

Review

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A comprehensive system of pharmaceutical care for drug misusers

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Abstract

This article outlines the evolution of a community pharmacy-based supervised consumption of methadone program in Greater Glasgow. The formalization of this program in 1994 promoted full patient compliance with the methadone regimen and reduced seepage of the drug to the illicit market. 184 of the area's 215 community pharmacies now dispense methadone for the treatment of opiate dependence. Of these, 173 have a supplementary contract with the local health board to supervise the consumption of methadone on their premises. In addition 15 of "methadone" pharmacists are involved in the provision of a pharmacy based needle exchange scheme. This has been shown to be the most efficient and cost effective method of delivering clean injecting equipment to injecting drug users in the Greater Glasgow area. Glasgow's pharmacists' have now been involved in the methadone and needle exchange programs for more than ten years. The support needed by pharmacists and the steps that have been put in place to provide this level of commitment are described. The development of the Glasgow pharmacy based services to drug users has had a major impact on practice elsewhere in the United Kingdom.

Introduction

Over the past ten years the involvement of Glasgow's community pharmacists in the area's methadone maintenance program has increased dramatically. In 1993 a major review of drugs services in Glasgow suggested that the high prevalence of injecting drug use prior to 1993 was because, before that date, little use was made of "successful" substitute prescribing of methadone [1].

This 1993 report proposed new service developments including the setting up of a specialist service and a drug crisis center. Methadone was recognized as the main therapeutic intervention, as it possessed the best chance of success, in terms of reducing morbidity and mortality. General (office based medical) practice was identified as the most appropriate setting for this to be carried out [2].

The 1995 report of the (Scottish) Ministerial Drugs Task Force "Drugs in Scotland: Meeting the Challenge" stated that 'there was considerable potential for pharmacists to play an even greater role in "frontline" services to drug misusers. This report recommended that health boards should consider how best this could be developed [3].

In the United Kingdom, a special license is not required by a medical practitioner to prescribe methadone for the treatment of addiction or organic disease. However, methadone prescriptions must satisfy certain statutory requirements. Valid prescriptions can be dispensed at any registered community pharmacy. There is no legal requirement for methadone prescriptions to be dispensed daily nor for the consumption of the doses to be supervised [4].

Until the development of the Glasgow supervised methadone program it was common practice in the United Kingdom for methadone to be supplied to patients to take away for consumption elsewhere. The dispensing of a supply for a whole week or longer was commonplace and a supply for one month was not unusual [5].

Anecdotally the catalyst for what has become the pharmacist-supervised consumption of methadone program was a personal request from one general practitioner (GP) to her local community pharmacist in 1992[6]. The pharmacist was asked if she would be prepared to supervise the consumption of methadone in her pharmacy on a daily basis for one specific patient about whom the GP was concerned. The success that resulted from this intervention led to the emulation of the idea by other local GPs and pharmacists.

Another reason for supervised consumption of methadone in Glasgow was previous experience of an unstructured and unsupervised system in the late 1970s-early 1980s. Public opinion was extremely antagonistic to methadone as a treatment modality. Great caution was thus required to gain acceptance of its reintroduction as a treatment option. To this day there is still a high level of public resistance to the concept that methadone is the drug of choice for the treatment of opiate dependence.

By the time of the Health Board review in 1993, a small number of prescribing GPs had followed the example of their colleague. In 1994, when the Glasgow Drug Problem Service was set up, it was decided to actively promote the concept of supervised consumption of methadone in community pharmacies. In 1997 Scottish Office Department of Health published guidance on the planning and provision of Drug Misuse Services and cited supervised methadone consumption by community pharmacists in Glasgow as innovative practice in drug misuse services [7].

In 1999 the United Kingdom Departments of Health published "Drug Misuse and Dependence – Guidelines on Clinical Management" [8]. These guidelines advised that in order to ensure compliance and reduce diversion new prescriptions [of methadone] should be taken under daily supervision for a minimum of three months.

In the same year the Greater Glasgow Drug Action Team (DAT) published its strategy for 1999–2003 [9]. The DAT's action plan listed a number of specific objectives including:

- To reduce the sharing of injecting equipment
- To reduce the frequency of drug injecting

- To reduce levels of drug use among current drug users

In the following year a report from the UK Advisory Council on the Misuse of Drugs (ACMD) went even further by advising that normal practice should be for methadone to be taken under daily supervision for six months or longer [10]. The ACMD report went on to recommend that this "should be varied only exceptionally, and if a strong case can be made out in the individual instance".

The number of Glasgow pharmacies dispensing prescriptions of methadone for the treatment of opiate addiction has steadily increased from 46% (97/212) in 1994 to 84% (181/215) in 2003. The number of pharmacies where supervised consumption (self-administration) of doses of methadone on the premises takes place has increased from 20% (43/212) in 1994 to 80% (173/215) in 2003. The number of patients visiting the pharmacies has increased from an estimated 2800 in 1997/8 to 6300 in 2003[11]. In contrast, the number of pharmacies offering a needle exchange service rose from 8 active participants in 1996 to 15 in 2002/3. A major review of Glasgow's needle exchange scheme in 2001 recommended that this number should be increased by 100% to 30 [12]. Financial constraints meant that the expansion was delayed but on target to be completed by early 2005. In addition, the views, beliefs, attitudes and objections of residents, other businesses and community representatives must be taken into account when a new pharmacy exchange is opened. These factors mean that it can take longer than anticipated to complete the process of opening a new exchange.

A Scottish Executive (Scottish Government): Effective Interventions Unit research report highlighted the success of Glasgow's existing pharmacy needle exchanges between 1997 and 2002. Over that period the total number of attendances at pharmacy exchanges rose by 686% from 11589 in 1996/7 to 79493 in 2001/2. There was a similar percentage increase in the number of sets of equipment 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 1996/7 to 86% in 2001/02 [13]. The data used to produce the report are routinely collected at all needle exchange outlets in Glasgow. A common data collection form is used. This made it possible to compare activity at the pharmacies with the other outlets. Over the study period the number of new clients attending the pharmacy exchanges increased by 474% from 220 in 1996/97 to 1262 in 2001/02. The number of attendances increased by 686% from 11589 to 70493.

In terms of the national prevalence of problematic drug misuse it was estimated that there were 55,800 individuals misusing opiates and benzodiazepines in the year 2000 within Scotland. These figures correspond to a

prevalence rate of 2% in the Scottish population aged between 15 and 54 (95% CI 1.5–2.7%) The minimum number of drug users identified as being in contact with services or identifiable from criminal justice sources was 22,795 (40% of estimated total)[14]. For Glasgow the 2000 estimates were 15,975 problem users giving a prevalence of 3.1% of the population between the ages of 15 and 54 [15].

As previously mentioned, there are 215 community pharmacies operating within the Greater Glasgow area. They serve a population of about 900,000 covering the City of Glasgow, the whole of the local authority area of East Dumbartonshire and parts of North and South Lanarkshire and East Renfrewshire. Though most of the area is inner city or urban there are some parts of the Lanarkshires and East Dumbartonshire that are rural in nature. The dispensing of National Health Service (NHS) prescriptions and other pharmaceutical services paid for by the NHS comprise approximately 80% or more of the business of a majority of pharmacies in Scotland. The supervision of the consumption of methadone by patients attending the pharmacy and the provision of pharmacy-based needle exchange service are both considered to be supplementary NHS services and are paid for by the health service. In order to receive a contract to provide such services pharmacists must have undertaken specified training programs and provide the service to set standards and criteria. Both schemes attract an annual retainer fee together with an additional fee for each supervision or needle exchange supply.

Very soon after the inception of the supervised methadone program in 1994/5 it was recognized that the participating pharmacists were in need of specific professional, clinical and practical support.

Professional support

A senior pharmacist with specific expertise in the field of drug misuse was appointed to the newly created post of Area Pharmacy Specialist-Drug Misuse in early 1996. The original job description stated that the duties of the postholder were to provide advice and support to the Greater Glasgow Health Board, hospital trusts, medical and pharmaceutical practitioners and others on all pharmaceutical matters that relate to drug misuse. The key functions were to: -

- Monitor and evaluate the supervised consumption of methadone program in terms of cost and quality of service
- Provide support/advice to community pharmacists involved in the continuing care of drug misusing patients

- Provide education and training to pharmacists and other health professionals on pharmaceutical aspects of drug misuse
- Undertake and encourage clinical audit and practice research in aspects of drug misuse
- Provide direct liaison between the Glasgow Drug Problem Service and hospital and community pharmaceutical services
- Provide advice to pharmacists supporting drug using patients on topics such as oral health and safe storage of medicines
- Provide pharmaceutical advice and expertise to Base 75 (Drop in center for Women Street Workers) and the Glasgow Drug Crisis Centre, including formulary development

Within a few months it was recognized that co-ordination of the pharmacy needle exchange scheme should be added to the list of functions. Previously a senior pharmacist working in HIV and infectious diseases had undertaken this role in an ad hoc manner.

Over the years as the number of pharmacies involved in the program and the number of patients increased it became clear that it was becoming increasingly difficult for one person to effectively undertake both functions. Other professionals have recognized that community pharmacists are an important but neglected resource in terms of patient treatment and care. Community pharmacists interact with drug users on a daily basis at least six times a week, within their own community and in a non-threatening environment. Nevertheless, the advice or opinion of community pharmacists was rarely, if ever, sought when decisions were made on a patient's future treatment. In 2002 a "Peripatetic Pharmacist" was appointed on a trial basis. The function of this post was to provide an effective and valued range of support services to community pharmacists in a clearly defined geographic area within Greater Glasgow. The scope of this ancillary post was to:

- Facilitate the development of a range of opportunities for community pharmacists to play a more active role in the care and treatment of problem drug users
- Provide locum cover so that individual community pharmacists could attend case conferences, assessment meetings, etc., relating to individual patients

- Provide locum cover so the individual pharmacists could attend GP practice multi-professional/disciplinary training sessions
- Facilitate the delivery of a range of development and support work to community pharmacies
- Support practitioner networks

Education and training

In the United Kingdom there are four national continuing post-qualification pharmaceutical organizations for pharmacists, one for each of the "Home Countries". In 1996 the Scottish Centre for Post-Qualification Pharmaceutical Education (SCPPE) published a distance learning package "Pharmaceutical Aspects of Methadone Prescribing" that includes 20 questions that can be returned to the Centre for marking [16]. Since publication of the module any pharmacist wishing to be contracted to provide a supervised methadone service must provide the Health Board with evidence of completion of this package. In 1999 another package "Pharmaceutical Care of the Drug Misuser" was published. This package deals mainly with harm reduction, needle exchange and blood borne viruses [17]. Pharmacists contracted to provide a needle exchange service are required to prove completion of this package.

In addition pharmacists are encouraged to attend study multidisciplinary study evenings. There is an annual meeting and training evening for the needle exchange pharmacists and their staff. In the last two years a training program has been developed for "Frontline Staff". These are pharmacy and general practice staff members. These staff members are often the first contacts that a drug user has when attending a GP's surgery or pharmacy.

Outcomes

Treatment of opiate-dependent drug injectors with methadone in a community wide general practitioner centred scheme, with supervised daily consumption of methadone, is associated with major beneficial change for a substantial proportion of patients [20].

There has been a 686% increase in the numbers of sets of injecting equipment issued by 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 [20].

Comparison of 2002 data from the Scottish Drug Misuse database [21] (Table 1) shows that for the year although Glasgow has a higher level of persons reported to the database and the higher level of prescribing of methadone than is the case in Edinburgh (Lothian), it has the lowest level of persons reported as using illicit methadone.

Lothian Health Board area has a much lower level of supervised consumption of methadone than is the norm in Glasgow [22] yet it has a much higher number of persons reported as being addicted to illicit methadone.

A recently published report on the role of methadone in drug related deaths in the west of Scotland found that a growing prevalence of heroin misuse has resulted in an increase in the number of individuals entering methadone maintenance programs. Despite a continuing increase in the amount of methadone prescribed, methadone deaths in Strathclyde (the police area covering Glasgow and the West of Scotland) have decreased since 1996 due possibly to changes both in prescribing and clinical care [23]. The report concluded that, along with the findings of a "Confidential Inquiry, " increased and widespread supervision implemented by pharmacists have been major factors in decreasing deaths involving methadone".

Since the appointment of Glasgow's Area Pharmacy Specialist-Drug Misuse in 1996, several other Scottish Health Boards have recognized the importance of supporting pharmacists involved in this area of practice. Six more Scottish Health Boards have created similar posts although one of the smallest failed to appoint due to lack of applicants. Of the five remaining Scottish Health Boards, at least two are actively considering the creation of Area Pharmacy Specialist-Drug Misuse posts.

A Peripatetic Pharmacist pilot proved to be very successful and popular with the pharmacists in the area covered by the project. In particular, the pharmacists welcomed the opportunity to attend practice meetings and case conferences. Following a major review of treatment services in Glasgow it is hoped that it will be possible to create three such posts to cover the whole of the health board area.

Evaluation of the peripatetic pharmacist post highlighted the benefits of training, support and advice to community pharmacists [21]. Together the posts of Area Pharmacy Specialist and Peripatetic Pharmacist Drug Misuse are viewed as a resource of value to other health and social work colleagues and promote effective multidisciplinary care of the drug misuser.

The planned expansion of the pharmacy needle exchange scheme led to the recognition that it required its own coordinator. More support than was available for the Area Specialist. A separate Pharmacy Needle Exchange Co-ordinator post was created in July 2003 with the express remit of taking forward the recommendations of the review and of increasing the number of participants in the scheme from 15 to 30 by 2005. The coordinator will liaise with the manufacturer and supplier of the needle exchange packs,

Table 1: (source Drug Misuse Statistics Scotland, 2002)

	New patients	Use of illicit methadone	Number of prescriptions for methadone	Number of prescriptions per 1000 population
GGNHSB (Glasgow)	1366	30	115,049	127
Lothian Health Board (Edinburgh)	593	130	30,818	39

arrange training of pharmacists and staff, organize Hep A&B vaccination of personnel, deal with local community groups, residents etc., and arrange for the collection and safe destruction of returned waste.

In order to allow the community pharmacist to fully participate in the integrated care of the drug misuser and maximize their role in harm reduction, it is essential that training and support mechanisms provided by the support posts are continued and extended.

It can be seen that community pharmacists have a vital role to play in harm reduction. Unlike other health-care professionals, pharmacists have a unique accessibility to the general population due to their open availability and multiple pharmacy locations. This is an important factor that should be utilized to maximize their important harm reduction role.

List of abbreviations

ACMD – Advisory Council on the Misuse of Drugs

APC – Area Pharmaceutical Committee

DAT – Drug Action Team

GGNHSB – Greater Glasgow (National) Health (Service) Board. Also referred to as GGHB

GGPCT – Greater Glasgow Primary Care Trust (Recently renamed Primary Care Division, NHS Greater Glasgow)

GP – General Practitioner

NHS – National Health Service

SCIEH – Scottish Centre for Infections and Environmental Health

SCPPE – Scottish Centre for Post-Qualification Pharmaceutical Education (Recently renamed NHS Education (Pharmacy))

Competing interests

None declared.

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References

- Greater Glasgow Health Board: **Drug misuse and health in Glasgow – A review of services.** Greater Glasgow Health Board and Glasgow Social Services, Glasgow 1993.
- Roberts K, Bryson SM: **The contribution of Glasgow pharmacists to the management of drug misuse.** *Pharmaceutical Journal* 1999, **6**:244-248.
- Lord Fraser of Carmyllie: **Drugs in Scotland: Meeting the Challenge – Report of the Ministerial Task Force.** The Scottish Office Home and Health Department, Edinburgh Recommendation 32 para 4.43 1995.
- Roberts K, McNulty H, Gruer L, Scott R, Bryson S: **The role of Glasgow pharmacists in the management of drug misuse.** *International Journal of Drug Policy* 1998, **9**:187-194.
- Strang J, Sheridan J, Barber N: **Prescribing injectable and oral methadone to opiate addicts: Results from the 1995 natural postal survey of community pharmacies in England and Wales.** *British Medical Journal* 1996, **313**:270-272.
- Barclay K: **(personal communication).** 2003.
- The Scottish Office, Department of Health: **Planning and Provision of Drug Misuse Services.** Appendix E. *The Scottish Office* 1997:29.
- UK Departments of Health: **Drug Misuse and Dependence – Guidelines on Clinical Management.** Stationary Office, London 1999:32.
- The Greater Glasgow Drug Action Team: **Tackling Drugs Together in Greater Glasgow Strategy 1999–2003.** 1999:34.
- Advisory Council on the Misuse of Drugs: **Reducing drug related deaths: A report by the Advisory Council on the Misuse of Drugs.** Home Office, London 2000:64.
- Roberts K, Norrie J, Murray H, Gilmour R: **Unpublished data from Annual Survey of Glasgow Pharmacies 1997–2003.** .
- Greater Glasgow Health Board: **A review of the needle exchange scheme.** Glasgow 2001.
- Effective Interventions Unit: **Evaluation of Greater Glasgow Pharmacy Needle Exchange Scheme 1997–2002: Summary.** *Scottish Executive Drug Misuse Research Programme* 2003 [<http://www.drugmisuse.isdscotland.org/eiu/eiu.htm>].
- Hay G, McKeganey N, Hutchinson S: **Estimating the National and Local Prevalence of Problem Drug Misuse in Scotland. Executive report.** University of Glasgow and SCIEH, Glasgow 2001, **5.1**:9.
- Hay G, McKeganey N, Hutchinson S: **Estimating the National and Local Prevalence of Problem Drug Misuse in Scotland. Executive report.** University of Glasgow and SCIEH, Glasgow 2001, **5.3**(Table 2):15.
- SCPPE: **Pharmaceutical aspects of methadone prescribing.** 1996 reprinted 1998 and 2000. Scottish Centre for Post Qualification Pharmaceutical Education. Glasgow 2001.
- SCPPE: **Pharmaceutical care of the drug misuser.** Scottish Centre for Post Qualification Pharmaceutical Education. Glasgow 1999.

18. Hutchinson SJ, Taylor A, Gruer L, Barr C: **One-year follow-up of opiate injectors treated with oral methadone in a GP-centred programme.** *Addiction* 2000, **95**:1055-1068.
19. Roberts K, Gilchrist G, Cameron J, Ahmed S: **Evaluation of the Greater Glasgow Pharmacy Needle Exchange Scheme 1997–2002.** *Effective Interventions Unit, Scottish Executive, Edinburgh* [<http://www.drugmisuse.isdscotland.org/eiu/eiu.htm>].
20. ISD Scotland: **Drug Misuse Scotland Statistics Scotland 2002.** Table B1 All prescribed drugs: year ending 31 March 2002. *Information and Statistics Division, Scotland, Edinburgh* 2003.
21. Weinrich M, Stuart M: **Provision of Methadone Treatment in Primary Care Medical Practices: Review of the Scottish Experience and Implications for US Policy.** *JAMA* 2000, **283**:1343-1348.
22. Seymour A, Black M, Jay J, Cooper G, Weir C, Oliver J: **The role of methadone in drug-related deaths in the West of Scotland.** *Addiction* 2003, **98**:995-1002.
23. Hunter C: **Preliminary Report on Peripatetic Pharmacist DAT Funded Post – The First Six Months.** *Report presented to Greater Glasgow Primary Care Trust, Director of Pharmacy* 2003.

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