



Evaluation of the Lord Advocate's Guidance on the distribution of sterile needles and syringes to injecting drug users

Effective Interventions Unit



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Scottish Executive Effective Interventions Unit

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Effective Interventions Unit

Evaluation of the Lord Advocate's Guidance on the distribution of sterile needles and syringes to injecting drug users

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The views expressed in this report are those of the researchers and do not necessarily represent those of the Department or Scottish Ministers

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Contents

	Summary	1
Chapter 1:	Introduction	7
	Background	7
	Aim	8
	Objectives	8
Chapter 2:	Methodology	11
	Evaluating the impact on risk behaviours	11
	Evaluation of the views of needle exchange and pharmacy workers	12
	Data analysis	13
Chapter 3:	Results	15
	Sample characteristics	15
	Risk behaviours pre and post awareness campaign	17
	Source and uptake of sterile needles and syringes	18
	IDUs awareness of change in guidelines	18
	Reasons for wanting/not wanting more needles/syringes	19
	Comparison of behaviours in IDUs injecting for less than six years in 2001-2002 and 2004	20
	Views of needle exchange staff	23
Chapter 4:	Discussion	27
References		31

Summary

Background

In December 2002, Scotland's Lord Advocate reviewed the Guidelines that govern the number of needles and syringes (n/s) dispensed at any one visit to a needle exchange. The new Guidelines increased the number that could be distributed to a maximum of 20 sets (previously 5 sets) on the first visit; a maximum 60 sets (previously 15 sets) on subsequent visits; and an exceptional upper limit of 120 sets (previously 30 sets) for holiday periods when facilities are closed or are difficult to access. These exchanges are subject to the return of used equipment for safe disposal. This study set out to evaluate the effects of this change on IDUs' risk behaviours.

Aim

The aim of the evaluation was to determine if increasing the supply of sterile needles and syringes to injectors reduces the frequency of needle and syringe sharing.

The main objectives of the study were to ascertain if the lifting of the Lord Advocate's restriction on the number of needles and syringes distributed to injectors:

1. reduces the frequency of needle and syringe sharing among injectors;
2. causes any other behavioural changes among injectors, either beneficial or detrimental, e.g. frequency of visits to needle exchange

The evaluation also sought to determine the views of needle exchange and pharmacy workers on the increase in supply of needles and syringes.

Methodology

Evaluating the impact on risk behaviours

The study originally set out to evaluate the effects of the new Guidelines by comparing the risk behaviours among recent initiates to injecting (i.e. had injected for six years or less) among Glasgow IDUs in 2004 with the behaviours of recent initiates to injecting who had been interviewed in 2001-2002. Recruitment of IDUs commenced a year after the introduction of the new Guidelines. However it very quickly became apparent that most IDUs were unaware that they could now obtain an increased number of sterile n/s per visit. It was clear that the aim of determining if the increase in supply had reduced risk behaviours could not be achieved.

An awareness campaign was incorporated into a new study design. This campaign, consisting of cards and posters displayed in, and distributed through, pharmacies, needle exchanges and drug treatment centres, aimed to inform IDUs that they could now collect more n/s and also included harm reduction advice.

The new study design changed to include all current injectors i.e. those who had injected at least once in the four weeks prior to interview. This allowed the recruitment of a more representative sample of injectors than in the original proposed method. Injectors within the sample who had begun injecting within the previous six years would still be compared to the respondents in 2001-2002 study to determine if there had been any change in behaviours over this longer period.

Between February and May 2004, prior to the introduction of the awareness campaign, 296 IDUs, all of whom had injected in the previous month, were recruited to the study from a variety of venues including street sites, pharmacies, needle exchanges and drug treatment centres. They were interviewed with a structured questionnaire that contained questions on their drug use habits and risk behaviours. The results of this phase of the study formed a baseline against which any changes in behaviour following the implementation of the awareness campaign could be measured.

Six weeks after the introduction of the awareness campaign, recruiting for the post awareness sample began and 299 IDUs were interviewed over a three-month period.

Evaluation of the views of needle exchange and pharmacy workers

Two members of staff from each pharmacy and needle exchange from which IDUs were recruited were interviewed. Staff members were asked a series of structured, open-ended questions about their views on the increase in supply of needles and syringes. These included their perceptions of any impact the Lord Advocates guidance had on their service including frequency of attendance by drug users and any impact on return of used n/s.

Results

The impact on risk behaviours

The characteristics of the participants in the pre and post campaign phases were comparable with respect to proportion of males (86% and 83% respectively); age at interview (mean 32 years in both); age at first injection (mean 21 years in both); length of injecting career (mean 11 years in both); recruitment setting (79% and 86% recruited in street respectively); type of residence in the six months prior to interview (hostel accommodation 37% and 36% respectively); and having ever been in treatment for drug use (93% and 88% respectively). Heroin was the most common drug injected (by 93%) in both samples.

A significantly higher proportion of participants from the post awareness campaign phase (54%) injected drugs twice daily or more compared to those recruited pre-campaign (44%).

There were no significant differences in injecting risk behaviours in the four weeks prior to interview. Almost 80% in both sweeps reported never having injected with a n/s previously used by someone else.

There was no significant difference in the number of n/s obtained in an average week from a pharmacy or needle exchange between the pre and post awareness surveys. Pre-awareness respondents obtained an average of 26 n/s (median=20) and post awareness IDUs received an average of 27 n/s (median=30) per visit.

There was a significant decrease in the number of respondents obtaining sterile n/s from non-exchange sources (i.e. friends, other drug users, on street, sexual partner, family, theft and drug dealers) in the post awareness phase.

The maximum number of needles and syringes that IDUs believed could be obtained per visit from a pharmacy or needle exchange increased significantly from a median of 20 n/s to a median of 25 n/s, an increase of 25%, between the pre and post awareness surveys. Few injectors, however, knew that the limit had been changed in either the pre or post surveys (20% in both).

The majority of IDUs in both surveys did not want to obtain as many as 60 n/s per visit and they were, moreover, generally satisfied with the number they were currently receiving (a mean of 19 and 21 (median 15 and 15), pre and post awareness campaign respectively). In both samples, the main reason for not wishing to obtain a greater number was that this was enough for their injecting needs (206/359, 57%). Despite this claim, half of these respondents (181/359, 50%) stated that, on average, they injected with the same needle more than once. Among IDUs who did wish to receive more n/s than they were currently receiving (236/595, 40%) the most common reason was to cut down the number of visits to the needle exchange (74/236, 31%).

In the 2004 survey, 170 IDUs had begun injecting in the previous six years and their behaviours were compared with those of 385 IDUs with the same length of injecting careers who had been interviewed in 2001-2002.

Injecting of cocaine (on its own) had increased with just over half of recent initiates reporting use of cocaine in the previous months in 2004 compared with just under two-fifths of IDUs in 2001-2002. With the increase of cocaine use it might have been expected that the frequency of injecting would also increase, however there was a significant decrease in the frequency of injecting in the previous six months in the 2004 sample compared with the 2001-2002 survey.

Moreover, those interviewed in 2004 were significantly less likely to inject with a n/s previously used by someone else; just over half of the 2001-2002 sample had injected in the previous six months with a n/s previously used by someone else compared with a quarter in 2004.

Views of needle exchange staff

Forty staff were interviewed about their views on the new Guidelines. This included 19 pharmacy assistants, 14 pharmacists, 2 nurses and 5 team workers.

The majority of staff (37/40) knew about the new Guidelines and nearly two-thirds (25/40) could correctly cite the maximum number of n/s that could be given out per visit.

Almost all (36/40) said that they had informed clients of this change. However, it appeared that, apart from displaying information about the new Guidelines, some staff directly told IDUs of the change only if asked. Other staff were more pro-active and explained the change to clients and encouraged them to take more n/s.

Just over a third of staff approved of the new Guidelines, with one third disapproving and the remainder having mixed views. Furthermore, whilst just under two-thirds said that the number of n/s that they dispensed depended on the number of returns they received, some respondents said that they decided what to dispense according to how well they knew the client

There were mixed views on the impact that the Guidelines had on exchanges. A third felt that the change in guidance had no impact on the pharmacy/exchange while

nearly a quarter believed that the frequency of visits by individuals had reduced. The remainder cited a variety of changes including an increase in numbers of clients (7/40), a decrease in clients (6/40) and an increase in frequency of visits (3/40).

Conclusion

More than a year after the introduction of the Lord Advocate's new Guidelines, very few IDUs in Glasgow were aware of the increase in the maximum number of n/s that could be obtained per needle exchange visit; even a specially designed, targeted campaign failed to raise awareness.

After the introduction of the new Guidelines, needle exchanges and pharmacies displayed information and informed IDUs. The results of the staff survey, however, indicated that some staff did not actively promote the increase to services users. Moreover, only one-third of staff approved of the new guidelines and some used their own judgement in deciding how many n/s should be given out.

It may be that the reluctance to implement, or disapproval of, the Guidelines among some staff was one reason for the low level of awareness among IDUs. Needle exchange and pharmacy staff need, therefore, to be made more aware of the necessity to actively provide oral advice and information to their clients.

The attitude of some staff, however, does not explain why the targeted awareness campaign also failed to inform the majority of IDUs. Posters and cards were distributed to all exchange outlets and the cards were inserted in all n/s packs. Yet this strategy, too, failed to increase knowledge among IDUs.

One of the study findings indicated that IDUs did not, generally, wish to have any more n/s than they were currently receiving. The message contained in the awareness campaign (or imparted by pharmacists) that more n/s were available was therefore meaningless to them. The main reason for not wanting more n/s was that the current level was sufficient for their needs. However it was noted that half of these IDUs were re-using their own n/s; yet the awareness campaign cards alerted IDUs to the risks involved in this.

Due to time constraints, the time period for the awareness campaign was six weeks. After this period, recruitment for the post awareness group began. Cards and posters were distributed to agencies throughout the city and were placed inside the packs of n/s that are distributed through the pharmacy exchanges. The cards placed within the packs, however, would not have reached some injectors until towards the end of the recruitment period. It may be that if the campaign had run for a longer period it would have had more impact.

There is some evidence, however, that leaflets are not successful in communicating messages to IDUs (Wright et al). Some IDUs may, for example, have literacy problems that render written material ineffective. There is perhaps a need to evaluate the readability of written harm reduction materials and to design and evaluate new ways of delivering harm reduction messages to IDUs.

Nevertheless, there have been some positive changes in behaviours among IDUs in Glasgow since the introduction of the awareness campaign and since 2001.

The maximum number of n/s that IDUs believed could be obtained per visit from a pharmacy or needle exchange increased significantly. Respondents were also less

likely to obtain sterile n/s from non-legitimate sources in the post awareness phase. Whilst frequency of injecting had increased, there was no increase in sharing behaviour. A comparison between recent initiates to injecting in 2001-2002 and 2004 found a decrease in both frequency of injecting and sharing in 2004.

These changes cannot definitely be proved to arise directly from the increased availability of n/s; other factors may have influenced behaviour between 2001-2002 and 2004. Nevertheless, the association between the introduction of the new Guidelines and behaviour changes suggests that the former may be having a positive impact. It would seem prudent to continue with the current policy on n/s distribution. However, the findings from this study suggest that further work needs to be done among needle exchange staff to inform IDUs of their entitlement to a greater number of n/s and to encourage them to make use of their entitlement.

Chapter 1: Introduction

Background

The hepatitis C virus (HCV) was discovered in 1988 and, in the UK, antibody testing became available in 1991. HCV infection causes a silent and progressive disease of the liver. While a minority of those who become infected with HCV will clear the virus naturally without intervention or treatment, an estimated 60-85% of infected people will continue to carry the virus and are at risk of developing cirrhosis. A systematic review of the worldwide literature indicated that 4%-10% of those with chronic HCV will develop cirrhosis after 20 years of infection (Freeman et al, 2001); higher rates of progression have been reported among heavy alcohol users and those co-infected with HIV. Although the efficacy of anti-viral treatment has improved (Manns et al, 2001), prevention of HCV transmission remains a high priority.

Injecting drug use is the most common risk factor for HCV with transmission associated with injecting with infected injecting equipment. Throughout the world, rates of infection exceeding 50% have been detected among populations of injecting drug users (IDUs) (Wodak et al, 1996). In 1999, the prevalence of HCV among drug injectors undergoing a named HIV test was 44% and 62% in Scotland and Glasgow, respectively (Hutchinson et al, 2000).

Needle and syringe exchange, which was introduced principally to prevent HIV infection, had become well established in the UK in the early 1990s. There is considerable evidence that this intervention has helped to control HIV transmission among injectors, and injectors' incidence of HIV has been low during the 1990s. However, evidence suggests that needle exchange has been less effective in preventing the spread of HCV. In 1999 a community wide study in Glasgow found an HCV prevalence of 53% among 436 IDUs who had commenced their injecting careers post 1989 (i.e. after the introduction of needle exchange) (A. Taylor, personal communication). Among those who had commenced injecting in the previous two years, HCV antibody prevalence was 23%. A further community wide study carried out in Glasgow in 2001-2002 found an HCV antibody prevalence of 58% among 466 IDUs who had begun their injecting careers in the previous five years (A. Taylor, personal communication). Thus, it was clear that HCV was continuing to spread among injectors.

Unless safe injecting is practised throughout an injector's entire injecting lifespan, he or she will be at high risk of acquiring HCV. However, 51% of injectors recruited in the Glasgow study during 2001-2002 had injected with a used needle and syringe (n/s) in the six months prior to interview (A. Taylor, personal communication). In Scotland, 34% per cent of injectors reported to the Scottish Drug Misuse Database in 2003/2004 had injected with a used needle and syringe (n/s) in the previous month (ISD, 2004).

Not enough is known about the reasons why injectors continue to share used needles and syringes. It is, however, possible that sub optimal access to clean needles and syringes is one reason why sharing continues to be practiced. Community wide surveys in Glasgow have shown significantly lower levels of needle/syringe sharing by IDUs who had obtained needles and syringes from a needle exchange compared with those who obtained no sterile equipment from this source (Hutchinson et al 2000).

A survey conducted in the UK in 1997 estimated that needle exchange schemes in Scotland distributed between 40 and 80 syringes per injector per annum (Hickman et al, 2001). If the target is to provide one sterile needle and syringe per injecting episode and if it is assumed that injecting occurs on average three times per day, then this represents a serious shortfall in supply. In comparison, in England and Wales, where the prevalence of HCV among injectors is much lower than that in Scotland and where there is no restriction on the number of needles and syringes distributed, each injector receives an average of 180-380 needles and syringes per annum.

Evidence such as this led to recommendations that the number of needles and syringes allowed to be dispensed in Scotland should be increased (SCIEH 2001, HEBS 2002). In the light of these recommendations, the Lord Advocate reviewed the Guidelines that govern the number of needles and syringes that may be dispensed at any one visit to a needle exchange (NHS HDL (2002) 90). Previously, the Lord Advocate's Guidance on the distribution of sterile needles and syringes allowed five sets to be offered to clients attending a needle exchange for the first time. On subsequent visits, up to 15 sets could be given as long as the same number of sets was returned for disposal. Exceptions to this guidance included when: i) an injector was collecting equipment for a partner and ii) distribution occurred in a rural area or around a public holiday. On such occasions, a maximum of thirty sets could be issued. The new Guidelines allow a maximum 20 sets on the first visit, a maximum 60 sets on subsequent visits and an exceptional upper limit of 120 sets for holiday periods when facilities are closed or are difficult to access. These exchanges are subject to the return of used equipment for safe disposal. These new Guidelines came into effect in December 2002.

The Effective Interventions Unit (EIU) provided funding through the Scottish Executive's Drug Misuse Research Programme to undertake an evaluation of the impact of the new Guidelines. The study forms part of the EIU's programme of research in the area of hepatitis C prevention (Effective Intervention Unit, 2003).

Aim

The aim of the evaluation was to determine if increasing the supply of sterile needles and syringes to injectors reduces the frequency of needle and syringe sharing.

Objectives

The main objectives of the study were to ascertain if the lifting of the Lord Advocate's restriction on the number of needles and syringes distributed to injectors:

- reduces the frequency of needle/syringe sharing among injectors.
- causes any other behavioural changes among injectors, either beneficial or detrimental, e.g. frequency of visits to needle exchanges.

The evaluation also sought:

- to determine the views of needle exchange and pharmacy workers on the increase in supply of needles and syringes.

The report is divided into four chapters. Chapter 2 describes how the study was undertaken. Chapter 3 provides the results from the study. Chapter 4 discusses the results and draws conclusions.

Chapter 2: Methodology

Evaluating the impact on risk behaviours

The original proposal aimed to recruit 500 injectors who had begun injecting in the previous six years and interview them about their injecting behaviours, in particular frequency of needle/syringe sharing and frequency of visits to needle exchange, in the previous six months. All respondents would be recruited at least six months after the introduction of the Lord Advocate's new Guidelines on the number of needles and syringes distributed to injectors. The behaviours of these 500 IDUs would then be compared with those reported by a sample of 500 injectors with the same eligibility criterion of recent injecting, who had been interviewed in 2001-2002. The 2001-2002 study found that in the six months prior to interview 51% had injected with needles and syringes previously used by someone else. The results from the 2001-2002 study would provide a baseline against which to evaluate the effects of the increase in the Lord Advocate's restriction on the number of needles and syringes distributed to injectors.

Recruitment of the sample began in December 2003, almost one year after the introduction of the new Guidelines. It very quickly became apparent to the interview team that most injectors were unaware that they could now obtain an increased number of sterile needles and syringes per visit to needle or pharmacy exchange. Accordingly, it was clear that the aim of the study, to determine if the increase in supply reduced the frequency of sharing among injectors, could not be achieved. In consultation with the EIU a new method to determine the effect of the Guidelines was developed. The method was as follows:

- an awareness raising campaign would be introduced throughout Glasgow, consisting of posters displayed in pharmacies, needle exchanges and drug treatment services providing information on the new minimum and maximum limits and re-emphasising the message about not sharing injecting equipment. Credit card size cards containing the same information would also be given to injectors when they attended needle exchanges, pharmacies and drug treatment services;
- prior to the launch of the awareness campaign 300 injectors would be recruited and interviewed. The results of this phase would form the pre awareness baseline data. A further 300 would be recruited approximately six weeks after the introduction of the awareness campaign. Comparison would then be made between behaviours pre and post campaign;
- the eligibility criterion of having started to inject in the last six years would be changed to include all individuals who had injected at least once in the month prior to interview. This would allow the recruitment of a sample representative of all current injectors and not just recent initiates to injecting as in the original proposed method. Injectors within this sample who had begun injecting within the previous six years would still be compared to the respondents in 2001-2002 study to determine if there had been any change in behaviours over this longer period;
- the questionnaire would be altered so that respondents could be asked about their behaviours in the last four weeks as well as the last six months, the period asked about in the 2001-2002 questionnaire. Apart from this change, the questions would remain the same as those in the 2001-2002 questionnaire.

The study proceeded on the basis of this new methodology. The pre awareness recruitment phase took place between February and May 2004. Recruiting then ceased and the awareness campaign was put into operation. This ran for approximately six weeks and then recruitment of the post-awareness sample took place from mid July to October 2004.

A multiple site recruitment strategy was used to generate as representative a sample as possible of IDUs in Glasgow. Sites included 16 pharmacy exchanges, Turning Point needle exchange and treatment service, Easterhouse GDPS needle exchange, the four needle exchanges operating in hostels for the homeless, the addiction teams located throughout Glasgow, Red Tower drug project, the Homeless Health & Social Care Centre, Wayside Day Centre, the Big Issue office and various street sites throughout Glasgow.

After obtaining permission from each exchange and treatment service, interviewers either sat inside or stood outside the premises and approached IDUs. Interviews took place either in a private area of the premises or in a mobile campervan that was parked nearby.

For the street sample recruitment the mobile campervan was parked in streets in all areas throughout Glasgow in which IDUs were known to frequent.

Interviewers explained the study to all respondents and assured them that all information provided by them was anonymous and confidential. Only the initials, date of birth and first part of postcode were collected from each respondent and these were used only to identify respondents who had inadvertently been interviewed more than once. After obtaining informed consent, the interviewers administered a structured questionnaire.

The questionnaire covered demographics, injecting patterns, sharing of needles and syringes and other injecting equipment, time spent in prison, access to needle exchanges, knowledge of entitlement to a greater number of needles and syringes, frequency of needle exchange attendance and number of needles acquired per visit. Each interview took between 20 and 45 minutes to complete.

Evaluation of the views of needle exchange and pharmacy workers

All of the pharmacies and needle exchanges from which IDU respondents were recruited to the study were included in the exchange workers' evaluation. Two members of staff from each establishment were interviewed either inside the exchange or outside in the mobile campervan during a four-week period in June/July 2004.

Respondents were asked a series of structured, open-ended questions about their views on the new Guidelines. These included their perceptions of any impact the Lord Advocates' guidance had had on their service including the frequency of attendance by drug users. Interviews took between five and ten minutes to complete.

Data analysis

The behaviours (i.e. uptake and sharing of n/s) of IDUs interviewed pre and post the awareness raising campaign were compared using univariate analysis (see footnote to table 1 for further details).

Univariate and multivariate logistic regression analyses were used to compare the behaviours (i.e. uptake and sharing of n/s) of pre and post awareness IDUs interviewed in 2004 with IDUs interviewed in 2001-2002; these analyses were restricted to IDUs who had begun to inject in the six years prior to recruitment. The multivariate logistic regression analysis was adjusted for age, gender, recruitment setting, frequency of injecting and hostel residence in the previous six months.

Descriptive statistics were used to analyse the views of pharmacy and needle exchange workers on the new Guidelines.

Chapter 3: Results

Sample characteristics (Table 1)

Questionnaires were obtained from 296 and 299 injectors recruited pre and post awareness campaign respectively.

The characteristics of the participants recruited in the pre and post campaign phases were comparable with respect to proportion of males (86% and 83%, respectively), age at interview (mean 32 years in both), age at first injection (mean 21 years in both), length of injection career (mean 11 years in both), recruitment setting (79% and 86% recruited in street, respectively), type of residence in the six months prior to interview (hostel accommodation 37% and 36% respectively), having ever been in treatment for drug use (93% and 88%, respectively) or in prison since onset of injecting (81% and 78%, respectively). Heroin was the most common drug injected (by 93%) in both samples.

A significantly higher proportion of participants from the post campaign phase (54%) injected drugs twice daily or more in the previous six months compared to those recruited pre campaign (44%) ($p=0.03$).

Table 1 Comparison Of Key Characteristics Of Current Injectors Interviewed Before And After The Awareness

Characteristics		Interview Undertaken		p ¹
		Pre campaign (N=296)	Post campaign (N=299)	
Age (years) (1 NR)	Mean/median (SD)	31.9/31.6 (6.0)	32.0/31.5 (6.0)	NS
Males	n (% of N)	253 (85.5%)	249 (83.3%)	NS
Age at first injection	Mean/median (SD)	20.5/19.0 (5.5)	20.8/20.0 (5.4)	NS
Time since onset of injection (1 NR)	Mean/median (SD)	11.0/9.3 (7.2)	10.7/9.0 (7.2)	NS
Frequency of injecting drugs in previous 6 month (1 NR)	< twice/day ≥ twice/day	164 (55.6%) 131 (44.4%)	138 (46.2%) 161 (53.8%)	0.03
Drugs injected in previous 6 months (three most reported drugs)	Heroin Cocaine Heroin + Cocaine	275 (92.9%) 179 (60.5%) 115 (38.9%)	277 (92.6%) 169 (56.5%) 112 (37.5%)	NS
Recruitment setting	Street Needle exchange Treatment	234 (79.1%) 53 (17.9%) 9 (3.0%)	256 (85.6%) 37 (12.4%) 6 (2.0%)	NS
Glasgow residence (17 NR)	East North/North West South Central Outside Glasgow	69 (24.1%) 61 (21.3%) 26 (9.1%) 126 (44.1%) 4 (1.4%)	57 (19.5%) 51 (17.5%) 39 (13.3%) 136 (46.6%) 9 (3.1%)	NS
Type of residence in past six months	Hostel Other ²	110 (37.2%) 186 (62.8%)	108 (36.1%) 191 (63.9%)	NS
Ever treated for drug use	n (% of N)	273 (92.2%)	264 (88.3%)	NS

¹ χ^2 test, t-test or where appropriate Mann Whitney U-test, NS is not significant at the 5% level

² other includes own home, someone else's home, residential drug treatment, hospital, B & B, rented accommodation and at work

NR non-response; SD Standard deviation

Risk behaviours pre and post awareness campaign (Table 2)

There were no significant differences in injecting risk behaviours in the four weeks prior to interview nor in the number of n/s obtained in an average week from the needle exchange or pharmacy between the pre and post awareness surveys. Almost 80% in both samples (78% and 79% in pre and post samples, respectively), reported never having injected with a n/s previously used by someone else in the four weeks before interview; just under half of each sample had shared a spoon (47% and 49%, respectively) and filter (44% and 44%, respectively) in the same time period.

Table 2 Injecting risk behaviours prior to interview 4 weeks

		Interview Undertaken		P ¹
		Pre campaign (N=296)	Post campaign (N=299)	
Injected with N/S previously used by someone else (4 NR)	Never	229 (77.9%)	237 (79.8%)	NS
	Once/month	13 (4.4%)	19 (6.4%)	
	2-5 times/month	31 (10.5%)	27 (9.1%)	
	>5 times/month	21 (7.1%)	14 (4.7%)	
Injected with N/S previously used by self (6 NR)	Once/month	128 (43.7%)	148 (50.0%)	NS
	2-4 times/month	139 (47.4%)	126 (42.6%)	
	>4 times/month	26 (8.9%)	22 (7.4%)	
Source of used N/S (5 NR)	Never shared	228 (77.8%)	237 (79.8%)	NS
	Either family, friend or sexual partner only	40 (13.7%)	46 (15.5%)	
	Casual acquaintance ²	25 (8.9%)	14 (4.7%)	
Number of different people from whom obtained used N/S (26 NR)	Never shared	228 (80.7%)	137 (82.9%)	NS
	One person	37 (13.1%)	37 (12.9%)	
	2 or more people	18 (6.4%)	12 (4.2%)	
Shared spoons (3 NR)	Never	155 (52.7%)	151 (50.7%)	NS
	Once/month	27 (9.2%)	26 (8.7%)	
	2-5 times/month	65 (22.1%)	56 (18.8%)	
	>5 times/month	47 (16.0%)	65 (21.8%)	
Shared filter (1 NR)	Never	165 (55.7%)	168 (56.4%)	NS
	Once/month	25 (8.4%)	22 (7.4%)	
	2-5 times/month	45 (15.1%)	42 (14.1%)	
	>5 times/month	61 (20.5%)	66 (22.1%)	
Passed on previously used N/S (4 NR)	Never	221 (75.4%)	231 (77.5%)	NS
	≤5 times	50 (17.1%)	50 (16.8%)	
	6-20 times	12 (4.1%)	10 (3.4%)	
	> 20 times	10 (3.4%)	7 (2.3%)	

¹ χ^2 test, t-test or where appropriate Mann Whitney U-test, NS is not significant at the 5% level

² Casual acquaintance includes drug dealer, someone in a shooting gallery, a fellow prisoner or a stranger
NR Non response

Source and uptake of sterile needles and syringes (Table 3)

The majority of participants in both surveys obtained their sterile needles and syringes from a reliable source (including needle exchange, pharmacy, drug agency, hospital or GP). The number of IDUs obtaining needles and syringes from only a non-reliable source reduced significantly between the pre and post surveys (17% to 9%, respectively; $p < 0.001$).

The frequency of visiting a needle exchange increased significantly between the pre and post awareness surveys (33% and 45% visited a needle exchange at least twice weekly, respectively; $p = 0.018$).

Table 3 Uptake of needles and syringes in the four weeks prior to interview

		Interview Undertaken		P ¹
		Pre campaign (N=296)	Post campaign (N=299)	
Source of needles and syringes (11 NR)	RS ² only	226 (77.4%)	228 (76.3%)	<0.001
	RS and elsewhere	18 (6.1%)	36 (12.0%)	
	elsewhere	50 (16.9%)	26 (8.7%)	
Frequency of using needle exchange in an average week ³ (14 NR)	< twice/week	163 (67.4%)	145 (55.1%)	0.018
	2-3 times/week	62 (25.6%)	95 (36.1%)	
	> 3 times/week	17 (7.0%)	23 (8.7%)	
Number of N/S obtained from needle exchange and /or pharmacist in average week ⁴ (1 NR)	None	38 (12.9%)	31 (10.4%)	NS
	1-5	36 (1.2%)	28 (9.4%)	
	6-15	63 (21.4%)	61 (10.4%)	
	16-30	72 (29.2%)	74 (24.7%)	
	>30	86 (29.2%)	105 (35.1%)	

¹ χ^2 test, t-test or where appropriate Mann Whitney U-test, NS is not significant at the 5% level

² RS refers to reliable source, which includes needle exchange scheme, pharmacist, drug agency, hospital and GP; elsewhere includes friends, other drug users, bought on streets, sexual partner, family, theft from legitimate source and drug dealer

³ Excludes 76 participants who obtained N/S from non legitimate source

⁴ N/S obtained by self and/or someone else for own use

NR Non-response

IDUs' awareness of change in Guidelines, views on ideal numbers of needles/syringes per visit to needle exchange and actual numbers obtained (Table 4)

The maximum number of needles and syringes that IDUs believed could be obtained per visit from a pharmacy or needle exchange increased significantly between the pre and post awareness surveys (mean 26 and 37, median 20 and 25, respectively; $p < 0.001$). Few injectors, however, knew that the limit had been changed in the pre and post surveys (20% in both samples).

In both the pre and post awareness surveys, the majority of IDUs stated that they would like to obtain up to a maximum of 30 n/s per visit to an exchange. The actual number of n/s they obtained on average were 19 and 21, (median 15 and 15), pre and post awareness campaign, respectively.

Table 4 IDUs' perceptions of maximum numbers of needles/syringes available and actual uptake

		Interview Undertaken		P ¹
		Pre campaign (N=296)	Post campaign (N=299)	
Reported Max number of N/S available from needles exchange per visit (166 NR)	mean/median (SD)	25.7/20 (18.5)	37.2/25.0 (30.0)	<0.001
Awareness of change in maximum number of N/S available (232 NR)	n (% of N)	58 (19.6%)	61 (20.4%)	NS
Number of sterile N/S would like to get per visit to pharmacy or NE	1-5	34(13.0%)	39(13.9%)	NS
	6-15	78(29.8%)	83(29.5%)	
	16-30	84(32.1%)	82(29.2%)	
	>30	66(25.2%)	77(27.4%)	
Number of sterile N/S on average obtained by self per visit to pharmacy of NE ² (22NR)	1-5	32 (13.3%)	43 (16.7%)	NS
	6-15	103 (42.9%)	108 (42.0%)	
	16-30	73 (30.4%)	69 (26.4%)	
	>30	32 (13.3%)	37 (14.4%)	

¹ test, t-test or where appropriate Mann Whitney U-test, NS is not significant at the 5% level

² Excludes 76 participants who obtained N/S from non legitimate source

NR Non responsive; SD Standard deviation

Reasons for wanting/not wanting more needles/syringes (Tables 5 and 6)

Sixty-three per cent (186/296) and 58% (173/299) from the pre and post awareness surveys, respectively, stated that they would not wish to obtain a greater number of needles than they were currently receiving (data not shown). In both samples, the main reason for not wishing to obtain a greater number was that what they were receiving already was enough for their injecting needs (206/359, 57%) (Table 5); however half of these respondents (181/359, 50%) stated that, on average, they injected with the same needle more than once (data not shown).

Among those IDUs who did wish to receive more needles and syringes than they were currently receiving (236/595, 40%) the most common reason was to cut down on the number of visits to the needle exchange (74/236, 31%) (Table 6).

Reason	n	%
Current number enough for injecting needs	206	57.4%
No reasons/don't know	46	12.8%
Don't like to carry them about	24	6.7%
Don't want them lying around	22	6.1%
I want to stop using	18	5.0%
The more I have the more I would use	19	5.3%
Other	14	3.9%
No response	10	2.8%

Reason	Count	Percentage
So I can go to the needle exchange less often	74	31.4%
So I could use a fresh needle every time I inject	56	23.7%
So I don't run of N/S	32	13.6%
No Reason	34	14.4%
So I wouldn't have to share N/S	13	5.5%
So I could give N/S to others	9	3.8%
In case I run into problems when injecting (Blunt needle, missed hit)	4	1.7%
Other/Don't know/ no response	14	5.9%

Comparison of behaviours in IDUS injecting for less than six years in 2001-2002 and 2004 (Tables 7 and 8)

In the 2001-2002 and 2004 surveys, 385 and 170 IDUs, respectively, had begun injecting in the six years prior to interview and had injected at least once in the four weeks prior to interview.

Comparison of key characteristics between participants in the 2001-2002 and 2004 surveys showed that the two groups were statistically significantly different with respect to age, gender, frequency of drugs injected, recruitment setting and area of residence. Those interviewed in 2004 were significantly more likely to be older, male, recruited from a street site and to reside in the centre of Glasgow, and significantly less likely to inject drugs more than twice daily than those interviewed during 2001-2002 (Table 7).

While heroin was the most common drug injected in both the 2001-2002 and 2004 surveys (98% and 89%, respectively), the proportion injecting cocaine (on its own) increased significantly from 38% in 2001-2002 to 54% in 2004 ($p=0.001$).

Univariate and multivariate logistic regression analyses were used to compare behaviours between the 2001-2002 and 2004 samples (Table 8). In univariate analysis, those interviewed in 2004 were significantly less likely than those interviewed in 2001-2002:

- to use a needle exchange at least twice a week (OR 0.5, 95% CI 0.4-0.8),
- to obtain more than sixteen n/s from an exchange in an average week (OR 0.6, 95% CI 0.4-0.9) and
- to have injected with a n/s previously used by someone else in the six months prior to interview (OR 0.3, 95% CI 0.2-0.5) than those interviewed in 2001-2002.

In the multivariate analysis, those interviewed in 2004 were significantly less likely than those interviewed in 2001-2002:

- to obtain more than sixteen n/s from an exchange in an average week in the six months prior to interview (adjusted OR 0.4, 95% CI 0.2-0.6) and
- to have injected with a n/s previously used by someone else in the six months prior to interview (adjusted OR 0.3, 95% CI 0.2-0.5).

Another multivariate analysis (not shown) also found a significant reduction in the proportion who reported injecting with a used n/s in the four weeks prior to interview among those interviewed in 2004 compared to 2001-2002 (adjusted OR 0.3; 95% CI 0.2-0.6).

Table 7 Characteristics of current injectors, with an injecting career of less than six years, recruited in Glasgow 2001/2002 and 2004

Sample Characteristics		Interviewed		p ¹
		2001/02 (N=385)	2004 (N=170)	
Age (years) (1 NR)	Mean/median (SD)	27.27/26.82 (5.34)	28.29/27.98 (5.37)	0.033
Males	n (% of N)	278 (72.2%)	140 (82.4%)	0.014
Age at first injection	Mean/median (SD)	23.87/23.00 (5.37)	24.85/24 (5.50)	0.046
Time since onset of injection (1 NR)	Mean/median (SD)	2.99/3.23 (1.64)	3.07/3.3 (1.80)	NS
Frequency of injecting drugs in previous 6 month (3 NR)	<2 times daily	132 (34.3%)	93 (54.7%)	<0.001
	2-3 times daily	150 (39.0%)	47 (27.6%)	
	> 3 times daily	100 (26.0%)	30 (17.6%)	
Drugs injected in previous 6 months (three most reported)	Heroin	377 (97.9%)	152 (89.4%)	0.028
	Cocaine	148 (38.4%)	91 (53.5%)	
	Heroin + Cocaine	132 (34.3%)	54 (31.8%)	
Recruitment setting	Street	119 (30.9%)	136 (80.0%)	<0.001
	Needle exchange	204 (54.0%)	32 (18.8%)	
	Treatment	62 (16.1%)	2 (1.2%)	
Glasgow residence (17 NR)	East	132 (34.2%)	36 (21.2%)	<0.001
	North/North	65 (16.9%)	26 (15.3%)	
	West	93 (24.2%)	20 (11.8%)	
	South	42 (10.9%)	78 (45.9%)	
	Central	29 (7.5%)	7 (4.1%)	
Type of residence in past six months	Hostel	122 (31.7%)	44 (25.9%)	NS
	Other ²	263 (68.3%)	126 (74.1%)	
Ever treated for drug use	n (% of N)	312 (81.0%)	139 (81.8%)	NS

¹ χ^2 test, t-test or where appropriate Mann Whitney U-test, NS is not significant at the 5% level

² other includes own home, someone else's home, residential drug treatment, hospital, B & B, rented accommodation and at work

NR non-response; SD Standard deviation

Table 8 Univariate and multivariate analysis of injecting risk behaviours for current injectors, with an injecting career of six years or less, recruited into the community-wide studies in Glasgow 2001/02 and 2004

Characteristics	Interview year		Odds ratio (95% CI)	
	Total	2001	2004	Multivariate *
Frequency of using N/S exchange in average week in the previous 6 months (40 NR)	once or less/week	180 (46.8%)	102 (60.0%)	1.00 (baseline)
	2 or more/week	233 (42.0%)	54 (31.8%)	0.53 (0.36-0.79)
Number of sterile N/S obtained from NE or pharmacy in average week in previous 6 months* (4 NR)	15 or less	309 (56.1%)	108 (63.5%)	1.00 (baseline)
	more than 15	242 (43.9%)	62 (36.5%)	0.64 (0.44-0.93)
Injected with N/S previously used by someone else in previous 6 months (6 NR)	No	311 (56.6%)	125 (74.4%)	1.00 (baseline)
	Yes	238 (43.4%)	43 (25.6%)	0.32 (0.22-0.49)
Number of individuals borrowed previously used N/S from (40 NR)	one person	116 (62.4%)	28 (65.1%)	1.00 (baseline)
	2 or more people	70 (37.6%)	15 (37.6%)	0.86 (0.42-1.75)

* Odds ratios 4 separate multivariate analysis are presented; odds ratios were adjusted for age, gender, recruitment setting, frequency of injection and hostel residence in previous 6 months

Views of needle exchange staff (Table 9)

Forty exchange staff were interviewed about their views on the new Guidelines. This included 33 pharmacy exchange staff from 16 pharmacies and 7 needle exchange staff from Turning Point exchange, Easterhouse GDPS needle exchange and the Homeless Health and Social Care Centre. From the pharmacy needle exchanges, 19 pharmacy assistants and 14 pharmacists were interviewed. Two nurses and five team members were interviewed from the remaining services.

Half of the exchanges had been operating for more than three years. The mean number of staff working in exchanges was five, ranging from two to 24 (data not shown).

Three members of staff had received no training in needle exchange. Just under half (19/40) had been given informal training, which included being shown what to do by the pharmacist and other staff, on the job training, reading information and discussions with the pharmacy needle exchange co-ordinator. The remainder of respondents (17/40) had had formal training in the form of lectures and courses.

Most staff (37/40) knew about the new Guidelines but only 25 could correctly cite the maximum number of n/s that could be given out per visit.

When asked what the exchange had done to implement the new Guidelines, almost all staff (39/40) said that staff had been informed and 36 said that clients had been informed.

Staff reported that the most frequent way in which IDUs had been informed of the changes was by word of mouth and distributing information cards (cited by 14/40). This was closely followed by the pharmacy displaying all information that they had received about the change (cited by 12/40).

The way in which IDUs were informed of the change differed between exchanges. Some staff commented that they would inform clients only if asked directly about the numbers that could be distributed.

"Clients are told of the change if they ask. Most just want five to 20...never had any wanting upper limit." (Pharmacist)

"If clients asked, we would inform them." (Pharmacy assistant)

Other exchanges were more pro-active.

"We encourage clients to take more." (Pharmacy assistant)

Just under two-thirds of respondents (25/40) reported that the exchange had changed their policies or the way in which the exchange was run after the introduction of the new Guidelines. The changes in policy included verbal and written policies on the number of needles and syringes to be given out per visit, how many n/s to be given when none were returned and how many n/s to give to new users.

As the change in the Lord Advocate's guidance is only a recommendation, respondents were asked how they individually, or as an exchange, decided on how many needles and syringes were given out to IDUs. Respondents reported that the

decision was based on a number of factors. Twenty-four staff stated that it was dependent mainly on the number of returns the individual brought back.

"If they don't have returns then we give them five." (Pharmacy assistant).

"If equipment is not returned then only two sets will be provided." (Pharmacy assistant).

"If people were not bringing back returns we would give out less. We try to make people responsible." (Drug worker)

Half of the respondents (20/40) said that the number of n/s distributed per visit was dependent on what the service user requested and 17 said that they used their own experience and the exchange's policies to guide them. Respondents also reported that all these factors could change dependent on how well or otherwise they knew the individual IDU who was requesting needles and syringes (data not shown).

There were mixed views on the impact that the Guidelines had had on exchanges. A third (12/40) felt that the change in guidance had no impact on the pharmacy/exchange. Nine staff believed that the frequency of visits by individuals had reduced and three respondents claimed that visits had increased. Six staff felt there had been a decrease in the number of clients who visited the exchange.

When asked their opinion on any impact on returns of used needles and syringes, 24 had not noticed any change.

Over a third of staff (15/40) were totally in favour of the new Guidelines.

"I think it is a good idea, a definite improvement, keeps them safe to have fresh needles. If they were a heavy user the old guidance meant that they had to reuse needles." (Nurse)

"It's better that they are getting more so that they are not reusing them." (Pharmacy assistant)

"I think it is positive; we need to get more needles out there. Just need to be sure that they are being safely disposed of." (Drug worker)

"Good idea so that they are not sharing as much." (Pharmacist)

A third of staff (14/40) did not personally approve of the new Guidelines and nine had mixed views about the change.

"Ridiculous, it's way too much, it's just encouraging them. Needles would be lying all over the place. They're not safety conscious." (Pharmacy assistant)

"I don't agree with the change, the numbers are too big. The fact that they can ask for 20 without returns is awful.....The old guidelines were better, even then maybe too many." (Pharmacist)

"Think it's a bad thing, encourages them to take more drugs. To have them lying around could be dangerous." (Pharmacy assistant)

“In some ways it is a bad thing as it encourages them but at the same time it reduces risks of catching viruses so it has its good and bad points.” (Pharmacy assistant)

“Good in some ways, stops sharing, but why should we give out so much for free?” (Pharmacy assistant)

Table 9. Views of pharmacy and needle exchange staff on new Guidelines (n=40)

		n
Amount of time operating as an exchange	Under 1 year	6
	1-2 years	9
	3-7 years	12
	>7 years	8
	DK	5
Training received (1 Non-response)	Informal training	19
	Formal training	17
	No training	3
Aware of Lord Advocate’s new Guidelines	Yes, can state new guidance	25
	Yes, but not sure of details	12
	No	3
What exchange has done to implement changes	Informed staff	39
	Informed clients	36
	Changed policies	25
How exchange informs service users of change	Word of mouth and cards	14
	Displays information	12
	Word of mouth	7
	Nothing has been done	4
	Distributes cards	3
How exchange decides how many n/s to distribute per visit	Number of returns	24
	Give client number requested	20
	Use own experience or pharmacy policy	17
Impact of change on exchange	No Impact	12
	Decrease in frequency of visits	9
	Increase in number of service users	7
	Decrease in number of service users	6
	Increase in frequency of visits	3
	Other	3
Impact on number of n/s returned	No Change	24
	Increase in returns	6
	Decrease in returns	4
	Unsure	4
	Varied	2
Personal opinion of change	In favour	15
	Not in favour	14
	Mixed opinion	9
	Unsure	2

Chapter 4: Discussion

The results of the study indicate that, more than a year after the introduction of the Lord Advocate's new Guidelines, very few IDUs in Glasgow were aware of the increase in the maximum number of n/s that could be obtained per needle exchange visit; even a specially designed, targeted campaign failed to raise awareness. Only one-fifth of injectors in both the pre and post awareness surveys knew that the limit had been changed.

However, despite the failure of the awareness campaign and continuing lack of knowledge of the new Guidelines among many IDUs, there were some positive changes in behaviour between the pre and post awareness surveys.

The maximum number of n/s that IDUs believed could be obtained per visit from a pharmacy or needle exchange increased significantly between the pre and post awareness surveys from a median of 20 n/s to a median of 25 n/s. There was a decrease in the number of respondents obtaining sterile n/s from non-reliable sources (i.e. friends, other drug users, on street, sexual partner, family, theft from reliable source and drug dealer) in the post awareness phase.

These findings could, perhaps, indicate that although the pre and post awareness IDUs did not appreciate that a change in policy had occurred, apropos the numbers of n/s being made available to them, this may be because the change happened gradually from the beginning of 2003. In the pre awareness phase in early 2004, IDUS reported that they were receiving a median of 20 n/s, more than the 15 sets recommended in the old Guidelines, suggesting that the new Guidelines had already increased the numbers of n/s dispensed to individual IDUs. If it is accepted that it may have been difficult for IDUs to perceive any obvious change between the pre and post awareness period (see Conclusion), the median increase, from 20 to 25, is impressive (i.e. a 25% increase). However, it still falls far short of the permitted maximum of 60 n/s per visit.

Whilst there was no difference in n/s sharing behaviour between the pre and post awareness periods, the proportion indicating that they had never shared in the previous four weeks was nearly 80% in both phases. Detecting any changes within such a short time period among a group who, during the pre awareness period, generally, did not share, would be very difficult. Although non-significant, however, the proportion sharing more than five times per month did decline from 7.1% to 4.7%.

There was a significant increase in the frequency of injecting in the post awareness sample, however over such a short comparative period it is difficult to say whether this was a result in the increase in n/s or merely a coincidence. Importantly, the findings show that the increase in availability did not lead to an increase in sharing of n/s.

About three-fifths of IDUs in both pre and post awareness surveys said that they did not want to obtain as many as 60 n/s per visit and they were, moreover, satisfied, generally, with the number they were currently receiving (a mean of 19 and 21 (median 15 and 15), pre and post awareness campaign respectively). In both samples, the main reason for not wishing to obtain a greater number was that this was enough for their injecting needs. Despite this claim, half of these respondents stated that, on average, they injected with the same needle more than once. It is clear that many IDUs do not yet know of the risks involved through re-use of their

own needles, nor are they perhaps aware of the danger of inadvertently re-using a n/s previously used by someone else if they store their used n/s along with those of an injecting partner (Taylor et al 2004).

Among the two-fifths of IDUs who did wish to receive more needles and syringes than they were currently receiving, the most common reason was to cut down on the number of visits to the needle exchange. As the role of needle exchanges and pharmacies extends beyond the dispensing of n/s to encompass imparting harm reduction messages, IDUs may fail to benefit from this if awareness and uptake of the increase reduces contact time with health care workers. However, this does not yet appear to have happened as reported frequency of visits to a needle exchange in an average week also significantly increased between pre and post awareness phases.

A further aim of the study was to determine changes in behaviours among recent initiates to injecting in 2001-2002 and in 2004. In the 2004 survey, 170 IDUs had begun injecting in the previous six years and their behaviours were compared with those of 385 IDUs with the same length of injecting careers who had been interviewed in 2001-2002.

There were some demographic differences between the two samples. In particular those in the 2004 sample were more likely to be male and reside in the city centre. After changing the design of the study to include an awareness campaign, there was limited time for recruitment and the running of the campaign. Recruitment was targeted more towards sites where the interview team knew they could recruit larger numbers in a short period of time. In comparison with the 2001-2002 study, more respondents were recruited from street sites, including homeless hostels, most of which housed male IDUs, and the city centre where larger numbers of injecting drug users are known to frequent. This may account for the significant difference in gender, recruitment setting and area of Glasgow residence from the study undertaken in 2001/2002.

After controlling for these demographic differences in the analysis, injecting of cocaine (on its own) had increased with just over half of recent initiates in 2004 reporting use of cocaine in the previous six months compared with just under two-fifths of IDUs in 2001-2002. With the increase of cocaine use it might be expected that the frequency of injecting would also increase. However there was a significant decrease in the frequency of injecting in the previous six months in the 2004 sample compared with the 2001-2002 sweep.

Moreover, those interviewed in 2004 were significantly less likely to inject with a n/s previously used by someone else; just over half of the 2001-2002 sample had injected in the previous six months with a n/s previously used by someone else in comparison with a quarter of the 2004 cohort. While it cannot be said with certainty that there is a causal link between the introduction of the new Guidelines and these behaviour changes (other factors may have influenced the changes between 2001-2002 and 2004), nevertheless, it is encouraging to note that both frequency of injecting and frequency of sharing used n/s has reduced among new injectors interviewed in 2004 in comparison with their peers in 2001-2002.

A third aim of the study was to ascertain the views of needle exchange and pharmacy staff about the change in Guidelines. The survey of 40 staff members showed that almost all knew about the change in Guidelines and almost all had informed clients of this change. However, it appeared that, apart from displaying

information about the new Guidelines, some staff directly told IDUs of the change only if asked. Other staff were more pro-active and explained the change to clients and encouraged them to take more n/s.

Just over a third of staff approved of the new Guidelines, one third disapproved of them and the remainder had mixed views. Furthermore, whilst just under two thirds said that the number of n/s that they dispensed depended on the number of returns they received, some respondents said that they decided what to dispense according to how well they knew the client.

These findings – that some staff were less forthcoming in telling IDUs of the change in guidelines; that two-thirds were either opposed to or had mixed views of the change; and that dispensing can sometimes depend on the individuals requesting n/s – may help explain why there was so little awareness of the new Guidelines among the IDU population.

Over one-fifth of staff members believed that frequency of visits by individual IDUs had reduced since the change. This contrasts with the results of the IDU survey, which indicated that visits to needle exchanges had increased. However the opening of more pharmacy exchanges since the new Guidelines had been implemented could have been a reason for a drop in the frequency of visits that some exchanges were experiencing.

The majority of staff believed that the guidelines had had no impact on the number of needles returned to the exchange.

Conclusion

More than a year after the introduction of the Lord Advocate's new Guidelines, very few IDUs in Glasgow were aware of the increase in the maximum number of n/s that could be obtained per needle exchange visit; even a specially designed, targeted campaign failed to raise awareness.

After the introduction of the new Guidelines, needle exchanges and pharmacies displayed information and informed IDUs. The results of the staff survey, however, indicated that some staff did not actively promote the increase to services users. Moreover, only one-third of staff approved of the new guidelines and some used their own judgement in deciding how many n/s should be given out.

It may be that the reluctance to implement, or disapproval of, the guidelines among some staff was one reason for the low level of awareness among IDUs. Needle exchange and pharmacy staff need, therefore, to be made more aware of the necessity to actively provide oral advice and information to their clients.

The attitude of some staff, however, does not explain why the targeted awareness campaign also failed to inform the majority of IDUs. Poster and cards were distributed to all exchange outlets and the cards were inserted in all n/s packs. Yet this strategy, too, failed to increase knowledge among IDUs.

One of the study findings indicated that IDUs did not, generally, wish to have any more n/s than they were currently receiving (about 20 per visit). The message contained in the awareness campaign (or imparted by pharmacists) that more n/s were available was therefore meaningless to them. The main reason for not wanting more n/s was that the current level was sufficient for their needs. However it was

noted that half of these IDUs were re-using their own n/s; yet the awareness campaign cards alerted IDUs to the risks involved in this.

Due to time constraints, the time period for the awareness campaign was six weeks. After this period, recruitment for the post awareness group began. Cards and posters were distributed to agencies throughout the city and were placed inside the packs of n/s that are distributed through the pharmacy exchanges. The cards placed within the packs, however, would not have reached some injectors until towards the end of the recruitment period. It may be that if the campaign had run for a longer period it would have had more impact.

There is some evidence, however, that leaflets are not successful in communicating messages to IDUs (Wright et al). Some IDUs may, for example, have literacy problems that render written material ineffective. There is perhaps a need to evaluate the readability of written harm reduction materials and to design and evaluate new ways of delivering harm reduction messages to IDUs.

Nevertheless, there have been some positive changes in behaviours among IDUs in Glasgow since the introduction of the awareness campaign and since 2001.

The maximum number of n/s that IDUs believed could be obtained per visit from a pharmacy or needle exchange increased significantly. Respondents were also less likely to obtain sterile n/s from non-legitimate sources in the post awareness phase. Whilst frequency of injecting had increased, there was no increase in sharing behaviour. A comparison between recent initiates to injecting in 2001-2002 and 2004 found a decrease in both frequency of injecting and sharing in 2004.

These changes cannot definitely be proved to arise directly from the increased availability of n/s; other factors may have influenced behaviour between 2001-2002 and 2004. Nevertheless, the association between the introduction of the new Guidelines and behaviour changes suggests that the former may be having a positive impact on IDUs behaviours. It would seem prudent to continue with the current policy on n/s distribution. However, the findings of this study also suggest that further work may need to be done by needle exchange staff to inform IDUs of their entitlement to a greater number of n/s, and to encourage them to make use of their entitlement.

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Scottish Executive Effective Interventions Unit Dissemination Policy

1. We will aim to disseminate the right material, to the right audience, in the right format, at the right time.
2. The unit will have an active dissemination style. It will be outward looking and interactive. Documents published or sent out by the unit will be easily accessible and written in plain language.
3. All materials produced by the unit will be free of charge.
4. Material to be disseminated includes:
 - Research and its findings
 - Reports
 - Project descriptions and evaluations
 - Models of services
 - Evaluation tools and frameworks for practitioners, managers and commissioners.
5. Dissemination methods will be varied, and will be selected to reflect the required message, and the needs of the target audience.

These methods are:

- Web-based – using the ISD website ‘Drug misuse in Scotland’ which can be found at: <http://www.drugmisuse.isdscotland.org/eiu/eiu.htm>
 - Published documents – which will be written in plain language, and designed to turn policy into practice.
 - Drug Action Team channels – recognising the central role of Drug Action Teams in developing effective practice.
 - Events – recognising that face-to-face communication can help develop effective practice.
 - Indirect dissemination – recognising that the Unit may not always be best placed to communicate directly with some sections of its audience.
6. This initial policy statement will be evaluated at six-monthly intervals to ensure that the Unit is reaching its key audiences and that its output continues to be relevant and to add value to the work of those in the field.

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