Addressing perceptions of opiate-using prisoners to take-home naloxone: findings from one English region

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Abstract

Purpose – *The purpose of this paper is to understand prisoner perceptions on being trained and having received take-home naloxone (THN) kits once released from prison back into the community, in order to prevent an opiate-related overdose.*

Design/methodology/approach – *A survey was run of all prisoners receiving THN training across ten prisons in one English region. In total, 142 prisoners were surveyed out of 206 (69 per cent) being trained in THN across the ten prisons. Five focus groups (n = 26) with prisoners were conducted across four remand and one open prison that included discussions on THN within a range of topics. Discussions were recorded using short-hand and the data were subsequently thematically interpreted using visual mapping techniques.*

Findings – *The survey highlighted a high degree of exposure amongst prisoners to overdose either directly (54 per cent) or having witnessed another person's overdose (73 per cent). For prisoners who had overdosed, only a minority (38 per cent) were taken to hospital by an ambulance. In total, 81 per cent of prisoners surveyed also expressed little or no knowledge about THN prior to training. Prisoners were resistant to THN as an intervention resulting from this lack of prior knowledge. Focus group interviews suggested that there was a confused and mixed message in providing a harm reduction initiative within the context of recovery-orientated treatment. Prisoners also exhibited name confusion with other drugs (naltrexone) and there was some degree of resistance to being trained based on perceived side-effects brought on by its administration. Prisoners were also acutely aware of official agency perceptions (e.g. police) if seen to be in possession of THN kits.*

Practical implications – *The distribution of THN within a custodial setting requires consideration of wider marketing approaches to address levels of confusion and misapprehension amongst prisoners.*

Originality/value – *The study is one of the few focused on THN based on a UK prison environment.*

Keywords *Prison, Interventions, Overdose, Addiction, Drug misuse, Naloxone*

Paper type *Research paper*

1. Introduction

The "Through-the-Gate" initiative is a tailored series of interventions that includes services for substance misusers across England that forms part of the Government's Transforming Rehabilitation policy. The aim of this approach is to provide an end-to-end series of interventions aimed at early identification of offenders with substance misuse issues arriving in the prison, the rapid access to specialist drug and alcohol treatment interventions, and crucially, an enhanced level of continuity of care through the gate back into the community, to support the goals of abstinence and sustained recovery. Within this context, this study explores prisoner perceptions of receiving training and use in the community of Prenoxad

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Injection (hereafter known as take-home naloxone (THN)), which acts as an opioid antagonist to prevent an opiate-related overdose.

Little is known about prisoner perceptions of THN as the literature thus far has focused on community provision within the context of a relatively weak and limited evidence-base (Strang *et al.*, 2013; Bennett and Holloway, 2012). The evidence has been largely reliant on testing whether the knowledge imparted during a THN training session has been maintained at subsequent points in time thereafter (usually short-term from three to six months later). Overwhelmingly, the literature suggests that service users (usually opiate injectors) are better informed and more knowledgeable about the risks of overdose following THN training sessions (Banjo *et al.*, 2014; Clark *et al.*, 2014; Bennett and Holloway, 2012; Gaston *et al.*, 2009; Worthington *et al.*, 2006; Seal *et al.*, 2005), although commenters have highlighted issues with the methodological robustness of these studies (e.g. Clark *et al.*, 2014).

One main concern within the literature is the perception that provision of THN may actually encourage drug use and therefore exacerbate the risk of overdose as part of a wider "safety valve" hypothesis (Bazazi *et al.*, 2010). In one US study by Seal *et al.* (2005), just over one-third of the interviewees (35 per cent) stated that they would "feel comfortable" using more heroin whilst having THN in their possession. Despite these stated concerns, there are relatively limited data supporting this hypothesis (Banjo *et al.*, 2014). Other concerns have revolved around how easily a user can administer an injection whilst being intoxicated (Worthington *et al.*, 2006) and the adverse side-effects following the administration (Neale and Strang, 2015; Worthington *et al.*, 2006). Other concerns across both USA and UK literature focus on the perceived negative consequences, especially from the police service, of having THN kits in possession. Gaston *et al.* (2009) linked the consequences of holding kits with the service user's negative perception of being viewed as an "active user" of drugs whilst in treatment or recovery. This study presents the perceptions of opiate-using prisoners concerning the implementation of THN across ten prisons in one English region.

2. Methods

Prisoners received training in THN in all ten establishments in the region. The prisons in the region included one Category A high-security prison; four remand or local Category B prisons; two Category C or trainer prisons; two "open" or Category D prisons, and one female establishment. In total, 206 prisoners received training in the use of THN. The numbers remained relatively small compared to the number of eligible opiate users due to a range of operational factors, which were being addressed at the time of the study. The training delivered by the pharmaceutical company (Martindale Pharma) comprised overdose awareness and information, knowledge of the recovery position, and demonstrations of delivering naloxone to someone who has overdosed. The survey was completed by 142 prisoners (69 per cent of the total number of prisoners trained) following a training event. The survey was comprised of basic demographic information on each prisoner, details on any previous overdose experiences of either themselves or another person, perceptions of risk post-release, comments about the training, and future plans to store the naloxone kits.

To supplement the survey, five focus groups with 26 prisoners were also run across four of the ten prisons. Four were facilitated by the research team and one initial group run by a NHS Strategic lead in conjunction with a representative from the Pharmaceutical company. The prisons were purposively chosen to focus on remand or all the regional Category B prisons (including the one female prison) and one "open" Category D prison. The choice of prisons was based on discussions with regional and prison stakeholders who suggested that prisoners likely to move back into the community in the near future should be prioritised. Prisoners were recruited by the prison substance misuse teams to discuss a range of issues with the Through-the-Gate initiative, including perceptions around THN. The criterion for interviewing prisoners included either having used opiates at some point in the past or receiving ongoing treatment (either psychosocial or clinical) whilst in the prison. The majority of prisoners either had not been trained or were about to receive training prior to running the focus groups. The focus group discussions were guided by a semi-structured interview schedule that focused on two core topics including

prisoners' perceptions of naloxone as an intervention alongside a discussion of the potential barriers to use of THN in the community. Discussions were manually recorded as electronic recording equipment was prohibited in each prison and the main themes were thematically mapped using visual mind-mapping techniques (Langfield-Smith and Wirth, 1992; Huff and Schwenk, 1990). The approach utilised key stages as advocated in the literature (cf. Pope *et al.*, 2000) to gain a better understanding of the themes discussed through detailed reading of interview notes or transcripts and recording emerging thoughts and recurrent themes. The process then developed a thematic framework through use of visual cues to define any emerging issues. All quotes were recorded using short-hand by the research team.

3. Findings

3.1 Prisoner perception survey

The prisoners surveyed were mainly male (90 per cent, $n = 128$) with a mean age of 36.1 years (20-56 range). Over half (54 per cent, $n = 77$) of the prisoners surveyed had experienced an opiate-related overdose at some point with 36 per cent ($n = 51$) admitting an overdose more than one year ago. Over three-quarters (79 per cent, $n = 59$) of all prisoners who had ever overdosed, stated that they had done so in the company of other users with 16 per cent ($n = 12$) overdosing on their own. Only 38 per cent ($n = 29$) of the prisoners surveyed, who had ever overdosed, were taken to hospital by ambulance with another 6 per cent ($n = 5$) taken by police or someone they knew. Few prisoners admitted receiving basic first aid (9 per cent, $n = 7$) or being put into a recovery position (18 per cent, $n = 14$). One-quarter (25 per cent, $n = 19$) came around on their own following an overdose event. In addition, 73 per cent of prisoners surveyed admitted witnessing or being in the company of another individual who had overdosed. 42 per cent ($n = 44$) of these individuals were taken to hospital by an ambulance with less than half (45 per cent, $n = 47$) put into the recovery position or given basic first aid (36 per cent, $n = 35$). Seven per cent ($n = 7$) stated that the person they witnessed having an overdose subsequently died (Table I).

The survey also asked a series of questions focusing on the quality of training and wider perceptions of future use or need. The majority of prisoners (81 per cent, $n = 115$) stated that they had no or limited knowledge of THN prior to the training event with only two prisoners (1 per cent) stating that they had actually used naloxone before. Following the training, prisoners rated their confidence in using THN as very high (8.5 out of 10), but were keen on further training to supplement this knowledge (77 per cent of prisoners stated a desire for a refresher course post-release). Prisoners were asked about where they planned to store the THN kits once in the community and just under two-thirds (65 per cent, $n = 92$) stated they planned to keep it with them at all times. In addition, the survey probed prisoners' perceptions as to their potential risk of an overdose post-release. Over two-thirds (68 per cent, $n = 97$) of the prisoners surveyed stated that friends and family were worried about the potential of having an overdose. In comparison, prisoners were moderately concerned about their own level of overdose risk post-release – recording an average risk level of 4.2 out of 10. These findings point towards a clear need for developing a post-release strategy for raising prisoner's awareness of overdose prevention (Table II).

3.2 Prisoner focus groups

Four themes emerged from the prisoner focus groups. The first focused on the potential mixed messages of placing a harm reduction initiative within the context of an abstinence-focused and recovery-orientated treatment system:

> I'm clean now with no intention of using, so why do I need this?
>
> I've finally got myself to a place where I am now longer using and don't now even want to use, which is a big thing for me. This [THN] […] takes me back to a place where I don't want to be (Male Remand prisoners).

Table I Prisoner survey responses

Survey question	*Number*	*(%)*
Gender		
Male	128	90
Female	14	10
Age		
Average (mean)	36.1 years	20-56 range
Have you ever experienced an opiate-related overdose?		
Yes[a]	77	54
How long ago did you experience your last overdose?		
Less than one year ago	25	18
More than one year ago	51	36
Who were you with when you overdosed last? (n = 2 missing)		
Other users	59	79
On my own	12	16
Non-substance misusers	4	5
What happened when you overdosed last?[b]		
Taken by ambulance to hospital	29	38
Given basic first aid or life support	7	9
Come around on my own	19	25
I was put in the recovery position	14	18
Taken to hospital by someone I knew or by police	5	6
Other	3	4
Have you ever witnessed someone else experience an overdose?		
Yes	104	73
What happened when you witnessed someone else overdose?[b]		
They were taken by ambulance to hospital	44	42
They were given basic first aid or life support	35	36
They came around on their own	9	9
They were put in the recovery position	47	45
Taken to hospital by someone they knew or by police	12	12
The person died	7	7

Notes: $n = 142$. [a]Includes three responses who were "not sure" but whose subsequent answers suggested that they had in fact overdosed; [b]more than one response was allowed; therefore, the total will add to more than 100 per cent

The lack of knowledge of THN was reflected in a number of discussions with prisoners. Some prisoners confused naloxone with naltrexone (an opioid antagonist used for users in long-term recovery or treatment). A number of prisoners also highlighted a perception that focused on the negative side-effects of using THN such as "[…] being put into an instant rattle". Despite having admitted to limited or no knowledge of naloxone, the "instant rattle" was widely acknowledged as an issue and when probed, prisoners stated that this information had been derived from word-of-mouth conversations with other prisoners:

> Some guys have said that it [naloxone] is a really big come down, worse than anything else (Male Remand prisoner).

Despite this perception, prisoners were asked as to whether the threat of an *"instant rattle"* would prevent use in the event of an overdose. Prisoners suggested that they would use naloxone in an emergency, but it would be dependent on access to the kits:

> If you got to use it, you will, end of story. It's really dependent on whether you have it there to use in the first place (Male Remand prisoner).

Table II Prisoner survey perceptions

Survey question	*Number*	*(%)*
Do your friends and family worry about you having an overdose?		
Yes	97	68
What do you feel your level of risk of overdose is on release?		
Average (mean) between 0-10	4.2	0-10 range
Prior to this training, what was your experience and knowledge of naloxone		
None or limited knowledge	115	81
Used naloxone before	2	1
Have been trained in the use of naloxone	8	6
Since receiving naloxone training, how confident do you think you would be in responding to an opiate-related overdose?		
Average (mean) between 0-10	8.5	0-10 range
Since receiving naloxone training, how important do you feel naloxone training is in responding to an opiate-related overdose?		
Average (mean) between 0-10	9.3	2-10 range
How important would further naloxone training be?		
Average (mean) between 0-10	7.7	0-10 range
Where do you plan to store the first naloxone kit?		
Carry it around with me	92	65
Keep it at home	25	18
Other place or person	6	4
Where do you plan to store the second naloxone kit?		
Carry it around with me	14	10
Keep it at home	64	45
With a family member or friend	12	8
Other	4	3

Note: $n = 142$.

The focus groups attempted to discern whether having access to the kits would encourage use (e.g. once released and back in the community). Some stated that once they had been trained, they may not keep the kits for themselves but pass the kits onto other users or friends in treatment, whilst others described the importance of having access to THN in the event of friends or acquaintances using ("it's important to know it's there"). Overwhelmingly, prisoners stated that the kits would only influence users who had not been trained ("in the wrong hands"). For those that had been trained, THN was seen as not encouraging future use; rather the opposite seemed to be the prevailing opinion:

> I can see […] If you have it [THN kits] there and you know it's there and you can see it, I think I would be less likely to use because you begin to think about what can happen.

> It [THN kits] will be a nice little reminder of the bad old days (Male Remand prisoners).

The final theme identified through the focus groups confirmed previous research (e.g. Gaston *et al.*, 2009) concerning the role of official agencies and the potential negative responses from police and ambulance forces. A number of prisoners were concerned over the consequences of being breached for having THN kits in their possession:

> Where I live, the police know me and let's say they stop me and find me with stuff that looks like I'm going to use. I will be breach[ed] and they will sling me back here (prison).

> This will be inviting trouble if I have this on me. I just can't be seen with this on me (Female and Male Remand prisoners).

The perception also included ambulance and other hospital services. A number of prisoners stated an opinion that ambulance staff would be likely to inform the police if they found a known-drug user in possession of injecting equipment:

> Saw one before [overdose], the ambulance arrived with the police in tow. They talk to each other you know (Male Remand prisoner).

4. Discussion

The majority of research on THN has emphasised the importance of individuals trained being able to retain key components of the training at future points in time. Few studies have examined the perceptions of opiate users in prison. The survey and focus group discussions with prisoners have suggested that despite a high degree of exposure to overdose either directly or indirectly (e.g. as a witness), the views surrounding THN are nuanced and potentially confused. Despite this personal exposure, the survey of prisoners trained on THN highlighted a lack of knowledge and awareness around the subject. This study has suggested that this lack of knowledge can translate to a number of negative perceptions and misconceptions around the use of THN in the community, and for many prisoners, these issues are particularly sensitive given their legal status as prisoners. This may have several knock-on effects when trying to implement a programme within a custodial setting. For prisoners interviewed, there was a degree of resistance to being involved in the THN training and receiving potentially life-saving equipment.

For some prisoners, there was a degree of confusion about THN that included name recognition issues – confusing naloxone with naltrexone for instance. A key finding from this study was the role of prisoner word-of-mouth in forming personal perceptions in the absence of any other information sources prior to training. A number of prisoners interviewed highlighted the perception that use of THN would lead to an "instant rattle" effect – in other words, going into immediate withdrawal from use of naloxone. Yet, despite this, many prisoners interviewed viewed having the naloxone kits potentially as a good thing: for example, acting as reminders or visual cues to the potential harm and severe consequence caused by using opiates.

For prisoners in the focus group, there was an awareness that the goals of substance misuse treatment inside a prison emphasise recovery and abstinence as the primary objectives, but for some interviewed, this sat uncomfortably with the harm reduction approach being simultaneously offered. A similar finding was identified in a study across two UK cities (Gaston *et al.*, 2009) identifying the "conflict" or perceived stigma of being seen to be in recovery and the perception of being an "active user". It is argued that this tension is especially acute for prisoners who will be aware that being seen as an "active user" may result in further criminal justice sanctions such as breaching the conditions of their release. The role of official agencies, including the police and ambulance services, were seen to be key as many interviewees highlighted concern that having THN kits in their possession would automatically lead to sanctions once released back in the community. For some, there was a wholly negative perception that ambulance services and police were able to exchange information about an individual's drug-using behaviours.

Therefore, the implementation of prisoner-based THN programmes are unlikely to ensure levels of compliance required for a wider effect without a high degree of prior "marketing" by prison healthcare and substance misuse teams. Implementation of THN programmes within a custodial setting will need to consider addressing the issues of mixed messages, drug name recognition issues, and misapprehension underpinning naloxone as a bespoke intervention. Innovative ideas advocated in other studies such as use of "buddies" (e.g. Gaston *et al.*, 2009), may have a natural home in a prison environment where engagement of specially trained peer mentors may help address such issues. Wider engagement with other official agencies including the police and ambulance services is also required to ensure the messages underpinning THN are consistently applied to prisoners once back in the community.

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Further reading

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