

Effective Interventions Unit

Evaluation of Greater Glasgow Pharmacy Needle Exchange Scheme 1997-2002: SUMMARY

Background

A review of needle exchange in Glasgow in 2001 noted that drug injectors continue to be at high risk of infection from HIV, hepatitis B and C viruses and other micro-organisms through sharing and other unhygienic uses of injection equipment (Gruer 2001). The review suggested that there was an urgent need to increase efforts to prevent the spread of these infections. Further, a Scottish report, 'Preventing HCV in Scotland: Options for Action' recommends that research to explore how needle exchanges vary in their clientele, and how different groups of drug users access these schemes, should be conducted. It further recommends that a reporting scheme for clients attending exchanges should be developed (HEBS 2002).

In Glasgow, needle exchange is provided at 4 key facilities; pharmacy needle exchanges, Glasgow Drug Problem Service (GDPS) needle exchanges, Base 75 and Glasgow Drug Crisis Centre (GDCC). Activity data are collected at all these services. This report focuses on pharmacy needle exchange, but draws on data from the other needle exchange facilities for comparative purposes.

Aim

The project had three key aims:

1. to examine activity levels and client profiles at pharmacy needle exchanges over a six year period
2. to compare activity levels and client profiles at pharmacy needle exchanges with other needle exchange facilities in the city
3. to develop a database for Greater Glasgow pharmacy needle exchange

Method

Pharmacy needle exchange log sheets are completed for each client contact. Date of attendance, patients' first name and initial of surname, date of birth, sex, whether the client is new and/or injecting steroids or stimulants, and the equipment issued and returned is recorded. Although these data are routinely collected, they had not previously been entered onto a database for analysis.

Client identification numbers were created based on first name, first initial of surname and date of birth. However, due to issues of consistency, clarity and accuracy with the recording of these data by pharmacists and in the accuracy and consistency of data entry, it is inevitable that more than one unique client identification number may have been created for the same individual. Therefore the total number of clients may include a number of duplicates and may be an overestimate.

For pharmacy needle exchange data, t-tests were used to ascertain any gender differences in age and number of client contacts. Simple descriptive statistics with 95% confidence intervals (95% CIs) were calculated for age, client contacts, the proportion of female clients and the proportion of needles and syringes returned from the pharmacy needle exchange data. These were compared to averages and proportions from community needle exchange facilities.

Needle exchange opening hours

Throughout the reporting period, pharmacy needle exchanges were open 8½ to 9 hours per day, 5 days a week. In addition, they were open for either a half-day or whole day on Saturdays. None were open on Sundays. The needle exchange at Base 75 is a female only service for street sex workers operating in the red light district 6 evenings per week (7.30-11.30pm). It is closed on a Saturday night. GDCC is open 24 hours a day, 365 days a year, and provides a 24 hour needle exchange as well as an assessment and treatment service. However, from time to time during staff shortages, the hours may be reduced at short notice. The GDPS provides 7 community needle exchanges (Easterhouse, Castlemilk, Possilpark, Gorbals, Parkhead, Pollock and Clydebank). Six of these are open 3½ hours on two nights per week and the exchange in Clydebank is open for 2 hours on Friday afternoon.

Key Results

1) Greater Glasgow pharmacy needle exchanges

Expansion of Greater Glasgow pharmacy needle exchanges

There was an 87% increase in the number of pharmacies in the pharmacy needle exchange scheme from 8 in 1996/97 to 15 in 2001/02. The percentage of Glasgow pharmacies offering this service rose from 4% (8/212) in 1996/97 to 7% (15/215) in 2001/02.

Activity in 1996/97-2001/02

The number of new clients attending the pharmacy exchanges increased by 474% from 220 in 1996/97 to 1262 in 2001/02. The total number of clients increased by over 1100% from 1599 to 19916 clients in 2001/02. The number of attendances increased by 686% from 11589 to 79493.

Profile of clients

The average age of female clients has been consistently younger than males. The average age of females attending was significantly younger in 2001/02 (30, range 16-59) than males (31, range 16-60; $p < 0.01$). In 2001/02, there were no differences in the proportion of males (6.4%) and females (6.1%) that were new clients ($p = 0.41$). Significantly greater average contacts per client were made by males (4.2, range 1-218) compared to females (3.4, range 1-109; $p < 0.01$).

Sets of equipment supplied by and returned to exchanges

There was a 686% increase in the numbers of sets of equipment issued by the pharmacies from 8014 in 1996/97 to 558176 in 2001/02. The percentage of used equipment returned to the pharmacies for disposal rose from 70% in 1996/97 to 86% in 2001/02.

2) Comparison of pharmacy needle exchanges with other community needle exchanges in Greater Glasgow for 2001/02

It is important to note that the clients may have attended more than one needle exchange. Therefore the total number of needle exchange clients will contain duplicates.

Activity in 2001/02

As already mentioned, the total number of attendances at pharmacy needle exchanges in this year was 79493. This compares to 12878 at GDPS exchanges, 5445 at Base 75 and 29151 at GDCC. A total of 1262 new clients attended pharmacy needle exchanges. This compares to 102 new clients at GDPS exchanges, 450 at Base 75 and 393 at GDCC.

Mean age of clients attending Glasgow needle exchanges in 2001/02

Clients attending the pharmacy needle exchange (average age = 31 years) were on average significantly older than those attending needle exchanges at both Base 75 (average age = 25

years) and GDCC (average age = 28 years). On average clients attending the GDPS needle exchange were significantly older (average age 32 years).

Average number of contacts per client to Glasgow needle exchanges in 2001/02

During 2001/02 the average number of contacts per client at the pharmacy needle exchange was 4, which was significantly lower than the average number of contacts at Base 75 (average=5 contacts), GDCC exchange (average=7 contacts) and GDPS exchanges (average=11 contacts).

Male/Female Ratio attending Glasgow needle exchanges in 2001/02

With the exception of Base 75 (which is a female only service), the majority of clients at all needle exchanges were male (71% overall). A significantly greater proportion of women clients attended GDCC (30%) and GDPS (29%) than pharmacy needle exchanges (25%, 95% CIs 24-26%).

Rates for needles and syringes returned to Glasgow needle exchanges in 2001/02

Over half of the needles and syringes issued during 2001/02 were from pharmacy exchanges (52%), compared to 15% from GDPS exchanges, 5% from the Base 75 exchange and 27% from the GDCC exchange. The return rate of needles and syringes issued at pharmacy needle exchanges (86%; 95% CIs 85.9-86.1%). was significantly higher than return rates at both GDCC (70%) and Base 75 (25%). A significantly greater proportion of needles and syringes were returned at GDPS (94%) than at pharmacy needle exchanges (86%, 95% CIs 85.9-86.1%).

Conclusions

This report demonstrates the growth in activity and clients attending the pharmacy needle exchanges in Glasgow and compares them to other community needle exchanges in the city. Despite the small increase in the number of pharmacies participating in the needle exchange scheme, there has been an increase of over 1100% in the number of clients and almost a 700% increase in the number of client contacts during the same period.

In 2001/02, over half of the needles and syringes issued were issued from pharmacy needle exchanges. However, the average number of contacts per client to the pharmacy needle exchanges was significantly lower than the other needle exchanges in the city. This suggests that pharmacy needle exchanges may attract occasional injectors, while regular users attend the other exchanges.

With the exception of Base 75, the proportion of used needles and syringes returned to pharmacy and community needle exchanges was high. The pick and mix system used at the pharmacy exchanges during the period under investigation resulted in far fewer personal cinbins being supplied than the number of exchange attendances warranted. The proposed move to pre-packs should reduce this imbalance and increase the supply and use of cinbins.

Moreover, the recent review of needle exchanges in Greater Glasgow found that the average costs per client contact were substantially lower at both pharmacy (£2.17) and GDCC (£2.28) exchanges compared to GDPS exchanges (£9.18). When the costs of needles and syringes were included in the cost calculations, the review found that the cost per set was twice as much at the GDPS exchange compared to the pharmacies. This was so even though the GDPS exchanges issued more sets per exchange than pharmacies (12 versus 7) (Gruer 2001). The review set a target to double the number of pharmacy needle exchanges.

Uptake of the service by female injectors at pharmacy needle exchanges was significantly lower than at other needle exchanges in the city. One reason for the low uptake of pharmacy exchange by women could be a reluctance to access the pharmacy in their community due to the stigma attached to injecting drug use. Other reasons could include not wishing to access the same pharmacy they use for other non drug-related services, or that they have children with them.

Pharmacy needle exchanges and GDPS needle exchanges appear to be used mainly by the older age group (average age >30 years), while younger injectors use Base 75 (average age 25 years) and GDCC exchanges (average age 28 years). This could be a result of the evening opening hours of both GDCC and Base 75, attracting a younger client group in crisis or engaged in street sex work.

There were approximately 18,000 clients attending pharmacy needle exchanges during 2000/01. The problem with duplicates has been described in the methodology section. This figure may be slightly inflated. However, it is worth noting that the figure is considerably higher than the estimated prevalence of approximately 7,000 injectors in the GGNHSB area (Hay 2001). It should be noted that only opiate and benzodiazepine injectors were included in this sample. Pharmacy needle exchange data were not included in the prevalence study.

Having developed a database of 5 years activity at the pharmacy needle exchanges it is vital to ensure that this database continues to be used and resources identified to ensure that returns are entered regularly by a named individual. These data can be used to generate monthly reports and calculate payment of the pharmacists for the needle exchange service.

Key recommendations

- ✓ The provision of pharmacy needle exchanges in the city should be further increased, given the success of the pharmacy needle exchanges in operation and the identified unmet need of clean needles/syringe provision for current injectors.
- ✓ Innovative ways of encouraging female injectors to use pharmacy needle exchanges should be sought. The trend in the female injectors use of the pharmacy exchange should be monitored following the introduction of the planned pre-packs system.
- ✓ The legal situation is unclear around the issuing of needles and syringes to injectors aged younger than 16 years, and requires to be clarified by the Lord Advocate's office.
- ✓ Data from all needle exchanges should be included in future studies or needs assessments estimating the local and national prevalence of injecting drug use.
- ✓ A copy of this report should be sent to all needle exchange providers to ensure that they are aware of the important contributions they make towards reducing harm to current drug injectors within the city.
- ✓ Pharmacists should be alerted to the importance of consistency, clarity and accuracy in their recording and should ensure that answers to all questions on the clinic log are asked at each client contact (especially data on whether the client injects steroids or stimulants).

References

Gruer L (2001). A review of needle exchange in Greater Glasgow. Prepared by a short-life working group for the City of Glasgow Addictions Planning and Implementation Group on behalf of the Greater Glasgow Drug Action Team

Hay G, McKeganey N, Hutchinson S (2001). Estimating the national and Local Prevalence of Problem Drug Misuse in Scotland. University of Glasgow, Scottish Centre for Infection and Environmental Health and NHS Scotland.

HEBS (2002). Preventing HCV IN Scotland: Options for Action. Report of a deliberative seminar. Health Education Board for Scotland, Edinburgh

This summary and the full report is at <http://www.drugmisuse.isdscotland.org/eiu/eiu.htm>
Scottish Executive Drug Misuse Research Programme