	75%	83%
Preferred drug is heroin	98%	97%	98%	100%	95%	100%
Have heard of training programs						
All respondents	62%	62%	70%	73%	61%	69%
Preferred drug is heroin	79%	69%	79%	85%	84%	88%
Have ever done a training program						
All respondents	20%	15%	15%	26%	26%	26%
Preferred drug is heroin	26%	21%	19%	39%	23%	38%
Have been resuscitated with naloxone						
All respondents	9%	11%	8%	10%	3%	18%
Preferred drug is heroin	15%	10%	13%	13%	3%	22%
Have resuscitated someone with naloxone						
All respondents	5%	7%	5%	17%	7%	12%
Preferred drug is heroin	8%	11%	9%	26%	7%	19%

Those who had used naloxone following the training program to attempt to resuscitate someone who had experienced an opioid overdose were asked how many people they had resuscitated. The median number ranged from two in 2013 to five in 2017. The maximum number of people resuscitated generally trended upwards peaking at 20 in 2018 although this may be a function of the cumulative number of people trained. This data is displayed in Figure 1.

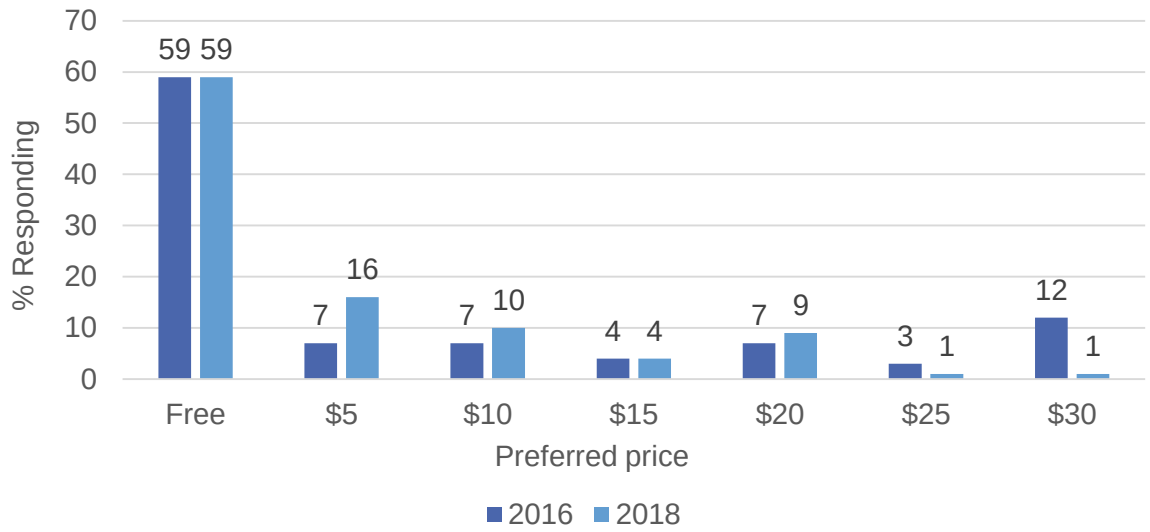
Figure 1: Self-reported number of people resuscitated with naloxone by respondents after training, WA IDRS sample 2013-2018



In the 2013 survey, 96% of those responding (n=75) indicated that they would either '*strongly support*' or '*support*' a program to expand the availability of naloxone. In Western Australia, this occurred in 2016 when the TGA changed scheduling of naloxone to make it available without prescription. Of those responding in 2016, 24% were aware that naloxone had been rescheduled, rising to 40% in 2018 and to 48% among respondents whose primary drug was heroin.

In the 2016 and 2018 surveys, respondents were shown flash cards displaying a range of suggested prices for OTC naloxone. These prices ranged from 'free' up to $30. In both years an absolute majority of respondents (59% in both 2016 in 2018) believed that OTC naloxone should be available free of charge.

Figure 2: Respondents perceptions of what naloxone should cost, WA IDRS 2016 and 2018



Respondents were asked about their experiences of OTC naloxone, specifically whether they had been resuscitated by someone using OTC naloxone, if they had tried to access it from a pharmacy without a prescription and if they had personally used OTC naloxone to resuscitate someone else. Generally speaking these figures increased slightly if only primary users of heroin were included in the analysis. Despite the widespread support for improved access to naloxone found in the 2013 sample however, after three years operation in Western Australia, uptake of OTC naloxone from pharmacies appears to remain low. This data is displayed in Table 2.

Table 2: Respondents' experiences of OTC naloxone, WA IDRS sample 2016-2018

	2016	2017	2018
Have been resuscitated with OTC naloxone			
All respondents	6%	12%	8%
Preferred drug is heroin	7%	13%	6%
Have accessed OTC naloxone without a prescription			
All respondents	3%	6%	1%
Preferred drug is heroin	4%	7%	2%
Have resuscitated someone with OTC naloxone			
All respondents	0%	0%	1%
Preferred drug is heroin	0%	0%	2%

In the light of these findings it is notable that the only respondent who had used OTC naloxone obtained from a pharmacy to resuscitate others reported that they had resuscitated 12 people while there were more respondents (n=12) who had obtained naloxone through a course but these tended to have resuscitated fewer people. This data is displayed in Figure 3.

Table 2: Respondents' experiences of OTC naloxone, WA IDRS sample 2016-2018

	2013	2014	2015	2016	2017	2018
Would participate in a naloxone training program						
All respondents	N/A	71%	66%	N/A	N/A	N/A
Preferred drug is heroin	N/A	69%	71%	N/A	N/A	N/A
Would purchase OTC naloxone from a pharmacy						
All respondents	N/A	N/A	N/A	74%	57%	68%
Preferred drug is heroin	N/A	N/A	N/A	78%	67%	82%
Would carry naloxone on your person if trained in its use						
All respondents	61%	83%	85%	61%	67%	44%
Preferred drug is heroin	67%	84%	93%	68%	70%	55%
Would administer naloxone in case of overdose						
All respondents	92%	100%	100%	97%	97%	67%
Preferred drug is heroin	100%	100%	100%	100%	96%	82%
Would want to be given naloxone if you overdosed						
All respondents	83%	94%	90%	N/A	N/A	N/A
Preferred drug is heroin	93%	91%	85%	N/A	N/A	N/A
Would stay with someone after giving them naloxone						
All respondents	98%	100%	100%	95%	100%	66%
Preferred drug is heroin	100%	100%	100%	100%	100%	80%

NA – Not asked

Discussion

In this bulletin we have looked at data collected from 447 respondents from the Western Australian Illicit Drug Reporting System from 2013 to 2018 concerning attitudes and experiences towards the use and availability of naloxone, an antagonist drug used to assist resuscitation of people who have had an opioid overdose.

Questions were asked concerning awareness of naloxone, awareness of and participation in training programs for its use, and experiences of having either been resuscitated with naloxone or having used it to resuscitate others. In the majority of these, levels of awareness, experience, and positive attitudes towards issues associated with naloxone were found to be higher when only respondents who identified heroin as their main drug of choice were included in the analysis. This is an important but not surprising finding since these are the respondents to whom a drug intended to resuscitate opiate overdose would have most salience. Although there were a small number of instances where this effect was not observed, this is likely the result of respondents whose drug of choice were substances other than heroin but nevertheless use opioids having been excluded from the analysis.

Regardless of their primary drug of choice, awareness of naloxone, its function, and awareness that training programs in its administration were available was found among an absolute majority of respondents. These findings were broadly compatible with those of an earlier study examining national IDRS data from 2013-2015 [4]. It should be considered however that this finding has likely been affected by the fact that the majority of respondents were recruited from organisations running these training programs and may not be reflective of the wider environment of people who inject drugs in Perth.
Having participated in these training programs in the use of naloxone was found to be widespread, especially among those respondents whose principle drug of choice was heroin with 39% having participated in 2016 and 38% in 2018. With regards to the entire sample across years, rates of participation in the training ranged between 15% and 26%. It is also notable that across years, between 36% and 67% of respondents whose principle drug of choice was heroin reported having ever resuscitated someone with naloxone.

With regards to respondents who had used take home naloxone from a training course, there were considerably more of these than had purchased naloxone from a pharmacy, but they tended to have resuscitated relatively small numbers of people. There was however one who reported having resuscitated 20. This lends support to the idea that there may be a very small number of people who use naloxone on others to treat opiate overdose on a frequent basis. This may possibly be because they are present at a large amount of overdose events or that they are regularly

called upon by peers in the event of an overdose These people may be important partners for public health and harm reduction efforts aimed at reducing opioid overdose morbidity and mortality in their communities.

After 2016 respondents were asked if they were aware that naloxone had been rescheduled by the Therapeutic Goods Administration and was now available at pharmacies without a prescription. By 2018 40% of respondents indicated that they were aware of this rising to 48% of respondents whose primary drug of choice was heroin, suggesting that the importance of this intervention was widely recognised among its target audience. Although there was widespread support for the improved access to naloxone, there was surprisingly little uptake of actually obtaining naloxone from a pharmacy with just 1% of respondents and 2% of respondents whose drug of choice was heroin reporting having ever done so. One possible reason for this may be associated with price with 59% of the 2016 and 2018 samples stating that OTC naloxone should be available for free, which sits at odds where obtaining it from pharmacies currently costs the full price of $34 as of April 1 2019. Another possibility for this possible reluctance may be found in additional data collected in the 2013 IDRS survey concerning respondents' experiences of discrimination due to being perceived as a user of illicit drugs.

This data revealed that the most commonly identified location where such discrimination tended to occur was pharmacies. In considering this, it is notable that only one respondent in the 2018 sample reported having resuscitated people using naloxone obtained from a pharmacy, although they stated they had resuscitated 12 people.

References

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Acknowledgements:

The following researchers and research institutions contribute to EDRS:

- Dr Rachel Sutherland, Ms Antonia Karlsson, Ms Julia Uporova, Ms Daisy Gibbs, Ms Georgia Kelly, Professor Louisa Degenhardt, Professor Michael Farrell, and Dr Amy Peacock, National Drug and Alcohol Research Centre, University of New South Wales;
- Ms Amy Kirwan, Ms Cristal Hall and Professor Paul Dietze, Burnet Institute Victoria;
- Ms Callula Sharman and Associate Professor Raimondo Bruno, School of Medicine, University of Tasmania;
- Ms Jodie Grigg and Professor Simon Lenton, National Drug Research Institute, Curtin University, Western Australia;
- Dr Caroline Salom, Institute for Social Science Research, The University of Queensland.
- We would also like to thank past and present members of the research team.

Other acknowledgements

- The people who inject drugs who participated in the 2018 IDRS survey.
- The agencies that assisted with recruitment and interviewing.

Suggested citation

Featherston, J., Grigg, J., & Lenton, S. (2019). Reviewing six years of peer-driven naloxone training program in Western Australia. Drug Trends Bulletin Series. Sydney: National Drug and Alcohol Research Centre, UNSW Sydney