



Short communication

Engagement in a National Naloxone Programme among people who inject drugs



Andrew McAuley^{a,b,*}, Alison Munro^c, Sheila M. Bird^{d,e}, Sharon J. Hutchinson^{a,b},
David J. Goldberg^{a,b}, Avril Taylor^c

^a Health Protection Scotland, Meridian Court, Cadogan Street, Glasgow G2 6QE, UK

^b Institute for Applied Health Research, School of Health and Life Sciences, Glasgow Caledonian University, Glasgow G4 0BA, UK

^c School of Media, Culture and Society, University of the West of Scotland, Paisley PA1 2BE, UK

^d MRC Biostatistics Unit, Cambridge CB2 0SR, UK

^e Department of Mathematics and Statistics, Strathclyde University, Glasgow G1 1XH, UK

ARTICLE INFO

Article history:

Received 23 December 2015

Received in revised form 19 February 2016

Accepted 20 February 2016

Available online 3 March 2016

Keywords:

Opioid
Overdose
Naloxone
Injecting
PWID
Prison

ABSTRACT

Background: Availability of the opioid antagonist naloxone for lay administration has grown substantially since first proposed in 1996. Gaps remain, though, in our understanding of how people who inject drugs (PWID) engage with naloxone programmes over time.

Aims: This paper aimed to address three specific evidence gaps: the extent of naloxone supply to PWID; supply-source (community or prisons); and the carriage of naloxone among PWID.

Materials and methods: Analysis of Scotland's Needle Exchange Surveillance Initiative (NESI) responses in 2011–2012 and 2013–2014 was undertaken with a specific focus on the extent of Scotland's naloxone supply to PWID; including by source (community or prisons); and on the carriage of naloxone. Differences in responses between the two surveys were measured using Chi-square tests together with 95% confidence intervals for rate-differences over time.

Results: The proportion of NESI participants who reported that they had been prescribed naloxone within the last year increased significantly from 8% (175/2146; 95% CI: 7–9%) in 2011–2012 to 32% (745/2331; 95% CI: 30% to 34%) in 2013–2014. In contrast, the proportion of NESI participants who carried naloxone with them on the day they were interviewed decreased significantly from 16% (27/169; 95% CI: 10% to 22%) in 2011–2012 to 5% (39/741; 95% CI: 4% to 7%) in 2013–2014.

Conclusions: The supply of naloxone to PWID has increased significantly since the introduction of a National Naloxone Programme in Scotland in January 2011. In contrast, naloxone carriage is low and decreased between the two NESI surveys; this area requires further investigation.

© 2016 Elsevier Ireland Ltd. All rights reserved.

1. Introduction

Mortality rates among people who inject drugs (PWID) are much higher than in the general population (Mathers et al., 2013). Overdose is a major cause of premature death among PWID, opioid users in particular (Darke et al., 2006).

Since first conceptualised by Strang et al. (1996), distribution of the opioid antagonist naloxone for lay administration (henceforth referred to as 'take-home naloxone'; THN) has developed into one of the main drug-related death (DRD) prevention strategies. In 2014, the World Health Organisation published guidelines

recommending expansion of naloxone access to people likely to witness an overdose in their community and it is now supplied for lay administration to opioid users and their family/friends in an increasing number of countries (European Monitoring Centre for Drugs and Drug Addiction, 2015; World Health Organisation, 2014). In the United States alone, over 26,000 peer-administered naloxone reversals are estimated to have been achieved between 1996 and 2014 (Centers for Disease Control and Prevention, 2015). Although increasingly adopted internationally, the evidence base for THN's effectiveness is still in its infancy; see for example (Walley et al., 2013) and (Coffin and Sullivan, 2013) on the likely effectiveness and cost-effectiveness of THN in reducing DRDs.

DRD rates in Scotland are higher than anywhere else in the UK and amongst the highest in Europe (English et al., 2012) averaging 500 annually, 400 of which are opioid-related (National Records

* Corresponding author.

E-mail address: andrew.mcauley@nhs.net (A. McAuley).

of Scotland, 2014). In 2011, Scotland became the first country in the world to implement a National Naloxone Programme (McAuley et al., 2012; Bird et al., 2014,2015). Take-home naloxone is available to any individual at risk of opioid overdose and is supplied following successful completion of a brief 10–15 min training session incorporating basic life support and naloxone administration. Training and supply of naloxone to individuals in Scotland takes place in a range of community settings (including pharmacy) and across the entire prison estate. The latter group holds particular significance given the elevated risk of DRD in the weeks following liberation from prison (Merrall et al., 2010).

Key gaps exist in understanding how naloxone is experienced by service providers and service users, including how PWIDs engage with naloxone programmes over time. Such knowledge is vital to understanding the uptake of THN by recent injectors and hence its effectiveness at a national level in reaching those most at risk of opioid overdose, PWID in particular. For THN to be effective, it has to be available at the time of the overdose event, whether in a domestic or public setting. Thus, knowledge of naloxone ‘carriage’ provides important insight to how naloxone is managed by individuals day to day and potentially serves as an estimate of the likelihood of naloxone availability during an overdose emergency. Scotland’s National Naloxone Programme affords a unique opportunity to address these and other important questions related to the population level impact of this innovative public health policy.

Using data from approximately 5000 PWID who took part in nation-wide surveys in 2011–2012 and 2013–2014, we address three specific evidence gaps: the extent of Scotland’s naloxone supply to PWID; supply-source (community or prisons); and the carriage of naloxone.

2. Material and methods

2.1. Setting

Scotland has approximately 60,000 problem drug users (Information Services Division Scotland, 2014), at least 20,000 of whom are in receipt of opioid-substitution therapy (OST) (Scottish Prison Service, 2014). Hay et al. (2009) estimated there to be 20,000 PWID in Scotland, Overstall et al. (2014) reported a somewhat lower figure (15,000). Among those entering prison in Scotland, a third test positive for opiates at reception (Scottish Prison Service, 2014).



Fig. 1. Take-home naloxone kit supplied through the national programme in Scotland.

2.2. Data collection

The Needle Exchange Surveillance Initiative (NESI) is conducted biennially and aims to measure and monitor the prevalence of the Hepatitis C virus (HCV) and injecting risk behaviours among people who inject drugs (PWID) in Scotland (University of the West of Scotland et al., 2015). Within each survey, NESI recruits [on average] a demographically-representative sample of between 2000–3000 PWID from across Scotland, and over 90% report heroin as the drug injected most often within the past 6 months. Approximately half (51%) of potentially eligible clients that were approached agreed to participate, however a true refusal rate is difficult to calculate as individuals may not engage one day but participate the next.

Of those who did agree to participate in NESI, approximately 80% are ‘recent’ injectors (defined as having injected at least once in the previous 6-months) and 20% are ‘ever’ injectors (injected in the past but not in the previous 6-months). Trained interviewers recruit participants from selected agencies and pharmacies across Scotland that primarily provide injecting equipment but may also offer other harm reduction services, such as OST. Questions related to naloxone supply and carriage were first asked in the survey in 2011–2012 to complement the formal implementation of the Scottish National Naloxone Programme in January 2011. We use data from two NESI surveys; one undertaken between April, 2011 and January, 2012 and the other between February 2013 and February 2014. Participation in NESI is voluntary, consented and anonymous. Full details on methods used in NESI are available in detail elsewhere (University of the West of Scotland et al., 2015; Aspinall et al., 2012). Ethical approval for NESI was obtained from the West of Scotland Research Ethics Committee.

2.3. Analysis

Prior to analysis, within-survey duplicate respondents (i.e. individuals who participated more than once in a survey year) were identified and excluded. Although NESI is an anonymous survey, it does collect details on date of birth, gender, initials and locality where recruited, therefore duplicates can be identified for exclusion based on these data.

The outcomes – naloxone supply and carriage – were measured via self report answers to the following questions:

- Have you been prescribed THN in the past year?
- Where did you obtain your supply of naloxone (community or prison)?
- Are you carrying any THN with you today?

Analysis was undertaken to determine changes in naloxone supply and carriage over time, both overall and by sub-group (i.e. gender, age-group, homelessness, injector status, and injecting frequency). Differences in responses between the two data surveys were measured using Chi-square tests together with 95% confidence intervals for rate-differences over time. All analyses were undertaken in IBM SPSS Statistics 21.0.

3. Results

Overall, the proportion of NESI participants who reported that they had been prescribed THN within the last year increased significantly from 8% (175/2146; 95% CI: 7% to 9%) in 2011–2012 to 32% (745/2331; 95% CI: 30% to 34%) in 2013–2014 (Table 1). Significant increases in naloxone supply were evident across all sub-groups analysed, that is: by gender, age-group, homelessness, and by injecting status and frequency. By 2013–2014, per sub-group, the higher proportions of naloxone supply in the past year

Download English Version:

<https://daneshyari.com/en/article/7504047>

Download Persian Version:

<https://daneshyari.com/article/7504047>

[Daneshyari.com](https://daneshyari.com)