

Short report

## Public injecting and willingness to use a drug consumption room among needle exchange programme attendees in the UK

Neil Hunt<sup>a,b,\*</sup>, Charlie Lloyd<sup>c</sup>, Jo Kimber<sup>a</sup>, Charlotte Tompkins<sup>d</sup>

<sup>a</sup> Centre for Research on Drugs and Health Behaviour, London School of Hygiene and Tropical Medicine, United Kingdom

<sup>b</sup> KCA, United Kingdom

<sup>c</sup> Joseph Rowntree Foundation, United Kingdom

<sup>d</sup> Leeds West Primary Care Trust, United Kingdom

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### Abstract

This study examines the prevalence of public injecting and willingness to use drug consumption rooms (DCRs) among UK needle exchange programme (NEP) attendees. Three hundred and one injecting drug users (IDUs) were surveyed using a brief questionnaire across five NEPs in London and Leeds between April and June 2005. Injection in a public place in the past week was reported by 55% of the sample and 84% reported willingness to use a DCR if it was available. Public injecting was positively associated with insecure housing (AOR = 2.1, CI 1.2–3.5,  $p = 0.009$ ), unsafe needle and syringe disposal in the past month (AOR = 3.6, CI 1.9–6.9,  $p < 0.001$ ) and willingness to use DCR (AOR = 2.7, CI 1.3–5.4,  $p = 0.006$ ). Public injecting was negatively associated with being aged more than 30 years (AOR = 0.4, CI 0.3–0.7,  $p = 0.003$ ) and living in close proximity (within 0.5 miles/0.8 km) of the usual place of drug purchase (AOR = 0.6, CI 0.3–0.9,  $p = 0.02$ ). Our findings suggest that recent public injecting is prevalent among UK NEP attendees and the majority would be willing to use DCRs if available. It is also probable that if such services were located close to key drug markets they would engage vulnerable IDU sub-populations such as young people and the insecurely housed and reduce their levels of public injecting and unsafe needle/syringe disposal. Targeted pilot implementation of DCRs in the UK is recommended.

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### Introduction

Public injecting is increasingly discussed as a source of both enhanced risk to injecting drug users (IDUs) and as a cause of public nuisance (Rhodes et al., 2006), yet the issue has received little recent systematic study in the United Kingdom (UK) (Klee & Morris, 1995).

Among the policy responses to public injecting internationally, there is growing evidence of positive outcomes associated with the operation of *drug consumption rooms* (DCRs), which aim to enhance IDU health and simultaneously diminish nuisance to local communities by providing a

managed, low threshold health and social welfare setting for the use of illicitly acquired drugs (Broadhead, Kerr, Grund, & Altice, 2002; Hedrich, 2004; Kimber, Dolan, van Beek, Hedrich, & Zurhold, 2003).

In the UK, there has been some debate about the potential role of DCRs, including a call in 2002 for their pilot evaluation by the Government's Home Affairs Select Committee which was rejected by the Home Office due to concerns about insufficient international evidence of DCR effectiveness and the extent of public injecting in the UK at that time (Shapiro, 2003). This paper describes findings from a survey of IDUs commissioned by the Independent Working Group on DCRs (Joseph Rowntree Foundation, 2006); which aimed to provide some local evidence on the prevalence and predictors of public injecting, and IDUs awareness of and willingness to use DCRs if made available.

\* Corresponding author at: Treacle Towers, Mackenders Lane, Eccles, Kent ME20 7JA, United Kingdom. Tel.: +44 1622 717652.

E-mail address: [neil@dadden.demon.co.uk](mailto:neil@dadden.demon.co.uk) (N. Hunt).

## Methods

The survey was conducted between April and June 2005. IDU participants were recruited using convenience sampling methods from three drugs agency-based NEPs in London (South-East England) and two in Leeds (Northern England). IDUs were also recruited from a pharmacy-based NEP in Glasgow (Scotland), but these data are not included in this paper due to sampling limitations, but are presented elsewhere (Hunt, 2006). Individuals who reported injecting in the week prior to survey were eligible to participate. A brief anonymous self-completion questionnaire was used and typically took less than 10 min to complete. In instances of low literacy, fieldworkers provided assistance in completing the questionnaire. Participants received a £5 supermarket voucher for their participation.

Questions related to: demographics; location and frequency of injecting in the past week; housing status; proximity of place of residence to the NEP; proximity of place of residence to the place where drugs are usually purchased; used needle/syringe disposal in the past month; awareness of DCRs internationally (accompanied by a brief description of the nature of DCR service delivery), and willingness to use a DCR if it was available.

Univariable and multivariable analyses were used to examine predictors of 'public injecting'. For the analysis we define 'public injecting' as having injected at least once during the previous week in any of the following locations: school/college, club/bar, outdoors (i.e. street/park), public toilet, abandoned building, or car. 'Unsafe disposal' is defined as used needle/syringe disposal in the past month in: public litter bins, drains, or on the street or in a disused building. Insecure housing is defined as rough sleeping/street homeless, living in hostel, rehabilitation facility, or other participant-defined insecure housing. Willingness to use a DCR is defined by reporting one would use a DCR rarely, occasionally, often, or always/nearly always versus never/almost never.

Variables were dichotomously coded (0,1): public injecting (no, yes); sex (female, male); age ( $\leq 30$  years,  $>30$  years); ethnicity (non-white, white); insecure housing (no, yes); proximity of NEP to residence ( $>0.5$  miles/0.8 km,  $\leq 0.5$  miles/0.8 km); proximity of usual place of drug purchase to residence ( $>0.5$  miles/0.8 km,  $\leq 0.5$  miles/0.8 km); unsafe needle/syringe disposal (no, yes), and willingness to use a DCR (no, yes).

Associations between demographic and drug use-related variables with public injecting were analysed using the  $\chi^2$ -test. Odds ratios (OR) and 95% confidence intervals (CI) and  $p$ -values are reported. Multivariable logistic regression analysis was used to determine factors independently associated with public injecting. Variables were considered in the model if significant at the univariable level ( $p < 0.05$ ) and the model was adjusted for age, gender and ethnicity. Backwards elimination was used to select the most appropriate model and adjusted odds ratios (AOR), 95% CIs and  $p$ -values

are reported. Data analyses were conducted using SPSS for Windows (Version 11) (SPSS, 2002).

## Findings

Three hundred and one IDUs participated in the survey (London,  $n = 199$ ; Leeds,  $n = 102$ ). Their mean age was 34.1 years (S.D. 7.6, range 19–58), 16% were females and 88% reported white ethnicity. More than two thirds (68%) reported living in insecure housing. Around half reported living within 0.5 miles of their NEP (54%) and their usual place of drug purchase (47%), respectively.

Public injecting in the week before survey was reported by more than half (55%) of participants. The most frequently reported locations were outdoors (39%) and public toilets (34%). One quarter (24%) reported unsafe used needle/syringe disposal in the past month.

One hundred and ninety-two (64%) participants reported prior knowledge of DCR operation internationally. All participants were provided a brief description of DCR service delivery and 253 (84%) participants indicated some level of willingness to use a DCR if such service was available (rarely = 8%; occasionally = 20%; often = 24%; always/nearly always = 30%) while a minority reported they would almost never or never use a DCR (16%).

### *Predictors of public injecting*

There were no differences between public injectors and non-public injectors in terms of sex, ethnicity, and proximity of their NEP to their residence. Public injecting was positively associated with insecure housing (60% versus 41%, OR = 2.2, CI 1.4–3.6,  $p = 0.002$ ), unsafe disposal of used needles/syringes in the month before survey (78% versus 47%, OR = 4.0, CI 3.1–9.4,  $p < 0.001$ ), and willingness to use a DCR (59% versus 33%, OR 2.8, CI 1.5–5.4,  $p = 0.002$ ). Public injecting was negatively associated with being aged over 30 years (47% versus 69%, OR = 0.4, CI 0.3–0.7,  $p < 0.001$ ), and residing in close proximity to usual place of drug purchase (47% versus 62%, OR 0.5, CI 0.3–0.9,  $p = 0.01$ ).

In the multivariable analysis (Table 1), participants who reported public injecting in the week before survey were independently twice as likely to report insecure housing (AOR = 2.1), over three times as likely to report unsafe needle and syringe disposal (AOR = 3.6), and more than twice as likely to report willingness to use a DCR (AOR = 2.7). Those aged more than 30 years (AOR = 0.4) and who resided within 0.5 miles their usual place of drug purchase (AOR = 0.6) were approximately half as likely to be public injectors as their counterparts.

## Discussion

This study examined the prevalence and predictors of public injecting, and willingness to use DCRs in a sample of

Table 1  
Logistic regression analysis of characteristics associated with public injecting in the past week

Characteristic	N = 301	Percent injected in public	Adjusted OR	95% CI	p
<b>Age</b>					
≤30 years	105	69	1.0		
>30 years	196	47	0.4	0.3–0.7	0.003
<b>Insecure housing</b>					
No	97	41	1.0		
Yes	204	61	2.1	1.2–3.5	<0.009
<b>Distance from usual place of drug purchase to residence</b>					
>0.5 miles	159	62	1.0		
≤0.5 miles	142	47	0.6	0.3–0.9	0.03
<b>Unsafe syringe disposal in past month</b>					
No	226	47	1.0		
Yes	73	78	3.6	1.9–6.9	<0.001
<b>Willingness to use a DCR</b>					
No	48	33	1.0		
Yes	253	59	2.7	1.3–5.4	0.006

Notes: Model adjusted for sex and ethnicity.

UK NEP attendees. We found that recent public injecting was common, with more than half of the sample reporting it in the past week. Two out of three participants were aware of DCR operation internationally and four out five reported willingness to use a DCR if it was available.

Public injectors were more likely to be in the younger age category and as has been reported elsewhere, public injecting was associated with insecure housing (although more than a third in secure housing were also public injectors) (Galea & Vlahov, 2002; Judd et al., 2005; Navarro & Leonard, 2004), and willingness to use a DCR (Fry, Fox, & Rumbold, 1999; Green, Hankins, Palmer, Boivin, & Platt, 2004; Kerr, Wood, Small, Palepu, & Tyndall, 2003; van Beek & Gilmour, 2000). As might also be anticipated given the urgency, lack of privacy and limited opportunities for hygiene and safety in public injecting environments (Rhodes et al., 2006), recent unsafe needle/syringe disposal was also strongly associated with recent public injecting.

Additionally we found that greater distance between place of residence and place of drug purchase was associated with public injecting. This is consistent with the many imperatives which may influence IDUs to use as soon as possible after drug purchase (e.g. group drug purchase, drug withdrawal/cravings, concern about police interdiction, and perceived distance from place of residence or an alternative non-public setting) (Kimber & Dolan, in press; Rhodes, Briggs, Holloway, Jones, & Kimber, 2005; Southgate et al., 2003). This finding also reinforces the importance of DCRs being located close to drug markets to maximise their impact on levels of public injecting and unsafe disposal (Dolan et al., 2000; Hedrich, 2004; Stoeber, 2002).

There are several limitations to this study. The survey used a convenience sampling approach and there was insufficient data on non-participation to calculate a response rate,

therefore may not be representative of UK NEP attendees. The survey also relied on self-reported behavioural information, which may be subject to recall or social desirability biases (e.g. the stigma associated with reporting unsafe needle/syringe disposal). Restriction of most behavioural information to the past month, however, and use of a self-completed questionnaire should have limited the extent of such bias (Bale, van Stone, Engelsing, Zarcone, & Kuldau, 1981; Darke, Hall, Heather, Wodak, & Ward, 1992). Finally, due to the brief nature of the questionnaire, the multivariable analysis was limited by the small number of predictor variables. In particular, data were not available on drugs used, and intensity of drug use and NEP use.

## Conclusion

Our findings provide some UK evidence that public injecting is prevalent behaviour among NEP attendees and that the majority of NEP attendees, especially public injectors, would be willing use to DCRs if made available. It is also probable that if such services were located close to key drug markets, they would engage vulnerable IDU populations such as young people and the insecurely housed and reduce their levels of public injecting and unsafe needle/syringe disposal.

We conclude that these findings, those of the Independent Working Group (2006) and the growing international evidence base (Hedrich, 2004; Kimber et al., 2003; Wood, Tyndall, Montaner, & Kerr, 2006) strengthen the case for selectively targeting the pilot implementation of well-managed DCRs in the UK. However, as with the transfer of any intervention into a new cultural context, a cautious and developmental approach that incorporates and learns from careful evaluation is desirable; so that impact and cost effectiveness can be gauged and, ideally, maximised.

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