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# **DRUG MISUSERS AND THEIR GENERAL PRACTITIONERS**

## **A SURVEY OF THE VIEWS OF DRUG MISUSERS**

### **TRAINING OF GENERAL PRACTITIONERS IN THE MANAGEMENT OF DRUG**

#### **MISUSE**

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**to the University of London**

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**ABSTRACT**

**Objectives**

1. To determine drug misusers' views about their primary health care and their relationship with general practitioners.
2. To undertake a controlled evaluation of small group education of general practitioners in the management of drug misusers.

**Method**

1. Drug misusers attending five treatment services in north east London - a general practice with a special interest in managing drug misuse; a private drug clinic; a community drug team; a drug dependence unit and a street agency – were interviewed using a semi-structured interview and the Social Functioning Questionnaire.
2. All general practitioners who practised within the former North East Thames Regional Health Authority were approached to take part in small group teaching about drug misuse. This was conducted over two consecutive afternoons in a general practice, with four follow-up seminars. The trained doctors were compared with two groups of untrained general practitioners. Outcome measures included: Drug Training Questionnaire responses at the outset and 9 months after training; evaluation of the training appraised on a ten point Likert scale; Home Office Addicts Index and North Thames Regional Drug Misuse Database figures for notification of newly presenting subjects, for each of the three groups of general practitioners, 8 months prior to training and 8 and 16 months after training.

**Results**

1. Ninety percent of the drug misusers were registered with a non-specialist general practitioner and 88% of these doctors were aware of their patients' drug use. Half of the non-specialist general

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practitioners aware of their patient's drug use were reported as prescribing substitute medication. Sixty percent of misusers attending the non-specialist doctors perceived their general practitioners to hold negative or neutral views about them. Doctors in the specialist general practice were more likely to prescribe, compared to the other four centres, and 97% of their patients believed these doctors had a positive view of drug misusers. The specialist general practice was more active in providing counselling and/or education about drug misuse.

2. Forty doctors attended the teaching programme. Twenty-eight doctors comprised comparison group one (interested but unable to attend the teaching) and 30 formed comparison group two (not interested in training but completed questionnaires). The about to be trained group were seeing and treating more drug misusers compared to the comparison groups. The overall ratings for the teaching programme were high (7.9 for usefulness and 8.0 for interest – maximum score 10). Doctors in the trained group were found to be notifying significantly more drug misusers to the Home Office and prescribing methadone more frequently 16 months after the teaching, than doctors in the comparison groups. Over 9 months, the Drug Training Questionnaires demonstrated no significant changes. The cost of the course per doctor was £127.

## **Conclusions**

1. The majority of drug misusers attending treatment centres are registered with general practitioners and regarded them as an important health resource in managing both their drug use and wider medical issues, despite the reluctance of non-specialist general practitioners to be involved in prescribing and a high prevalence of unfavourable attitudes towards drug misusers.
2. The participating doctors assessed the teaching programme positively and it was relatively cheap to run. The self-report questionnaires as a single determinant of outcome revealed no significant change in attitudes, knowledge or behaviour but when assessed by more objective means, demonstrated a rise in notification rates and methadone prescribing by the trained doctors.

## **ACKNOWLEDGEMENTS**

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## **INTRODUCTION**

### **Background**

With the increasing prevalence of abuse of opiates, stimulants and other associated drugs, particularly in inner city areas, there is a pressing need for general practitioners to be more effectively involved in prevention and treatment (Richards, 1988), with general practitioners regarded as the key to early and easy access to care for drug misusers (Advisory Council on the Misuse of Drugs, 1993). The thesis sets out to examine drug misusers' views of their primary care service and whether training of general practitioners in the field of drug misuse is effective in meeting the needs of drug misusers.

### **The Drug Misuser**

Drug misusers have rarely been asked about their perceptions of the primary care they receive. The issue of patient satisfaction in the context of the National Health Service was highlighted by Sir Roy Griffiths (Griffiths, 1983) and emphasised in subsequent reports (Secretaries of State for Health, 1989; The Patients' Charter, 1991; Priorities & Planning Guidance for the NHS, 1995). Consumerism in the Health Service, however, is somewhat different to that in ordinary market conditions when it is assumed (not always correctly) that the consumer is knowledgeable and has freedom to choose (Mooney, 1986). In this context drug misusers face a particular difficulty, with a reputation as unreliable and untrustworthy, which may mean that their views are considered sceptically or as merely a measure of their satisfaction with access to prescribing.

### **The General Practitioner**

Several surveys of general practitioners' attitudes to, and their work with drug misusers have indicated that this group of patients were not welcomed by general practitioners and considered unrewarding to

treat (Glanz, 1986a,b; King, 1989; Abed & Neira-Munoz, 1990; Greenwood, 1992b; Tantam et al, 1993; Davies & Huxley, 1997). This reluctance stems from inadequate knowledge about drug dependence and available management options (Glanz, 1986a; Glanz & Friendship, 1990), as well as inadequate back up from specialist services (Robertson, 1985; Abed and Neira-Munoz, 1990). It has been shown that general practitioners have a significant involvement with drug misusers (Glanz, 1986a; Bell et al, 1990; Davies & Huxley, 1997) with an estimated one in five doctors having been consulted by a drug misuser in the past month (Glanz, 1986a) and two out of three (Groves et al, 1996) or three out of four doctors in London, consulted in the preceding four weeks (Bell et al, 1990). There is also evidence that medical education on the management of drug misuse was (Bell et al, 1990) and is, inadequate (Letters to the British Medical Journal, 1997).

## **Aims**

1. To survey drug misusers attending five different treatment centres about their relationship (past, present and future) with their general practitioner and their views concerning primary health care.
2. To undertake a controlled evaluation of small group education of general practitioners in the management of drug misusers, utilising information from the survey

## **The Study**

This began on the 1st May 1992 when I was appointed on a half time basis as a Research Fellow funded by the Mental Health Foundation. There were five grant holders, one of which was Professor Michael King who is supervisor of this thesis. The research continued for 2½ years ending on 31st October 1994.

The data collection and the majority of the data analysis was undertaken by myself. I received assistance from Professor King and a statistician with some of the more complex statistical analysis.

The findings from the two studies have been published in peer reviewed journals:

- Hindler C G , Nazareth I, King M B, Cohen J, Farmer R, Gerada C. Drug misusers' views of their general practitioners. British Medical Journal 1995; 310:302.
- Hindler C, King M, Nazareth I, Farmer R, Cohen J, & Gerada C. Characteristics of drug misusers and their perceptions of general practitioner care. British Journal of General Practice 1996;46:149-152.
- King M, Hindler C G, Nazareth I, Farmer R, Gerada C, Cohen J. A controlled evaluation of small-group education of general practitioners in the management of drug misusers. British Journal of General Practice 1998;48(429):1159-1160.

### **Proceedings of Thesis**

The introductory section of the thesis consists of six chapters which address the development of drug services in Britain during the twentieth century, consider the increasing scale of the drug problem in recent times, discuss the relationship between drug misusers and general practitioners and review the issues of training of general practitioners in the field of drug misuse. This is followed by Chapters 7 and 8, respectively describing the method and results of the survey of drug misusers' views of their general practitioners and the controlled evaluation of small group education of general practitioners. The results are critically discussed. The thesis ends with a concluding chapter incorporating findings from both the studies with the literature, and considers the future of drug services in relation to general practice.

## **CHAPTER 1**

### **The "British System" - Policies and the Development of Drug Services**

The idea that there was a "British System" of treating or dealing with opiate dependence arose not because of any identifiable method of organisation, but because of the difference between American and British practices. In the USA where narcotic maintenance had been banned in the early years of this century, drug dependence increased rapidly and was closely associated with major crime, whereas in the UK, where maintenance was permitted, the drugs scene was small and stable. This was attributed, complacently, to the correctness of the British approach that in time was dignified by the title, the "British System" (Ghodse, 1983).

#### **Before 1920**

Although some of the substances now controlled by the Dangerous Drugs Act (1968) have been known for many hundreds of years, control at a national or international level is essentially a 20th century phenomenon (Bean, 1974). A Western European view of the world in the 18th and 19th centuries was that the use of opium and cannabis was probably attributable to national character or in some cases to national degeneracy. However, in China drug misuse was recognised as a problem, with the Emperor issuing an edict prohibiting opium use in 1729. During the 16th century In Turkey, the consumption of opium and cannabis was forbidden by the Sultan and in 1884, the use of cannabis was prohibited in Egypt (Bean, 1974).

In the first half of the nineteenth century, the distinction between the medical and non-medical use of opium was difficult to make, and the drug was in widespread use for a variety of common ailments. Morphine was first extracted from opium in 1830 and was used to treat the wounded during the



American Civil War, with some soldiers continuing to use the drug after the war had ended. Those who had developed a habit of regular use of morphine were known politely as having developed “The Army Disease” (Bean, 1974). In 1874 diamorphine (heroin) was discovered but not used in any major way until 1898, with some of its dangers recognised by the early 1900s. The invention of the syringe by Pravaz in 1843 was bemoaned by Tanzi, who in 1909 stated that, “forty years ago there were no morphomaniacs; nowadays the syringe of Pravaz is everywhere” (James, 1969). Thus, the addictive properties of opiates began to be recognised but not dealt with specifically within a medical framework, as the concept of ‘treatment’ for ‘drug dependence’ was absent.

Towards the end of the nineteenth century with the development of medical specialities, doctors began to study individuals who used alcohol and drugs habitually, which was termed ‘inebriety’. The Society for the Study of Inebriety was founded in 1884 (Berridge & Edwards, 1987). At the turn of the century, there was a general tolerance in the U.S.A. towards drug dependence. However, there were concerns about the large number of drug takers and the ease with which narcotics could be obtained. This resulted in a ‘climate’ change soon after the turn of the century, with America moving to prohibition and linking narcotics with alcohol as the ‘general drug problem’ (which may well have been politically expedient at the time).

In Britain, the 1868 Pharmacy Act gave a small measure of control over opium and its preparations in terms of prohibiting any person from selling or offering to sell or dispense opium, unless registered as a chemist or ‘druggist’. The 1908 Pharmacy and Poisons Act also included restrictions on selling or dispensing morphine and cocaine to ‘known’ purchasers of these drugs only, with the requirement of a signature in the pharmacy’s poisons book. Attempts were also made to exert control over the narcotic misuser such as including them under the aegis of the Inebriates Acts of 1888 and 1889, which

provided both compulsory and voluntary treatment of those convicted of drink-related offences. As the definition of 'inebriate' involved only those consuming liquid forms of a drug, misusers injecting morphine were outside the competency of the Acts. Although the management of both the supply of drugs and the misuser was recognised to be a professional medical and pharmaceutical matter, systems to address these issues were underdeveloped prior to the First World War, with much of the treatment occurring in private nursing homes (Ministry of Health, 1924). Thus, in Britain drug dependence was viewed as a disease with both physical and psychical components (Lancet, 1922) requiring medical treatment. Events which threatened to disrupt this medical control involved American pressure for a system of international control through the post-war settlement at the Treaty of Versailles and a wartime 'emergency', based on leakage of narcotics through smuggling and the supposed use of cocaine by soldiers in the West End of London (Berridge, 1996). Consequently, Regulation 40B under the Defence of the Realm Act issued in July 1916, which covered cocaine as well as raw and powdered opium, introduced for the first time requirements that these drugs were to be available on a prescription-only basis. The requirements of international control led to the extension of this regulation into the post-war 1920 Dangerous Drugs Act.

The introduction of the 1920 Dangerous Drugs Act was delayed due to the 1914 -1918 war. It was the first act of domestic and social legislation to be passed as a result of an international agreement. This dated back to the Shanghai Conference in 1909 and the International Opium Convention which was held in the Hague in 1912 which were both concerned with the control of opiates and cocaine, then regarded to be the most dangerous drugs or at least, the drugs most readily accessible to control. The regulations of this Act made it clear that that both doctors and pharmacists were to be subordinated to an approach which had as its primary aim, the 'stamping out of addiction' (Berridge, 1996).

## **The Rolleston Committee**

The controls over drugs of dependence introduced in the United Kingdom in 1920, preserved the right of doctors to prescribe for medical treatment, thereby enabling them, if they thought it right, to prescribe controlled drugs to drug misusers. This principle was, however, soon questioned and subjected to detailed review by a departmental committee appointed by the then Minister of Health. This committee was asked to advise on firstly, the circumstances if any, in which the supply of morphine and heroin and preparations containing these substances to persons dependent on them, might be regarded as medically advisable. Secondly, to advise on the precautions which medical practitioners administering or prescribing morphine or heroin should adopt to avoid abuse, and any administrative measures that seemed expedient to secure observance of those precautions. In 1926 the Rolleston Committee published its report (Ministry of Health. Rolleston Report, 1926) and established the right of medical practitioners to prescribe regular supplies of opiates to certain patients, which the Committee regarded as "... treatment rather than the gratification of addiction". This philosophy was at odds with that in the United States of America where drug dependence was identified as a deviant and criminal activity. The Committee concluded that drug dependence should be regarded as an illness and not as a "mere form of vicious indulgence". From this conclusion the Committee went on to consider the various ways, then in use, for the treatment in medical terms of drug misusers. The Committee clearly favoured some form of institutional treatment involving withdrawal of the drug, either abruptly or gradually. At the same time it recognised that institutional treatment would not be practicable in all cases and accepted that in consequence, there was a valid argument for treatment by general practitioners. The guidelines laid down as to when it would be appropriate to prescribe morphine or heroin to drug misusers. This involved either, (i) when undergoing treatment for the cure of drug dependence by the gradual withdrawal method or, (ii) while capable of leading a useful and fairly normal life so long as he/she took the drug of drug dependence,

he/she ceased to be able to lead such a life if the regular allowance (of the drug) was withdrawn. These guidelines were drawn up in the context of a relatively small number of drug misusers, the absence of any illicit drug trafficking, the absence of any drug sub-culture or drug related crime as well as a relatively small number of young drug misusers. In fact, the majority of drug misusers at this time originated from the medical profession and from other socially stable areas (Schur, 1966). Certain of the Rolleston Committee's (Ministry of Health. Rolleston Report, 1926) central conclusions formed the basis of United Kingdom Policy on the treatment and rehabilitation of drug misusers until the 1960s and in some respects until the present day (Advisory Council on the Misuse of Drugs, 1982). They thus, provided the foundation of what has since become known internationally as the "British System", which meant the management of a drug misuser by the prescription of maintenance doses, often over a fairly lengthy period of time.

### **The Brain Committee**

Ghodse's (1983) view was that in retrospect, it seemed that the Committee's perception in 1920 of the problem of drug dependence in the UK was fairly accurate, and that their recommendations were appropriate for that time. Thirty years later, as a result of enquiries made in 1958 and 1959, a further Committee under the chairmanship of Sir Russell Brain (later Lord) reviewed the policy as set out by the Rolleston Committee (Drug Addiction: Report of the Inter-Departmental Committee, 1961). This "Brain Committee" reported that although there had been some changes in the situation since Rolleston (Ministry of Health. Rolleston Report, 1926), that these were not of sufficient significance to warrant any change in policies. The Committee endorsed the view that drug dependence should be regarded as an expression of mental disorder rather than a form of criminal behaviour and that the satisfactory treatment of drug dependence was possible only in "suitable institutions". It concluded

that the number of drug misusers was insufficient to justify the establishment of specialised institutions.

In the 1960s the media began to report on the presence of young drug misusers most of whom were living in the London area and were predominantly male. They were also injecting heroin and cocaine. This group differed from the middle aged/elderly population of misusers who had often become dependent on drugs in the course of medical treatment or were otherwise "professional addicts" such as doctors, dentists and nurses. By 1964, there had been a significant rise in the number of persons known to be dependent on dangerous drugs (from 454 in 1959 to 753 in 1964) and in particular, of known heroin drug misusers (from 68 to 342 over the same period) (Advisory Council on the Misuse of Drugs, 1982). The Brain Committee was therefore reconvened and produced the Second Brain Report, which came up with a number of proposals (Inter-departmental Committee on Drug Addiction: Brain Committee, 1965). The Committee voiced its concern about the overgenerous prescribing of drugs, particularly heroin and cocaine, and it was felt that the existing British system at the time was failing to limit the spread of heroin dependence amongst the young. The main new source of concern was overprescribing by a very small number of doctors. General practitioners were charged with having played their part in creating an opiate abuse problem through indiscriminate prescribing practices (Stimson & Oppenheimer, 1982). Such intemperate prescribing was regarded as responsible for the great increase in heroin drug dependence, with drug misusers selling the surplus of their overgenerous prescriptions and thus spreading the "infection" (Edwards, 1969). Heroin drug misusers recorded by the Dangerous Drugs Branch of the Home Office (1947 - 1966) began to approximately double every two years (Bewley et al, 1968; Ghodse, 1983).

The Brain Committee made extensive proposals to limit the number of doctors authorised to supply heroin and cocaine to drug misusers and to ensure that the supply of such drugs only took place in a setting where there was a comprehensive range of treatment facilities. The Brain Committee's second report (Inter-departmental Committee on Drug Addiction: Brain Committee, 1965) formed the basis of the Dangerous Drugs Act of 1967, of which the most important features were:

- (1) The compulsory notification of drug misusers to the Home Office.
- (2) The limitation of the right to prescribe heroin and cocaine to drug misusers, to those doctors holding a special licence from the Home Office.
- (3) The setting up of special clinics to treat drug dependent patients.

Derived from this, the Misuse of Drugs Act 1971 consolidated the existing piecemeal legislation and established new and more extensive provisions for controlling certain drugs liable to misuse (see Appendix 1).

The Brain Committee's (Inter-departmental Committee on Drug Addiction: Brain Committee, 1965) proposals were accepted by the Government of the day, leading to the establishment of special treatment centres in several National Health Service Hospitals under the clinical direction of consultant psychiatrists. Heroin and cocaine could henceforth only be supplied to drug misusers by doctors licensed by the Home Secretary and in practice, licences were issued only to doctors working in treatment centres, hospitals and other special institutions. It was not proposed to issue licences to general practitioners. At the same time, a system of notification was introduced which required any doctor who attended a person who was considered or reasonably suspected to be dependent on certain controlled drugs, to report details to the Chief Medical Officer at the Home Office. With the exception of heroin and cocaine however, the long established right of a doctor to prescribe

'dangerous' (meaning, addictive) drugs without restriction was maintained. The implication of the Committee's recommendation was that most drug misusers would receive treatment in treatment centres, or in areas where numbers were insufficient to justify a special centre, in suitable facilities in selected hospitals in each health region (Advisory Council on the Misuse of Drugs, 1982).

The Second Brain Report (Inter-departmental Committee on Drug Addiction: Brain Committee, 1965) also recognised the dilemma facing authorities responsible for the control of dangerous drugs in the UK. It acknowledged that with insufficient control there could be a spread of drug dependence, as was occurring at that time. On the other hand, if the restrictions were too severe preventing the drug misusers from obtaining supplies from legitimate sources, it could then lead to the development of organised illicit trafficking in drugs. The Report indicated that the absence of an organised black market was largely attributable to the drug misusers being able to obtain supplies of drugs legally but recognised that this facility had been abused, with the result that there had been an increase in the number of drug misusers.

Edward's (1969) interpretation of the recommendations of the Second Brain Report (Inter-departmental Committee on Drug Addiction: Brain Committee, 1965), was that a drug misuser in the UK would continue to be treated as a sick person and that the medical profession was required by society to accept responsibility for the drug misuser's care. However, Edwards (1969) recognised that two fundamental changes in the system had occurred at the time of the Second Brain Report. (Inter-departmental Committee on Drug Addiction: Brain Committee, 1965). Firstly, the occurrence of new cases would be prevented. This was to be achieved by not prescribing heroin unless the clinic doctor was certain of the true need for the drug; prescribing conservatively to avoid surplus heroin becoming available for sale, and by controlled medical prescribing to reduce the development of a well organised

criminal black market. The second change related to the treatment offered to drug misusers. Hospital clinics would no longer provide hand-outs of drugs, but engage in treatment processes involving a goal of withdrawal from the drug of dependence. Despite these changes in the system, there was an acceptance that some misusers required a regular maintenance dose of opiate to live a normal life as a "stabilised addict".

### **Implications of the Dangerous Drugs Act of 1967**

At the beginning of 1968, the new treatment clinics began to open and since most doctors holding a licence to prescribe heroin and cocaine to drug misusers worked in the clinics, drug misusers had to attend the clinics if they wanted a prescription for these drugs. This enabled the identification and notification of many previously unknown drug misusers and accounted for the increase of the number of drug misusers notified to the Home Office from 1 729 in 1967 to 2 782 in 1968 (Ghodse, 1983). Hence, the new clinics were suddenly faced with an enormous number of patients but had little experience on which to draw. The usual response was to prescribe for the drug misusers, the drug or drugs and doses that they had been receiving from the general practitioner. During the first year of the clinics' opening, it was estimated that as many as 80% of the misusers attending were prescribed heroin (Stimson & Oppenheimer, 1982). Furthermore, approximately three quarters of those receiving heroin were prescribed on a maintenance basis, so for the first year of the new clinic system 'heroin maintenance' was the norm (Johnson, 1977). As the clinic doctors became more experienced, doses were reduced and when new patients attended, their drug requirements were assessed more critically. Heroin withdrawal was attempted by methadone substitution and injectable methadone was prescribed. The presentation to the clinics of patients with primary methadone dependence confirmed the continuing diversion of prescribed drugs to the black market (Ghodse, 1983).



During 1968, the Advisory Committee on Drug Dependence recommended the setting up of hostels both for homeless drug misusers and for those who had completed treatment for drug dependence (The Rehabilitation of Drug Addicts, 1968). The Committee stressed its belief that rehabilitation should begin with the first contact of the drug misuser at the outpatient clinic, which should be the focal point of the whole rehabilitation process. Furthermore, the report stressed that the drug misuser would need help not only from the medical services but from a wide range of social services to deal with social and psychological disabilities which might have contributed to drug dependence and prejudice the drug misuser's chance of freeing him or herself from drug misuse. Hence the report suggested social workers should be attached to treatment centres and for services to work together to achieve continuity and co-ordination (Advisory Council on the Misuse of Drugs, 1982).

The Advisory Council on the Misuse of Drugs (1982) commented that the system envisaged by the Brain Committee (Inter-departmental Committee on Drug Addiction: Brain Committee, 1965) and built on by the suggestions of the Advisory Committee in 1968 (The Rehabilitation of Drug Addicts, 1968), had never been wholly or even largely realised, as services had developed in a piecemeal manner as a result of a mixture of initiatives at national and local levels by both statutory and non-statutory agencies. The lack of any clearly established policy or guidelines may also have inhibited action at a local level.

When the clinics opened in the late 1960s and early 1970s, an evaluation of the London Drug Clinics found that they were faced with an existential type crisis, with the dilemma of whether their prime responsibility was for care or control. This was described in terms of prescribing when one wished to prescribe "... enough drugs so that these patients did not turn to the black market for supplies, yet at the same time not prescribing too much in case the patient sold their supply and fed the black market"

(Stimson & Oppenheimer, 1982). Stimson and Oppenheimer (1982) identified three reasons for the need to change therapeutic direction. Firstly, that legal prescriptions for opiates had not and never could entirely abolish a large scale black market in opiates, let alone in other drugs. Secondly, that control of drug use was not an appropriate role for treatment agencies and should be left to legislators and law enforcers. Thirdly, that there were practical problems associated with maintaining drug misusers on injectable drugs when they eventually started running out of veins. Consequently, towards the end of the 1970s most drug clinics had introduced a policy that only oral methadone would be available for new patients and to 'maintain' only those patients who had already been in treatment for some time (Spear, 1982). This rationale was strengthened by the finding of a more favourable outcome, in some respects, with oral methadone (Hartnoll et al, 1980). Furthermore, because of cross-tolerance pharmacologically, it was unimportant as to which opiate was prescribed to an opiate dependent patient, so that in many clinics oral methadone mixture was the only drug prescribed to new patients. By 1979, fewer than 10% of patients were receiving prescriptions of heroin (Bennett & Wright, 1986b).

It was envisaged that in-patient units would be important in treatment. The general idea was that the clinic would build up a therapeutic relationship with the drug misusers who would then feel able to accept in-patient detoxification and long term rehabilitation. In-patient units did not in fact play a numerically important part in the management of drug dependence although it was not clear if this was due to a reluctance on the part of the drug misusers, the quality of the facilities or a belief among doctors that out-patient withdrawal was preferable (Ghodse, 1983).

It was generally believed that the introduction of "sensible prescribing policies" coupled with legal restrictions (Inter-departmental Committee on Drug Addiction: Brain Committee, 1965) would result in

disruption of the developing criminal black markets. This optimism proved unjustified and the generous legal prescription of opiates intended to undercut the black market, continued to contribute to it. To prevent drug misusers in London "shopping around" for the most liberal clinic, the consultants in charge met regularly to co-ordinate policies (Ghodse, 1983). However, it was generally agreed that it would not be possible to undercut the black market by legal prescription and that this market would be endemic and supplied in part by an overspill of legally prescribed drugs. It was further suggested that some drug misusers were opting out of the clinic system in favour of consulting private, independent doctors who, after notifying the addict to the Home Office, would prescribe injectable opiates. Private doctors were also more likely to prescribe dipipanone and methylphenidate to drug misusers. The rationalisation for such a prescription was that it saved the drug misusers from using the black market. However, it was argued that this ignored the fact that the drug misuser had to pay for the private consultation and prescription, and usually would have to sell some of their drugs to the same black market for this money (Ghodse, 1983).

Ghodse, (1983) suggested that over 20 years (1960 - 1980), the wheel had come the full circle and that private doctors were again playing a substantial and undermining role in the drugs scene. Dally (1983) provided alternative views on the then, current management of drug misusers. She highlighted the limitations of clinic treatment for drug misusers, noting its restriction to those who live in the catchment area (leaving some drug misusers with no possibility of attending a clinic); the lengthy waiting lists which could involve weeks before an appointment or assessment; the restriction on drug misusers to those who were able and willing to accept "contract packages" and to those drug misusers prepared to accept daily attendance at the clinic or pharmacy. Overall, she concluded that most drug misusers were not interested in such clinics and that only a minute proportion of drug misusers (estimated at 5% at most) attended such clinics. Dally (1983) emphasised that such hospital based

clinics had great difficulty in attracting drug misusers, particularly with their policy of withholding prescriptions until a complete assessment had been conducted, which could take some weeks. This was aside from the lengthy waiting time to attend such clinics. She concluded that the drug problem would only be eased when it was recognised that the proper person to treat an addict was his or her own general practitioner, or a doctor to whom the general practitioner had referred the patient, emphasising that a balanced response to an individual's needs was required.

Other critics of the system regarded the development of 'prescribing practice' as a major cause of the reported spread of drug dependence and its associated social problems, in particular crime (Bennett & Wright, 1986b). The problems of prescribing practice were seen as lying in both the restrictive treatment policies of clinic doctors and the limited availability of prescribing doctors nation-wide. It was argued that misusers not receiving a prescription would resort to buying their drugs on the black-market, which was expensive and would result in crime to pay for their drugs. One proposed solution to this problem, was to return to a policy of unrestricted, free prescribing of heroin to opioid misusers to 'eliminate' addict-related crime (Ditton & Speirits, 1981). A second suggestion was to encourage general practitioners to become more involved in prescribing, which would result in a reduction in the use of black-market drugs and a 'monumental decrease' in the number of crimes committed by drug misusers (Trebach, 1982).

### **The Treatment and Rehabilitation Report**

It should be recognised that from the mid 1960s to the early 1980s, the only role for the general hospital doctor and general practitioner had been to refer the drug misuser on to a specialist clinic. In the early 1980s, there were two major changes in the perception of the drug problem. Firstly, an understanding that drug takers comprised a heterogeneous group and that their problems extended

beyond those associated solely with the substance itself. Secondly, an appreciation of the non-specialist nature of much of the intervention required so that it might be appropriate for general hospital doctors and general practitioners to be involved in the provision of some of the less specialised elements of treatment (Strang, 1989). This change in view of the management of drug misusers dated from the publication of The Treatment and Rehabilitation Report by the Advisory Council on the Misuse of Drugs in 1982, (Advisory Council on the Misuse of Drugs, 1982). It may have been precipitated by the need for an increase in the scale of drug services following an influx of large amounts of black market heroin from the Middle East as well as the increase in numbers of drug misusers. It was recognised that general practitioners could help to promote better general health care among drug misusers who, despite evidence of increasing contact with primary care services, were still relatively isolated from medical services (Elander et al, 1994).

### **The Human Immunodeficiency Virus (HIV)**

Infection with HIV is presently among the greatest health hazards for injecting drug misusers, who place themselves at risk by using non-sterile injecting equipment. In turn, drug misusers may contribute to the spread of HIV through unprotected sex. The spread of HIV by drug misusers was identified as posing a greater threat to public health than drug use per se (Department of Health and Social Security, 1988; Strang, 1989). Injecting drugs using contaminated equipment was identified as the method of transmission of the virus in 16% of the known cases of HIV infection in the UK as a whole (Advisory Council on the Misuse of Drugs, 1988) and may have been a major pathway through which the virus was introduced into the heterosexual population. Of some 8,000 people in the UK who by the late 1980s had been found to be HIV antibody seropositive, almost 1,300 were injecting drug misusers (Advisory Council on the Misuse of Drugs, 1988). It seemed likely that these represented only a small proportion of the total infected. Early studies conducted in Edinburgh, Scotland found HIV

seroprevalence levels of around 50% among injecting drug misusers where the practice of sharing needles and syringes correlated with seropositivity (Robertson et al, 1986a). Conversely, smaller studies in a number of English cities showed seroprevalence rates of between 0 and 10% (Advisory Council on the Misuse of Drugs, 1988). Later studies found a range of seroprevalence rates varying from 64% among drug misusers in Edinburgh (Skidmore et al, 1990) to 2.4% of needle exchange attenders in London (Hart et al, 1991). It was suggested, that these variations reflected differences in the availability of sterile injecting equipment, the cultural patterns of sharing and on how recently the virus was introduced locally (Robertson et al, 1986b; Feldman & Biernacki, 1988). More recent multi-site studies, showed that in England but outside of London, a prevalence rate among current injectors (both in and out of treatment) of less than 1% (Unlinked Anonymous HIV Surveys Steering Group, 1995). In London, multi-site studies of current injectors indicated a stable rate of 7% (Stimson et al, 1996). In Edinburgh the previous high sero-prevalence rates had declined to about 20% (Peters et al, 1994) and in Glasgow, the rate was estimated at 1% (Haw et al, 1992).

In the UK, as in many other countries, injecting drug misuse has been the route of acquisition of HIV for the majority of infected women, most of whom are of childbearing age. Many of the children born to drug misusing women have developed or are likely to develop the infection and have died of AIDS. Infected drug misusers also transmit HIV sexually as well as by sharing injecting equipment. Since the majority of drug misusers in the UK are heterosexual, sexual transmission is an important route for transmission of HIV into the general heterosexual population. The Advisory Council on the Misuse of Drugs report (1988) indicated that outside of a small number of locations (notably Edinburgh), the virus may not have been well established in the drug injecting community. Hence, vigorous preventative measures could stand a good chance of stemming the spread of the virus. However, the experience of Edinburgh where the prevalence of HIV amongst injecting drug misusers rose to around 50% within

two years of the first seropositive sample, illustrated how rapidly the virus could spread and highlighted the need for immediate action. This finding was also mirrored in Europe, where injecting drug misusers comprised the fastest growing group of people with AIDS (Carballo & Rezza, 1990), with the incidence of HIV rising at an annual rate of 11% overall in Europe between 1990 and 1995, particularly in central and eastern Europe (Hamers et al, 1997). A decline in the incidence and prevalence of HIV acquired through drug misuse has however, been found in several western European countries in recent years (Hamers et al, 1997) and is consistent with the findings in the United Kingdom (Stimson, 1996).

### **The effect of HIV on policies for drug services**

The Advisory Council on the Misuse of Drugs Reports of 1988 and 1989 made it clear that for the future there should exist increasingly widespread involvement of general practitioners and general psychiatrists in the provision of general health care (including short- to medium- term prescribing of oral methadone) at a primary and secondary care level. At the same time, specialist treatment approaches (such as the prescribing of injectable drugs, and working towards intermediate goals) should become major areas of work for specialist tertiary level drug clinics (Strang, 1989). The Advisory Council on the Misuse of Drugs (1988) report outlined a number of approaches to help contain the spread of the virus through drug misuse. These consisted of (a) preventing or reducing injecting drug misuse, (b) preventing or reducing sharing of injecting equipment, (c) preventing or reducing unprotected sexual intercourse (involving injecting drug misusers - but also applicable to the population as a whole) and (d) advising infected women to avoid pregnancy and providing help where needed to reduce the number of births to those women. This report (Advisory Council on the Misuse of Drugs, 1988) recognised that a substantial number of the drug misusing population was not in contact with services, particularly those using illicit stimulants (mainly amphetamines). It was also

recognised that roughly half of all drug misusers had injected on one or more occasions and could well have shared injecting equipment. Thus, with the advent of HIV, an expansion of the definition of "problem drug use" was required to include any form of drug misuse which involved or could lead to the sharing of injecting equipment. It also led to a change in philosophy about the management of drug misuse, with the recognition that reducing the harm from drug use was as important a goal as curing the drug misuser of his/her drug dependence. This concept known as "harm minimisation", aimed at reducing harm from drug misuse rather than narrowly focusing on abstinence (Strang & Farrell, 1992). This approach has been described as a "triumph of pragmatism over purism" or alternatively, the acceptance that second best may be best first (Strang & Farrell, 1992). This idea was not completely new and had been described in the Prevention Report of 1984 (Advisory Council on the Misuse of Drugs, 1984) and more recently in the Department of Health's 1991 guidelines on managing drug misuse (Department of Health, 1991). The use of intermediate goals working towards the ultimate goal of stable abstinence, has been put into practice. A realisation that safer injecting was a priority, resulted in the further development of needle exchange schemes (Lart & Stimson, 1990) and over the counter sales of needles in high street pharmacies (Glanz, 1986b). Oral methadone maintenance schemes represented another form of harm minimisation (Gerstein & Harwood, 1990). Methadone could also be used for withdrawal crises when drug misusers are remanded in custody and as a preventative measure to avoid the transition from smoking to injecting drugs. Other proposals based on the principle of harm minimisation included testing and vaccination of drug misusers for Hepatitis B infection and providing Naloxone, an opiate antagonist, for drug misusers who inadvertently overdose (Strang & Farrell, 1992).

The Advisory Council on the Misuse of Drugs report (1988) regarded community based services as having the best chance of reaching the greatest number of drug misusers by the provision of more



varied and acceptable sources of help and advice. It recognised that general practitioners could play a key role as readily accessible points of contact, who were well placed to help drug misusers move toward safer practices. It further recommended that although general practitioners possessed the skills required to help drug misusers, some may need to improve their confidence and knowledge of the field through further training. It noted that some general practitioners had already obtained such experience through clinical attachments to local specialist drug services. The report recognised that general practitioners could play a vital role in preventing the spread of HIV infection by increasing their contacts and involvement with drug misusers. The Advisory Council on the Misuse of Drugs (1988) report referred to the White Paper, "Promoting Better Health", which emphasised the need for general practitioners in primary health care teams to play an increasing role in health promotion and preventive medicine. Finally, the report endorsed the postgraduate educational allowance as an incentive for general practitioners to maintain a regular programme of education and training throughout their careers. This focus on involvement and training of general practitioners in the field of drug misuse has again been highlighted in the recent Guidelines on Clinical Management of Drug Misuse and Dependence (Department of Health, 1999b).

### **Appraisal**

Following the rise in numbers of drug misusers in the 1960s, more rigorous guidelines on prescribing were introduced and specialist treatment centres advocated. Despite changes in practice and philosophy, these clinics failed to meet the expectations of the policymakers and the patients. Waiting times of several weeks for treatment were not uncommon and many referrals and first contacts did not lead to engagement. Very little research was undertaken on the best approach(es) to manage drug misusers and changes in practice were not evidence based.

Private practitioners developed a controversial role in the management of drug misusers (Bewley & Ghodse, 1983) which remains of concern currently. They have recently been found more likely to prescribe injectable methadone, higher doses of oral methadone and allow for longer intervals between collection of this medication, increasing the likelihood of diversion of methadone to the black-market (Strang et al, 1996).

The recognition of HIV and its relation to injecting drug use and the appreciation of the non-specialist interventions required for the treatment of drug misuse, resulted in recommendations for the development of primary and secondary care services. With their community based role and greater familiarity with the social circumstances of patients, general practitioners are potentially well placed to promote harm minimisation and provide services for drug misusers with HIV related problems (Robertson, 1989). They may also be better placed than specialist clinics to consider the more sensitive aspects of HIV risk reduction such as sexual transmission and risk to partners (Klee et al, 1990; Gillam et al, 1992). It was however conceded, that work-load and time constraints militated against general practitioners adopting a more active role in HIV prevention (Gallagher, 1989), and the need to respect patient confidentiality raised ethical dilemmas where drug misusers and their partners were patients at the same general practice. Many general practitioners were also not prepared to deal with AIDS (Milne & Keene, 1988; Clarke, 1993) and some doctors removed patients from their lists because of their HIV antibody status (Gallagher, 1988; King, 1989). More recent studies have demonstrated that general practitioners have become more comfortable treating patients with HIV which appears to be related to their improved knowledge of the condition, although discriminatory practice still occurs (Shaw et al, 1996; Kellock & Rogstad, 1998; Bermingham & Kippax, 1998).

Drug misuse has been described as the “the greatest peace-time threat to our nation” (House of Commons, 1985) and HIV and AIDS as “ the greatest new threat to public health this century” (Secretary of State for Health, 1991), yet it has been acknowledged that similar to the war on poverty, the war on drugs will never be won (Strang, 1991). Despite the ever increasing numbers of drug misusers and rising proportions of drug injectors among individuals with newly diagnosed AIDS (in Europe from 15% to 36% between 1985 and 1989 - World Health Organisation, 1990), there do appear to be opportunities for influencing the condition (Strang, 1991). This optimistic view appears to have been borne out, as the United Kingdom has for the time being, averted the expected epidemic of HIV infection among drug misusers with a successful public health prevention strategy (Stimson, 1996). Probably, the most significant component of this strategy involved the adoption of the concept of harm minimisation, which resulted in the introduction of preventative measures at a time when the prevalence was low (Stimson, 1996). The most important of these measures involved a rapid development of syringe distribution and exchange, which was evaluated as resulting in lower risk behaviour (Donoghoe et al, 1992; Morrison & Ruben, 1995) and the expansion of methadone treatment programmes which also appeared to be associated with a reduction in risk behaviour (Farrell et al, 1994; Morrison & Ruben, 1995). Nevertheless, while the prevalence rates for HIV infection are currently low, those for hepatitis B (approximately 40%) (Morrison & Ruben, 1995) and hepatitis C (approximately 60%) are much higher (Waller & Holmes, 1995) and raise questions about the interaction between viruses, population behaviour and epidemic dynamics (Stimson, 1996). Practically, these findings suggest that hepatitis B vaccinations are an important but possibly neglected part of the service for drug misusers (Morrison & Ruben, 1995) and a role where general practitioners could take the lead.

## CHAPTER 2

### The History of Services Available to Drug Misusers

#### **Specialist Services**

##### Hospital Based Services

The Second Brain Committee (Inter-departmental Committee on Drug Addiction: Brain Committee, 1965) called for the provision of "suitable" units for the treatment of drug dependence and stated that: "Each centre should have facilities for medical treatment, including laboratory investigation and provision for research. A centre might form part of a psychiatric hospital or of the psychiatric wing of a general hospital" (paragraph 22, Inter-departmental Committee on Drug Addiction: Brain Committee, 1965). The provision of such facilities combined with stricter controls over the supply and availability of opioid drugs were measures intended to prevent the further spread of drug dependence. It was hoped that encouraging existing opioid drug misusers to seek medical treatment would lead to drug misusers' eventual withdrawal from their drug dependence.

In 1982 there were 100 hospitals within the National Health Service known to provide some services for the treatment of drug misuse, but these varied enormously in their scope (Advisory Council on the Misuse of Drugs, 1982). The consultant psychiatrists who had clinical responsibility for these patients had variable degrees of specialist expertise in the area of drug misuse. Their commitment varied from running a full time multi-disciplinary drug treatment clinic, through to working as a general psychiatrist with a contractual obligation to undertake treatment of this patient group. Staff support could have included a complete multi-disciplinary team, to no para-medical input at all. Facilities for the treatment of drug misusers in hospitals were equally disparate. Most did however, provide an outpatient service;

a few had designated inpatient units, but the majority were dependent on the availability of general psychiatric beds should these have been required. Long-term rehabilitation was dependent mainly on continued outpatient contact (Advisory Council on the Misuse of Drugs, 1982). At the time when the 1982 report of the Advisory Council on the Misuse of Drugs was written, the prescribing of cocaine had virtually ceased some years previously and heroin was rarely prescribed. Few consultants were prescribing injectable opioids to new patients and first time attenders to a clinic were generally receiving oral methadone DTF (Drug Tariff Formula) in doses of 30 to 50 milligrams daily. Prescribing was seen as only one part of a treatment programme and often conducted on a time limited basis included in a therapeutic contract with the patient. However, while recognising abstinence as an ideal, some hospital based services were prepared to continue maintenance prescribing over an indefinite period of time to enable stabilisation of behaviour.

The specialist drugs services were evaluated and found to be wanting in several areas. The problem of excessive delay between referral and first appointment was highlighted by Dally (1983). In 1985, Love and Gossop (1985) described 194 referrals to a London drug dependence unit and reported mean waiting times of 32 days between referral and first appointment and 27 days between first appointment and seeing the doctor at the unit. Forty-four percent of first appointments and 14% of doctor's appointments were not attended. Only 15 (8%) of this group were less than 20 years old, with 68% aged over 25. Set against the findings that many opiate misusers in London were younger people, it appeared that this age group who were likely to be seeking treatment for the first time, were in a minority at the drug clinics. Gillam et al (1992) similarly found among 91 drug misusers attending another London drug dependence unit, that the mean age for this group was 29 years and the mean duration of drug use was 8 years. This study also found that the mean duration between referral and assessment was ten days with 42% of referrals failing to attend. A wider study of 31 drug dependence

units in England and Wales found an average waiting time for the first appointment was 22 days (Smart, 1985).

Bucknall, Robertson and Strachan (1986), examined the outcomes of 251 referrals to a drug dependence unit in Edinburgh. Only 100 engaged in treatment. Waiting times were longer for the 70 cases (28%) where first appointments were not attended. The engagement rate was 61% for self-referrers who were seen within one week of presentation, and between 18 - 53% for other types of referral who waited for over one month for a first appointment. This study also found that a group of 96 heroin misusers referred to the unit from a large local general practice were significantly older (mean age 28 years) than a similar number of misusers registered at the practice but not referred (mean age 24 years). Among the former group, first appointments were attended by 81 and treatment begun in 60 cases. However, over half the in-patient admissions were terminated before detoxification was complete (usually within 2 days), and more than 75% of out-patient contacts ended prematurely. Of those patients known to be abstinent from heroin at the last medical contact, higher levels of success were achieved for those who had not begun treatment in the drug dependence unit (6 out of 36) compared to those involved in treatment with the drug dependence unit (4 out of 60). The findings from an outcome study by Gillam et al (1992), was that only 5 of 86 opiate misusers who entered a detoxification programme at a London unit achieved abstinence. At nine months follow-up, 24 continued to use methadone and the remainder had either been referred to other services, entered another detoxification programme or had dropped out of all services.

The drug misusers have themselves described problems with in-patient units involving the rigidity of the clinic regime, conditions attached to treatment and fear of notification to the Home Office (Bennett & Wright, 1986a).

### Specialist Non-Statutory Services

A major problem for services was the provision of detoxification and residential care for young poly-drug misusers who were often chaotic misusers of barbiturates rather than opioids (Advisory Council on the Misuse of Drugs, 1982). Some drug treatment clinics found themselves unable to manage such patients and non-statutory centres attempted to fill this gap, such as the "City Roads Crisis Intervention Centre". Rehabilitation services were divided broadly into two groups. Those which offered counselling and practical services to drug misusers living independently, and the residential, drug free, rehabilitation houses whose object was to detach drug misusers from the drug using environment and teach them to live their lives without the need for drugs (Strang, 1989). Such drug free houses also offered continued practical help to residents on their return to society. These drug free rehabilitation houses fell into three categories: Christian based hostels, concept based therapeutic communities and community based hostels. All aimed to develop in the resident a more positive approach to life so as to eliminate the need to take drugs in order to cope.

The concept model is based on an hierarchical structure in which the resident has to earn privileges and progress through the hierarchy, dependent on his or her work, attitudes and behaviour. Both the Christian based and concept houses isolate the individual from the problems of the outside world for an initial period in order concentrate on themselves, while the community based projects tend to integrate the individual back into society as soon as possible. All the houses operate a phased re-integration into the community with some having "half-way" houses where residents move out of the main house to prepare for re-entry into society. A major problem with the rehabilitation houses was a high rate of client drop out (up to 80%) within three months in some projects (Strang, 1989). Introducing a less rigid structure with a wider range of individual and group activities reduced the drop out rate. A survey in 1980 revealed that 29% of referrals to these rehabilitation services came from

the courts, the prison service, probation and after care service. Twenty-eight percent were self referrals and 26% from non-statutory services. Only 17% were referred by drug treatment clinics or by general practitioners (Strang , 1989).

### **Non-Specialist Services**

#### **Medical Practitioners**

By 1982, there were indications that the number of drug misusers treated outside hospital based specialist services was increasing (Advisory Council on the Misuse of Drugs, 1982). Such treatment was occurring in general practice (both NHS and Private) and in other forms of private practice. One reason for this trend was that some drug misusers lived a considerable distance away from a hospital clinic. A further reason related to the profound differences in professional opinions on the prescribing of opioids (Dally, 1983; Ghodse, 1983).

#### **Probation Service**

Given the high percentage of drug misusers involved in and convicted of criminal acts, it was not surprising that the probation service was involved with a substantial number of misusers, providing counselling and support to them within the community.

#### **Non-Statutory Non-Specialist Services**

A number of agencies working at street level provided services to a wide range of clients involving self-help groups both for the clients and also for parents, relatives and friends of drug misusers. An example is Narcotics Anonymous (NA), a self-help group organised and run by people in varying stages of recovery from drug misuse, which began in the UK in 1979. The ideology is of daily abstinence for drug misusers who are regarded as not responsible for their illness but totally



responsible for their recovery. The treatment programme focuses on the 'twelve steps' to recovery, which is derived from the original form as written by the founding members of Alcoholics Anonymous and consequently, this literature contains strong spiritual overtones. In the UK, the programme of abstinence allied to the 12 steps, has become known as the Minnesota Model. Membership of NA comprises a variety of people who have experienced problems relating to drugs. Treatment can involve attendance at meetings in the community, but residential centres, out-patient, or day-care with a number of half-way houses are also available. Addiction is acknowledged as affecting the entire family. A self-help group, Families Anonymous, offers a programme based on the 12 steps to support family members. Some residential centres also provide a programme for families. NA grew rapidly throughout the 1980s and remains an important, freely available adjunct to therapy and after-care for individuals and their families suffering drug-related problems (Wells, 1994).

### **Changes in Services from 1982**

The aforementioned, were the existing services available in 1982 (Advisory Council on the Misuse of Drugs, 1982). To judge whether these services providing treatment and rehabilitation were effective, it was necessary to demonstrate improvement superior to that of the natural progression of drug misuse. Follow-up studies conducted up to 1970 of limited treatment strategies with almost no co-ordinated rehabilitation, found the outcome of physically dependent opioid drug misusers to be 10% drug free after one year, 25% drug free after five years and 40% abstinent after 10 years. Two to three percent of the drug misusers died of a drug related cause annually (Thorley, 1981). In comparison, longitudinal studies of British drug misusers attending clinics since 1968 showed significant improvements in recovery rates over the "spontaneous" rates. Overall, approximately a quarter to a third more opioid drug misusers were likely to be abstinent after five years. Similar studies carried out in the United States suggested that therapeutic communities, drug free out-patient clinics and

methadone maintenance programmes all produced higher rates of abstinence from illegal drugs, improved rates of employment and reduction in criminality as compared with detoxification or assessment only (Wille, 1980).

The report of the Advisory Council on the Misuse of Drugs (1982), saw as one of its tasks, to review the then current problem of drug misuse and provide relevant recommendations in the light of that problem. They highlighted that in the past most drug misusers had been regarded as usually dependent on one drug. During the 1970s, a more clearly defined group of poly-drug misusers emerged, with such individuals not necessarily physically dependent on any one drug but often psychologically dependent on a variety of drugs. There was concern about the multiple drug misusers who ultimately became physically dependent on barbiturates and at that time there was accumulating evidence on the misuse of minor tranquillisers including benzodiazepines. The report acknowledged the inadequacy of the Home Office Addicts Index statistics on the basis of underreporting but nevertheless, noted the trend of an increasing proportion of drug misusers notified by doctors in general practice. It was also found that notifications were received from most parts of the country reinforcing the view that, though greater London continued to be a major problem area, other parts of the country had become increasingly affected. Thirdly, an increasing proportion of those first notified had claimed to be addicted to heroin (74% in 1981 as opposed to 46% in 1970). A further cause for concern, based on clinical impression gathered from discussions with drug workers in the field, was that an increasing number of teenagers were misusing heroin. Hence, in reviewing the existing services in terms of their adequacy to meet the growing drug problem, the Advisory Council was limited by the underestimates in terms of the size of the problem in the United Kingdom. Nevertheless, the existing hospital based services which were specifically designed to deal with the rise in numbers of opioid misusers (Interdepartmental Committee on Drug Addiction: Brain Committee,

1965), were in many instances unable to cope with the growing numbers of misusers. They were found to be unable to respond to the newly emergent group of poly-drug misusers. There was also a wide diversity of approaches in the hospital clinics. Some clinics had introduced a strict no opioid prescribing policy and in some areas it had resulted in drug misusers rejecting the service. Other clinics had altered their prescribing policies at various times and consequently long-term drug misusers had lost contact with the staff. It appeared that a policy of not prescribing drugs had deterred opioid misusers from seeking treatment thus reinforcing the view of the Second Brain Committee (1965) that prescribing would help to limit misusers resorting to illicit supplies. On the other hand, continued maintenance prescribing had not prevented a substantial growth in drug misuse and could have been a factor in blocking the ready access of new patients to the clinic.

As regards the rehabilitation agencies, a major problem was the substantial geographical bias of such services to the south east of England. Aside from the uneven distribution of the services there was a substantial shortfall in the number of places available for those seeking such treatment. Considering the non-residential services, in 1982 the total number of specialist street agencies, detached work projects and day centres in the whole of the United Kingdom did not exceed single figures (Strang, 1989).

The suggested changes in the provision of services by the Advisory Council on the Misuse of Drugs (1982) were based on the philosophy of adopting a "flexible approach responsive to the varying problems faced by drug misusers". By adopting this viewpoint, they were able to side-step the two difficult major issues of whether it is right to prescribe controlled drugs to drug misusers and secondly, whether the aim should always be to achieve a drug free existence or whether it is sufficient to enable a misuser to become stabilised. It is interesting to note that this report on Treatment and

Rehabilitation published in 1982, which promoted the flexible approach towards individual misusers agreed with the views expressed in the two previous reports of 1926 (Ministry of Health. Rolleston Report, 1926) and 1965 (Interdepartmental Committee on Drug Addiction: Brain Committee, 1965). It was however, concerned that with a greater emphasis on the ultimate objective of a drug free existence, that increasing numbers of drug misusers would be deterred from seeking help from the specialised drug services. The drug misusers could then turn to doctors in general practice and other forms of private practice who were prepared to prescribe on a regular basis but who did not have the resources to provide the full range of support services needed for treatment and rehabilitation.

The proposed framework for the future involved service development at a regional level with each regional health authority establishing a multi-disciplinary regional drug problem team which would provide the specialist service, usually based in a hospital with access to inpatient beds. At district level it was proposed that a district drug problem team should be developed, possibly located in a community setting and having input from Social Services, the Probation Service, a lay volunteer as well as medical and para-medical services. Essentially the role of this team would be to provide information or advice about the referral or management of clients with drug problems (Advisory Council on the Misuse of Drugs, 1982).

### Community Drug Teams

The development of the Community Drug Team (CDT) as originally proposed in the Treatment & Rehabilitation Report of 1982 (Advisory Council on the Misuse of Drugs, 1982), was the most significant expansion to occur within drug services during the 1980s, with about 100 across the UK by 1992 (Strang et al, 1992). One of the key characteristics of the CDT involved a "shared care" philosophy to encourage collaboration from local general practitioners. However, it was found that in

some areas up to a third of general practitioners were willing to be involved while in other districts less than 10% were prepared to cooperate (Bell et al, 1990). Consequently, there was a drift toward the creation of local general practitioner "specialists" who were willing to see and prescribe for drug misusers in conjunction with the CDT (Strang et al, 1992).

### Other Agencies

The Advisory Council on the Misuse of Drugs (1982) highlighted the importance of the specialist non-statutory agencies, commenting that the advisory/counselling services had a valuable role particularly for those drug misusers not yet prepared to commit themselves to specific treatment. Such services could still offer a number of treatment options should the misuser wish to avail him/herself. The Council also commended the provision of non-residential day care and saw the potential in combining specialist advisory/counselling services with such day care provision in order to facilitate the introduction of problem drug takers to rehabilitation. The report also emphasised the input from non-specialist services, particularly as their problem oriented approach allowed for greater recognition that drug misusers experience a range of difficulties of which drug misuse was but one. Hence, Social Services, probation and after care service, housing departments and housing associations, employment services as well as primary medical care all had a role to play in providing aspects a treatment package of rehabilitation.

### General Practice

The spread of HIV was identified as posing a greater threat to public health than drug use per se (Advisory Council on the Misuse of Drugs, 1988), with more general spread of HIV by injecting drug misusers through unprotected sex. The Advisory Council on the Misuse of Drugs Report of 1989 stated that the key provider of health care in the community for those with HIV disease is the general

practitioner working in collaboration with a primary health care team. It was noted that everybody is entitled to receive primary health care from a general practitioner but that many drug misusers did not receive even this, let alone help with their drug problem. This report (Advisory Council on the Misuse of Drugs, 1989) stressed that people with HIV disease should have access to primary care to help monitor and treat their health care problems. If general practitioners were to provide this monitoring and care for drug misusers with HIV disease then it was also regarded as highly desirable for them to provide help with drug misuse problems. This would have the effect of encouraging asymptomatic (of HIV) drug misusers to register with general practitioners and promote regular contact. The Advisory Council on the Misuse of Drugs Report (1989) concluded that general practitioners should accept responsibility for the ongoing health care of drug misusers with HIV disease. Where possible shared care systems should be developed so that general practitioners and physicians with experience of treating HIV disease combined to monitor the health of these patients.

Research studies have focused on general practice as a setting for managing drug misusers. One approach involved a CDT member acting as a general practitioner liaison worker (Carnwath et al, 1994). This worker provided counselling and undertook urine testing and form-filling, freeing the general practitioner from these tasks. The general practitioner continued to provide medical care and prescribe. The initial results showed an improvement in safer drug and needle use, reduced criminality, less unemployment, safer sexual behaviour and improved social functioning. Patients also preferred to receive treatment from the general practice.

Another model involved a drug worker and general practitioner experienced in the management of drug misuse, providing a consultancy and liaison service to the local general practices (Gerada & Tighe, 1994). The outcome of this pilot project was that general practitioners preferred assistance

either in terms of having an initial assessment and treatment plan aligned to practice policy, or the provision of help for specific management problems.

### **Recent Developments**

In the mid-1980s, the time was right for the renaissance of harm reduction with the government willing to accept any measures to prevent an AIDS epidemic (Raistrick, 1997). Guidance from the Advisory Council on the Misuse of Drugs (Advisory Council on the Misuse of Drugs, 1988; Department of Health, 1993) was careful not to endorse wholesale adoption of the harm reduction approach but to include needle exchange schemes and substitute prescribing as useful elements of a public health strategy to contain the spread of HIV and initiate the process of becoming abstinent from drugs. As the fear about an AIDS epidemic receded, new '1990s' concerns about the criminal activity of drug misusers emerged, coinciding with a swing away from too liberal an approach towards harm reduction (Raistrick, 1997).

In 1994, the government set up a task force to review the effectiveness of services in relation to the principal objective of assisting drug misusers to achieve and maintain a drug free state (Department of Health, 1996). The White Paper "Tackling Drugs Together" (Department of Health, 1995) published in May 1995 committed the Department of Health to produce purchasing guidance, based on the task force review of services, in time to inform the 1997-1998 purchasing round. "Tackling Drugs Together" (Department of Health, 1995) identified a reduction in the acceptability and availability of drugs to young people, an increase in the safety of communities from drug-related crime, and a reduction in the health risks and other damage related to drug misuse, as key elements of government strategy. In response, the task force set out to map and categorise existing services and to conduct a multi-centre

study of treatment processes and outcomes, referred to as the National Treatment Outcome Study (NTORS). The services considered were:

1. **Outreach services**, which provide advice and harm minimisation interventions to drug misusers not in contact with services, and could deliver clean injecting equipment and other materials such as condoms. It was concluded that further research was required on the effectiveness of such interventions which had not been monitored in a systematic way.
2. **Services for young people** were highlighted in "Tackling Drugs Together" (Department of Health, 1995) with an aim of targeting this group of people and providing a more flexible type of service which was less bureaucratic and medically orientated. Meeting this group's needs was regarded by the task force as important and could provide a conduit into the 'mainstream' drug services.
3. **Social services** as purchasers of services and a point of contact for drug misusers was regarded as high priority but improvements could be made in terms of prioritising services for drug misusers and especially younger misusers.
4. **Casualty Departments** were recognised as a frequent point of contact for drug misusers with recommendations for an enlargement in the scope of provision for drug takers, such as setting up needle exchanges, education on harm minimisation and health promotion by posters and leaflets.
5. **Maternity services** could be improved with the introduction of maternity drug liaison workers to manage pregnant drug misusers.
6. **Pharmacies** were recognised as having untapped potential in respect of reaching drug misusers out of contact with other services, their role in dispensing controlled drugs, involvement as a needle exchange service, selling injecting equipment and providing 'sharps' boxes, information leaflets and face to face advice.



7. It was accepted that the **police, criminal justice system and probation service** were well placed to identify and encourage drug misusers into treatment, which would prove cost effective in terms of the burden that drug misusers place on the judicial system.
8. The importance of **general practitioners** in identifying those drug misusers not in contact with services was stressed. Maximising general practitioners' involvement, particularly in the model of 'shared care' was emphasised, although not as an alternative to the current role of the specialist drug services.

The National Treatment Outcome Study (NTORS) (Gossop et al, 1998a,b), a prospective, uncontrolled, observational trial involving 1110 subjects (thus far), has found that treatment is effective in terms of a reduction in drug use and decline in criminal activity, but also improvement in health and psychological well-being. The in-patient, residential rehabilitation, methadone maintenance and methadone reduction treatment modalities were all found to produce benefit which was maintained at six month follow-up. This study will continue for five years.

In 1997, a Working Group was set up to revise the 1991 Guidelines on Clinical Management of Drug Misuse and Dependence. The terms of reference included the policy implications of Tackling Drugs Together (Department of Health, 1995), the emergence of new patterns of drug misuse and the new developments in treatment, rehabilitation and prevention. In May 1999, 'Drug Misuse and Dependence - Guidelines on Clinical Management' was published (Department of Health, 1999b). These guidelines were compiled from the best available evidence and relied substantially on the task force (Department of Health, 1996) findings, which reviewed the evidence base of services for drug misusers. The rights of drug misusing patients to access good quality services was a fundamental principle underpinning the guidelines.

The Guidelines were written for all doctors with the expectation that they should be able to deal with drug related issues. The framework of the guidelines consisted of assessment, management of withdrawal and dependence and preventing relapse. General practitioners would be required to offer basic harm-minimisation advice, general health care, Hepatitis B vaccination and possibly replacement medication prescribing. Doctors providing services beyond this basic level were divided into three groups of ascending level of expertise: the generalist, specialised generalist and specialist. The guidelines suggested that some general practitioners could develop additional skills and become generalists. Emphasis was placed on the key role of 'shared care' service delivery predominantly between primary and secondary care, a multidisciplinary approach to management and treatment and the strong evidence for the effectiveness of methadone maintenance treatment. It is noteworthy that responsibility for shared care was also placed on commissioning bodies to deliver such a service and to support doctors.

### **Appraisal**

Evaluation of drug services before 1982 revealed a disparity in the provision and approach to treatment. The services became overwhelmed by the increasing numbers of drug misusers and the emergence of the poly-drug misuser posed further problems for existing services.

The growth of drug misuse, the spread of HIV and studies highlighting the failings of hospital clinics has led to the development of services based at primary rather than tertiary levels of care. Research has shown that the 'shared care' model of management involving joint participation of specialists and primary care appears to be viable and effective (Gask et al, 1997), and this has recently been endorsed by the Guidelines on Clinical Management of Drug Misuse and Dependence (Department of Health, 1999b). An evidence based approach to managing drug misuse is a recent development

(Department of Health, 1999b) and perhaps follows on from criticism of the earlier task force (Department of Health, 1996) recommendations of a lack of theoretical basis to the task force's opinions, leading to inconsistencies and contradictions in the report (Raistrick, 1997). Similarly, the Guidelines (Department of Health, 1999b) appear to have addressed further criticisms of the task force (Department of Health, 1996) involving a failure to define the meaning of 'shared care', the issue of whether or not general practitioners must include substitute prescribing as part of their contracted general medical services and a neglect of the role of the general psychiatrist (Raistrick, 1997). Unresolved, is the assertion that "counselling should be recognised as a core component of treatment" (Department of Health, 1996), given the evidence that unstructured counselling is ineffective but commonly used in the UK (Raistrick, 1997).

The various reports on service development dating from 1982 (Advisory Council on the Misuse of Drugs, 1982) until the present share a common failure to identify the resources required to implement recommendations. This is partially addressed in the Guidelines on Clinical Management of Drug Misuse and Dependence (Department of Health, 1999b), which states that Health Authorities, Primary Care Groups and Primary Care Trusts all have a duty to provide treatment for drug misusers. The new guidelines represent a consensus framework for good clinical practice for all doctors working in the NHS and private health care system. Clinicians are likely to be judged against this reference point with a hint of the possibility that accreditation may be introduced (Keen, 1999). It is acknowledged in the guidelines that there are only a limited number of rigorous reviews available in the field of drug misuse and practitioners may have concerns about certain recommendations. The advocating of supervised consumption of replacement medication may well be controversial as it is inadequately researched. The views that there is little clinical indication for the prescribing of diamorphine contradict some of the evidence available in the literature (Uchlenhagen et al, 1997; Perneger et al,

1998). Nevertheless, what should be welcomed from both the task force review (Department of Health, 1996) and the Guidelines on Clinical Management of Drug Misuse and Dependence (Department of Health, 1999b), is the continued support for methadone programmes.

## **CHAPTER 3**

### **Scale of the Problem**

#### **Introduction**

The International Narcotics Control Board has reported that drug misuse is rising dramatically in almost every country in the world (British Medical Journal, 1994). In the United Kingdom, young people's exposure to illicit drugs has increased dramatically from the early 1990s (Denham Wright & Pearl, 1995).

#### **The Figures nationally**

The Second Brain Committee in 1965 (Interdepartmental Committee on Drug Addiction: Brain Committee, 1965) noted the increased use of opiates, particularly heroin, from the Home Office Addicts Index statistics which described the total annual number of drug misusers rising from 68 to 342 over the previous five years and that this was accompanied by a similar increase in the number of known cocaine drug misusers from 3 to 211. This represented a 5 to 7 fold increase in numbers of drug misusers.

Statistics from the Home Office Addicts Index (Home Office Statistical Bulletin, 1981) showed that in 1971, 774 new drug misusers were notified. The average annual rate of increase over the period 1971-1981 was about 9½% per year, reaching a total of 2,248 notifications in 1981. Overall, the number of drug misusers receiving narcotic medication in the United Kingdom from medical practitioners on the 31st December 1981 was 3,850 as compared with 2,850 at the end of 1980. This large increase of 35% over one year was much greater than previous annual changes recorded since 1971 and brought the number of drug misusers known to the Home Office at the end of 1981 to 2½

times the number known at the end of 1971. This rise in the known number drug misusers at the end of 1981 reflected on both first notifications and re-notifications in that year (Advisory Council on the Misuse of Drugs, 1982). The proportion of notifications of new drug misusers from general practitioners rose considerably from about 15% in 1970 to about 50% in 1981. The majority of known drug misusers were from London and the Home Counties (60% in 1981) although the proportion of known drug misusers in other parts of the country was also increasing (Advisory Council on the Misuse of Drugs, 1982).

Following the introduction of the Misuse of Drugs Act 1971 (which came into force in 1973), the number of seizures of controlled drugs in the United Kingdom by the police paralleled the increase in the number of notifications. The quantities of drugs seized also rose over time from 1973 to 1978 (Advisory Council on the Misuse of Drugs, 1982). A further parallel was found in the number of persons found guilty of or cautioned for offences involving controlled drugs, with an annual increase from 1974 until 1981.

During 1982, the Home Office Addicts Index statistics showed an escalation of notified narcotic drug misusers from the 1981 figure of 2 248 to 2 793 (Advisory Council on the Misuse of Drugs, 1984). This represented an increase of approximately 25%. During the latter part of the 1980s, drug misuse in Britain climbed steadily (Advisory Council on the Misuse of Drugs, 1989). Between 1987 and 1990, Home Office notifications of new drug misusers rose by 51% (from 4 593 to 6 923) as did the number of renotifications by 70%, from (6 123 to 10 382). Taken together, these figures represented a growth of 61% in the number of notified drug misusers in the UK (Public Health Directorate, North East Thames Regional Health Authority, 1991) (See Figure 1). However, these figures were widely considered to be a gross underestimate of the true number of drug misusers, (Glanz & Taylor, 1986)

with the likely number in the region of ten times the number of notifications to the Home Office Addicts Index (Advisory Council on the Misuse of Drugs, 1982). This was because the Home Office Addicts Index only covered use of opiate and cocaine drugs. In addition, information was only collected from medical practitioners which excluded a whole range of services to which drug misusers may have presented including Community Drug Teams, and non-statutory agencies (North East Thames Regional Drug Misuse Data Base, 1993). The medical practitioners were often reluctant to, forgot or were ignorant of the system, contributing to under-notification.

In 1990, the Advisory Council on the Misuse of Drugs (Advisory Council on the Misuse of Drugs, 1990), recognised that at a conservative estimate, there were probably 75 000 regular problem misusers of notifiable drugs and perhaps as many again using a variety of non-notifiable drugs such as amphetamines. It was predicted that these numbers were unlikely to diminish in the near future. This was confirmed by the 19% increase of notified drug misusers from 1991 to 1992. From January to December 1992, a total of 24 703 drug misusers were notified to the Home Office, 39.1% of those being new drug misusers and the remaining 60.9% renotified drug misusers (North East Thames Regional Drug Misuse Database, 1993). In 1993, the Home Office had received notification of 28 000 drug misusers (Home Office, 1993).

Considering notification of new heroin misusers only, the Home Office notification system demonstrated an increase from 6328 in 1991 to 11 620 in 1995, with a similar trend for new cocaine misusers over the same period, from 882 to 1809 (Home Office, 1996). Although regarded as a reliable indicator of trends in numbers of drug misusers seen by doctors (Raistrick, 1997), the Home Office Index was discontinued in May 1997. It was decided that data on drug misusers could be more

accurately collected from regional databases, which received their information from a wider range of sources than just medical practitioners.

The most recently published data from the Regional Drug Misuse Databases demonstrated that the total number of drug misusers presenting for treatment in the six months ending March 1998 was approximately 30 000 in Great Britain (Department of Health, 1999a). Fifty-four percent were in their twenties with 15% aged under 20. The ratio of males to females was 3:1 but the use amongst girls was growing, with the age of initiation into drug use declining and young people increasingly using a wide range of drugs and alcohol at a younger age (Parker et al, 1995). Over half (55%) of the drug misusers reported to the Regional Drug Misuse Databases described heroin as their main drug of misuse with methadone reported next most frequently (13%), followed by cannabis and amphetamines (both 9%).

### **The Figures for London**

A substantial number of problem drug misusers in England and Wales are concentrated in London (Advisory Council on the Misuse of Drugs, 1993; Home Office, 1997) with the Thames regions contributing 23% of all methadone prescriptions (Strang & Sheridan, 1998a). London is unique in terms of drug misuse with 11.8% of the UK population living in London but 38% of drug misusers notified from the London area. This may be attributable to many drug misusers travelling from other parts of the UK, from European Community countries and from further afield to the capital. This leads to housing difficulties, a lack of social and familial support systems and considerable mobility across districts within London. Of further concern are the figures for the prevalence of HIV infection among long term drug injectors in London, estimated in 1992 as being between 7% and 13% - the highest in England (Daniel et al, 1992).



The Collaborative Report by the Regional Drug Misuse Data Bases (Daniel et al, 1992) incorporated data drawn from all four regional drug misuse data bases in London from 1st April 1991 to 31st March 1992. In greater London as a whole, nearly 8,000 individuals were reported as presenting to drug services between the 1st April 1991 and 31st March 1992. This figure was adjusted to avoid double counting of the same drug misuser presenting to different services and/or in different districts. The overall incidence rate of presenting drug misuse was calculated as 1.2 per 1,000 population. The incidence of presenting drug misusers was notably higher in some inner London areas where rates of over 7 per 1,000 were found. There was a marked association between underprivileged, as defined by the Jarman Index, and incidence of presenting drug misusers (correlation coefficient  $r = 0.7$ ). Overall, underreporting of contacts from agencies was suspected although no estimates were available. As regards numbers of notifications from various agencies in London, the Community Drug Teams reported the largest proportion of drug misusers' presenting (at their service) episodes at 26% followed by the Drug Dependency Units constituting 23% of the total. Reports from general practitioners accounted for 9%. The proportion of notifications from non-statutory sector agencies was 24% of the total, 16% from non-residential services and 8% from residential services. A further 10% of individuals were seen by other agencies including prisons, police and social services.

Considering the demographic characteristics of the drug misusers notified from these four databases, the majority were male, with a ratio of male to female of 2:1. Fifty-one percent of the misusers were aged between 20 to 29 years with an overall mean of  $29.1 \pm 8.6$  SD. Twenty percent of drug misusers were from ethnic minorities and 80% described themselves as "white". Sixty percent of the drug misusers stated that heroin was their main drug of use with methadone the second most commonly used drug (16%). Other opiates, benzodiazepines, cocaine and cannabis were each estimated at 4% as the main drug of use. Further details on drug use showed that cocaine, benzodiazepines,

amphetamines and cannabis were more likely to be used as secondary drugs and in combination with other substances. There was a high rate of injecting among presenting drug misusers at around 50%, most of which was associated with primary heroin use. However, based on past injecting profiles, there appeared to be a shift away from injecting practices. Among the current injectors, an average sharing rate of 16% was calculated for the London area.

This report (Daniel et al, 1994) suggested that in London, the predominance of heroin reporting may be partly due to traditions in service delivery particularly as other sources, for example, police seizures, indicated widespread use of amphetamines and crack cocaine but without the comparable treatment options within drug services. Notification guidelines could have further skewed returns toward opiates, a tendency which was marked in the drug profiles received from general practitioners. One conclusion of the Report (Daniel et al, 1994), was that an accurate picture of the type of drug misusers that general practitioners see, could only be ascertained with higher response rates from that sector. It also appeared that services attracted a particular type of drug misuser i.e. those who were white, male and aged between 20 and 29 and that this could have reflected an inequality in access for some ethnic minority groups as well as for women.

### **North East Thames Region**

Considering the North East Thames Region of London in more detail, according to the Home Office Notification Index there were 2 197 drug misusers in the region in 1990 which represented the second highest number in England and Wales after the Mersey Region (Public Health Directorate, North East Thames Regional Health Authority, 1991). The North East Thames Region also recorded the third highest notification rate in 1990 of just under 600 per million of population. The North East Thames Regional Drug Misuse Data Base was established in October 1990 (Public Health Directorate, North

East Thames Regional Health Authority, 1991). Between the 1st October 1990 and 31st March 1991, a total of 2,235 individuals were registered with the Data Base of whom 69% were male. Almost two thirds of all clients registered were aged from 20 to 34 years, with the peak age group for both sexes between 25 and 29 years. Almost 60% of drug takers admitted using heroin, 27% methadone and 18% other opiates. Twenty-six percent acknowledged to using benzodiazepines, 23% cannabis and 11% amphetamines with a similar percentage using cocaine. There were single figure percentages for uses of solvents, hallucinogens and other drugs.

Twenty-four percent of the drug using population in the North East Thames Region were employed, 6% were students and 66% were unemployed. Ninety percent were reported as Caucasian, 7% as Afro/Caribbean and 2% from the Indian sub-continent.

The North East Thames Regional Drug Misuse Data Base produced a further regional report dated April 1992 - March 1993 (North East Thames Regional Drug Misuse Data Base, 1993). Over this period, 3,960 individuals were recorded on the Regional Drug Misuse Data Base with a total of 4,772 agency episodes. Hence, 17% of the total number of forms submitted to the Data Base represented clients who were in contact with more than one agency. Almost 75% of the total were new to the Data Base with the remainder having been reported prior to April 1992. Both the individual and episode totals had increased over the findings from the previous year's Data Base report, with a 4.2% increase in the number of episodes and a 1.5% increase in the number of individuals recorded. When considering episodes and individuals by Health Authority within the North East Thames Region, it was clear that the prevalence of presenting drug use was highest within the inner city areas. Camden and Islington, and East London and the City accounted for almost three quarters (73.9%) of all the recorded agency episodes.

The report (North East Thames Regional Drug Misuse Data Base, 1993) calculated incidence rates of presenting drug use by Health Authority, with the analysis considering the population aged 15 to 44, as this was the age band in which the vast majority of reported problem misusers lay. The overall incidence was 2.19 per 1,000 population, with the inner London districts scoring higher than those districts found further out of the capital in less urbanised areas. This incidence figure was unadjusted and described as based on "raw" data, with an acknowledgement that variance in the number and accessibility of services, variable agency staff compliance in completing forms to the Database and varying numbers of younger people in a district would be just some factors influencing the figures. There was nevertheless, a fairly strong positive correlation ( $r=0.74$ ) between the incidence figures in relation to the Jarman Underprivileged Area Scores.

When the sources from which the 4,772 reported episodes were assessed, a distribution similar to that of the report of the previous year was found. Community Drug Teams recorded the greatest number of episodes at 34%, general practitioners and private doctors constituted 16%, non-statutory services 14%, prison services 8%, statutory services 6% and hospital and other residential rehabilitation services constituting the remaining 5%. It was noted that returns of forms from the general practitioners and private doctors had increased compared to previous reports. The largest proportion of misusers (28.8%) were in the 25-29 year age group with a further 22% falling into the 20-24 age bracket.

The main drug of use was heroin (60.8%) followed by methadone (15.6%) with use of cannabis, cocaine and amphetamines (4-6%) being the third most common drug of abuse. It was clear that

cocaine, cannabis, amphetamines and benzodiazepines were far more likely to be used and recorded as secondary drugs than opiates.

Reports of AIDS cases in HIV infected persons in the UK have tended to be concentrated within London particularly in the North Thames region. Similar to the higher prevalence of injecting drug use seen in London, this uneven distribution was not due simply to a higher prevalence of HIV infection in the capital but also to the presence of established specialist treatment centres. Injecting drug use was the stated exposure category in 8% of all HIV positive reports in the former North East Thames Region and 5.4% of all reported AIDS cases in the Region. Nevertheless, these figures should be treated with caution as the number of infected individuals who had not sought testing, of which a proportion will be injecting drug misusers, was unknown.

The North Thames regional drug misuse database was evaluated in a recent study to determine the accuracy of reporting of "episodes" i.e. new clients or clients who reattend after an absence of six months (Hickman et al, 1997). The findings were of under-reporting, which varied by type of agency from 9% of unreported episodes at drug dependency units compared to 20% for non-statutory community services, 31% for statutory community services, 40% for residential rehabilitation units and 63% for the needle exchange. Thus, the figures derived from this database during 1994 were found to be an underestimate of the number of drug misusers in contact with services and were unreliable as a measure of the prevalence of known, problem drug takers.

Crabbe et al (1999) set out to validate the University of Manchester drug misuse database and concluded that the reporting system was providing accurate measures of the extent and nature of presenting problem drug use in the region. However, they only examined data from one agency,

community drug teams. These findings contrast with those of Tantam et al (1993) who evaluated reporting by general practitioners to the drug misuse database for the same region over a similar time period and found a fall in reporting of drug misusers to the database over 15 months. Caan (1998) has commented that compiling unreliable data from all the regional databases will result in shaky foundations for the planning of services for drug misusers.

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### **Change in prevalence of drug misuse in two boroughs of North East Thames Region**

In 1983, Hartnoll et al (1985) estimated that approximately 2 000 opioid misusers were living in the Boroughs of Camden and Islington. Cox et al (1998) aimed to estimate the numbers of problem drug misusers in these boroughs ten years later. They obtained data from regional drug misuse databases, hospital admissions and magistrates' court records, from April 1993 to April 1994, including any problem drug misuse (but excluding cannabis) of Camden and Islington residents between the ages of 16 and 65 years. A capture-recapture methodology was used and log-linear analysis undertaken. The estimated total population of problem drug misusers was found to be 9 200 (95% C.I. 7 052 - 12 520). This represented an approximate 4.5 fold increase over ten years following the estimate by Hartnoll et al (1985), although the earlier figure represented people with opioid dependence only whereas Cox et al (1998) considered all drug misusers in these two boroughs. The prevalence was determined as between 2.0 to 3.6% in the two boroughs, twice the expected value nationally (Durante & Heptonstall, 1995). The higher prevalence was thought to reflect local conditions believed to be associated with substance misuse including poverty, poor housing stock, unemployment and a large transient population. These findings have important implications for the planning of drug misuse services in these boroughs including a potential growth of AIDS related illness.

## **Scale of the Problem in Relation to the General Practitioner**

### **Incidence and Prevalence**

Concern about the rise in use of illicit drugs in the United Kingdom during the 1980s prompted the Department of Health and Social Security to issue the "Guidelines of Good Clinical Practice in the Treatment of Drug Misuse" to all doctors, but drawing the attention of Family Practitioner Committees to the need for action on drug misuse (Medical Working Group on Drug Dependence, 1984; Department of Health and Social Security, 1986). There was no doubt that general practitioners had been seeing drug misusers and of all first time notifications made by doctors to the Home Office Addicts Index, general practitioners notified 15% of these in 1970, 29% in 1975, 49% in 1980 and 55% in 1984 (Advisory Council on the Misuse of Drugs, 1982; Anonymous, 1985). This trend could have reflected the growth in the prevalence of drug misuse outstripping the capacity of specialist treatment facilities to respond. The uneven distribution of specialist facilities in the UK may also have meant that in some areas general practitioners were the only source of assistance for drug misusers. Clearly, for many individuals family doctors remain the first point of contact. However, the services provided to drug misusers by their general practitioners was noted by Edwards (Edwards, 1981) to be largely unrecorded and unexplored. A postal survey was conducted in mid 1985 of a 5% national sample of general practitioners in England and Wales in order to ascertain their role in, and views on, the treatment of opiate drug misusers (Glanz & Taylor, 1986). Based on a response rate of 72%, about one in five general practitioners acknowledged contact with an opiate drug misuser in the period of one month. It was calculated that for England and Wales as a whole, between 6,000 and 9,000 such patients were attending general practitioners in a four week period with about one third of these constituting new patients. Assuming the monthly rate of presentation is steady over 12 months, a minimum of 30,000 new cases of drug misuse per year was calculated and adjusting for non-respondent general practitioners, the figure is perhaps more realistically 44,000. The overall numbers

of drug misusers attending general practitioners annually in England and Wales was estimated as ranging from 80,000 to 125,000. Thus, a typical general practitioner with a list of 2,000 patients (of whom 1,000 were aged 15-44), would see about two new cases of opiate misuse in a year (Glanz & Taylor, 1986).

A later study of heroin misusers attending an urban general practice found a prevalence of 2.2 per thousand population (Neville et al, 1988). This represents four heroin misusers per average list of patients which was higher than the 2 per thousand found by Glanz (1986). Other studies published at a similar time by Parker et al (1987) and Robertson (1985) estimated prevalence of 6 and 9 per thousand population respectively. The higher prevalence figures were probably related to the location of these general practice samples in urban centres where drug misuse was known to be more prevalent.

### Mortality

Misusers of some types of drugs are at greater risk of death compared to their non-drug misusing counterparts. The mortality rate of notified drug misusers in the U.K. between 1978 and 1980 was 18.4 per 1 000 per annum which was 16 times higher than among the general population (Ghodse et al, 1985). This figure was confirmed in an 11 year follow-up study where the mortality rate was 18.6/1000 misusers per annum (Cottrell et al, 1985). Among 180 drug misusers attending a general practice in Edinburgh, 7 died during a four year period (Bucknall & Robertson, 1986). This mortality rate was larger by a factor of 11.6 compared to the overall Scottish mortality figures. It was argued that many of these deaths may have been preventable by better primary health care, as the dangers associated with opiate use often related more to aspects of the lifestyle of the misuser and ways in which drugs are used, rather than damage caused directly by drugs (Gossop, 1982).



These figures from the general practice studies are similar to findings from drug clinics. In a 22 year follow-up study of heroin injectors attending London drug clinics, a mortality risk almost twelve times greater than the general population was found (Oppenheimer et al, 1994) and 34% of the original sample of 128 misusers had died (Tobutt et al, 1996). Another study considering drug misusers who injected, demonstrated that they were twenty-two times more likely to die than their non-injecting peers (Frischer et al, 1997).

Accidental overdose and sudden death following opiate use accounted for only 29% of deaths among misusers known to the Home Office, with suicides reported for about 23% and the remainder caused by violence, septic conditions and 'natural causes' (Bewley et al, 1968). More recent data indicates that mortality from self-poisoning with opiates has increased over nine fold in the past twenty years (Neeleman & Farrell, 1997).

A 10 year follow-up study (January 1983 to December 1992) of a general practice based population of drug misusers, found that the pattern of deaths had changed from largely overdose as the cause of death in the early years, to deaths from AIDS related illness in the later years which was most evident from 1991. The overall mortality was 20% of the sample (42/203) (Robertson et al, 1994).

Non-fatal heroin overdose remains a common occurrence with a recent Australian study reporting that approximately two thirds of a sample of heroin injectors had taken an overdose (Darke et al, 1995). In a non-clinical sample of heroin misusers in London, twenty-three percent of the heroin misusers acknowledged to at least one overdose. Those who injected and with a higher level of dependence and treatment contact were found to be most at risk (Gossop et al, 1996). More recently, attention has

been drawn to opiate misusers who die from methadone misuse (McCarthy, 1997). There is also increasing concern about deaths related to methadone among people who have not been prescribed this medication (Greenwood et al, 1997). A doubling of such deaths has been found in the Lothian area of Scotland between 1995 and 1996 (Greenwood et al, 1997) with a similar trend in Manchester (Cairns et al, 1996). Thus, there may be a public health issue of methadone recipients supplying some of their prescription to people who do not have tolerance for opiates who consequently die after taking this methadone

### **Appraisal**

The prevalence of drug misuse appears to be rising in the United Kingdom. The figures for prevalence of drug misusers in contact with services are almost certainly an underestimate of the true prevalence. Previous criticism of the Home Office Addicts' Index can also be levelled at the Regional Database system operating currently and relate to underreporting of contacts by the drug agencies.

The figures in London tend to be higher than in most other parts of the country, particularly in the inner city areas where there appears to be a relationship between the incidence and prevalence of drug use and the Jarman Underprivileged Area Scores. The prevalence of drug misuse in general practice lies between 2 and 9 per thousand patients. The higher figure appears to reflect the prevalence of drug misusers in urban general practices and the lower figure of the national prevalence incorporating both rural and urban practices. It is however, recognised that drug misuse is spreading to involve the rural areas of Great Britain (Department of Health, 1999b).

Mortality among drug misusers is substantially higher compared to the general population particularly among injecting drug misusers. The recent marked increase in drug-related deaths among young

people aged 15-19 years is of current concern (Roberts et al, 1997). Causes of death vary but the impact of AIDS and more recently, overdose of prescribed methadone has become a focus of attention. The use of oral methadone in the treatment of drug misusers has probably played a significant role in the decline of HIV infection and other hazards of injecting illegal drugs but perhaps at a cost of new deaths from consumption of methadone by non-opiate tolerant people.

## **CHAPTER 4**

### **The General Practitioner and Drug Misusers**

#### **Introduction**

An editorial in the British Medical Journal in 1988 stated that most drug misusers turned first to their general practitioners for help but that unfortunately, with a few shining exceptions, most general practitioners were reluctant to take them on (Richards, 1988). Part of this reluctance was ascribed to ignorance, as throughout the 1970s it was policy to send patients directly to specialist units thus bypassing general practitioners who were discouraged from treating drug misusers. In addition, formal teaching on drug abuse was noticeable by its absence from the undergraduate curriculum and from courses in general practitioner vocational training schemes. This reluctance to see drug misusers was also thought to be due to prejudice. Drug misusers were regarded as "undesirable, manipulative and violent, who have brought the problem on themselves". Richards (1988) concluded that "... an understanding, tolerance and acceptance of the drug misuser's behaviour are essential if general practitioners are to manage these patients successfully". The author of this editorial urged general practitioners to take a key role in the management and treatment of these patients by adopting an attitude that would encourage drug misusers to trust them and come forward for help.

#### **Policies**

Thirty years ago, the Second Brain Committee (Interdepartmental Committee on Drug Addiction: Brain Committee, 1965) stated that hospital based treatment should be the priority in tackling the emerging problem of drug abuse. As a consequence, there were just over one hundred centres serving such a function, usually in major regional psychiatric hospitals (Social Services Committee. Fourth Report 1984-85: Misuse of Drugs. London: HMSO, 1985). Few of these had specialised units exclusively for

the treatment of drug misuse and most of them incorporated drug dependence as part of a general psychiatric service (Bucknall et al, 1986a). An evaluation of the use of psychiatric drug treatment services by heroin misusers referred from general practice, found that patients receiving treatment from the psychiatric drug treatment service did not have a higher rate of abstinence than those not starting treatment and in fact those avoiding this service showed a statistically better prognosis (Frazer & Leighton, 1984; Love & Gossop, 1985). Furthermore, it was found that from the high rates of non-attendance, few patients could effectively have been said to have undertaken adequate treatment. This indicated that patients found the psychiatric service both uncomfortable and inappropriate. The involvement of a general psychiatric clinic when few of the drug misusers saw themselves suffering from a psychiatric illness was reported to be a major reason for non-attendance. The lack of obvious success of the service appeared to be reflected in the decline in the number of referrals, as practitioners and patients became progressively disillusioned with what was being offered (Bucknall et al, 1986b). The remitting and relapsing pattern of heroin use was seen as an important issue in devising more appropriate management.

The overall management of drug misusers began to undergo change as a consequence of disillusionment with maintenance forms of treatment (Jenner & Gill, 1985) and the need for a more broadly based system of treatment (Advisory Council on the Misuse of Drugs, 1982). The change in approach involved hospital based detoxification combined with outpatient support from psychiatric and primary health teams, social workers and non-statutory agencies (Edwards, 1979). General practitioners were regarded as being in the best position to cope with what was often an extended management plan. Community based treatment was regarded as more likely to maintain contact with a drug misuser, particularly as the treatment needed to be varied and flexible to take account of the

differing needs of each patient over time. It was concluded that the greater part of the management of drug abuse would occur outside units specialising in dependence problems (Bucknall et al, 1986b).

The encouragement of greater involvement by general practitioners "to play a major part in the care and treatment of drug misusers" was fundamental in formulating health policy (Department of Health and Social Security, 1986). This was one of the principles underlying the Guidelines of Good Clinical Practice in the Treatment of Drug Misuse, issued by the Department of Health and Social Security in 1984 (Medical Working Group on Drug Dependence, 1984). This policy received support from the House of Commons Social Services Committee in its report on misuse of drugs, which recommended that Family Practitioner Committees, "regard as a priority the encouragement of general practitioner services to drug misusers" (Social Services Committee, 1985). The DHSS had indeed, recently drawn the attention of Family Practitioner Committees to this in a circular in 1986 (Department of Health and Social Security, 1986).

Though the Social Services Committee recognised the importance of the general practitioners' role, some of the evidence it received also indicated the problems of implementing their recommendation and for that matter the DHSS policy. In a memorandum to the Social Services Committee, the Royal College of General Practitioners stated that it was prepared to "reaffirm strongly" the advice given in the Guidelines of Good Clinical Practice ((Medical Working Group on Drug Dependence, 1984), but the College's verbal evidence was not encouraging. It was suggested that many general practitioners were reluctant to take on drug misusers as patients because "they are a nuisance, they make demands ... are abusive to the staff ... a lot of general practitioners do not want to have anything to do with drug misusers" (Social Services Committee, 1985). It was also stressed, that a general practitioner's training was insufficient to deal with drug misusers' devious methods of obtaining drugs.

A similar picture of general practitioners' attitudes emerged in a House of Lords debate when the "typical" general practitioner was described as regarding drug dependence as a "self-inflicted wound" unworthy of the doctor's valuable time (Deitch, 1985). Hence the receptiveness of general practitioners to the policy of promoting a more active role for them in the treatment of drug misusers was uncertain. Nevertheless, the findings from a survey of general practitioners' views on opiate misusers (Glanz, 1986a,b), was that general practitioners overwhelmingly supported the policy of the Department of Health to granting the highest priority to developing services for drug misusers (Department of Health and Social Security, 1984). However, less than a third of general practitioners agreed that they were prepared to treat opiate misusers as willingly as other types of patients, possibly because 75% of practitioners regarded opiate misusers as more difficult to manage than other types of patients and 66% felt that the treatment required by such patients as beyond their competence (Glanz, 1986b). These views on the limitations of general practice as the place to treat opiate misusers reflected the Royal College of General Practitioners' views that "the special and complex needs of those addicted to hard drugs" and the insufficiency of a general practitioner's training for responding to those needs accounted for part of the resistance of general practitioners to treating opiate misusers (Social Services Committee, 1985). However, general practitioners were not entirely averse to treating opiate misusers with the majority of respondents agreeing that when opiate misusers were not prepared to come off their drugs, there was still a positive role for the general practitioner to play (Glanz, 1986b). It seemed that if back up resources in the form of a specialist drug dependence clinic was more widely available, some general practitioners would be encouraged to take a more active role in the treatment of opiate misusers. It was shown that general practitioners who had qualified more recently were more willing to take on opiate misusers and also appeared to be more confident of their ability to deal with them (Glanz, 1986b). Overall, most general practitioners regarded drug misusers

as especially difficult to manage and beyond their competence to treat and most were unwilling to accept them as patients.

Glanz (1986a) commented, that it was not surprising that the Medical Working Group ((Medical Working Group on Drug Dependence, 1984) and Minister of State (Social Services Committee, 1985) had felt the need to emphasise that general practitioners had a responsibility and "duty" to provide services to this group of patients. However, the government had rejected the "carrot" option as suggested by the Social Services Committee (1985), of making additional payment to general practitioners who undertook special training and treated drug misusers (Department of Health and Social Security and other Departments, 1985). It was acknowledged that since general practitioners are independent contractors to the Health Service, working largely outside the planning system, that there was little "stick" that could be deployed to steer general practitioners in line with the central strategy. Glanz (1986a) concluded that the level of management of opiate misusers that may legitimately be expected of general practitioners was open to debate. Providing basic medical care for complications associated with drug misuse could be the most acceptable role for the general practitioner rather than prescribing opiates as maintenance treatment, or even limited prescribing to help with withdrawal from drugs. Glanz (1986) supported general practitioners undertaking a more active role if a network of support as recommended by the Advisory Council on the Misuse of Drugs (1982) and the Social Services Committee (1985) was established.

The issue of general practitioners dealing with drug misusers with little specialist advice and support from hospitals was raised by Robertson (1985) a year before the National Survey by Glanz in 1986. This general practitioner commented, that general practice was perhaps the best place to manage the problem of drug misuse but that the general practitioner could feel isolated and at times guilty for



prescribing anything at all. A similar view was later echoed by Ball (1988) who emphasised that the reluctance of general practitioners to participate in combating drug misuse was founded on lack of training, the expectation of lack of support based on past experience, concern about demands on time and worries about staff being exposed to patients who bring manipulation and violence into the waiting room. Ball's (1988) view was that success could only come from a programme designed to train general practitioners and their staff to deal with this group and effective support in the hospital and community. This view was supported some years later in a survey of 102 general practitioners, determining what might increase their involvement with patients who misuse drugs (Rozewicz et al, 1992). Only 14% reported that they would be willing to see more drug misusers if these patients attracted an enhanced capitation fee. Increased support from community nurses (43%) or drug dependence units (41%), or further training for the doctors in the management of drug misuse (30%) were more likely to improve general practitioners' involvement (Rozewicz et al, 1992). This issue of support was raised again at the General Medical Services Committee in April 1988 (From the General Medical Services Committee, 1988), when the implications for general practice following on from the recommendations in "AIDS and Drug Misuse" (Advisory Council on Misuse of Drugs, 1988) was discussed. Included in this report was the recommendation that, "all general practitioners should provide care and advice for drug misusing patients to help them move away from behaviour which may result in them acquiring and spreading the virus". The comment on this report (From the General Medical Services Committee, 1988) was that doctors who dealt with drug misusers were already overwhelmed, and not only would general practitioners need adequate support in the community but they would have to be given the opportunity to attend training courses and be given advice on how to deal with drug misusers. Another general practitioner commented (From the General Medical Services Committee, 1988), that many doctors were unable to withstand the siege when they started to treat drug misusers and noted that in hospitals, doctors had the support of their colleagues whereas

in general practice doctors were often working alone. This general practitioner went on to state, that he believed if general practitioners went down the road of dealing with drug misusers, it would bring general practice into disrepute. A similar viewpoint was held by another family doctor who regarded the treatment of drug misusers as part of the hospital service, and that all the time there was open access to general practice drug misusers would abuse the service (From the General Medical Services Committee, 1988).

### **General Practitioners' Attitudes towards Drug Misusers**

King (1989) conducted interviews with 270 general practitioners in London and found that over a quarter would not accept intravenous drug misusers as permanent or temporary patients. King (1989) speculated that perhaps the first likely obstacle to a greater involvement of general practitioners in the management of drug misusers, is a reluctance to accept them as legitimate patients.

A twelve-month prospective survey that considered general practitioners' attitudes towards drug misusers was published in 1987 (Parker & Gay, 1987). The findings were of a wide variation in the numbers of problem drug misusers seen by individual practices, which depended on both the situation of the practice and the varying attitudes of the general practitioners towards drug misusers and their problems. At one end of the spectrum were practices that had a clear policy of not accepting drug misusers onto their lists. This policy was justified by threats of violence and reports of burglaries and sometimes associated with the belief that legal measures were the only way of dealing with drug misusers. Other practices were less definite, but did not believe they had anything to offer patients with drug problems. In the middle of the spectrum were practices, which would accept medical responsibility but had an explicit policy against the prescription of controlled drugs in order to avoid attracting such patients. At the far end of the spectrum were the small group of practices who would

prescribe opiates to help drug withdrawal or would even be prepared to maintain drug misusers over a period of years. A small number of practices were prepared to prescribe opiates independent of specialist input and risked attracting drug misusers with this policy.

A qualitative type of study considered the interaction between the general practitioner and the drug misuser at a personal level, from data collected through enhanced records and semi-structured interviews with the doctor. (McKeganey, 1988). This information was collected from 23 general practitioners in Glasgow involving 50 consultations with 42 heroin misusers. These doctors were able to identify an appropriate treatment plan in only 33% of consultations and in only 4% of those did they estimate that the patients' chances of complying were better than poor. Manipulation by drug misusers was reported by sixteen of the doctors, lying by twelve, problems with motivation to comply with treatment by fifteen and aggression by nine. The general practitioner felt that a large number of the consultations were initiated primarily to obtain drugs. The doctors admitted that the patients' social circumstances played a part in their drug abuse but on only relatively few occasions did the doctor feel able to identify aspects of the patients' social circumstances which could be mobilised for treatment purposes. During 63% of the consultations the doctors reported negative feelings, in 33% there were positive feelings and in only 4% were emotions of a neutral nature. The percentage of negative feelings related closely to 67% of consultations where the doctor felt unable to cite anything that they felt approximated to a treatment plan for these patients. Many of the difficulties were attributed to the doctor's inability to 'slot the drug misuser into a typical patient role'. Overall, it was clear that the doctors were experiencing a good deal of difficulty in their relationships with these patients. They tended to be pessimistic about the patients' motivations for initiating treatment and also about their own contributions to the treatment.

Two further studies investigated general practitioners' attitudes towards drug misusers and their knowledge of drugs, by postal return of questionnaires. The first study was conducted in 1985 (but published in 1990) and surveyed general practitioners in the Norwich Health District (Abed & Neira-Munoz, 1990). They found that almost 80% of general practitioners agreed that the management of drug misusers should be a shared responsibility with the specialist clinic but that there was an urgent need for a local drug clinic staffed by a consultant psychiatrist and paramedical staff. The majority of general practitioners were prepared to help drug misusers despite their views that these patients were unreliable, that their problems were of their own making and that drug misuse was not considered to be a medical problem. General practitioners who had recently graduated were more likely to prescribe methadone as part of a withdrawal programme and similarly, such general practitioners were prepared to use methadone as maintenance drug therapy. This contrasted with older general practitioners, particularly those working in larger practices, who felt that prescribing should be left to the specialist. They viewed their role as primarily managing the treatment of withdrawal symptoms and/or medical complications of drug misuse. A further finding was that the majority of general practitioners thought that there had been no increase in the number of drug misusers over the previous five years (1980-1985). Given that almost 66% of general practitioners had no drug misusers on their lists, with the remaining one third of practices containing all of the misusers, this finding came as no real surprise. The male general practitioners in smaller practices who had fewer years of experience were more likely to have a positive attitude and a greater preparedness to treat drug misusers. Nevertheless, 76% of the general practitioners regarded the management of drug misusers as beyond their competence.

The second postal questionnaire survey was published in 1990 involving general practitioners in the inner London area (Bell et al, 1990). The low response rate of 48.5% was thought to reflect the lack of

interest of general practitioners in drug misusers. Of this sample, 30% agreed that general practice was an appropriate place to manage the problems of drug dependence with significantly more of the younger general practitioners in agreement with this view. Vocational training of general practitioners correlated significantly with those who felt that general practice was an appropriate place to manage drug misusers. Twenty-five percent of the general practitioners had received undergraduate training, with 26% having received vocational postgraduate training and 29% continuing postgraduate training in the management of drug misuse. Only sixteen percent regarded their previous training as sufficiently useful to equip them to deal with drug misusers. However, 35% acknowledged that more specific training in drug misuse would influence them to become more involved with patients. Twenty-seven percent expressed an interest in small group training, of which the majority were younger general practitioners.

Different concerns about training emerged from a study which evaluated general practice and drug misuse in the North Western Health Region (Tantam et al, 1993). It was found that despite an increase in the rate of drug misuse in this region, reports of drug misuse by general practitioners to the newly developed North western regional drug misuse database fell over the fifteen months of the study (January 1986 to March 1987). A linked interview study over 12 months, of a representative sample of general practitioners in the region, also found a decline in the number of drug misusers attended by general practitioners. Consistent with these findings was that forty-eight percent of general practitioners acknowledged to receiving training in or having attended talks on the treatment of drug dependence prior to the first interview but only 24% of general practitioners had done so in the following year. A further finding was that general practitioners offered no treatment in the primary care setting or referral elsewhere, to significantly more of the drug misusing patients compared with the interview findings one year previously. The conclusion from this study was that general practitioners

were not prepared to accept the burden of the medical care of the drug misuser (despite training) and essentially ranked assessment and referral as the highest priority in their management followed by dealing with the physical complications of drug misuse. Detoxification was given a low priority.

It has been argued that opiate misusers are subject to negative stereotyping by general practitioners (Jones, 1995) with the suggestion that the origin of positive or negative attitudes may be rooted in the accretion of influences from the lay and medical communities. These "influences" which were described as operating before entry to medical school (Lester & Bradley, 1997), were not elucidated in this commentary. Greenwood (1992b) however, has described some of the factors behind general practitioners reluctance to take on the responsibility of caring for opiate misusers. They include fears about contracting HIV, being censured for irresponsible prescribing or being taken advantage of by the drug misuser, difficulty in establishing rapport, disgust at self-injecting practice, disillusionment with prognosis and frequent relapses, concern about the costs of prescribing methadone over extended periods and loss of non-drug using patients by the presence of drug misusers in the practice.

The recent literature has a more positive view about general practitioners' attitudes and involvement with drug misusers. General practitioners have been shown to be seeing more drug misusers, based on a postal survey in the Lothian over the time period 1988 - 1993 (Donmall & Millar, 1993). Bury et al (1996) also demonstrated that general practitioners were becoming more confident in dealing with this group of patients. They showed a trend of greater confidence in the management of drug misuse, improving from 34% in 1993 to 45% in 1996, of general practitioners with above average confidence (Lothian Health Board, 1995; Bury & Sherval, 1997). It was emphasised that the introduction of local guidelines supported by training may have played a role in this change which was likely to be relevant specifically to general practitioners working in the Lothian area.

Davies & Huxley (1997) described more optimistic findings in a postal questionnaire of general practitioners' opinions on the treatment of opiate misusers. The questionnaire was sent to 341 general practitioners in Greater Manchester and elicited a 79% response rate. It revealed that general practitioners were twice as likely to hold positive attitudes as negative attitudes. More specifically, the younger doctors and those in contact with support drug services displayed this positive view of drug misusers, but it was not stated whether these subgroups of doctors had received any more (or less) prior training in managing drug misusers. The survey again found that general practitioners wished to have more training and acknowledged a deficit in their skills and knowledge to deal effectively with drug misusers (Davies & Huxley, 1997).

#### **Characteristics of Drug Misusers attending General Practice**

A case controlled study of heroin misusers attending three urban general practices in Dundee compared 36 heroin misusers with 36 control patients (Neville et al, 1988). The practices had no established policy for managing heroin misusers and did not actively encourage or discourage drug misusers to register with a practice. It was found that the drug misusers usually volunteered information concerning their addiction to the general practitioner. Seventy-two percent of these drug misusers first presented with a problem related to heroin. Comparison of the index cases with the general practice control patients revealed that the heroin misusers consulted significantly more often than the control group, but consultation rates for general medical care (excluding consultation specifically for a heroin problem) were similar in the two groups. Heroin misusers kept significantly fewer appointments than their controls but home visit rates and casualty department attendance were similar for both groups. Similar numbers of patients had a documented psychiatric history but there was a higher prevalence of alcohol abuse amongst the drug misusers. Half the heroin misusers had a known criminal record and substantially more were known to have been dishonest with their general

practitioners and had displayed violent behaviour or threatened actual violence to doctors or their staff. These findings suggested that most heroin misusers consulted their general practitioner in much the same way and for much the same reasons as patients who did not use heroin. Only a few heroin misusers had high consultation rates and made heavy demands on their general practitioner. The importance of treating heroin misuse from the standpoint of general practice was borne out by the high proportion (26 out of 36) of misusers who initially presented to the general practitioner rather than to other medical agencies. The data also supported the view that the general practitioner provided some continuity of care for most of the heroin misuser group, whether for heroin related problems, general medical care or family support. Furthermore, twenty-four of the thirty-six heroin misusers had remained with the same general practitioner since presentation and had a close family member registered with the same general practitioner. Hence, there was commitment and loyalty by the drug misuser and members of their family to a specific general practitioner and presumably this commitment was reciprocated by those family doctors who helped and supported the heroin misuser and did not look upon the drug misuser as undesirable. There were similarities between the index and control groups with respect to major family disruption in childhood which did not support the popular stereotype that heroin misusers tended to come from unstable or broken homes. The overall conclusion was in favour of planning management of drug misusers around the primary care team as there were high doctor/patient contact rates, the patient had trust in the family doctor and there was an opportunity to involve family members in the management of heroin misusers. This also had implications for providing support and counselling to those misusers infected with the HIV virus and to modify the behaviour of those injecting misusers as yet free from the virus.

Concerns about the use made of medical facilities by heroin misusers was addressed in a retrospective study from a general practice in Scotland (Bucknall, 1986a). It showed that there was a



rise in the number of general practice appointments of drug using patients after the onset of heroin use. This contrasted with the number of appointments at hospital departments, which remained stable after onset. This finding seemed to confirm that general practice was the main interface between the drug using patient and the medical establishment, and that placing an emphasis on interventions based in hospital for the education and the management of drug misusers was inappropriate, particularly with respect to HIV. Similar findings were reported from other Edinburgh practices. Another study considered the use of general practice, not only by drug misusers, but also by drug misusers who were HIV positive (Ronald et al, 1992). It was found that the mean annual consultation rate for 191 drug misusers was 19.5 compared to 4.4 for the practice population as a whole. Drug misusers who were HIV positive consulted their general practitioner significantly more frequently, a mean of 25 visits over a year, than those who were not HIV positive (mean of 16 consultations per annum). However, HIV positive patients did not spend significantly more days as hospital in-patients, suggesting that the burden of care lay with primary care rather than hospital services. Robertson (1989) also found that amongst 50 drug misusers attending general practice that their consultation rates increased significantly over two consecutive 2 year periods. In London, Leaver et al (1992) compared 29 heroin misusers with 58 non-drug using patients registered at the same practice, matched for age, sex and general practitioner. The heroin misusers made significantly more routine consultations than the control group over six months. The majority of these visits involved collecting prescriptions only, but prescription rates were higher even when methadone prescriptions were excluded. The heroin misusers failed to attend significantly more appointments and had significantly more emergency consultations.

## **Management and Treatment in Primary Care**

A survey involving a 5% national sample of general practitioners in England and Wales was published in 1986 considered the role of general practitioners in the treatment of opiate misuse (Glanz & Taylor, 1986). The rationale for this survey arose as a consequence of the growth of drug misuse in the United Kingdom and the increasing emphasis in national policy for drug misusers to receive treatment from general practitioners. Very little information was available at that time on the extent of contact between general practitioners and drug misusers, general practitioners' management of drug misusers and general practitioners' views on the treatment of misusers. The rise in figures of first time notifications of drug misusers made by doctors to the Home Office indicated that general practitioners were seeing many drug misusers. In 1970 general practitioners notified 15% of the total recorded Home Office notifications. This increased to twenty-nine percent in 1975, forty-nine percent in 1980 and in 1984 to fifty-five percent of all first time notifications (Anonymous, 1985).

Some of the findings on the extent of contact between general practitioners and drug misusers have been described in a previous chapter (Glanz & Taylor 1986). Almost two thirds of drug misusers said they consulted the general practitioner for help for withdrawal or rehabilitation. One third admitted to primarily seeking a prescription for opiate drugs, 23% requesting help for medical complications of drug misuse and a further 20% wished for other types of input. These survey findings of general practitioners suggested that they were not approached principally as a source of providing maintenance of opiate drugs. It also highlighted the important position of the general practitioner as both a provider of and gate keeper of key services for drug misusers.

The second part of this study considered how general practitioners manage the opiate misusing patient (Glanz, 1986a). Thirty-one percent of those general practitioners responding to the

questionnaire, stated that they had "never" seen an opiate misuser. Of the remaining general practitioners, over half had been treating an opiate misusers for at least six months. Beyond assessing the patient, the most common response of general practitioners in dealing with opiate misusers was to refer them to specialist hospital drug dependence clinics or to general psychiatric services. Other potential sources of care such as referral to other members of the primary health care team, to local authority social services or voluntary services occurred infrequently. Few of the general practitioners reported that they had undertaken screening of urine for drugs. On the other hand, a substantial proportion of general practitioners (35%) had prescribed opiate drugs either in the short (up to two weeks) or the long term. It could not be determined how much of the prescribing related to a withdrawal programme or for maintenance treatment. Finally, it was found that only one third of the general practitioners had notified the Home Office of the opiate misuser on their list.

A follow-up survey five years later of one in ten general practitioners in England and Wales, found a fall in the numbers of opioid misusers consulting with general practitioners from 21% in 1985 to 15% in 1990 (Glanz & Friendship, 1990). Only 15% acknowledged confidence in meeting the needs of consulting drug misusers. Forty-three percent of general practitioners referred these patients to a specialist service without further appointments at the practice and 7% of doctors admitted that they would remove identified misusers from their list. The implications of drug misusers informing their general practitioner of their problem, are not simply possible removal from their doctor's list. There will be a loss of benefits and/or services for an individual who has an illness or long-term disability, who is not registered or cannot register with a general practitioner (Morrison & Rubin, 1995). This may also affect the drug misuser's family with the children similarly unable to access primary care and also mainstream child health services. Drug misusers may then use Accident and Emergency services in order to access health care, which is inappropriate,

as there are no follow-up review appointments and no preventative medicine can be undertaken (Stone et al, 1989).

A postal survey involving inner London general practitioners (Bell et al, 1990), also found that the majority of general practitioners (91%) referred narcotic misusers to the local drug dependency unit, with only one third of doctors describing themselves as satisfied with the back up services provided from the local specialist services. Sixteen per cent of the general practitioners referred patients to general psychiatric services and 14% to private psychiatric services. Seventy-eight per cent of the respondents saw drug misusers in their practice and although younger general practitioners were more inclined to do so, this difference was not statistically significant. Supportive interviews were the most common form of management undertaken by the general practitioners themselves (79%), with younger general practitioners (under the age of 45) much more willing to do so. Only 15% of the general practitioners were prepared to undertake methadone withdrawal and 10% methadone maintenance. These findings gave little support to the active role that the Department of Health had been encouraging general practitioners to adopt (Medical Working Group on Drug Dependence, 1984). The study identified two possible factors responsible for this: (1) Less than one third of general practitioners thought the general practice was an appropriate place to manage drug misusers although it appeared that training in the field of drug misuse would have a significant positive effect on the way general practitioners perceived their role. General ignorance of the management of narcotic misuse was widespread and only 16% of doctors felt sufficiently equipped to deal with drug misusers, with 36% of respondents regarding narcotic withdrawal as dangerous. (2) Only 60% of the general practitioners had seen a copy of the "Good Clinical Practice in the Treatment of Drug Misuse" (Medical Working Group on Drug Dependence, 1984). Hence, if the Department of Health expected general

practitioners to comply with its guidelines it was suggested that such guidelines should be made more memorable and refresher courses offered.

A more recent postal survey of general practitioners in south east London which achieved a response rate of 78%, found that the responding doctors were reporting a high degree of involvement in the identification and management of opiate misusers (Groves et al, 1996). Two-thirds of the general practitioners had seen at least one opiate misuser in the previous month. This contrasted markedly with the national survey findings ten years previously, of 21% of general practitioners having had contact with an opiate misuser in the month prior to the survey (Glanz, 1986 a,b). While only 15% of doctors were willing to prescribe methadone in the survey by Bell (1990), Groves et al (1996) demonstrated that over a quarter of the general practitioners prescribed methadone. However, it was evident that just over 10% of the general practitioners were seeing a substantial number of drug misusers and that given the high prevalence of substance misuse in the area sampled, the findings were probably not generalisable to other areas of the UK.

### **Treatment outcomes in general practice**

Martin (1987) described the treatment of 12 chronic opiate misusers who presented to a practice in Bedford, where there was no drug dependence unit available locally. Only two of the six partners were prepared to prescribe opiates, but the practice was able to offer maintenance and detoxification prescriptions. The clinical management also involved urine testing, discussions with families and friends, plans about the aims of treatment and doses of methadone as well as issues relating to lifestyle. After 15 months, most of the misusers were still taking opiates but their lifestyles had stabilised and there were improvements in terms of criminal convictions, employment and the misusers' social circumstances. In a later paper, the same practice undertook a retrospective study of

all drug misusing patients attending their surgery between 1986 and 1995 to consider outcome, again in the context of an absent supporting specialist service (Martin et al, 1998). One hundred and fifty-five patients had been involved in the practice programme with almost 41% ceasing illicit drug use during the ten year period. One hundred and sixteen patients were prescribed methadone with forty-three (37%) receiving ampoules rather than methadone mixture. One third of the methadone misusers became abstinent with significantly more women than men in this group. Those patients who continued with methadone and maintained a stable lifestyle including a subgroup in employment, were more likely to be misusers of ampoules than methadone mixture. Two-thirds of all patients prescribed amphetamines stopped using illicit drugs. Thus, from this study of a single general practice, it was suggested that in terms of outcome prescription of methadone ampoules and amphetamines can be beneficial and that the long-term care of drug misusers is feasible entirely within general practice.

The impact of prescribing methadone mixture to drug misusers attending an inner London general practice was described by Cohen & Schamroth (1990). After 12 months of treating 85 drug misusers with methadone, either on a reduction or maintenance regime, 19 (22%) had stopped use of all illicit drugs and 9 (16%) who had been unemployed at presentation had obtained regular employment. The authors also compared the cost of providing primary health care to the costs to society when a drug misuser obtained money illegally to finance his or her habit. They found it was much cheaper to provide misusers with primary health care including methadone and that there were other obvious advantages such as education about drug misuse and HIV as well as treating drug misusers' medical problems. The authors estimated that the costs of prescribing methadone in general practice for 85 opiate misusers over one year involved 8% of each of the two doctors' consulting time (£2 171 per general practitioner annually), or £663 per patient. This was based on a consulting time of 15 minutes

per fortnight and methadone prescribing costs of £500 per patient per year. These figures were contrasted with an estimated £70 000 worth of stolen goods required by the misuser annually, to support the use of half a gram of black-market heroin per day. These costs would be borne by the public in higher prices and from insurance premiums.

A later study from the same practice with a larger sample of patients examined whether general practice was a suitable venue for providing withdrawal programmes for patients who misuse drugs (Cohen et al, 1992). This study involved offering patients attending a central London general practice a methadone reduction programme of not more than 60mg per day of methadone mixture to be collected on a daily basis from the same pharmacist. Injectable drugs or long term prescribing was not made available. The patients were seen weekly or fortnightly and their progress reviewed. The dose of medication was reduced by 5mg at each visit and random urine testing was undertaken to encourage compliance. Regular attendance at a drug project was expected during the programme. Of the 150 misusers who presented to the practice over the two year study period, 79% of the women completed the programme as opposed to 59% of the men. After three months, 20% of the whole sample were not taking drugs as confirmed by urine tests with a further 23 (15%) patients stating that they were not taking drugs although this was not confirmed by analysis of urine samples. Twenty-one (14%) were resident in a rehabilitation facility and drug free. Only 18% of the patients were known to be infected with HIV. Patient factors which suggested long term success were an ability to keep appointments, regular attendance at the drug support and counselling agencies, less manipulative behaviour, agreement to urine testing for opiates and a daily consumption of 0.75gm of heroin or less at the start of treatment. A criminal record was a poor prognostic factor. The authors of this study concluded that problem drug use could be managed in a general practice setting. Wilson et al (1994) conducted a similar study, which involved the provision of methadone maintenance from a general

practice setting. They too concluded that this resulted in a reduction of illicit drug misuse and could be successfully delivered in primary care. They were however, concerned about the high financial costs of running such clinics and the substantial workload placed upon the general practitioners in the practice.

These findings were replicated in a study published in 1992 (Greenwood, 1992b). It reported on a new service for drug misusers in Edinburgh, Scotland involving a policy of shared care and substitute prescribing by the drug misusers' general practitioner in conjunction with a community drug problem service. Over a period of three years (1988 - 1991), the average referral rate to the service from general practitioners doubled. In the first year 75% of patients were offered prescriptions. The remaining 25% were offered counselling only and 78% of this group were lost to follow up confirming the "adhesive" quality of a prescription, involving either a gradual reduction programme or stable drug regime. Although cases were lost to follow up, of those who remained in treatment a preliminary survey found a significant reduction in injecting behaviour. This was confirmed by findings from prison medical staff of significantly fewer signs of recent injecting amongst newly arrested prisoners, and the police drugs squad reports of less evidence of injecting during house and body searches of drug misusers. Furthermore, continued regular use of street drugs was found to be exceptional in the treatment group which was confirmed by regular analysis of urine samples. Most of those who had remained in treatment were also less involved in criminal behaviour. An anonymous survey of these drug misusers indicated that over three quarters of those attending the community drug problem service were appreciative of the counselling given, particularly for the depression and anxiety which emerged following pharmacological treatment. There was a significant decline in the prevalence of HIV and it was suggested that this fall in numbers could be explained by the increasing number of non-injecting drug misusers seen in the latter part of the three year study. One of the consequences



of this shared prescribing programme was that the general practitioners' understanding and knowledge of drug misusers' problems improved significantly and it provided an opportunity for general practitioners to learn about the management of drug misuse. It was also found that prescription of medication in the community by a general practitioner, served to normalise the drug misuser's view of him or herself. It was suggested that it could also serve to alter society's perception of drug misusers as they became more integrated into the conventional community based care system. It appeared to be cost effective to utilise generalists such as general practitioners, nurses and other community workers but supported by a small number of specialists available to offer expertise when required. Over time, the need for expert advice lessened as the general practitioner became more familiar with the speciality.

Greenwood (1996) published an update of the progress of this service covering the period 1988 to 1993. It was found that the proportion of drug misusers sharing injecting equipment and the proportion of new referrals who had ever injected both fell over the six years. HIV seropositive rates of new referrals also declined over time from 21% to 8%. These findings were in the context of rising numbers of referrals to this service each year, with seventy percent of general practitioners in Edinburgh prescribing for approximately 1200 drug misusers. Greenwood (1996) concluded that the provision of specialist support was the key factor in general practitioners becoming more involved in treating drug misusers.

The problem of drug misuse in Scotland resulted in the development of a different service model, focusing on needle exchanges in Glasgow (Gruer et al, 1993). The philosophy underlying this service derived from Stimson et al (1988) view that, needle exchanges should be located in areas with a high prevalence of injecting; have ease of access both physically and psychologically; have staff who are

non-judgmental and have informal working relationships with clients; have suitable working hours, good relations with local media, police and community groups and issue adequate supplies of injecting equipment. On this basis eight needle exchanges were established from 1988 to 1992, at sites where there was the greatest problem of drug misuse. They were staffed by nurses, a health visitor, drug workers and security staff. Primary health care advice and counselling was offered. Over four years the attendance rate rose but stabilised in the latter two years. Retention of clients improved over time and there was a ten fold increase in the rate at which needles and syringes were issued with an increase in the return of used equipment. The success of this service resulted in its incorporation into the mainstream community health service.

This service evolved from 1994, with the introduction of a shared care scheme between general practitioners and specialist services (Gruer et al, 1997) partly modelled on the successful community drug problem service in Edinburgh (Greenwood, 1992b). The key difference was the involvement of community pharmacists in supervising the self administration of oral methadone by drug misusers in Glasgow. Formal training for general practitioners was also an additional component of this scheme. Outcome over two years showed that 65% of all patients were prescribed methadone, an increase in the number of supervised daily doses of methadone and a sixty percent probability that the patients would remain in the programme. The number of general practitioners participating increased over time. The authors concluded that three factors were important in the development of confidence among general practitioners to manage drug misusers. Firstly, the availability of a specialist drug service to facilitate shared care of these patients. Secondly, the provision of detailed guidance on clinical management and thirdly the training seminars which had an educative purpose but also allowed for discussion with colleagues who managed similar patients. As regards the scheme as a whole, the other key partners were the pharmacists and the drug counsellors. It was acknowledged

that methadone played a role in reducing chaotic drug use behaviour and injecting, but that unless help was offered to deal with co-existing psychological, social and legal problems, the patients would find themselves unable to cope.

The costs of prescribing methadone were also estimated by Gruer et al (1997). These amounted to £861 per patient during one financial year, and were not substantially different to the cost estimated by Cohen & Schamroth (1990) seven years earlier.

### **Appraisal**

It has been reported that many family practitioners are reluctant to become involved with drug misusers, who are described as troublesome and unrewarding to treat and who often remained undetected by the conventional health establishment (Edwards, 1981). This was despite the Department of Health Guidelines which stated that all doctors have a responsibility to provide care for the general health needs and drug related problems of drug misusers and the fact that these patients represented the group most affected by the Human Immunodeficiency Virus (Medical Working Group on Drug Dependence, 1984). It has been acknowledged that combining the roles of prescriber and therapist can be problematic (Rowland et al, 1989), especially where there is a risk of violent or dishonest behaviour by drug using patients (Harris, 1989). Nevertheless, the literature appears to demonstrate that drug misusers have a preference for attending general practice than hospital clinics.

There was a wide variation in doctors' attitudes and expertise, with younger general practitioners generally more inclined to treat drug misusers. This finding could reflect more tolerant attitudes among this group of doctors or more recent incorporation of teaching on the management of drug misuse. It should be expected that some general practitioners may decide not to prescribe opiates but

perhaps offer more responsive primary care to drug misusers and refer to specialist agencies for prescribing, counselling and liaison with other services. Other doctors might prescribe for certain patients and refer to specialist services for inpatient detoxification or rehabilitation. These doctors are likely to attract further misusers. Prescribing policies would need to be agreed within the practice as well as arrangements made for urine testing and notification to the Regional Drug Misuse Databases. Between these two broad approaches lies the shared care model with general practitioners prescribing on a limited basis advised by a Community Drug Team (Mack, 1989). The reported success of shared care models of service delivery for drug misusers has been incorporated into the recent Guidelines on Clinical Management of Drug Misuse and Dependence (Department of Health, 1999b) and appears to be the current consensus approach to the management of drug misuse.

Reports of outcomes among drug misusers attending general practice, show that misusers make greater demands on general practitioners' time and resources than other patients, based on studies of consultation rates and prescribing patterns. In this area of research, there is greater use of control groups. However, there is virtually no research on the impact that drug misusers make on other services in general practice. A further difficulty in interpreting the findings relates to the representativeness of the practices concerned. The outcome studies provide a useful indication of what can be achieved in general practice but do not constitute treatment evaluations or reliable indications of what could be expected if more general practitioners were to prescribe opiates. Thus far, control groups of drug misusers treated in different settings have not been described and indices of outcome vary from study to study. In some cases, outcomes were reported for only those misusers who remained in contact with the practices concerned.

## **CHAPTER 5**

### **Drug Misusers' perceptions of their General Practitioners**

#### **Introduction**

One of the principal functions of the National Health Service (NHS) clinics for drug misusers when first established in 1968, was to attract opioid misusers into treatment (Edwards 1979). However, a paucity of research has been conducted on the views of drug misusers (Bennett & Wright, 1986a). Most of the evidence about such views has been derived not from systematic empirical research but from impressions gained by doctors and other staff who worked directly with drug misusers attending clinics (Gossop et al, 1986). It has even been argued that in the absence of empirical research data, clinic policy relating to drug misusers evolved from no more than a set of unfounded beliefs held by doctors about how drugs should be prescribed to outpatient drug misusers (Gossop et al, 1986). As regards primary health care services, few studies have considered service utilisation and help seeking behaviour by drug misusers attending general practice (Drug Indicators Project, 1989).

#### **Findings from three studies**

One study has attempted to address the issue of opioid misusers' views on the available treatment services in Britain (Bennett & Wright, 1986a). The authors interviewed misusers who obtained drugs from general practices, NHS clinics, a private doctor or on the black-market. The misusers were interviewed with a structured and semi-structured interview schedule. The results of this survey showed that even those drug misusers solely dependent on the black-market for supplies of drugs, had at one time been involved with the NHS services, with over half the misusers in all groups having approached a general practitioner for opioids. The drug misusers regarded the general practitioners

as the ideal doctor to provide them with a prescription, although negative attitudes and a lack of interest in drug misusers by their doctors were common complaints. However, the authors also found a general lack of awareness on the part of the drug misusers, that general practitioners could or would help them.

Similar results were found in a later study, which surveyed 116 heroin misusers attending hospital clinics in Liverpool (Telfer & Clulow, 1990). Attitudes towards their general practitioners were rated in terms of general practitioner availability, empathy, knowledge and confidentiality, by completing 10 questions posed in a semantic differential format. Sixty-three percent of the drug misusers lived in stable circumstances under which continuity of primary medical care would have been possible. One quarter of the sample, however, had not sought their general practitioner's advice about drug use and 89% had approached the drug clinic via routes other than their general practitioner. In this study, attention was drawn to the deficits in doctors' medical training as undergraduates and postgraduates and the lack of support from specialised secondary and tertiary services. These problems were suggested as explanations for the drug misusers' lack of involvement with general practitioners. Drug misusers' attitudes towards their general practitioners were generally unfavourable with the most common complaints that general practitioners lacked knowledge and understanding, and were critical and unsympathetic. Due to the limited nature of the survey it was not possible to appraise these issues in any greater detail.

Gerada et al (1992) described drug misusers' concerns about general practitioners' attitudes in a paper which evaluated two community based "walk-in" health clinics for drug misusers. The aims of these clinics were to provide primary health care to drug misusers in contact with established health or "statutory" drug services and to liaise directly with existing health agencies including general

practitioners. The clinics did not aim to provide a prescribing or detoxification service. However, they did provide needle exchange schemes and two doctors were available to see drug misusers regarding their health care. Of the 112 drug misusers attending the two clinics over a year, only 38% were registered with a general practitioner. Reasons for non-registration included being struck off for misbehaviour after disclosing themselves as drug misusers or an inability to find a doctor because of full lists. Even amongst those registered with a general practitioner, there was a reluctance to attend the surgery. Views expressed by drug misusers about their general practitioners were described as: "he only provides a script", "if he finds out about my heroin use the social services will take my child away", and "he doesn't know about my habit".

### **Appraisal**

Drug misusers' views of the service provided in a primary care (or hospital clinic) setting have not been addressed in a systematic fashion. The limited information available suggests that drug misusers experience difficulties in their relationship with their general practitioner. This involves the perception that the doctors hold unfavourable views about drug misusers and may be lacking in the expertise required to manage and treat the problems of drug misuse.

## **CHAPTER 6**

### **Training Issues**

#### **Introduction**

In the United Kingdom undergraduate medical students receive on average a total of 14 hours of formal training in the field of substance misuse during their 5 year course (Glass, 1989a). The barriers to training are numerous, in particular, negative societal and medical attitudes to substance misusers, which are often based on an inaccurate perception of poor outcome (Holden, 1986; Babor et al, 1986). Training courses in substance misuse are in general, uncoordinated and unapproved by any professional body (Glass, 1989b). Concerns have also been expressed about how adequately the present undergraduate curriculum and postgraduate programmes for hospital consultants and general practitioners address the subject of substance misuse (Kamerow et al, 1986), particularly with the World Health Organisation targeting drug dependence as one of the major health problems and taking an interest in training medical graduates in this area with a focus on treatment in the community (World Health Organisation, 1987).

#### **Continuing medical education for general practitioners**

Vocational training for general practice has only been regulated by statute since 1980 and hence has a short history (Bain et al, 1995). Responsibility for undergraduate and postgraduate education has remained within two separate organisations which some have regarded as impeding the development of the discipline of general practice (Allan et al, 1993; Rashid et al, 1994). Recently, concern has been expressed about the undergraduate training of doctors and recommendations were made for changes in medical education (Joint Committee on Postgraduate Training for General Practice, 1992; Lowry,



1993; General Medical Council, 1993). Similarly, the vocational training for general practice has been assessed and found wanting in a number of areas (Crawley & Levin, 1990), particularly hospital posts which provide very little opportunity for study relevant to general practice (Bayley, 1994).

Surveys of past trainees involved in vocational training for general practice have shown that just over half undertook training in psychiatry, with only half of these trainees regarding the experience as useful to their work as general practitioners (Thornham, 1980; Short, 1987; Kelly & Murray, 1991). Those trainees who undertook these training posts would have been unlikely to have gained experience in specialist drug units (Ireland & McLeod, 1995). Given that a minority of general practitioners have any formal experience in psychiatry, it has been recommended that they should acquire further experience in this field (Styles, 1991).

In 1980, a review of the educational activities provided for general practitioners concluded that such continuing education was flawed in three areas (Wood & Byrne, 1980). Firstly, the selection of priorities of continuing medical education was unsystematic and rarely arose from joint discussion between the consumers of the teaching and educators. Secondly, there was too much emphasis on imparting information with the use of lectures and too little on the use of learning participative methods. Thirdly, it appeared as if very little education was being carried out and it therefore followed that evaluation of such postgraduate medical training was required. Some 15 years later both the government and professional bodies viewed continuing medical education as an important means of influencing the behaviour of doctors and enhancing their clinical performance (Kelly & Murray, 1993).

A paper describing the evidence for the success or failure of different methods used to influence the behaviour of general practitioners found that personal contact with doctors and patient participation

groups could lead to changes (Horder et al, 1986). Vocational and continuing education was demonstrated to be a method of influencing general practitioners but gains in knowledge and skill, and changes in behaviour, were harder to achieve with general practitioners compared to undergraduates. Reinforcement of new learning was regarded as essential and active involvement of the learner through self instruction or seminar teaching was more successful than listening to the instruction of others. Coles (1994) found that interactive training, with doctors making contributions themselves, improved the educative process.

General practitioners' views of postgraduate education and their preferences for the provision of such education were discussed in two postal surveys of general practitioners. Shirmiffs (1989) ascertained from doctors in Grampian, Scotland that postgraduate courses were the most popular form of methods of learning if they were two or three days in length and intensive in nature rather than weekly or fortnightly. Evening meetings were preferred over weekend and lunchtime meetings and the form of postgraduate learning found to be most popular involved local small groups, discussions with hospital consultants as well as additional sessions for updating. Only 37% of the respondents felt that lectures were important and the use of more modern types of learning such as distance learning programmes and educational video or audio tapes were not popular. Similar results were found in a survey five years later, with the most preferred type of learning involving lecture and/or small group-work with distance learning least preferred. Evening and afternoon meetings over two or three days were also the most popular times for such training (Kelly & Murray, 1994).

An interview of a random sample of general practitioners yielded more detail on general practitioners' views of continuing medical education (Owen et al, 1989). There was little evidence of regular attendance at local postgraduate centre meetings. However, practice based educational meetings

were common and communication between partners and with other members of the primary health care team was highly valued in the process of continuing medical education. The general practitioners considered that the most useful educational activities occurred within the practice and they were very much in favour of education based on the content of the individual general practitioner's day to day work. Again, discussion groups were the preferred learning method although input from hospital doctors participating in practice based educational meetings was welcomed.

A postal questionnaire considering the views of providers of postgraduate medical education found that the majority usually used a mixture of lecture and small group work, organised meetings mainly in the evening or over half days and undertook post course assessments. However, very few providers engaged in practice based learning, they tended to rely on lecture-style courses and they chose the subjects for the courses mainly through their own personal interest rather than in response to the doctors' needs (Kelly & Murray, 1993). The review of postgraduate education by Wood and Byrne in 1980 found that the determination of priority areas for training was unsystematic and frequently dependent on the provider's choice of subject. Despite general practitioners' preference for small group type training in a practice setting, use of lectures remained a favoured means of teaching in a postgraduate medical centre. In terms of evaluating the education process, a review 19 years ago found only four out of 50 studies on postgraduate education had been assessed by means of a controlled trial (Evered & Williams, 1980).

A recent review of continuing medical education in general practice (Cantillon & Jones, 1999) involved a search of four major bibliographic databases between 1990 and March 1999 for systematic reviews of postgraduate medical education and postgraduate educational intervention studies based on general practice. Only those intervention studies which included a robust evaluation were considered,

which numbered just 138 of the 1 032 papers assessed. Of these 138 articles, 16 were randomised controlled trials, 15 were controlled trials and 18 papers described audits with educational interventions. Systematic reviews of the educational literature found that although there were very few rigorous evaluations of educational interventions, there were sufficient studies demonstrating that continuing medical education could improve performance and patient outcomes. The reviews also indicated which methods could best bring about change in doctors' behaviour. The most effective methods included learning linked to clinical practice, interactive educational meetings, outreach events and strategies involving multiple educational interventions. Less effective methods were audit, feedback, local consensus processes and the influence of opinion leaders. The least effective and paradoxically, the most commonly used strategies in general practice continuing medical education, were lecture format teaching and unsolicited printed material.

The authors (Cantillon & Jones, 1999) commented, that the ideas of mainstream educationalists have been widely incorporated into undergraduate and postgraduate medical education, such that 'adult learning theory' i.e. learning not teaching, causes doctors to change their practice. However, despite this theoretical shift, traditional styles of expert led teaching still prevailed in postgraduate continuing medical education for general practitioners. It was stressed that general practice educational activity should be based on the work that doctors do and that the educational programme should be self-directed, practice based and multi-professional.

This review highlighted the lack of robust evaluations of general practice based educational interventions and the very small proportion of such studies which were designed to test whether behavioural change was sustained. It was recognised that controlled trials of educational research were particularly difficult to undertake, citing problems with grant funding for such research, finding

appropriate control groups and difficulties with generalising evaluation studies to other settings because of the singular nature of each learning environment.

### **Training of general practitioners in drug misuse**

Concerns about the lack of training of general practitioners in the management and treatment of drug misuse has been mentioned by numerous influential bodies and researchers on drug misuse and general practice, in the course of the past four chapters. To summarise, in the recent past patients were sent directly to specialist units, bypassing general practitioners who may or may not have been part of the referral system. Consequently, formal teaching on drug abuse was absent from the undergraduate curriculum and general practitioner vocational training scheme (Richards, 1988). Not surprisingly, a series of studies have found that general practitioners regard the management of drug misusers as beyond their competence. This has been an observation by the drug misusers themselves (Chapter 5).

The report of the Advisory Council on the Misuse of Drugs (1982) devoted an entire chapter to training and noted an increasing concern at the lack of training available to those working with problem drug takers whether in the generic services or in more specialised agencies. There was little doubt that very little training of specialist or non-specialist workers was being undertaken. The report commented that one aspect of this lack of specialised training which was of particular concern, was that workers often had to overcome basic prejudices and hide pejorative attitudes towards problem drug takers. This was in part engendered by their own ambivalent attitudes toward the use of more socially approved "drugs" such as tobacco, alcohol and tranquillisers. The report suggested three areas in which professional workers would be expected to have knowledge, namely, (a) accurate knowledge about drugs and drugs misuse, (b) skills and management ability to recognise drug problems, work

with clients and utilise services most appropriately and (c) skills in educating clients and other professional workers regarding problem drug taking.

The report (Advisory Council on the Misuse of Drugs, 1982) also highlighted concerns about the increasing number of problem drug takers receiving treatment from doctors working outside of hospitals. The first cause for concern was that such doctors lacked the specialised knowledge, training and experience essential for working with drug misusers and through a variety of circumstances may be prescribing inappropriate drugs and/or inappropriate quantities of drugs. The second concern was that drugs supplied to these misusers may be diverted onto the black market. Thirdly, that such doctors could be subject to pressures from the problem drug takers to prescribe, particularly those doctors working alone, who may be vulnerable to a client group that was persuasive and sometimes aggressive in their anxiety to obtain further supplies of drugs. Fourthly, relatively few of these doctors had easy access to the support staff and facilities to adequately assess the needs of the problem drug misuser. This was judged to be extremely important in terms of a problem oriented approach to the management of drug misusers.

Various studies have shown that general practitioners would be prepared to take a more active role in the treatment of opiate misusers if backup resources in the form of a specialist drug dependence clinic or increased support from community nurses were available (Glanz, 1986a; Rozewicz et al 1992; Davies & Huxley, 1997). Shared care between the general practitioner and hospital consultant has been proposed as the best strategy in the management of drug misusers (Advisory Council on the Misuse of Drugs, 1989). A study investigating such a policy of shared care and substitute prescribing by the general practitioner was assessed in Edinburgh (Greenwood, 1992b). It appeared to be successful overall, both from the drug misuser's perspective of a normalisation of him or herself but

also that the general practitioner grew to understand the drug misuser's problems, became more confident about substitute prescribing and consequently became knowledgeable in the management of drug misuse. It has also been suggested that a programme designed to train not only the general practitioner but also their staff, to deal with drug misusers was necessary in order to overcome the reluctance of general practitioners to participate in combating drug misuse (Ball, 1988). Robertson (1992) emphasised that postgraduate and undergraduate training for doctors is important but, both had been neglected for decades and that with adequate support general practitioners were in an excellent position, perhaps a unique situation, to contact people with drug problems.

The case for an improvement in drugs training has been determined by two factors. Firstly, during the 1980s and into the 1990s, there was a considerable increase in the prevalence of problem drug use (British Medical Journal, 1994) and secondly, the potential threat of HIV infection and the development of HIV disease associated with HIV brought added urgency to the problem. As a consequence, the Advisory Council's (1990) emphasised the direction of a much wider involvement by non-drug specialist staff in response to the drug problem, to the extent that some of the distinctions between specialists and generalists became blurred. This report (Advisory Council on the Misuse of Drugs, 1990) recognised that every individual who became involved with a problem drug misuser should be sufficiently well trained to be able to intervene in an informed, effective and competent way. The report outlined a three tiered approach as follows: (a) at the base of the pyramid, there should be a basic level of awareness and understanding. This would include information about drugs, their uses and associated problems and an opportunity to explore one's own and society's attitude towards problem drug misusers. This should provide the professional with an approach based primarily on interaction with the person rather than a focus on a substance of misuse. It should also include training on how and where to refer for more specialist help. Moving up the pyramid, (b) advanced

training, would enable the professional to have a detailed knowledge of local drugs services and the ability to provide basic training for other staff. He/she might assume responsibility for particularly complicated cases. At the top of the pyramid, (c) specialist training should equip those who are directly involved in the management of drug related problems to provide an effective service. It would embrace a whole range of skills including types of intervention, counselling, knowledge of interaction between substances, research and evaluation.

### **Training programmes for general practitioners**

It has been acknowledged, that the provision of training in the management of drug misuse may not attract many general practitioners to traditional educational events (Stammers, 1996). Apart from the well known unpopularity of drug misusers with general practitioners (Greenwood, 1992a), a further reason for the lack of interest in drug misuse may relate to general practitioners' poor self assessment of their own level of knowledge generally. Tracey et al (1997) found a low correlation between doctors' self assessment of their knowledge and their subsequent performance in objective tests on the subject. A randomised controlled trial of continuing medical education also showed that if given the opportunity, clinicians choose educational events that fit in with what they already know (Sibley et al, 1982). Given the lack of training in substance misuse, it would therefore be expected that few general practitioners would avail themselves of postgraduate education.

To address the issue of provision of training in the management of drug misuse, the Division of Addictive Behaviour at St. George's Hospital in London and Merton, Sutton and Wandsworth Family Health Services Authority, set up the Addiction Prevention Primary Care Project in September 1991 as a joint initiative (Ghodse, 1995). This involved addiction prevention counsellors working within general practice to help primary healthcare staff to recognise the early symptoms of substance misuse. Each



counsellor was attached to a general practice for 3-5 months, offering a clinical service but also incorporating training of the primary healthcare staff, providing information leaflets and developing screening techniques and instruments relating to substance misuse. Evaluation of this project, showed that 90% of general practitioners and practice nurses found the service valuable to themselves, other staff and the patients (Ghodse, 1995). Seventy-two percent reported that their knowledge of substance misuse problems had improved and 51% felt more confident in managing patients with these problems. The counsellors themselves developed a better understanding of the ways in which general practitioners worked and were able to adapt strategies to the individual practice working philosophies. Consequently, the project evolved to address addiction prevention issues sensitive to the requirements of primary care staff and their patients. The Division of Addictive Behaviour also offers a postgraduate diploma course for general practitioners. This involves a comprehensive academic and treatment skills training in substance misuse as applied to the primary health care setting (Williams & Ghodse, 1995).

In Wales, a training course was developed for general practitioners in the management and treatment of drug misusers (Blank & Nelles, 1994). It was a five day residential course free to the doctors including the offer of paid locum cover. A letter of invitation was sent to practices but individual approaches were made to general practitioners known to be "sympathetic to drug misusers". The emphasis was on group work although quality speakers (some, practising general practitioners) were also included in a course addressing knowledge, attitudes, treatment, HIV and rehabilitation. Those general practitioners attending were also asked which subjects they would be keen to have addressed. Outcome was assessed by questionnaires, before and after, which was acknowledged as a crude measure but which showed an improvement in all areas over the time of the course. The cost per doctor was just over £1000 for the five day programme. It was concluded that the course had

been a success, as many doctors were prepared to expand their roles from providers of 'curative' medicine to embrace harm-reduction practices. It was also seen as a very cost-effective investment in the primary care sector in terms of widening the choice of service available to drug misusers and in the improvement of general health care for drug misusers.

A brief report documented an eight hour programme of training on working with drug misusers in general practice, with the participating doctors (general practitioners who felt poorly prepared to deal with such patients) identifying their learning needs and the course presenters addressing these in the training programme (Preston & Campion-Smith, 1997). The course appeared to be well received as the doctors then formed a monthly, local special interest group for peer support and further learning. The training was evaluated (how, was not stated) as meeting the needs of busy general practitioners who do not wish to become experts in the field. The importance of shared care with a community drugs agency was also highlighted as an important component in helping the doctors manage these patients.

## **Appraisal**

Little time is devoted to undergraduate medical training in substance misuse but up until a decade ago, general practitioners referred their drug using patients to specialist units. With the increasing numbers of drug misusers overwhelming the tertiary treatment services (Smart, 1985; Love and Gossop, 1985) and a change in policy to treating drug misusers in the community, general practitioners have found themselves with the problem of dealing with these patients. The deficits in training and consequent lack of knowledge about the subject of drug misuse pose difficulties for general practitioners in managing drug misusers. This lack of knowledge may be a contributing factor to an avoidance of attending postgraduate educational activities on drug misuse, as given the freedom

to select which educational events to attend doctors often decide not to stray outside their “comfort zone” (Cantillon & Jones, 1999).

Considering the literature on training programmes for general practitioners in the field of drug misuse, there is no evidence of rigorous outcome research. This is consistent with an overall finding that robust evaluations of general practice based educational intervention studies are scarce (Cantillon & Jones, 1999). Controlled trials of educational events are acknowledged as particularly difficult, but if undertaken, should include follow-up of more than three months (of which there are few studies from the review by Cantillon & Jones, 1999) in order to assess the long-term outcome of the educational intervention.

## CHAPTER 7

### **A survey of drug misusers' views of their general practitioners**

#### **Introduction**

For over a decade, it has been a policy of the United Kingdom to encourage greater involvement of general practitioners in the treatment and management of drug misusers given the increasing numbers of these patients which have been overwhelming of tertiary drug services, and the concerns about the vulnerability of drug misusers to HIV infection (Department of Health, 1996). Relatively little is known about the actual implementation of this policy (Gossop et al, 1998a). From an epidemiological perspective about half of general practitioners nationally reported seeing illicit drug misusers (Glanz & Taylor, 1986) and just over three-quarters (Bell et al, 1990) and two-thirds (Groves et al, 1996) of general practitioners in London. There is some evidence that general practitioner involvement with opiate misusers may be falling (Tantam et al, 1993) and the Home Office Addicts' Index have found a decline in notifications by general practitioners from 47.6% in 1987 to 37% in 1993. However, neither the nature nor the effectiveness of general practitioner interventions with drug misusers is clearly understood (Gossop et al, 1998a).

The views of consumers are seen as central to the monitoring of the performance of a service and the formulation of policy, and have been placed at the top of the health agenda (Department of Health, 1989; Stallard et al, 1992). Consumers' views are essential to service provision for three reasons (Fitzpatrick, 1991): (i) there is evidence that satisfaction is an important outcome measure in influencing compliance and re-attendance for appropriate treatment, (ii) consumer satisfaction can provide a measure of assessing consultations and patterns of communication such as the provision of

information and the involvement of the client in decision about care, and (iii) consumer feedback can be used to modify or propose alternative care practice.

The literature review demonstrated that drug misusers' views regarding their involvement with general practitioners have not previously been assessed in any systematic way. Consequently, a survey of drug misusers' views of their management in primary care was undertaken and is described in this chapter. The information derived from the survey findings were incorporated into a small group training programme for general practitioners in the management of drug misuse, which is reported in Chapter 8.

### **Hypothesis**

The views of drug misusers attending a range of drug treatment centres will provide important information about the current management of drug misusers in primary care, which will have relevance to the training requirements of general practitioners in the management of drug misuse.

### **Aim**

The aim was to survey drug misusers attending a range of different treatment centres about their past and present relationship with their general practitioner, their views concerning primary health care and their suggestions for change.

## **METHOD**

### **Subjects**

Drug misusers involved with one of five treatment services in North East London were approached to participate in this survey. The services were a general practice with a special interest in treating

drug misusers; a private drug clinic; a community drug team; a drug dependence unit and a street agency for drug misusers.

### **Treatment centres**

The five treatment settings were chosen so that drug misusers from a variety of backgrounds and receiving a range of services could be interviewed. The general practice venue was one in which the doctors were committed to the care of drug misusers and where drug misusers were principally managed. This allowed for a comparison of the management provided for drug misusers in the other general practices.

A private drug clinic located in London was originally approached to participate in the study. A meeting to discuss the protocol was held with the medical director, who decided that interviews with their patients could only be granted if the clinic was remunerated. Consequently, another private clinic was sought. Following discussions with the doctors and staff, it was agreed that their clients could be interviewed, without remuneration.

A local community drug team agreed to interviews of their clients.

A local drug dependence unit in central London was approached to participate in the study. Unfortunately, the consultant in post was not prepared to allow the clients attending this unit to be interviewed due to other ongoing research involving their patients. Meetings with another drug dependence unit were set up but they declined to be involved because of staffing problems in this unit at the time. A third drug dependence unit was considered, but the local Ethics Committee could not reach agreement about the study. In the meantime, a drug dependence unit in the east

of London agreed to be involved in the study after discussions about the protocol with the manager and staff, and approval from the local Ethics Committee.

A street agency, which had close links to the general practice with a special interest in drug misusers, was approached to participate in the study. This was refused as research on another project was underway. Three further such agencies were contacted and copies of the research protocol sent to them. One street agency expressed an interest and following a meeting with the staff, agreed to participate.

Staff at each location were briefed in detail about the research protocol, copies of which were left with the manager of each service for further scrutiny by staff. A notice explaining the study was placed in a prominent position two weeks before interviewing began. Days when it was most likely that drug misusers would present to the service were determined from the staff, and it was agreed that I would undertake interviews at these times.

Drug misusers were seen by appointment on one morning per week at the general practice with a special interest in providing a service to drug misusers, with a further session without appointment available, to take account of the more chaotic drug misuser. The private drug clinic saw drug misusers four days per week and it was arranged that I should interview two mornings per week when there was a full complement of staff and no group or individual counselling arranged.

A general practitioner provided an outpatient type service at the community drug team-base and it was agreed that interviews should occur at these times, two afternoons per week. Outpatient clinics occurred at the drug dependence clinic twice a week for new and repeat attendees

respectively, and I interviewed at these times. Attendance by drug misusers at the street agency was variable, but two specific afternoons were determined when it was most likely that drug misusers would visit.

Consecutive attendees were invited to take part by myself accompanied by a member of staff. The study was explained to each drug misuser and verbal consent obtained before interviewing took place. On completion of each interview the next available misuser was approached. No inducements were offered to take part in the study.

### **The semi-structured interview (see Appendix 2)**

It was initially envisaged that the semi-structured interview would be computerised with the drug misuser answering questions posed directly on the screen of a lap-top computer. The drug misuser would answer questions following a decision tree, based on the respondent's prior answers. The researcher would be present to guide the respondent and help with any difficulties. Responses would be encoded directly in a computerised format. After further consideration, it was decided that a personal interview with such a client group would be more appropriate as it would facilitate better rapport and allow the interviewer more flexibility to question the drug misuser. Face to face interview would also prevent the exclusion of those drug misusers who were illiterate. It was also decided that a lap-top computer could prove to be an item easily stolen. Hence, the interview was printed as a document and filled in by myself, the interviewer.

The schedule of questions to be included in the semi-structured interview were obtained from a review of the literature in this field. This included questions from the national survey of the role of general practitioners in the treatment of opiate misuse (Glanz, 1986a,b; Glanz & Taylor, 1986), the



study by Bell et al, (1990) and the semi-structured interview used in previous work with patients testing positive for HIV (King, 1989).

The semi-structured interview was initially piloted with ten drug misusers attending the specialist general practice venue before final modification. The semi-structured format covered: demography; details of general practice registration; the primary care provided; views about the general practitioner; history of drug use; criminal activity; sexual behaviour; medical problems; well-woman and antenatal care in general practice. Some of the questions were open-ended allowing the drug misuser an opportunity to discuss or clarify issues.

In addition, each drug misuser was asked to complete the Social Functioning Questionnaire (Tyrer, 1990) in order to provide a measure of social function in the two weeks prior to interview (see Appendix 3).

No names or addresses of the drug misusers or their general practitioners were recorded on the interview schedule to ensure anonymity. However, the initials of the drug misusers were collected to be correlated with date of birth in order to avoid the possibility of duplication of interview.

## **Numbers**

There was very little literature to serve as a guide as to the type of differences which might be found in such a descriptive survey, where attitudes of drug misusers attending different treatment centres were to be compared. It was thus not possible to establish sample size, as for example in other studies which set out to compare outcomes between groups. It was envisaged that at least 20 - 30 drug misusers would be interviewed in each setting, or 100 - 150 individuals in total.

## **Statistical analysis**

The frequency and nature of the contact between drug misusers and general practitioners together with the perceived needs of the drug misusers was analysed. The characteristics and views of misusers attending the private drug clinic, community drug team, drug dependence unit and street agency were analysed separately and later compared with those misusers attending the general practice with a special interest in treating drug misusers.

A coding frame document to allow entry of data for statistical analysis, was composed in consultation with one of the grant applicants experienced in this matter. Categorical variables were given numerical equivalents (e.g. yes = 1; no = 2) and each variable, relating to a particular question in the interview schedule, assigned a name. The coding frame was later modified by myself, as errors were discovered in the initial document. This was noted after the information derived from the first few interviews had been recorded on to the original coding frame. The data from all the interviews was then transcribed on to the final version coding frame by myself together with a secretary employed for the purposes of the study. Data from the coding frames were then entered on to the Statistical Package for the Social Sciences (SPSS) - version 4.0, by myself assisted by the secretary.

The initial statistics obtained was a frequency analysis. This analysis revealed omissions in the transfer of data from the coding frames to SPSS and these were rectified. The frequency analysis was then repeated and found to be free of errors. The demographic characteristics of the sample of drug misusers were derived from the frequency analysis.

Comparison of proportions were analysed using the Chi-squared statistic with Yates correction for categorical variables and Student's t - test for continuous variables. Answers to open-ended questions were subject to content analysis and categorised as positive, negative or neutral. This process involved myself and a collaborator involved with this study, agreeing into which of the three categories a subject's reply best fitted. Multivariate analyses were conducted using stepwise logistic regression.

## **Results**

One hundred and eighty of the 195 drug misusers approached (92.3%) agreed to be interviewed. One individual at the general practice, five from the street agency, two from the private clinic, four attenders at the community drug team and three at the drug dependence unit declined to be interviewed. The commonest reason given was that they did not have the time to undertake the interview. The number of drug misusers interviewed at each session was limited by the time taken to conduct the interview and the number of drug misusers available for interview. The time per interview varied from twenty to forty-five minutes with a slight decline in the duration as I became more conversant with the interview schedule. The predicted figure of approximately thirty drug misusers to be interviewed at each treatment service was achieved in all but the street agency, where fewer drug misusers regularly attended. Thirty-five drug misusers (19.4%) were interviewed in the general practice surgery, 46 (25.6%) in the private drug clinic, 35 (19.4%) in the walk-in clinic of the community drug team, 46 (25.6%) in the drug dependence unit and 18 (10.0%) in the street agency.

## **Drug misusers attending the specialist centres**

### **Demography**

The majority of the respondents were single, unemployed men, British born, with a history of involvement with the police and living in local authority accommodation (table 1). Forty-six drug misusers (31.7%) had never worked since leaving school and over 70% were unemployed at the time of the interviews (table 1). More patients attending the private drug clinic were in employment compared with those attending the other three centres (chi-sq.= 31.9; 3 degrees of freedom (df);  $p<0.001$ ) and significantly more misusers at the drug dependence unit were receiving sickness benefit (chi-sq.= 11.4; 3 df;  $p<0.05$ ) - table 2. There were no significant differences in age, sex, social class or scores on the social functioning questionnaire between subjects interviewed in the four centres (table 1). Only two patients of the 91 who reported undergoing an HIV antibody test stated that they were positive (table 1).

### **Details of drug use (table 3)**

One hundred and thirty-eight drug misusers (95.2%) had a history of opioid misuse. The mean duration of illicit drug use was 17.8 years (SD 5.2 years; range 10 - 28 years). Almost 80% reported current use of methadone, of whom 39 had taken both heroin and methadone (equivalent to 23% of this sample) over the previous seven days. All misusers acknowledged attempting to control their drug intake by means of prescribed or personal, reduction or maintenance programmes.

Significantly more drug misusers attending the street agency had injected illicit drugs in the past month than those attending the other three centres (chi-sq.= 7.9; 3 df;  $p<0.05$ ). Fewer patients from the private practice admitted using heroin in the past week (chi-sq.= 25.1; 3 df;  $p<0.001$ ).

More drug misusers from the street agency and private drug clinic reported they were on their own personal reduction programme (chi-sq.= 15.7; 3 df; p<0.01). Use of alcohol varied from 0 to 300 units per week with a mean weekly consumption of 12.5 units (SD 35.6 units).

#### **Sexual Behaviour (table 4)**

The majority of the respondents reported that they were heterosexual. Three quarters of the interviewees acknowledged to sexual activity in the previous year. One hundred of the 145 patients (69%) did not wish to comment on the rationale for use of condoms (i.e. safe sexual practice/ birth control). Of the 117 misusers who replied to questions on contraception, over 80% did not regularly use condoms during intercourse. The most frequent reasons given for this behaviour was that they had a stable, monogamous relationship and/or they and their partners used safe injecting practices.

#### **Antenatal and well-woman care**

Three women were pregnant at the time of the interview and were receiving hospital antenatal care or shared care between the hospital and general practitioner. Twenty-eight of the 31 women (90.3%) were able to recall their last cervical smear test. Two women had undergone cervical smear testing within the past five years and 26 within three years. Ten women had had their most recent cervical smear test at their general practice, seven at a well-woman clinic and eleven in a hospital outpatient department.

#### **Registration with a general practitioner**

Almost 90% of the drug misusers were registered with a general practitioner, of whom 93 (72.7%) attended a group practice and 101 (78.9%) reported that their principal doctor was a man (table 5).

Over 60% had been registered for more than a year and almost 90% were permanently registered. On bivariate analysis, no significant differences in registration details were found between drug misusers in the four centres. However, significantly more misusers attending the community drug team had at some time registered temporarily with a general practitioner in order to obtain drugs (chi-sq.=8.3; 3 df;  $p<0.05$ ).

Comparison between the 128 patients who were permanently registered with a non-specialist general practitioner and the 17 who were not, revealed that the former were more likely to be women [25.7% versus 6.3%; chi-sq.=4.5; 1 df;  $p<0.05$ ; odds ratio (OR) 5.2; 95% confidence interval (CI) 1.8 to 20.3], living with a partner (45.1% versus 25.0%; chi-sq.= 3.4; 1 df;  $p<0.05$ ; OR 4.4; 95% CI 3.0 - 5.8) and living in permanent accommodation (87.6% versus 12.4%; chi-sq.= 5.1; 1 df;  $p<0.05$ ; OR 3.2; 95% CI 1.2 - 9.0). In order to determine independent predictors of permanent registration these three variables were entered into a logistic regression, controlling for other demographic and social variables that may have influenced permanent registration. This analysis showed that, younger drug misusers ( $p<0.05$ ; OR 1.1 per year of age; 95% CI 1.01 to 1.2) and those living in permanent accommodation ( $p<0.05$ ; OR 4.4; 95% CI 3.0 to 5.8) were more likely to report permanent registration with a non-specialist general practitioner.

Twelve of the 145 misusers (9.4%) admitted to registering with more than one non-specialist general practitioner, of whom seven had two doctors, three had three doctors and two were seeing four practitioners. Bivariate analysis revealed that a drug misuser who preferred to receive prescriptions for periods of over two weeks was more likely to be registered with more than one general practitioner (chi-sq.=3.7; 1 df;  $p<0.05$ ; OR 4.2; 95% CI 1.1 to 20.7). As the number of

misusers registered with more than one practice was small, multivariate analysis to determine independent predictors of multiple general practice registration was not undertaken.

Fifty-seven of the 137 misusers (41.6%) who were able to give a reason for choosing their non-specialist general practitioner reported that they were influenced by friends, acquaintances or health professionals to seek a doctor known to be sympathetic to the treatment of drug misusers. Forty-eight (35.0%) chose their general practitioner because he or she was in the neighbourhood and 32 (23.4%) stated that they had stayed with their general practitioner since childhood.

#### **Care provided in general practice (table 5)**

The 145 respondents reported many physical problems, both past and present. Most drug misusers reported that their general practitioners were aware of their drug use. Significantly fewer drug misusers attending the community drug team had informed their doctor of their habit compared to those attending the other three centres (chi-sq.=10.7; 3 df;  $p<0.01$ ). Drug misusers were more likely to have a non-specialist general practitioner who was aware of their drug use, if they had been in trouble with the police (chi-sq.=6.2; 1 df;  $p<0.05$ ; OR 5.0; 95% CI 1.3 to 18.8). Injecting in the past month was the only significant independent predictor from logistic regression analysis, of whether a general practitioner was aware of the subject's drug use ( $p<0.05$ ; OR 4.4; 95% CI 3.1 to 5.8).

Half of the non-specialist general practitioners aware of their patient's drug use, were reported as prescribing substitute medication. Fewer prescriptions for opiates were supplied from the non-specialist general practitioners to drug misusers attending the private practice compared with the other three centres (chi-sq.=8.8; 3 df;  $p<0.05$ ). Comparison between the 55 drug misusers who

reported that their non-specialist general practitioner was prescribing for them and the remaining 57, revealed that the former had left school at a lower mean age (15.5 years versus 16.8 years; 95% CI of difference 0.3 to 2.4;  $t = -2.6$ ; 111 df;  $p < 0.05$ ) and more were likely to come from social classes 3,4 or 5 (92.0% versus 23.7%;  $\chi^2 = 5.5$ ; 1 df;  $p < 0.05$ ; OR 5.1: 95% CI 1.2 to 24.3). Controlling for other demographic and social variables which could have influenced prescribing, logistic regression analysis revealed that drug misusers who were earlier school leavers (dichotomised around the mean) were more likely to report that their non-specialist general practitioner provided prescriptions ( $p < 0.05$ ; OR 1.3; 95% CI 1.03 to 1.5).

Of the fifty-seven misusers whose non-specialist family doctor was aware of their drug use but did not prescribe for them, twenty-five (43.9%) claimed that their doctors had an explicit practice policy of not prescribing for drug misusers, while twenty-one (36.8%) felt that they only had access to their doctors if they avoided requesting prescriptions for drugs. Six misusers claimed that their doctor lacked confidence in prescribing a detoxification regimen while five misusers considered that their doctors did not trust them sufficiently to provide a prescription.

#### **Perceived attitude of the doctor (table 5)**

On content analysis of open ended questions answered by 99 of the interviewees, 39 of 99 subjects (39.4%) reported that their non-specialist doctor had a positive view of them. Sixteen reported a neutral view and 44 a negative view.. A stepwise logistic regression analysis was conducted to determine independent predictors for the perceived attitudes. Potential predictors entered into the regression were education, employment, recent registration, prescription of benzodiazepines or opiates, specialist general practitioner, history of being charged or arrested by the police, history of imprisonment, doctor's knowledge of drug use and general practitioner



prescribing replacement drugs. The analysis showed that the belief that doctors had negative attitudes was significantly associated with drug misusers having been charged or arrested by the police ( $p < 0.05$ ; OR 8.9; 95% CI 7.2 to 10.5).

#### **Drug misusers' expectations of general practitioner services (table 6)**

Drug misusers were asked specifically about their views on general practitioners providing help with a range of treatments. Most drug misusers preferred their general practitioners to provide detoxification programmes, maintenance prescriptions, general medical care and counselling. Services suggested by a smaller number of drug misusers were a greater role in preventive medicine through the provision of needles, syringes and condoms, and education on the medical problems resulting from drug use. Some misusers felt that general practitioners should change their attitudes to drug use and should regard dependency on drugs as a medical disorder. Others believed that more widespread prescribing of maintenance drugs by general practitioners would lead to a decline in the market of illicit drugs, which would consequently reduce the level of crime.

Respondents preferred general practitioners' services to outpatient drug dependence services for prescriptions of maintenance and detoxification. Content analyses of a total of 159 views on this issue revealed that 23 respondents found it difficult to travel to hospital drug services, preferring the proximity of their general practice. Fifty-two respondents said that general practitioners established a better rapport with drug misusers, and 12 claimed that general practitioners provided a more holistic approach to their problems. On the subject of hospital based services, 19 respondents regarded them as inflexible, 14 complained that their waiting lists were too long, eight found them impersonal, and seven thought they were stigmatising. Eight drug misusers

commented, however, that they preferred to attend a hospital for treatment, regarding the service as appropriately specialist.

Most misusers preferred a negotiable approach to an agreed contract for reducing doses of methadone. When asked to consider what a general practitioner might reasonably do when a patient breaks a contract, 119 misusers thought that the doctor should allow up to three relapses before regarding a detoxification programme as a failure.

Drug misusers were asked how frequently they would prefer to collect their prescriptions from the doctor and medication from the chemist. Of the 142 respondents who were currently using substitute medication, 54 (38%) preferred to obtain their prescriptions weekly and 40 (28%) fortnightly. Seventy-six (54%) misusers wished to collect their medication from the chemist on a weekly basis rather than the 30 (21%) misusers who preferred a daily pickup.

#### **Drug misusers attending the specialist general practice**

The demographic characteristics of this group were similar to the combined sample from the other four centres except that there were significantly more single drug misusers attending the specialist general practice (chi-sq. =3.8; 1 df;  $p < 0.05$ , OR 2.3; 95% CI 1.02 to 3.6) - table 1. No significant differences were found in terms of the profile of the drug misusers (table 3) or their sexual practice, between the general practice venue and the other four centres combined. It was noteworthy (but not statistically significant) that none of the specialist general practice attenders had made an attempt to undertake their own reduction/detoxification programmes, whereas just over 10% of the combined group were trying of their own accord to reduce their drug intake.

Considering the details of registration, the specialist general practice sample contained significantly more drug misusers as temporary patients (chi-sq. =20.5; 1 df;  $p<0.001$ , OR 8.0; 95% CI 2.8 to 22.7), a greater number of misusers who had been registered within the past 6 months (chi-sq. = 8.4; 1 df;  $p<0.01$ , OR 5.1; 95% CI 1.6 to 16.6) and fewer who were registered for longer than 5 years (chi-sq. =11.5; 1 df;  $p<0.01$ , OR 7.1; 95% CI 2.0 to 33.4) - table 5.

All the specialist general practice attenders had made their doctors aware of their drug use, a much greater proportion than those in the combined group (chi-sq. = 4.9; 1 df;  $p<0.05$ , OR 10.3; 95% CI 1.4 to 78.2). There was total support from the drug misusers attending the specialist general practice for doctors to prescribe and these doctors were more likely to prescribe compared to the other centres (chi-sq. (Yates) = 20.8; 1 df;  $p<0.001$ , OR 17.1; 95% CI 3.9 to 74.5), both opiates (chi-sq. (Yates) =46.4; 1 df;  $p<0.001$ , OR 20.4; 95% CI 6.8 to 65.4) and benzodiazepines (chi-sq. = 17.7; 1 df;  $p<0.001$ , OR 5.6; 95% CI 2.3 to 13.6) - table 5. The specialist general practice attenders were more in favour of their general practitioners providing maintenance prescriptions over hospital based prescribing compared to the combined group (chi-sq. = 4.4; 1 df;  $p<0.05$ , OR 2.5; 95% CI 1.8 to 11.2) and preferred the use of methadone mixture and benzodiazepines for maintenance treatment - table 6. Methadone mixture was also favoured by the specialist general practice group for detoxification purposes compared to the combined group. Misusers attending the specialist general practice venue were significantly more likely to prefer a contract approach over a negotiable approach to opiate reduction by drug substitution, when compared to misusers at the other venues (chi-sq. (Yates) =3.9; 1 df;  $p<0.05$ , OR 2.5; 95% CI 1.1 to 5.7) - table 6.

Thirty-four (97%) misusers from the specialist practice believed that their general practitioner had a positive view of drug misusers, with one (3%) perceiving the doctor as maintaining a neutral view

on the matter - table 5. In comparison, only 40% of misusers from the combined four centres regarded their general practitioners as having a positive outlook towards them with 44% claiming their doctor had a negative view and 16% describing a neutral attitude (table 5). The doctors in the specialist general practice were more active in providing counselling and/or education about drug misuse, and referring to other agencies when compared to the non-specialist general practitioners - table 5. Far fewer of the specialist general practitioner drug misusers admitted to seeing a private doctor or attending a drug dependence unit, but more had attended a casualty department or hospital outpatient clinic compared to the combined group - table 6.

## **Discussion**

To my knowledge this is the first study of the views of drug misusers, interviewed in a range of treatment sites, concerning the current service they receive from primary care. Misusers were sought in five different centres in order to obtain a range of views. As misusers who were not in touch with services were not interviewed, the sample is not representative of all drug misusers.

There was no difficulty in recruiting drug misusers for interview. The commonest reason given for refusal was lack of time. The drug takers interviewed were mainly single, unemployed men who had begun to use drugs at an early age, reported many physical problems and had a considerable lifetime record of criminality. These findings accord with other studies by Gruer et al (1993), Robertson et al (1994) and Greenwood (1996) and the demographic profile described from the North East Thames Regional Drug Misuse Database (1993). There was a higher proportion of men in this study than has been reported in the national Home Office figures (Home Office Statistical Bulletin, 1990) and from regional drug misuse databases (Daniel et al, 1992). This may be as a result of other services concerned with HIV, targeting female drug misusers, which is

perhaps reflected by the high rates of cervical smear testing and the substantial amount of testing occurring outside of the practice surgery. It is doubtful whether a truly representative sample of drug misusers is ever obtainable, but the ratio of men to women found here was similar to samples from general practice (Neville et al, 1988; Gruer et al, 1993; Greenwood, 1996) and also the National Treatment Outcome Research Study (NTORS) which sampled from 54 purposely selected treatment agencies throughout England, located in areas where drug problems and drug treatment services were prevalent (Gossop et al, 1998a). The demographic characteristics from the much larger NTORS study including age, ethnicity, accommodation arrangements, employment and criminal activity were similar to the findings in this study suggesting that this sample was representative of drug misusers attending for treatment.

Only 63% of this sample of drug misusers acknowledged having been tested for HIV, which is higher than the figure of 51%, reported by Gruer et al (1993). The two misusers admitting to a positive result represents 2.2% of those having been tested and accords with other studies' findings (Gruer et al, 1993; Morrison & Ruben, 1995; Greenwood, 1996), which also describe a fall in HIV seropositive rates over time. The figure of 15% using condoms on a regular basis described by Greenwood (1996), is not dissimilar to this study's finding of 19%. These low figures and ambivalence about discussing safe sexual practice suggest that despite the local public health education programmes, there had been a reluctance to move towards safer sexual behaviour at the time these data were collected.

The private drug clinic had a policy of only treating clients who were in employment (with some exceptions), which would account for the greater number of employed misusers attending this centre compared with the other three non-general practice centres. The private drug clinic clients

received fewer prescriptions for opiates than their counterparts at the other three centres, probably because doctors at the private clinic were prescribing for these patients. Those misusers attending the community drug team could have obtained substitute medication from a part-time general practitioner who worked in that team and this may have been why they were less likely to inform their own non-specialist general practitioner of their drug use compared to misusers at the other three centres. Alternatively, the local non-specialist general practitioners' reluctance to prescribe may have contributed to their lack of knowledge about their patients' drug use. This is perhaps supported by these drug takers' increased likelihood of having temporarily registered with other general practitioners to obtain drugs.

More of the drug misusers attending the street agency had injected street drugs in the past month and this difference is likely to have resulted from this centre offering a needle exchange service. The finding that the patients attending the drug dependence unit were more likely to receive sickness benefit probably relates to their increased contact with social services, as this was the only one of the four settings located in a National Health Service hospital setting. The overall finding of a wide variation in alcohol consumption but a mean number of units well within recommended levels, suggests that generally, alcohol was not an additional drug of misuse among this population of misusers attending the four treatment centres.

The high rate of registration with the non-specialist general practitioners is perhaps not surprising for a sample of drug takers attending treatment centres. It is greater than figures obtained in other studies of 38% (Dath & Feinmann, 1990) and 74% (Morrison & Ruben, 1995) of drug misusers registered with a general practitioner. Younger patients who lived in permanent accommodation were more likely to be permanently registered with a non-specialist general practitioner, which may

simply reflect a continuation of registration with the family doctor. A high proportion of drug misusers (42%) had sought out a doctor known to be sympathetic to the treatment of drug misusers, which may have biased the sample of non-specialist general practitioners. Yet, relatively few of these non-specialist general practitioners involved other agencies in treatment or undertook an educative or counselling role. Not surprisingly, the specialist general practitioners compare much more favourably in accessing or providing additional care.

There is some indication from the drug misusers seeking out certain general practitioners, that much of the treatment of drug misuse is provided by a core of general practitioners who are familiar with the management of this problem. This is supported by the findings of Abed & Neira-Munoz (1990) that two thirds of general practices surveyed had no drug misusers on their lists. Similarly, Groves et al (1996) in their survey of general practitioners in south east London, showed that over half of the opiate misusers were seen by only 10.2% of the doctors. Such 'uneven' activity may be due partly to the varying attitudes of doctors towards opiate misusers and also to the 'grapevine' effect which transmits news of treatment to other misusers (Parker & Gay, 1987).

Only half of the non-specialist general practitioners were reported to be providing substitute medication. This is a lower figure than that of 69% obtained by Ralston & Kidd (1992) in their survey of general practitioners in Glasgow, but similar to Groves et al (1996) findings in a postal survey of general practitioners in south east London. The latter study demonstrated that over a quarter of these doctors reported always or often prescribing medication such as methadone and a further 25% sometimes prescribing medication for stabilisation or withdrawal. In most instances where non-specialist general practitioners were refusing to prescribe, the drug misusers reported that this was because of a practice policy not to become involved (also a finding from a small

postal survey in East Anglia by Mason (1997)), or an implicit understanding that the general practitioner would only manage the non-prescribing part of the misusers' medical care. Although a small proportion of drug misusers believed that this reluctance to prescribe stemmed from a lack of knowledge about drug misuse or lack of trust in the misuser, the results presented here cannot confirm whether this was true. However, similar findings were described by Telfer & Clulow (1990) in their study on heroin misusers attending hospital clinics.

Several surveys of general practitioners, however, have shown that general practitioners are not confident in their ability to manage drug misuse (Glanz, 1986a; Abed & Neira-Munoz, 1990; Glanz & Friendship, 1990; Davies & Huxley, 1997). Despite this finding, drug misusers expressed an overwhelming preference for detoxification or maintenance prescribing to be undertaken in general practice. They perceived primary care services to be more accessible and responsive to their needs than hospital based services. This conforms with the outcome from the survey of drug misusers by Bennett & Wright (1986), that given a free choice, the majority of misusers would prefer to attend a general practitioner than a hospital clinic or private practitioner.

The perceived negative attitudes of general practitioners to drug misusers was found to be associated with drug misusers' involvement in criminal activities. This probably contributes to the general practitioners' lack of trust in the drug misuser and perhaps explains the difficulties that can arise in the relationship between the general practitioner and the drug taker. An earlier, qualitative study considering the interaction between general practitioners and drug misusers, described 63% of general practitioners reporting negative feelings towards drug misusers which is substantially higher than the 44% obtained from this study (McKeganey, 1988). A more recent study which considered attitudes of general practitioners to opiate misusers found that the doctors were twice



as likely to hold positive than negative attitudes (64% versus 30%), with 6% presumably undecided or neutral (Davies & Huxley, 1997). However, this was a postal survey to general practitioners and these findings may not necessarily be comparable to this study.

Almost all the patients interviewed in the general practice with a special interest in drug use believed their doctors had a positive view of drug misusers. This may be related to the considerable amount of prescribing of both opiates and benzodiazepines from the specialist general practice, influencing the drug misusers' perceptions of their general practitioners. Nevertheless, the drug misusers appeared to be honest about their misuse when consulting the doctors at the specialist practice. They supported their doctors' approach of using methadone mixture for maintenance and detoxification purposes on a contract basis but were also more likely to receive additional non-drug treatment from the practice doctors. The drug misusers also seemed satisfied with the management of their problems by the specialist practice, as they appeared less likely to seek treatment elsewhere from a private doctor or drug dependence unit. Relatively more of this specialist practice group were attending hospital for treatment of physical problems than their counterparts from the other centres which may be a reflection of the chaotic lifestyles of this sample of drug misusers. This practice was situated in an inner city area and attracted a wide range of misusers who tend to lead chaotic lifestyles (Cohen et al, 1992), which is perhaps vindicated by the greater number of single drug misusers and patients registered either temporarily or very recently compared to the group attending the non-specialist general practices.

The results of this study are limited by their dependence on self report by drug misusers. For reasons of confidentiality it was not possible to validate misusers' claims concerning their general practitioners. Previous studies have examined the reliability of drug misusers' self-reported data.

Elliot et al (1985) and Barnea et al (1987) found that self-reported crime by drug misusers was a reliable indicator of actual criminal involvement. Kokkevi et al (1997) compared information provided by drug misusers on two different occasions (median time of 50 days) on the same interview schedule. Their findings were of a 90% agreement for socio-demographic data and drug use history and an overall reliability of the information given of 90%. Gossop et al (1998a) examined the concordance rate between the results of urinalysis and self-reported use of heroin, cocaine and amphetamines and found a 93% agreement. Whether or not drug misusers' perceptions are completely accurate, many patients behave on the basis of these opinions and thus their views must be taken seriously.

Despite the fact that 51% of misusers were registered with general practitioners who did not prescribe, there was an overwhelming preference for detoxification or maintenance prescribing to be centred on general practice. Most misusers regarded their general practice as accessible and reasonably accepting of their general needs. This is perhaps surprising given that alternative drug services are specifically tailored to meet misusers' needs. It may be that the lower key, more general primary care environment is less stigmatising and more useful for misusers. Conversely, it remains possible that drug misusers may feel that they are more likely to receive generous prescriptions from general practitioners, although we have no evidence to support this from the current study. Whatever the reason, it is clear that drug misusers desire a more active and holistic approach by general practitioners.

This wish by drug misusers to receive their treatment in a primary care setting should be considered in the context of the relationship with the general practitioner. Clearly, there are a substantial number of general practitioners who have reservations about the management and

treatment of drug misusers. General practitioners with an interest in this subject appear to develop a reputation, which is then passed on by word of mouth within the drug misuser subculture. This seems to have created a “nucleus” of general practitioners with registered drug misusers and similarly, a larger group of practices with few if any drug misusers. The result is a network of local “expert” general practitioners and/or practices who are known to the drug misuser peer group as prepared to manage these patients.

In conclusion, the majority of drug misusers attending treatment centres are registered with general practitioners and regard them as an important health resource in managing both their drug use and wider medical issues, despite the reluctance of general practitioners to be involved in prescribing and a high prevalence of perceived unfavourable attitudes towards drug misusers. The specialist general practice venue illustrates that even those drug misusers leading unpredictable, chaotic lives will attend a general practice and be satisfied with the treatment provided by doctors who are knowledgeable and comfortable with the management of such patients.

## **CHAPTER 8**

### **A Controlled Evaluation of Small Group Education of General Practitioners in the Management of Drug Misusers**

#### **Introduction**

To date, very little literature has addressed the implementation and outcome of educating general practitioners in the management of drug misuse. The survey findings demonstrated an undoubted preference by drug misusers for treatment in the primary care setting and in particular, for substitute drug prescribing. There are also wider public health concerns in relation to the associated physical problems with drug misuse and the increased risk of HIV among drug misusers. However, the literature indicates that general practitioners lack confidence in the management of drug misusers which is supported by the subjective views of those drug misusers interviewed in the survey. There is also evidence that only a proportion of general practitioners are prepared to engage with and undertake treatment of drug misusers.

Consequently, a study of the effectiveness of a programme of educating general practitioners in the management of drug misuse was undertaken with a view to assessing how this might improve knowledge, confidence and attitudes toward drug misuse, expand the 'core' of local general practitioners who would be prepared to manage drug misusers or add to the skills of general practitioners already involved in the management of drug misusers.

The use of small groups of general practitioners, and a training programme held in a primary care setting was determined as the best approach to education about drug misuse after a careful review

of the literature on this subject. The teaching programme was rigorously evaluated, particularly given the relatively crude measures employed to assess outcome in previous studies found in the literature.

### **Hypothesis**

Intensive, small group education of general practitioners about drug misuse will result in a detectable improvement of doctors' knowledge, attitudes, involvement with and management of drug misusers.

### **Aim**

To assess the outcome of educating general practitioners about drug misuse by undertaking a controlled evaluation of the effectiveness of small group education of general practitioners in the management of drug misusers.

## **METHOD**

### **Subjects**

All eight hundred and sixty-one general practitioners who practised within the former North East Thames Regional Health Authority and whose address included a London postal code were approached in a postal survey about their willingness to take part in small group teaching about drug misuse. The lists of general practitioners in the former North East Thames Regional Health Authority were obtained from five Family Health Service Authorities. The letter sent to the general practitioners was carefully considered and composed with advice from general practitioners currently treating drug misusers, as there was concern about a low response rate for involvement in

this project. It was the experience of these general practitioners that requests to respond to letters in relation to research (and to complete questionnaires), were frequently received by general practices. In the context of an ever increasing workload, such requests were viewed sceptically by many general practitioners and were frequently left unanswered. The agreed final version of the letter stated the broad purpose of the project relating to drug misusers and primary care services and described an outline of the teaching programme, noting that it was free and approved for Postgraduate Education Allowance. The general practitioner was offered a choice of participating or not, but was requested to return his or her reply in an enclosed stamped addressed envelope. Eight hundred and sixty-one letters were addressed and posted over the course of three weeks.

Predictions of a low response rate proved to be well founded and those general practitioners who had not replied were again sent the letter. To improve response rates, letters were printed on green paper to focus greater attention on the study.

Despite the overall low initial response rate (exact figures given in Results section), over 40% of those general practitioners who did reply expressed an interest in the training. Based on these initial figures it was decided to randomise two thirds of the interested general practitioners to the teaching programme and one third to a control group. There was one proviso however, that doctors who were in the same general practice partnership could not be allocated to different groups i.e. training or control group. The rationale for this, was that if one doctor was trained and the other not, that the trained doctor might influence the work of the untrained doctor in the shared practice. Thus, where more than one doctor in a partnership indicated an interest in training, those doctors were randomised together to either the trained or untrained group. It was envisaged that the

control group would receive a letter explaining the randomisation and that training would be offered at a later date if the teaching was evaluated as successful.

It was planned that of those general practitioners who declined to be involved, they would be sent a questionnaire and offered a £5 book token if this was returned, and similarly for the follow-up questionnaire. These doctors would comprise a second control group.

Utilising random numbers from the computer, doctors who expressed an interest in the research were randomised as described above. However, following the randomisation of the 133 general practitioners who stated that they were interested in participating, it became clear that there would be a substantial shortfall in numbers of doctors able to, or persisting with their interest in, attending the teaching programme. Consequently, the methodology required reappraisal.

It was decided that all the general practitioners expressing an interest in the training should be offered the programme and that the randomisation could not be undertaken, owing to the small numbers of doctors who eventually agreed to participate. It was also decided that there should be two comparison groups consisting of: (i) those general practitioners who were interested but unable to attend - comparison group 1, (ii) those who replied indicating no interest in the course - comparison group 2.

### **Small Group Teaching**

The teaching was conducted on three separate occasions in the summer of 1993. Each course of teaching was arranged over two consecutive afternoons in a central London general practice, as

the literature has shown that general practitioners prefer a compact training programme taking place in a general practice setting. Lunches were arranged prior to the teaching. Slide and/or overhead projectors were utilised for some of the sessions, but the majority of the teaching involved discussion rather than presentations as the literature on education of general practitioners demonstrated a preference for small group participative methods of learning.

The training focused on the prevalence, causative factors, psychology and sociology of drug misuse; methods of management; types of substitute prescribing programmes, and the legal aspects of managing drug misuse - see Course Programme (Appendix 4). Information from the survey of drug misusers' views of their general practitioners was presented (Hindler et al, 1995; Hindler et al, 1996) and the role of the general practitioner in the context of these consumers' views was discussed. Three drug misusers in the care of the general practice where the training took place, attended for an hour question and answer discussion with the training doctors, as the involvement of patients in the education of general practitioners has been shown to be an additional means of improving knowledge. Further interactive sessions involved input from general practitioners with a specific interest in treating drug misusers and a Consultant Psychiatrist with a special interest in Substance Misuse. The literature demonstrates that involvement of general practitioners and hospital consultants in primary care education is welcomed by general practitioners. Professionals from a number of non-medical disciplines involved in work with drug misusers, including a drug counsellor employed by a general practice and drug workers from a needle-exchange and Community Drug Team, also participated in the small group sessions.

We invited all doctors attending the teaching programme to attend four follow-up seminars over a period of 9 months to provide mutual support and an opportunity to discuss management problems



with drug misusers under their care. These were one hour lunch-time sessions occurring every two months. The use of such seminars has been shown to be beneficial in previous studies (Gruer et al, 1997). For reasons of geographical convenience, the training general practitioners agreed that there should be two centres for follow-up seminars, one to be held at a general practice in the East End, the other at the central London practice where the training occurred.

## **Evaluation of Teaching**

### Evaluation of Course

We asked doctors in the trained group to appraise each session of the two day course on a ten point Likert scale (see Appendix 5).

### Effectiveness of Course

To evaluate the teaching, two structured questionnaires were adapted which had been used in other studies to determine general practitioners' extent of involvement in the care of drug misusers, knowledge about the subject, general policy and practice, and attitudes towards the care of drug misusers (Glanz, 1986a,b; Bell et al, 1990). The earlier questionnaire had been used in a postal survey of general practices in England and Wales to determine the role of general practitioners in the treatment of opiate misuse. The later questionnaire involved an assessment of the willingness of general practitioners to manage drug misusers. In order to test knowledge about drug misuse, eight up-to-date questions to assess knowledge about this subject were added to complete what is from here on, referred to as the Drug Training Questionnaire (see Appendix 6). As published data on reliability were not available for either of the original questionnaires, we estimated the test-retest

reliability of questions in the final version of the questionnaire by asking general practitioners, not involved in the study, to complete the Drug Training Questionnaire on two occasions, three weeks apart. This information was entered and analysed for reliability on the Statistical Package for the Social Sciences (SPSS) programme.

The training group of general practitioners were requested to answer the Drug Training Questionnaire before the teaching programme began. Shortly before the training, the Drug Training Questionnaire was posted to the doctors in the two comparison groups. All doctors who responded to the initial request to complete the Drug Training Questionnaire were sent a further questionnaire nine months later. Up to three postal reminders and two telephone calls were made in order to prompt replies. A £5 book voucher was offered on return of a completed questionnaire to doctors in comparison group two (not interested in participating), who were predicted as least likely to respond.

### **Outcome Measures**

1. The Drug Training Questionnaire responses at the outset of the training and nine months later.
2. The Home Office figures for notification of newly presenting subjects was chosen as an indicator of general practice involvement with drug misusers. Despite suspicions by general practitioners regarding confidentiality and consequently, likely underreporting by doctors, it provided an index of general practice commitment to drug takers and this database had been running for many years.
3. The North Thames Regional Drug Misuse Database at the time of the study, had been operating for approximately two years. General practitioners had similar concerns regarding confidentiality but also disquiet about the additional detailed information required and the time needed to

complete the forms. Further, there was a lack of awareness of its existence in some practices which made it more likely that inconsistent reporting would occur. However, using figures from both the Home Office and North Thames databases provided a more complete picture of general practice involvement with drug misusers first presenting to primary care, than simply responses to a questionnaire.

### **Statistical Analysis**

The data were analysed using the Statistical Package for the Social Sciences (Versions 4.0 and 6.1) and also, Generalised Linear Interactive Modelling (Generalised Linear Interactive Modelling System Release 3.77, 1986). Proportions were compared using the Chi squared statistic or Fisher's exact test. Means were compared using one-way analysis of variance.

Data from the Home Office and North Thames Regional Database were analysed using log-linear and linear logistic (for proportions) models (Generalised Linear Interactive Modelling System Release 3.77, 1986). This approach is the most appropriate form of statistical analysis to deal with the interaction of change over time between groups. It is a statistical method for modelling categorical frequency data involving a comparison of proportions. The statistical difficulties encountered with such an evaluation of this type of data are simplified by transforming the proportions into their 'logit' or log odds, which allows for a prediction of probability between the variables. The deviance (G squared) scores derived are approximately distributed as a Chi-square, based on the log-likelihood ratio (McCullagh & Nelder, 1989). Specific software and expertise was required to undertake this part of the analysis consequently, the statistician conducted the analysis with the author present.

## RESULTS

### **Test-retest reliability of the Drug Training Questionnaire**

Thirty-eight general practitioners not involved in the study participated in determining the test-retest reliability of the attitude and clinical practice questions in the Drug Training Questionnaire. The responses to questions, originally determined on Likert scales with either four or five choices, were reduced to two or three choices respectively. Cohen's Kappa values of 0.6 for the two-choice questions and 0.4 for the three-choice questions were considered acceptable in terms of reliability. Of 35 questions, 19 were found to be reliable on these criteria and were considered in the analysis. Sixteen of the questions concerned attitudes towards, and usual treatment of drug misusers in general practice. They involved usual practice with drug misusers and referral practices, views about primary care management, willingness to notify, attitudes to short- and long-term prescribing, provision of counselling, poly-substance abuse and appropriateness of treating drug misusers in general practice. Scores on these 16 questions had high internal consistency (Chronbachs Alpha = 0.8) and were normally distributed. To reduce the number of comparisons, the 16 questions were analysed as a single scale. Total scores on this scale were compared at follow-up between the three groups using analysis of variance, covarying for baseline scores. The three remaining questions concerned the doctors' referral practices to hospital drug services and voluntary agencies. Baseline and change scores were calculated and analysed using Kruskal-Wallis one-way analysis of variance as these data were not normally distributed.

## **Trained and Comparison Groups**

One hundred and thirty-three general practitioners expressed an interest in participating in the teaching programme after the first letter describing the study was sent. A further 9 doctors were recruited following the second mailshot, constituting a total of 142 general practitioners from the 861 approached (16.5%), who indicated an interest in the course (Table 7). One hundred and six doctors (12.3%) replied stating that they would not be interested in such a course and no reply was received from 613 (71.2%) general practitioners. General practitioners in Enfield and Haringey were the least enthusiastic in participating and numbered the fewest in terms of replying to our letter about the teaching programme (Table 7).

Forty (28%) of the 142 were able to attend the teaching programme and they constituted the trained group. One doctor from this group refused to complete the Drug Training Questionnaire on a general principle that he would complete no more questionnaires. Doctors in comparison group one who were interested but unable to attend on the teaching days, made up the remaining 102 (142 - 40) doctors, of whom 28 (27.5%) returned their questionnaire. Thirty of the one hundred and six doctors (28%) who stated that they did not wish to take part in teaching, complied with our request to complete a questionnaire and formed comparison group two.

## **Demographic Characteristics**

Numbers occasionally vary from the total in each group as doctors sometimes omitted to answer individual questions. The general practitioners in comparison group two had been qualified for an

average of 26 years compared to 18 years for doctors in the other two groups ( $F = 6.422$ , 2 df ;  $p = 0.002$ ) - Table 8. There were also more men in control group two than in the trained group or control group one ( $\chi^2 = 7.8$ ; 2 df;  $p < 0.05$ ). General practices teaching trainee doctors were present in approximately one third of each of the three groups and on average, between 3 and 4 partners were present in each practice surgery across the three groups (Table 8).

### **Knowledge and experience of drug misuse prior to training**

A similar proportion of doctors in each group (range 15 to 29%) had previously attended a talk or seminar on drug misuse (Table 8). The about to be trained group were seeing numerically more drug misusers compared to doctors in comparison group 1, who in turn were treating more misusers compared to those in comparison group 2 (Tables 12, 13). This reached statistical significance as regards numbers of heroin misusers attending those general practitioners in the training group compared to control group 2 ( $\chi^2 = 4.2$ ; 1 df;  $p < 0.05$  Odds ratio 2.8, 95% CI 1.7 - 4.5). The training group were also providing more prescriptions for withdrawal purposes than comparison group 2 ( $\chi^2 = 3.9$ ; 1 df;  $p < 0.05$  Odds ratio 3.1, 95% CI 1.6 - 6.2) - Table 8. The median number of patients using opiates, amphetamines or cocaine who were seen in the last month was greatest for the training doctors (3.0) compared to doctors in comparison groups one (2.0) or two (0) - Kruskal-Wallis one-way ANOVA  $\chi^2 = 8.15$ ; 2 df;  $p = 0.017$ .

Attitudes towards, and usual practice with drug misusers were assessed by comparing total scores on the 16 questions which had high internal consistency. Doctors about to be trained were the most positive and prepared to be involved, while those in comparison group two were the least (table 10). The only difference for the three questions on referral practices, was that doctors in

comparison group two were more likely to refer drug misusers to hospital services (Kruskal-Wallis one-way ANOVA  $\chi^2=8.87$ ; 2 df;  $p=0.012$ ).

In answer to specific knowledge questions about drug misuse, most of the doctors in all three groups could name three controlled drugs (range 93 - 100%) and provide four general hazards of injecting drugs. Twenty-one doctors (54%) in the about to be trained group, 21 (75%) in comparison group one and 17 (57%) in comparison group two knew it was a statutory requirement to notify non-medical use of Temgesic. Seventeen doctors (44%) in the training group, 14 (50%) in comparison group one and 14 (47%) in comparison group two were aware that notification of a drug misuser should be carried out within seven days. Five doctors (13%) in the training group, 3 (11%) in comparison group one and 4 (13%) in comparison group two incorrectly assumed that a special Home Office Licence was required to prescribe methadone. Twelve doctors (31%) in the training group, 7 (25%) in comparison group one and 3 (10%) in comparison group two believed that "crack is a smokeable form of heroin". Significantly more doctors in comparison group two (8/27) believed that notification of a drug misuser provided "immunity from criminal proceedings for possession of unprescribed heroin", than doctors in the trained group (2/37) or comparison group one (2/25) ( $\chi^2=8.75$ ; 2 df;  $p<0.02$ ). Doctors in the training group (6/37) were least likely to consider that methadone detoxification should normally take place in hospital, compared to doctors in comparison groups one (8/26) or two (14/28) ( $\chi^2=8.54$ ; 2 df;  $p<0.02$ ).

### **Appraisal of Teaching**

Thirty-nine doctors completed Likert scales on their views of the course at the end of each training day. One doctor refused to complete questionnaires. Scoring ranged from 0 to 10 (least to most

positive) and were normally distributed. The mean scores for the first day of teaching was 7.9 (standard deviation 1.4) for usefulness and 8.1 (sd 1.3) for interest. The second day was rated 7.9 (sd 1.4) for usefulness and 7.5 (sd 1.4) for interest. Of the seven sessions of teaching which took place, a small group format for addressing individual clinical problems was rated most highly [mean 7.7 (sd 1.3) for usefulness; 7.8 (sd 1.4) for interest], followed by the discussion of the findings from the survey of views of drug misusers about their general practitioners (10, 11) [mean 7.6 (sd 1.9) for usefulness; 8.0 (sd 1.7) for interest]. The final feedback session was rated least highly [mean 6.8 (sd 1.7) for usefulness; 6.9 (sd 1.6) for interest]. The overall rating for the teaching programme was 7.9 (sd 1.3) for usefulness and 8.0 (sd 1.1) for interest.

#### **Cost appraisal of training the general practitioners - see table 11**

The costs of arranging and conducting the two day seminars were calculated from the expenditure involved administratively of £741.59, together with the outlay for the teaching £4340.00. This combines to a total of £5081.59. The cost per doctor (n = 40) was £127.04.

#### **Follow-Up Supervision Groups**

Between four and ten doctors out of a possible 18 attended any one of the four sessions at the site of a general practice in east London. One to four out of a possible 22 doctors attended sessions at the practice surgery in central London where the teaching had occurred. Overall, these groups were not particularly well attended despite the presence of two and sometimes three members of the "teaching staff" at each of these seminars, designed to provide support to doctors taking on more drug misusers after the course. Informal enquiries by letter and telephone addressing the



lack of engagement in these groups, revealed that a lack of time was the main reason for failure to attend.

### **Response Rates To The Second Set Of Questionnaires**

Thirty-five trained doctors (88%), twenty-four (86%) in comparison group one and twenty-eight (93%) in comparison group two returned questionnaires nine months after the time of the training. This followed a series of reminder letters and telephone calls. It was elicited from four doctors in the trained group, that the lack of a 100% response was due to retirement, maternity leave, long-term sick leave and refusal to complete another questionnaire. Reasons for failure to return questionnaires from the comparison group doctors could not be established.

## **OUTCOME**

### **Questionnaires**

There were no significant changes from the pre-training figures in the median number of patients reported to be consulting the three groups of general practitioners in the preceding month, who were using opiates, amphetamines or cocaine (trained group 3.0; comparison group 2.0, comparison group 1.0). The trained doctors continued to see more patients - Kruskal-Wallis one-way ANOVA  $\chi^2=8.8$ ; 2 df;  $p=0.012$ . There were also no significant changes in replies to the eight questions on knowledge or the three questions on referral practices in any group. Total scores on the 16 questions concerning attitudes towards, and work with drug misusers, changed most in comparison group two. An analysis of variance of follow-up scores, co-varying for baseline scores showed no significant differences between the groups (table 12).

## OUTCOME

### **Home Office and North Thames Regional Drug Misuse Database**

The Home Office and North East Thames Regional Health Authority (NETRHA) Drug Misuse Database were approached about providing data on the number of notifications made by the three groups of general practitioners over three, 8 month periods. Initially, the Home Office replied that their work-load was too great. NETRHA stated that they were unable to furnish such data as this would breach confidentiality agreements. Similar concerns were expressed by the Pharmacy Advisers at the various Family Health Services Authorities when they were asked whether they would provide details about changes in prescribing by the doctors. No further progress was made with the Pharmacy Advisers who did not reply to letters requesting a meeting to discuss the study. There was also a logistical problem of separate meetings with the different Advisers. However, I visited the offices of the North East Thames Regional Health Authority Drug Misuse Database. Once I had explained the requirements for the research in more detail to the person directly involved with obtaining and analysing the data needed, agreement was reached to provide me with both retrospective, current and future data pertaining to the three groups of doctors involved. The only proviso was that data relating to individual general practitioners could not be disclosed and hence there would be no breach of the confidentiality agreements. Thus, the numbers of notifications, prescribing plans and details of injecting recorded by the North Thames Regional Drug Misuse Database (formerly North East Thames Regional Drug Misuse Database) for all the doctors involved in the study, eight months before, and eight and 16 months after training were posted to me. A member of the research team made contact with the Home Office and was able to obtain their co-operation in obtaining figures of numbers of notifications, but again, only in terms of groups of doctors and not for individual general practitioners to protect confidentiality. The

information involved numbers of notifications recorded by the Home Office Addicts' Index for doctors in the three groups in the eight months prior to training, and during the 8 and 16 months after training.

General practitioners notified more of their drug misusers to the Home Office than the North Thames Regional Drug Misuse Database (table 13), presumably for the reasons described in the literature review, of the relatively recent introduction of the Regional database and the more time-consuming form to be completed. This would account for the differences in figures between the databases, for the same group of doctors. The Home Office figures revealed that in the 8 months prior to the training course, doctors in the trained group notified more drug misusers compared to comparison groups one and two. This higher notification rate persisted for the trained doctors over the following 16 months (table 13). Following the date of the training (1st & 2nd of July 1993), the number of notifications declined in the comparison groups. The North Thames Regional Drug Misuse Database notification figures demonstrated a similar pattern to the Home Office notification data (table 13), except for comparison group two where the notification rate remained stable. These findings should be considered against an overall decline in the total number of notifications (from 327 to 205) received by the North Thames Regional Drug Misuse Database over the 24 months.

The North Thames Regional Drug Misuse Database also had figures for the numbers of subjects currently injecting and sharing needles. This information was provided for each group of general practitioners - table 14. Doctors in all three groups reported lower proportions of injecting misusers, when contrasted with the numbers notified, over the three 8 month time periods. Figures for drug misusers sharing needles were low in all groups (table 14) compared to the numbers of drug

misusers notified (table 13). In table 14, the proportion of injecting and needle-sharing drug misusers include figures for the total number of drug misusers seen. Some of these totals are lower than those in table 13 for the total number of notifications to the North Thames Regional Drug Misuse Database. This was thought to reflect inconsistent reporting by general practitioners, occurring in both the trained and comparison groups. It would appear that the doctors were more rigorous in their reporting of newly presenting drug misusers to the North Thames Regional Drug Misuse Database compared to injecting and needle-sharing drug misusers. In contrast to the declining numbers of misusers reported to be injecting and the relatively low proportion of misusers sharing needles, the North Thames Regional Drug Misuse Database figures demonstrated a progressive rise in the frequency of methadone prescribing by general practitioners at first consultation with a drug misuser, in the trained and also both comparison groups over 24 months (table 15).

Log-linear and linear logistic analyses were undertaken on figures for the trained and comparison groups one and two combined (table 16). Combining the comparison groups increased the statistical power of the analyses. The analyses considered the main effects and interaction effects for figures for notification, current injecting behaviour, current needle sharing and methadone prescribing, between the groups over the three time periods (tables 17,18,19). Main effects of group relate to whether there were significant differences between trained and comparison doctors. Main effects for time indicate whether the behaviour of doctors changed over time. Interactions between group and time are of most interest as they provide the best indication of whether the training had any impact. A significant effect on Home Office notifications was found for both group and time (table 16). Doctors in the trained group notified consistently more patients than the control doctors, in the context of a decline in the number of in notifications over 24

months. The interaction of time and group revealed a significant difference between the trained and combined comparison groups, which was located between time one (1/11/92 – 30/6/93) and time three (1/3/94 - 31/10/94) (table 14). Thus, doctors in the trained group were notifying significantly more drug misusers 16 months after the teaching than doctors in the combined comparison group (table 13).

Analysis of the North Thames Regional Drug Misuse Database notification figures revealed an effect for time alone (a decrease in notifications), but no statistical significance when the group and interaction effects were assessed. Similarly, there were significant time effects for current injecting (a decrease with time in notification of injecting misusers) and methadone prescribing (an increase with time in the proportion of misusers prescribed methadone at initial interview). There were no significant findings for the interaction between time and group with respect to needle sharing or current injecting but there was an association between time and group in terms of methadone prescribing. This significant interaction occurred at the interval between time one and time three. Thus, sixteen months after the teaching course the trained general practitioners were prescribing methadone more frequently at a drug misuser's first visit than those doctors in the combined comparison group (tables 19 & 20).

## **Discussion**

Relatively few controlled evaluations of continuing medical education in general practice have been published (Cantillon & Jones, 1999) and to our knowledge none have appeared on education about drug misusers. The study is limited by the poor initial response rate of the doctors from the five family health service authorities and thereafter, a lack of sustained interest in the training by the general practitioners, leading to a revision of the intended methodology. Hence, of the targeted 861 general practitioners, over 70% did not respond. Of those 30% (248 doctors) who did initially respond, 98 (40%) participated in the study. Overall, analysable data was available for 98 of the 861 (11.4%) doctors approached. Thus, the scope for selection bias was large and the results should be considered with this reservation.

It was not possible to use the power of a hypothesis test to determine appropriate sample sizes prior to undertaking this study, owing to the absence of previous such research. There was no estimate of the kind of change or variance of that change to undertake a power calculation. However, the power of a study of a given sample size can be assessed retrospectively, even with unequal samples in two groups (Altman, 1991). The data on proportions of drug misusers prescribed methadone at initial interview by general practitioners over 24 months (table 15) were used to retrospectively determine the power of this study, as these findings were significant on logistic analyses (table 16) and allowed for a calculation of standardised difference. The two groups compared were the trained doctors ( $n = 40$ ) and the combined comparison group ( $n = 58$ ), as the aim of this study was to assess the effect of the educational intervention between the trained and untrained groups. To evaluate the power of a study with unequal sample sizes, the 'effective' sample size (Altman, 1991) was calculated for these two groups, as 95. The standardised difference was derived from the change in methadone prescribing over 24 months (table 15) by the

trained group from 7% to 94% (87%) and the combined comparison group from 25% to 82% (57%). This was calculated as 0.67. The power calculation at the 5% level of statistical significance was found to be 0.91. It is common to require a power of between 80-90% (0.8 - 0.9) to assess retrospectively, how much chance a completed study had of detecting as significant, a clinically relevant difference. The result of 0.91 suggested that this study was robust in terms of the sample sizes required to detect a significant, clinically relevant difference.

Response rates by general practitioners to postal surveys on various clinical topics has been dropping over time, since 1961 (Cartwright, 1978; McAvoy & Kaner, 1996). Reasons for the decline include increase in general workload as well as length of postal questionnaires, concerns about patient confidentiality and research methodology, lack of feedback about the survey findings, dislike of the research topic or its relevance to practice and lack of financial incentives (McAvoy & Kaner, 1996). Suggested ways to improve participation include personal contact between researcher and general practitioner, assurance about confidentiality and clinical autonomy, feedback on outcome of the study and choosing a relevant topic (Ward, 1994). Lydeard (1996) has commented that the single most important factor for success in such surveys, is the perceived value or general applicability of the research to the respondent. This theme is further elaborated by Springer & van Marwijk (1996) who described two surveys of general practitioners' attitudes to alcohol use which both met with extremely low response rates. These authors' suggestion for improving response rates to postal surveys was to link the research study with postgraduate education and training.

This study on small group education broadly followed this proposal by offering general practitioners a postgraduate training course but recruiting by letter to determine interest in such a course. However, Springer & van Marwijk's (1996) recommendation for improving response rates from general practitioners by including training did not prove successful for the small group education study. Although this education study did not involve a postal survey it did require the practitioner to reply to a letter. The subject matter (alcohol versus drugs) also differed which is relevant as shown by Roche et al (1991). They found general practitioners held different views of substance misusers according to the drug in question. In this study, doctors were most sympathetic to patients with alcohol problems, with opiate misusers least favoured and hostility expressed by most doctors towards them. Thus, despite the use of financial incentives (for comparison group 2) and the opportunity provided for integrating research with training, it would appear that the unpopularity of the subject of drug misuse with general practitioners (Greenwood, 1992a; Stammers, 1996) substantially handicapped recruitment to the small group education study.

Problems with engaging general practitioners to participate in research have been described in a few studies. Tognoni et al (1991) attempted to undertake a randomised controlled trial involving the treatment of hypertension among an elderly sample of primary care attenders. Sixty-three of 806 (7.8%) general practitioners were successfully recruited and the study had to be abandoned. Taylor et al (1998) experienced similar difficulties with their randomised controlled trial, but described their methods of recruitment in detail. These involved personal letters to general practitioners, information flyers and advertising in a general practice newsletter. Similar to the small group education study, the research incorporated training which was free of charge and PGEA approved. Follow-up telephone calls were also employed for those general practitioners who had not responded. The outcome, was that of 1121 contacted, 210 (18%) expressed an



interest but eventually only 115 (10%) of these were recruited. It was found that a personal letter and at least three personal telephone calls to interested general practitioners were necessary for recruitment. Recommendations to promote participation in research among general practitioners included extra financial incentives, resources for locum cover, changes in contractual agreements to support research and development (Taylor et al, 1998); research hypotheses of interest to primary care and simpler protocols and data collection procedures (Tognoni et al, 1991).

It is nevertheless, known that general practice is one of drug misusers' most frequent points of first contact with treatment services. Seventy percent of drug misusers who had ever contacted a service had sought help from a general practitioner (Stimson et al, 1995), and 86% of a sample of 250 injecting poly-drug misusers had consulted their general practitioner for health or drug related problems in the previous year (Klee, 1993). Only 6% of responding general practitioners surveyed by Davies & Huxley (1997) had not seen any opiate misusers in the past year. There is also evidence that most general practitioners can expect to encounter several drug misusers in their practice every year although numbers will vary depending on regional trends in drug misuse as well as general practitioners' own policies and practices (Glanz & Friendship, 1990; Porter & Johns, 1995). One would therefore have expected in this study, a greater uptake on the offer of training in the management of drug misuse given that there are greater numbers of drug misusers in London (Home Office, 1997), and the literature findings that general practitioners acknowledge to a lack of skills in addressing drug misusers' needs (Glanz & Friendship, 1990; Abed & Neira-Munoz, 1990; Davies & Huxley, 1997). The apparent lack of interest by general practitioners on the subject of drug misuse appears to relate difficulties in establishing rapport with and fears of deceit by drug misusers (McKeganey, 1988), fear of censure from colleagues for substitute prescribing, fear of contracting HIV, disgust at injecting practices, possible effect on other practice patients,

disillusionment at patient's relapses and costs of prescribing (Greenwood, 1992b). This latter issue is perhaps of increasing relevance as general practice becomes more involved in budget holding and controlling costs, with drug misusers a demanding and high cost population (Robertson, 1992). Thus, there appear to be clinical, attitudinal and financial reasons for general practitioners to avoid involvement with drug misusers. These are likely to be contributory factors for the low rates of response in relation to recruitment for this study and attendance at the training course.

It would seem that perhaps a large proportion of the drug misusers are treated by a minority of general practitioners. This is a finding described in various previous studies (Glanz, 1986a; Parker & Gay, 1987; Abed & Neira-Munoz, 1990; Strang et al, 1992). More recently, Groves et al (1996) found 10.2% of general practitioners accounting for over half of the opiate misusers seen in the past four weeks. Similar results may be derived from Davies & Huxley's (1997) postal survey findings, that 9% of responding general practitioners had seen 22 or more opiate misusers in the past year, indicating that these doctors regularly treated such patients. If there are a small proportion of general practitioners who are prepared to manage drug misusers, it would explain the overall poor postal response rate and uptake for the training programme, as well as the bias of training doctors who were seeing and treating more drug misusers prior to the teaching. This group of doctors had qualified more recently than doctors in comparison group two. This concurs with findings from previous studies (Glanz, 1986a; Parker & Gay, 1987; Bell et al, 1990; Abed & Neira-Munoz, 1990) that showed recently qualified general practitioners were more prepared to treat drug misusers. The only other difference between those interested in training and doctors in comparison group 2, arose in the gender mix with more women present in the trained and comparison group one. This may suggest that female general practitioners are more prepared to manage drug misusers or identified themselves as requiring more training. Overall, those doctors who attended

the training course appeared to have had a greater involvement in the management of drug misuse in general practice than doctors in the comparison groups. These Drug Training Questionnaire findings were confirmed by the Home Office and North Thames Regional Drug Misuse Database notification figures for the eight months prior to training. However, before they undertook the teaching programme, the training doctors were not more knowledgeable or previously involved in other such teaching when compared to the comparison group doctors.

One might speculate that the general practitioners who participated in this study were a representative sample of doctors who were actively engaged in managing drug misusers in north east London. This is substantiated by the finding that doctors in the trained group and in comparison group one, all of whom wished to participate in the teaching, were contributing between 16 to 25% of the total number of notifications received by the North Thames Regional Drug Misuse Database from the five relevant Family Health Service Authorities over a 24 month period (table 13). Hence, the finding of small numbers of such general practitioners is commensurate with the literature and may well be reflective of the situation nationally.

Great efforts were made to ensure the best possible inclusion of all the general practitioners from the five family health service authorities identified for this study. Considering the Home office and North Thames Regional Drug Misuse Database notification figures for the 24 months, the issue of recruitment to the study should be viewed in the context of an overall decline in the numbers of notifications by general practitioners to the drug misuse databases and a fall in the number of drug misusers reportedly consulting with the general practitioners (table 13). This is despite evidence of an increase in drug misuse nationally and in one locality (Tantam et al, 1993). Thus, there is further indirect evidence that many general practitioners prefer not to be actively involved in the

care of drug misusers. Hence, engaging doctors who have declared no interest in education on drug misuse is a difficult task but obtaining at least some information on these doctors (comparison group 2) was thought to be valuable and there was a high response rate to follow-up once the doctors were engaged.

Considering the small group education from a theoretical perspective, the traditional teacher centred approach was de-emphasised with the training broadly following the concept of 'adult learning'. This involved the principles of adults motivated by learning which is perceived as relevant, is based on and builds on their previous experiences, is participatory and actively involves them, focuses on problems and can be immediately applied in practice (Knowles, 1990). The expectation from 'adult learning' involves a gain in knowledge and consequent change in behaviour. Two systematic reviews of continuing medical education have proposed models for ensuring change in medical behaviour, which involve three sequential strategies (Davis et al, 1992; Davis, 1998). Firstly, the consideration of predisposing factors which prepare doctors for change. Applying this strategy to the small group education study, the predisposing factor involved acknowledging and identifying the problems general practitioners had in managing drug misusers. Secondly, identification of enabling factors by which new knowledge and skills are related to the learner's work environment. This was addressed using the particular methods of training the general practitioners (as outlined below), including the incorporation of the findings from the survey of drug misusers' views of their general practitioners. Thirdly, reinforcing new behaviour through the use of reminders and feedback. This was implemented using follow-up seminars. Thus, the small group education of general practitioners broadly conformed to the proposed model of ensuring a change in behaviour of those doctors attending this training programme.

The education process undertaken in this study incorporated the methods regarded as influential in changing the behaviour of general practitioners. These included the setting, of educational meetings taking place in a general practice. The timing of training, which occurred intensively over two days in the afternoons. The content of the training, addressing general practitioners' day to day work. This study also sought to use the best available methods (derived from the literature) to teach general practitioners. These involved multiple educational interventions including teaching by general practitioners, hospital consultant involvement, patient participation groups and input from non-medical staff involved with drug treatment, all occurring within a small discussion group. The reinforcement of the teaching and provision of feedback to maintain the momentum of the training and to correct any misperceptions was addressed in the follow-up seminars. The attendance by general practitioners at the four seminars was variable but overall low. Attendance also differed between the two locations. Postgraduate educational allowance was obtained for the sessions but a lack of time was described as the main reason for non-attendance. Some doctors working with a few or no partners may well have had problems dedicating time to these lunch-time sessions and given their short duration of one hour, were unlikely to have taken on a locum to provide cover for them. In a study of educational interaction between general practitioners, increasing workload was described by general practitioners and specialists as an important barrier in preventing clinicians meeting, and led to them giving a low priority to their educational needs (Marshall, 1998). The frequency of the seminars every two months following the training was another possible contributory factor for the low attendance. A more intensive follow-up of four fortnightly sessions may have been more effective. General practitioners have acknowledged in a study on their perception of effective health care, that feelings of tiredness, stress and lack of

motivation were reasons for not practising effectively (Tomlin et al, 1999) which would presumably also be reasons for not attending educational events.

To evaluate the effectiveness of the small group education for general practitioners, an experimental design was employed. For an evaluation of an educational intervention to be considered as research, rigorous standards of reliability and validity must be applied regardless of whether qualitative or quantitative methodologies are used (Hutchinson, 1999). This approach was followed in respect of evaluating the Drug Training Questionnaire for reliability by piloting with general practitioners not involved with the study and determining those questions with high internal consistency for use in the study. Kirkpatrick (1967) described four levels of evaluation of an educational intervention with the complexity of the behavioural change increasing as the evaluation strategies ascend to a higher level. At the lowest 'rung' is evaluation of reaction (satisfaction or happiness) of the training, which in this study was assessed using the Likert scale. The second 'rung' involves evaluation of learning (knowledge or skills acquired), and was determined from the questionnaire. The third and fourth levels are evaluation of behaviour (transfer of learning to the workplace) and evaluation of results (transfer or impact on society), respectively. These were measured using the Home Office and North Thames Regional Drug Misuse Database. Hence, a comprehensive evaluation of the effectiveness of small group education for general practitioners was achieved involving assessment of the most complex behavioural change, according to this four step hierarchy. To evaluate outcome it is essential to develop a longitudinal database to allow for long-term follow-up to determine the validity of the selected outcomes (Wilkes & Bligh, 1999). This was implemented in the study using both the questionnaire (nine months after training) and the database figures (8 and 16 months post teaching course).

It was difficult to separate out the components of training which were most relevant to the doctors or most effective in informing their practice. The participating doctors' assessments of the course were generally high, with a small group session and a non-didactic information-giving session rated most highly. This may suggest that the appraisal of the literature regarding the best methods of providing teaching for general practitioners and employing these techniques was successful. Thus, a small interactive group format in which training was provided mainly by experienced general practitioners, rather than hospital specialists, was perhaps the key to its success. It was also relatively cheap to run and considering the training costs alone, amounted to approximately £127 per doctor.

Assessing the effect of the teaching when considering the questionnaires as a single determinant of outcome, revealed no significant change in attitudes, knowledge or behaviour. Taken alone, the questionnaire data would have led us to conclude that the training had had little impact. The validity of general practitioners' self assessment of knowledge has been studied in New Zealand by comparing self assessment and objective test scores (Tracey et al, 1997). It was concluded that general practitioners could not accurately assess their own level of knowledge on a given topic. This finding was further elaborated by Gask et al (1998), who undertook to evaluate the impact on the behaviour and attitudes of experienced general practitioners of a 10-hour training package in the assessment and management of depression. Both subjective and objective assessments were carried out which suggested significant improvements in both assessment and management skills, but subjectively reported changes were not always supported by the objective data. These results in relation to this study, casts doubt on the validity of the subjective assessments by questionnaire of the general practitioners. Thus, there may indeed have been a change in attitudes, knowledge or behaviour that was not detected in the questionnaire data.

The general practitioners' work with drug misusers was assessed by more objective means and showed that higher notification rates to the Home Office were recorded for the trained doctors 16 months after entry to the study. They were also prescribing methadone more frequently 16 months after the teaching course was completed. The relevance of these findings should be considered against the decline of notifications to the Home Office Addict Index by general practitioners from 47.6% in 1987 to 37% in 1993 (Home Office, 1994), which is confirmed in this study (table 13), and the absence of change in the prescription of methadone in south-east England between 1995 and 1997 (Strang & Sheridan, 1998b). These results suggest that even though the answers to the Drug Training Questionnaire showed no change, the trained general practitioners appeared to have gained some meaningful benefit from the teaching programme such that they began to see and treat greater numbers of drug misusers. It may be that the findings of change in the doctors' behaviour from the database figures 16 months after training, but no change in outcome from the questionnaire at 9 months or the database figures at 8 months, reflect the importance of long-term follow-up to determine outcome in this study. If the questionnaire had been completed 18 months after training, it may have yielded more positive results.

In conclusion, our results showed that almost 17% of general practitioners in north-east London were interested in taking part in interactive, group teaching about drug misuse. The small group education appeared to be an enjoyable and useful experience for those general practitioners already involved with drug misusers and had an impact in terms of increased involvement with drug misusers. It is noteworthy that this outcome would accord with the drug misuser survey findings of drug takers preferring treatment to occur in a primary care setting, including a greater ease in prescribing for them.



The training was not aimed at producing general practice specialists in drug misuse. In this case a programme such as that undertaken in Edinburgh (Greenwood, 1992b) involving shared care of drug misusers would have been more appropriate. Many doctors in the inner cities will require some expertise in the field of drug misuse and brief training of this type seemed to be effective for those doctors who are motivated to take part and who already see a considerable number of drug misusers. A greater willingness to prescribe methadone is particularly important currently, given its wide-ranging benefits (Farrell et al, 1994; Sorensen, 1996).

It is often concluded that continuing medical education only reaches more committed doctors who are already better trained than their peers. A more likely explanation for the results from this study is that the offer of training appealed to doctors working in areas where drug misuse was already a greater problem. Rather than being more committed, they may simply have needed new skills for a problem forced upon them by the circumstances of their practice.

## **CHAPTER 9**

### **Conclusion**

#### **Critique of research studies**

##### **Survey**

The hypothesis of the survey study stated, that the views of drug misusers attending a range of drug treatment centres will provide important information about the current management of drug misusers in primary care, which will have relevance to the training requirements of general practitioners in the management of drug misuse. The most important finding from the survey results which linked to the training of general practitioners in drug misuse, was that drug misusers' preferred that their treatment should occur in the primary care setting, which appeared to be validated by the high numbers of drug misusers registered with a general practitioner. This confirmed the applicability of training general practitioners in the management of drug misuse.

The possibility of subjective bias on the part of the drug misusers in terms of primary care treatment requires consideration. The drug misusers claimed that the specialist hospital clinics were inflexible. This may have related to security issues involving urine drug screening and/or contracts related to prescribing. General practice may not be so strict on such matters. If so, it could be argued that locating the treatment of drug misusers in general practice is inappropriate and the finding that drug misusers prefer it, may be an indication that some unwise practices (such as over-prescribing or lack of urine monitoring) occur. This might have been inferred from the specialist general practice where a substantial amount of prescribing occurred. Prescription of substitute medication is often a core function in the management of drug misuse and was relevant to the training given the increasing evidence supporting the use of oral methadone in the

management of drug misuse. However, the specialist general practice whilst prescribing oral methadone also incorporated contracts for methadone reduction programmes, urine drug testing and monitored attendance for counselling. Thus, it was possible to demonstrate that pragmatic management of drug misuse in primary care was achievable and was critically considered as a model for good practice in the training course, particularly as this surgery had also been involved in published research on drug misuse and primary care (Cohen & Schamroth 1990; Cohen et al, 1992).

Specific topics for training that arose from the survey findings, included the high prevalence of physical illness but low prevalence of HIV in the sample and the large percentage of drug misusers involved in crime. A statistical relationship was found between drug misusers charged or arrested by the police and doctors' negative attitudes reported by the drug misusers. A cautious attitude would seem to be understandable in this situation from the doctor's perspective but was interpreted by the drug taker as negative in nature. At the other end of the spectrum, a drug misuser reporting a positive attitude of a general practitioner may not necessarily equate to good primary care management. Clearly, interpretation of attitudes of doctors by drug misusers was highly subjective. Possibly, drug misusers' assessment of a doctor adopting a neutral, non-judgemental attitude would be the most desirable but there should be no implicit assumption that positive attitudes (as determined from drug misusers' views) were necessarily associated with commendable outcomes.

I certainly developed the impression from many of the drug misusers interviewed, that I could act as a spokesperson for their views. This may have accounted for the high response rate for

agreement to undertake the survey. This enthusiasm was unlikely to have influenced the factual components of the survey but may have created bias in the descriptive sections.

Separate from selection process for interviewing the individuals, it could be argued that bias in the sample surveyed arose from the practical difficulties in selecting the treatment centres. At the outset of the study, local treatment centres had been identified and in the absence of any choice for some of these centres (e.g. only one drug dependence unit and one community drug team), randomisation could not be undertaken. When some centres were found to be unavailable to this study the next most local centre was located. Ideally, randomisation of each type of treatment centre in London (given that the drug misusers sampled, resided in London) would have been an improvement to the methodology.

A further advance on the original methodology may have been to use a 'snowballing' technique, whereby each drug misuser interviewed would have been asked if they could find a drug misusing friend willing to be interviewed. This could have provided a sample of drug takers not necessarily receiving treatment at a centre and/or not necessarily registered with a general practitioner. This may have widened the representativeness of the sample as a whole and perhaps provided a comparison group(s). An alternative method of addressing the limitation of representativeness of the sample, was to undertake a household survey of members of the public. This would have provided an improved representative sample of drug misusers, both in and out of treatment. However, this is a substantial project and probably not the most efficient way to survey misusers' views. Alternatively, a larger study of misusers attending more treatment centres would have enhanced the representativeness of views of drug misusers about their general practitioners. Both such studies were beyond the scope of this particular study which had limited financial resources.

The latter study has been undertaken (Gossop et al, 1998a), although issues relating to drug misusers and their opinions of general practitioners have not been described. An alternative method of improving the survey would be a validation of drug misusers' views by the general practitioners themselves. Variables such as attendance rates at the surgery or general practitioners' knowledge of the drug misusers' problems could be used as measures of validation.

#### Small group education study

The hypothesis for this study stated, that intensive, small group education of general practitioners about drug misuse will result in a detectable improvement of doctors' knowledge, attitudes, involvement with and management of drug misusers. It is contended that this hypothesis was proven on the basis of a rise in numbers of drug misusers notified and the increase in numbers of new patients medicated with methadone, 16 months after training, by the trained group of doctors compared to the untrained groups. A question arises as to why these two findings were not replicated at eight months after training. Possibly, these two changes in outcome were not related to the intervention at all. It is perhaps a deficiency in the study that the questionnaire was not resubmitted at 16 months to the general practitioners in all three groups, as this may have provided confirmatory evidence for or against the 16 month findings. However, change in two outcome variables, which bore no direct relationship to each other, both at 16 but not at 8 months suggests that this was more than a simple coincidence occurring among forty trained general practitioners compared to the 58 untrained doctors. The length of time to take effect I would suggest, is a function of the relatively small number of trained doctors involved and the constraints of the individual surgery and doctor, of taking on more drug misusers too rapidly. Increasing confidence in managing and treating this population would only have developed gradually as a consequence and hence, not manifested through the outcome variables at 8 months.

The difficulties of recruitment of general practitioners to this study are striking. It could be argued that general practitioners, who act as representatives of society, may view drug misusers as deviant and this may explain their unwillingness to be involved either in their medical care or engage in postgraduate education on drug misuse. This negative stereotyping of drug misusers may have developed in some doctors even before entry to medical school, with such attitudes perhaps hardened by factors like disgust at self-injecting practice, disillusionment with frequent relapses and fears of being taken advantage of by the drug misuser. Consequently, it would be of little surprise to find general practitioners unwilling to register drug misusers as patients nevermind involved in postgraduate education on this subject. A finding that large numbers of drug misusers were registered with only a small number of general practitioners would support this view. This is in fact substantiated from the small group education study, as doctors in the trained group and in comparison group one (68 general practitioners in total) all of whom expressed a wish to participate in the teaching, were contributing between 16 to 25% of the total number of notifications received by the North Thames Regional Drug Misuse Database from the five relevant Family Health Service Authorities over a 24 month period. Thus, this may provide some explanation for the low recruitment of primary care doctors on the basis that relatively few general practitioners see drug misusers and would therefore be interested in teaching on this subject.

Hence, there may have been an unavoidable self selection bias reflecting the reality that only a small number of interested doctors exist and would desire special skills in this domain. This conforms to the adult learning principle of providing education where there is a self perceived need for training. An expectation would be however, that doctors with an interest in a topic would already have high levels of knowledge but this proved not to be the case in this study when trainees were compared to the

control doctors. The need for such knowledge may have been a motivating factor for attending the teaching programme.

An interview with the training doctors to elicit their reasons for attending the teaching programme, might have provided useful information for the study generally and to aid the future recruitment of general practitioners. Similarly, interviewing a sample of the almost three-quarters of the general practitioners who did not respond to the original approach or a sample of the later stage attrition group of doctors such as the apparently interested doctors who failed to return questionnaires, may have shed additional light on their difficulties in attending such an event.

Evaluating the study with the advantage of hindsight, undertaking a comprehensive preliminary needs analysis by consulting with local general practitioners about how to attract doctors to an educational event on the subject of drug misuse and also, the most appreciated (as useful and effective) methods of education, could well have improved the study. It was not entirely overlooked as four members of the grant proposal team were practising general practitioners. These general practitioners were highly influential in determining the contents of the educational programme. Perhaps involving drug misusers on their views about the training package may have resulted in an improvement to the content validity of the teaching programme.

Inclusion of other members of the primary health care team who would be most frequently involved with drug misusers, particularly the receptionist and nurse, may have enhanced the study. However, the recruitment of three staff in a controlled trial would be fraught with problems, particularly given the difficulties found in recruiting just one health care professional. Additional learning experiences within the teaching programme such as role play with feedback or modelling practice with opinion leaders,

might well have been valuable, for example, to demonstrate how best to deal with the awkward situations drug takers sometimes create in general practice.

The failure to demonstrate any changes of doctors' knowledge, attitudes, involvement with and management of drug misusers based on the drug training questionnaire, may have been related to the reliability of the questionnaire itself rather than involving issues to do with the adequacy of the doctors' completion of the questionnaire. Perhaps an improvement in the reliability of the questions by more rigorous testing, may have resulted in demonstrable effects from the teaching. Nevertheless, the possibility exists that the training as an intervention had no genuine effect on the general practitioners' behaviour. This could be extrapolated to the follow-up groups, in terms of the poor attendance reflecting on the training doctors simply disliking or finding them of no benefit.

Overall, undertaking both of these studies threw up unexpected and expected problems. The refusal of various treatment centres to participate in the survey study was not predicted and delayed the study proceeding as to plan. The enthusiasm of the drug misusers, who had been expected to be reluctant to engage in a research interview, facilitated this study. Recording the data from the 18 page interview schedule for 180 patients required much stamina and perseverance. This also applied to the general practitioner recruiting process, which although forecast as a potential problem, nevertheless became quite demoralising given the efforts expended throughout the small group education study. On the positive side, despite the usual problems involved in organising events, the teaching programme was a rewarding experience for the teachers and via informal feedback at the time, also for the training doctors.



In summary, it would be difficult to argue against the training of general practitioners in the management of drug misuse as being intrinsically beneficial, both to the drug misusers and society at large. What may be contentious is whether drug misusers' preference for treatment to occur in general practice should necessarily guide policy decisions on this matter.

## **Policy Implications**

### **Growth in drug misuse**

The Rolleston Report (Ministry of Health: Rolleston Report, 1926) has been widely credited with establishing the 'British system' of drug control, which it is argued prevented Britain from experiencing the worst excesses of an American style 'war on drugs' and consequent criminalisation of drug misusers and the doctors who prescribed for them. (Edwards, 1969; Berridge, 1996). In the 1980s and 1990s, the Rolleston Report (Ministry of Health: Rolleston Report, 1926) has retained its symbolic importance for those who support maintenance treatment and for the advocates of harm minimisation. It is also significant in having fostered the development of a much closer relationship between doctors and the State in the area of drug misuse, with doctors moving from the sidelines to advise on policy. This alliance between doctors and the State over drug addiction, established in the Rolleston Report (Ministry of Health: Rolleston Report, 1926), still remains as a fundamental basis of policy (Berridge, 1996).

The deliberations of the Rolleston Committee (Ministry of Health: Rolleston Report, 1926) have been described as 'a system of masterly inactivity in the face of a non-existent problem' (Downes, 1988) reflecting on the small number of drug misusers in Britain at the time. This is clearly not the case at present with 20-30% of people aged 16-59 years and about half of those aged 16-29 admitting

to having taken an illegal substance at some time (Leitner et al, 1993; Parker et al, 1995; Ramsay & Percy, 1996; McC Miller & Plant, 1996). In all age groups, cannabis is the most common illicit substance taken but use of amphetamines, LSD and ecstasy (methylenedioxymethamphetamine - MDMA) by young people is now fairly widespread. Cocaine use has also increased in the last ten years and heroin use has spread to rural areas. Hence, although the pattern of illegal drug misuse varies between areas, virtually no part of the UK should be considered 'drug free'. These findings are perhaps ameliorated by the British Crime Survey report of 1996 which was a nationally representative household survey of the population aged 16 to 59 years, of England and Wales (Ramsay & Spiller, 1997). This general population survey when considered against the findings of the similar 1994 survey (Ramsay & Percy, 1996), found drug misuse to be relatively rare. For the most at risk 16-29 age group as a whole, that there had been no change in consumption of prohibited drugs over the two years whether that be usage on a lifetime, last year or last month basis. Thus, it could be concluded from this survey that a plateau may have been reached in the prevalence of drug misuse, from the increase in drug taking dating back over the past three decades. These results are contradicted by the figures of annual notifications to the Home Office Addicts' Index. This demonstrated an increase of 20% per year in numbers of drug misusers notified, with the proportion of those injecting of over 50% (Home Office, 1995; 1997). The most recent estimate from the Regional Drug Misuse Databases of the total number of drug misusers presenting for treatment in Great Britain, was 30 000 over a 6 month period (Department of Health, 1999a). Extrapolating this figure to 60 000 for the year (of 1998) and comparing to the Home Office Addicts' Index annual notification of 28 000 drug misusers in 1993, it shows a rise in the number of drug misusers over the past five years.

These findings are supported by the study of Cox et al (1999) of a 4.5 fold increase in the number of drug misusers in two inner London boroughs, over a decade (1983–1993). This study was independent of health professionals specifically reporting contacts with drug misusers, but the results could simply reflect a local change in the patterns of drug misuse. This paper's results do not conform with the small group education study findings of a decline in notifications of drug misusers to the North Thames Regional Database and Home Office over a two year period (1992–1994). However, this appears to be attributable to a decline in the rate of notification by general practitioners, which has also been reported for the Regional Drug Misuse Database in the north west of England (Tantam et al, 1993).

The epidemiological data regarding drug misuse is uncertain and consequently contradictory at times, in part because drug misusers prefer to remain anonymous and are hence difficult to 'count' but also due to health professionals' variability in notifying drug misusers, resulting in incomplete and inaccurate data. Overall, the majority of the epidemiological evidence seems to indicate a growth of drug misuse that is spreading beyond the urban areas and involving younger people who are using a wide range of illicit drugs (Department of Health, 1999b).

### Service Development

In the past ten years there has been enormous growth in the size and the range of services for people who misuse drugs. The blueprint for service development was a report from the Advisory Council on the Misuse of Drugs entitled 'Treatment and Rehabilitation' (Department of Health and Social Security, 1982). In response, growth of the non-statutory sector was particularly encouraged and the whole venture was funded through a series of Department of Health initiatives aimed at both the prevention of the spread of HIV infection and the treatment of drug dependence.

In 1994, Department of Health Ministers set up a Task Force (Department of Health, 1996) to review the effectiveness of treatment services for problem drug misusers. The National Treatment Outcome Research Study (NTORS) was commissioned to undertake this task. The findings from this prospective, longitudinal cohort study examined treatment outcome after one year, from 72% of the sample (Gossop et al, 1998b). A decline in the use of illicit opiates, injecting of drugs and sharing of injecting equipment was demonstrated. Improvements in physical and psychological health and a marked reduction in criminal activity was also shown. Nevertheless, the authors commented that since the inception of the study, there had been an overall reduction in treatment resources with some programmes closing down. Residential services were found to be particularly vulnerable to withdrawal of financial support. The unwritten implication from these latter findings is that the burden of care must have shifted elsewhere, with primary care services likely to experience some of the impact from the decline in the community and residential treatment services.

### Doctors and Drug Misuse

The difficulties doctors face in managing drug misuse have remained largely unchanged over time. Following the introduction of the Dangerous Drugs (Notification of Addicts) Regulations in 1968, Griffith Edwards commented that doctors working in clinics may find themselves constantly questioning the ethical premises of their actions which may be complemented by criticism from colleagues, and they may also be subjected to emotional manipulation by patients (Edwards, 1969). To continue to function successfully as a therapist, the doctor would require support and opportunity for discussion, which if absent, could result in the doctor becoming increasingly punitive or over-permissive towards the drug misuser. These remarks applied to doctors working in specialist drug treatment centres where the opportunity for support from other drug workers

would be expected. The general practitioner, however, is much more isolated and in the light of Professor Edwards's comments in 1969 (Edwards, 1969), it seems hardly surprising that general practitioners have continued to call for greater support and training in managing drug misusers, who present the exact same problems in the primary care setting at the present time.

Currently, relatively few general practitioners believe that primary care based treatment programmes for drug misusers should constitute a core service in general practice (General Medical Services Committee, 1996). Many general practitioners support the objectives of shared care approaches to increase the range of options for delivering services to people with drug problems (Glanz & Friendship, 1990), but to implement them would require adequate specialist support and it is presently unclear whether this is forthcoming despite the success of such schemes as described by Greenwood (1996) and Gruer et al (1997). The multiplicity of problems presented by drug using patients means that a similar multiplicity of skills must be deployed, including skills held by those outside of primary care. Models of shared care developed in alcohol treatment have been applied to drug misuse services and involve joint participation of specialists and generalists (usually psychiatrists and general practitioners, often with community pharmacists). In most cases, the general practitioner maintains the central co-ordinating role for the patient's long term health care but often in the context of a well developed specialist service (Farrell & Gerada, 1997). Farmer (1997) asserts that the Community Drug Team should be pivotal in the provision of specialist treatment, not only in direct service provision but in advising, liaising with and training staff in other agencies both generic and specialist. The Task Force to review services for drug misusers (Department of Health, 1996) acknowledged that there was no single ideal model of shared care but that the key to success lay in the level of specialist support available to the general practitioner. Raistrick (1997) has criticised the Task Force for failing to

define the meaning of 'shared care' and also, to state whether or not general practitioners must include substitute prescribing as part of contracted medical services. The role of the general psychiatrist was also largely overlooked by the Task Force (Department of Health, 1996), but these specialists are involved in the treatment of patients with co-morbid mental illness and substance misuse (dual diagnosis). Little research has been undertaken in the UK (or Europe) to assess the prevalence, management and outcome of patients with dual diagnosis in secondary services (Johnson, 1997), and there are no such studies in primary care. This is a subject which requires further study, with initially, an epidemiological investigation of the prevalence and incidence of dual diagnosis patients. This could be undertaken within a local catchment area at multiple sites, both urban and rural, where such individuals may attend for treatment in primary care, the local drug and alcohol service, the local secondary mental health service and a team managing homeless patients with mental illness.

#### Policy implications of the Survey Study

Drug misusers are very clear about their preference for treatment in the primary care setting despite subjective reservations about their general practitioners and the lack of prescription of substitute medication, as shown in the survey study described in Chapter 7. Patients' views have received increasing acknowledgement in the planning and delivery of health care, most notably in *Working for Patients* and the Patients' Charter (The Patients' Charter, 1991). The Priorities and Planning Guidance for the NHS in 1996/97 issued by the NHS Executive states as one of its priorities, to "Give greater voice and influence to misusers of NHS services and their carers in their own care, the development and definition of standards set for the NHS locally and the development of NHS policy both locally and nationally" (Priorities and Planning Guidance for the NHS, 1995). The Task Force (Department of Health, 1996) is clear that the Patients' Charter

applies to drug misusers as much as to other client groups and that their views should not be disregarded “simply because they are engaged in an illegal activity and can sometimes be disruptive” (p. 85). This political standpoint underlines the importance of the drug misusers’ views about their primary health care.

In eliciting the views of patients, two assumptions are crucial (Sensky & Catalan, 1992). Firstly, that patients want their views taken into account and secondly, that such views are trustworthy indicators of a patient’s health or health care. The drug misusers in the survey (Chapter 7) were keen to express their views with very few disagreeing to participate. The trustworthiness of the drug misusers in relation to their wish to be treated in primary care could be assessed by the high numbers of drug misusers registered with a general practitioner, indicating a preference for treatment outside of hospital based settings. Their comments on the attitudes of general practitioners towards them and reasons why general practitioners were not prescribing substitute drugs have been replicated in other studies. Clearly, comments and questionnaire ratings are not necessarily adequate end points in determining the planning of health care, but difficulties of interpreting information from patients should not detract from the aim of involving them as fully as possible in their health care. Surveys of patients’ opinions can contribute to the evaluation of health service interventions. Data from the survey of drug misusers’ views on their primary health care reported in the first part of this thesis, contributed to, and was highly rated by the doctors, in the controlled evaluation of small group education of general practitioners as described in the second section of the thesis.

Despite resistance by general practitioners to become involved in the treatment of drug misusers, there has been increasing political and medical pressure for them to adopt a more central, co-ordinating role. This has now been echoed by the misusers themselves based on the survey findings (Chapter 7). Many of the recent studies into the primary care of drug misusers have concentrated on general practitioners acting as members of multidisciplinary teams (Gruer, 1997; Greenwood, 1996). Research has also begun to focus on community pharmacists (Strang et al, 1996; Sheridan et al, 1996). Very little work however, has addressed the needs of the individual general practitioner and in particular, the issue of their knowledge and training in the area of management of drug misuse. Dicker (1998) acknowledges that the study of addictive behaviour is barely mentioned in the medical curriculum and the substantial correspondence in the British Medical Journal supporting education and training for general practitioners in drug misuse, suggests that this is an area requiring further development (Letters, 1997).

#### Policy implications of the Small Group Education Study

The principal limitation to the controlled trial of training general practitioners (Chapter 8) was the low response rates of the doctors and the biased sample of the training general practitioners, who were seeing more drug misusers than the comparison group doctors, prior to the teaching. Two recent postal surveys of general practitioners regarding drug misuse (Groves et al, 1996; Davies & Huxley, 1997) demonstrated higher levels of response from doctors compared to this study (Chapter 8), although such a straightforward comparison cannot be made as the small group education study involved an invitation to attend a course for training rather than completing a questionnaire survey. It would seem that requesting the active involvement of general practitioners in a research trial had a serious adverse effect on response rates. This is borne out from other studies (Tognoni et al, 1991; Taylor et al, 1998), with the former, proposed study, eventually



abandoned as a consequence of the lack of general practitioner recruitment. It seems likely that the topic of drug misuse was a further important contributory factor for the poor engagement of doctors in the small group education study. Questionnaire surveys on this subject appear to be less threatening but nonetheless difficult to undertake.

A finding from the survey and small group education studies indicated that there was a group of general practitioner 'specialists' undertaking treatment of the majority of drug misusers in that area, which seems to be confirmed from other studies (Glanz, 1986a; Parker & Gay, 1987; Richards, 1988; Abed & Neira-Munoz, 1990; Groves et al, 1996; Davies & Huxley, 1997; Personal Communication, 1998). Thus, the concern about the sampling bias of the trained doctors may in fact reflect the actual representativeness of general practitioners involved in the treatment of drug misusers in the north east of London. Consequently, further studies in this field would involve establishing that this is the pattern of care among groups of general practices, perhaps by postal survey of general practitioners or general practices in a randomised number of primary care groups in England and Wales. If there was such a 'network' of drug misuser-friendly general practitioners, it would be logical to target training as well as specialist services (and perhaps additional funding) on this interested group of general practitioners who were managing the majority of drug misusers. An alternative approach may be to focus training on those general practitioners found to be non-responders to postal surveys on drug misuse (Groves et al, 1996; Davies & Huxley, 1997) or similarly, the sample indicating no interest in participating in the small group education teaching programme (Chapter 8). Demographically, this group of general practitioners have been described as older more experienced men, in single-handed, non-training practices with substantial list sizes. Apart from the age and sex variables, the other demographic characteristics indicate problems of high workload with little support. Engagement in training in drug misuse for this sample of general

practitioners clearly poses practical problems which would need to be addressed before it became likely that this group of doctors would undertake such teaching. A possible solution to this problem, may be to introduce a drug worker into these particular practices who would take on patients for treatment, and provide education on management for the general practitioners and primary care team. A randomised control trial of such practices with and without a drug worker would be feasible, but perhaps compromised by doctors fearful of attracting drug misusers on to their already oversubscribed lists.

The small group education study incorporated the principle of promoting clinical effectiveness, for the management and treatment of drug misuse in primary care. The teaching involved an evidence based approach to support the development of best practice. Outcome measures to evaluate this process included those associated with the greatest complexity of behavioural change, involving evaluation of the transfer of learning to the workplace and the impact of the learning on society (Kirkpatrick, 1967). Implicit in this process is the assumption that an evidence based medicine model was acceptable to, and used by general practitioners in their clinical practice. This assumption was broadly evaluated in a study addressing general practitioners' perceptions of effective health care and clinical application in the primary care setting (Tomlin et al, 1999). It was a qualitative study of 24 general practitioners in the North Thames region, using semi-structured interviews. The findings were that general practitioners did not entirely adhere to the evidence based clinical effectiveness model but viewed it as part of a framework which also incorporated patients' concerns and the doctors' time management. When clinical information was sought, general practitioners preferred to make more use of their colleagues or hospital doctors than scientific, written literature and verbal consultation was more likely to result in change of clinical practice.

The evaluation of the process of educational interaction between doctors has been acknowledged as difficult, with the interaction between hospital consultants and general practitioners inadequately researched (Marshall, 1998). Another qualitative study using semi-structured interviews and also focus groups, was undertaken to identify the main barriers to effective education between general practitioners and hospital specialists (Marshall, 1998). The specialists regarded didactic lectures as the principal way to convey information but this was the least popular model for general practitioners. They preferred interactive sessions based on clinical cases or informal, unplanned learning centred on referrals. In general, general practitioners wanted information directly applicable to their clinical work and to control their own educational agenda. Increasing workload was considered an important barrier to meeting educational needs.

Despite the small sample of general practitioners in both aforementioned studies (Marshall, 1998; Tomlin et al, 1999), which were neither random nor representative, it would seem that an educational intervention which positively influenced clinical practice, required the involvement of medical colleagues. However, it would appear that the applicability of the evidence based medicine approach had limitations, which concurs with theories on the holistic nature of general practice in which biomedical, personal and contextual perspectives converge in the decision making process. This has implications for the training of general practitioners. Time constraints, a high threshold for education to be directly applicable to their practice and the structure of the teaching are important variables in determining a general practitioner's decision about undertaking training.

Gossop et al (1998a) state that neither the nature nor the effectiveness of general practitioners' interventions with drug misusers is clearly understood. The survey of drug misusers' views of their general practitioners (Chapter 7) sheds greater light on both the nature and effectiveness of the general practitioners' role from the drug misusers' perspective. It highlights misuser satisfaction with 'specialist' general practitioners comfortable in the management of drug misuse and also, the help-seeking behaviour by a substantial number of drug misusers to find general practitioners prepared to treat them.

Effectiveness has been evaluated in a prospective study randomising 108 opioid misusers to either specialist or primary care treatment (Porter & Johns, 1995). The patients initially presented expecting to receive specialist treatment, which would account for the higher numbers failing to engage with general practitioners (40%, compared to 20% of patients randomly assigned to the specialists). Nevertheless, where general practitioners were successful in engaging drug misusers, there were no differences in retention rates in either service, or injecting and other risk behaviours. The evaluation of the small group education (Chapter 8) was able to demonstrate a greater involvement with, and increased prescribing of methadone for drug misusers, by the group who were trained, indicating that it is possible to improve the effectiveness of the primary care physician. This is highly relevant in the context of previous findings that general practitioners are resistant to substitute prescribing (Glanz & Taylor 1986; Abed & Neira-Munoz, 1990; Glanz & Friendship, 1990; Mason, 1997). The use of methadone in the treatment of drug misusers is now acknowledged as a mainstay in management (Department of Health, 1996), with methadone maintenance found in four randomised control trials to be superior to control conditions on several measures including use of illicit opioids, crime and mortality (Farrell et al, 1994; Sorenson, 1996; Gossop et al, 1998b). These American trials were conducted under highly regimented conditions

involving daily attendance, compulsory counselling and frequent urine testing. Hence, they may be criticised for having little relevance to the pragmatic, harm reduction form of care in the United Kingdom. However, these randomised control trial findings have been replicated when applied under usual conditions of general practice throughout the United Kingdom (Cohen & Schamroth, 1990; Cohen et al, 1992; Greenwood, 1996; Gruer et al, 1997; Martin et al, 1998).

A study considering the effect of government recommendations on methadone prescribing (Department of Health, 1996) was undertaken in the south east of England (Strang & Sheridan, 1998b). Scant evidence for change in methadone prescribing was shown. This study did not consider specifically which prescribers were involved, but previous studies have demonstrated high proportions of general practitioners to be unaware of government clinical guidelines relating to drug misuse (Bell, 1990; Abed & Neira-Munoz, 1990; Cohen, 1991; Davies & Huxley, 1997) raising doubts about the viability of national policies (Tantam et al, 1993; Strang & Sheridan, 1998b). Such findings also conform with the literature demonstrating that general practitioners tend not to change their practice by reading written material (Tomlin et al, 1999).

It appears that the 'philosophy' of 'harm minimisation' has had an impact on drug misuse, in terms of a move by drug misusers from injecting to oral use of opiates, a fall in the numbers of misusers sharing injecting equipment and a reduction in the rates of HIV among drug misusers, over time (Robertson et al, 1994; Greenwood 1996). Britain has maintained one of the lowest HIV seroprevalence rates among injecting drug misusers globally (Stimson, 1995), and appears to have contained the 'epidemic' of HIV. Despite the success of the HIV prevention strategies, of concern remains the high incidence and prevalence of Hepatitis B and C among drug misusers (Stimson, 1995; van Beek et al, 1998).

## Crime and Drug Misuse

Attention has recently turned towards the relationship between crime and drug misuse. This is manifest by a change from the previous UK drug strategy in 1995, to a crime dominated perspective (Department of Health, 1995) and the appointment of a 'drug czar' to oversee an increase in drug enforcement methods (Strang et al, 1997). It has been recommended most strongly that funds should not be diverted away from treatment and rehabilitation to enforcement, given the evidence for a reduction in criminal activity by drug misusers with the use of methadone (Farrell et al, 1994; Gossop et al, 1998b) and the lack of success that punitive approaches have had in the United States (Strang et al, 1997). In complete contrast, but following a similar logic, high-ranking members of the police and other influential people have 'thought the unthinkable', that some illicit drugs should be legalised, as a consequence of the failure of society's attempts to tackle the escalating drug problems by punishment and reducing the supplies of drugs (Independent: Editorial, 1993). Hence, although there appears to be a divergence in views regarding the way forward, there is a commonality of thought as regards preventing the supply of and use of illicit drugs to reduce crime.

In 1993-1994, the Government spent £526 million on drug treatment and control measures with 66% of this sum expended on enforcement measures and 12% on rehabilitation and treatment (Department of Health, 1994). Evidence for the effectiveness of treating drug misusers in residential or community settings has emerged from the one year follow-up study by NTORS (Gossop et al, 1998b). A reduction in the use of illicit drugs to approximately one third of the levels one year previously, was linked to the decline in numbers of crimes committed and numbers of clients engaged in criminal activities. The cost savings were estimated at £14.6 million per year with further uncalculated savings to the criminal justice system. Taking into account the

expenditure on care, it was estimated that for every £1 spent on treatment, there was a return of more than £3 associated with the lower levels of crime. These are promising results but they should be considered in the context of the withdrawal of resources from the treatment centres involved in this study (Gossop et al, 1998b). This raises the question of whether similar results can be achieved in future by alternative treatment services, such as primary care, where drug misusers may well present for treatment.

### Current Policies

The guidelines on drug misuse and dependence (Department of Health, 1999b) focused on the importance of treating drug misuse in the primary care setting. The guidelines were careful to concede that involving general practitioners and expanding shared care should not be seen as an alternative to the current role of specialist services. The introduction of Primary Care Groups and formation of Primary Care Trusts was seen as a new way for services to be delivered to patients, and presumably viewed as an opportunity to implement the recommendations for greater general practitioner involvement in the management of drug misusers. This could be a mixed blessing because general practitioners will be taking responsibility for budgets, particularly the cost of medication, and may be discouraged from taking on a demanding and pharmaceutically expensive population such as drug misusers.

The current philosophy in addressing the problem of drug misuse was recently launched by the UK government (President of the Council: Tackling drugs to build a better Britain, 1998) and welcomed for taking an approach based on evidence (rather than rhetoric) (Farrell & Strang, 1998). It focused on drug prevention among the young, although the evidence for the effectiveness of prevention is insubstantial, which is a weakness of this report. Nevertheless, the numbers of

young drug misusers is increasing and services need to be tailored to manage these individuals who may not seek help because the current services are stigmatising, rigid in approach, based on a medical model or inflexible in dealing with amphetamine or cocaine misusers (Farrell & Gerada, 1997; Rawaf, 1998). The introduction of outreach service professionals to provide advice and health promotion away from a traditional treatment setting has been endorsed (Department of Health, 1996), although the literature is short of evidence on the effectiveness of such services (Rawaf, 1998). However, the proposal to build stronger partnerships across the various sectors involved with drug misusers, including the criminal justice system, health service and social services appears sound, albeit a substantial challenge.

The discussion on Training for Clinicians working with Drug Misusers, present in the Guidelines on Clinical Management (Department of Health, 1999b), was limited to an Annex rather than a Chapter and disappointing in terms of its length and breadth. It focused on the generalist and the primary health care team and there was an absence of supporting literature for the views expressed. The lack of an evidence based framework in this chapter was at odds with the philosophy underlying the development of these guidelines. It was suggested that training should be delivered locally with involvement of local specialist providers and that the duration of a teaching course might take in total three days, but not longer than “about six months”, with some form of local accreditation occurring. A curriculum for training was proposed. This corresponded largely with the course programme provided in the small group education study.

In the absence of current evidence for training clinicians in the management of drug misusers, I would suggest that the small group education approach to training general practitioners (Chapter 8) could be applied nationally to form the foundation of teaching general practitioners about the



management of drug misuse. It is based on the evidence of how best to educate general practitioners with outcomes demonstrating a change in the behaviour of the general practitioners who were trained on this course.

### Final Comments

The use of illegal drugs affects individuals, their families and society as a whole. Drug misuse may lead to social, behavioural and psychological as well as health problems. In addition, the overall cost to society of drug misuse is enormous. As a result, there is great public concern about these problems and about ways in which it can be treated. The problems associated with drug misuse are complex and their treatment can be difficult. There is now a strong and increasing body of evidence which demonstrates the possibilities for recovery among even the most severely dependent drug misusers (Gossop et al, 1998b). Employing the 'traditional' approach of delivering a treatment by an expert clinician to a patient who is a passive recipient does not apply in the field of drug misuse. Treatment as an event that happens to a drug misuser is inappropriate and must be considered rather as a process, in which the patient takes an active role. The survey findings (Chapter 7) demonstrated that this group of drug misusers preferred to enter the process of treatment through the route of general practice. Adopting a multi-disciplinary, shared care approach appears to be the right direction to be taking in addressing the problem of drug misuse. It is clear from the health perspective that professionals working as a team rather than in isolation will confer the greatest benefits for the drug misuser. The future will involve determining how to integrate the intake of new misusers with their own particular problems, as well as the care of current service misusers such that they are matched to appropriate interventions, to plan long-term management and to integrate health and social care for rehabilitation (Farrell & Gerada, 1997). Derived from the survey findings, the drug misuser perceives him/ herself as a patient with a

medical problem who acknowledges that he/ she has a relapsing/ remitting type of illness that often results in contact with the justice system, Casualty Departments or street homelessness. The logical approach is 'multi-sectorial' to guide drug misusers into a treatment programme which has been evaluated as effective, in order to manage this group of individuals who place substantial demands on our society.

It may well have to be acknowledged that many general practitioners will continue to resist accepting drug misusers on their lists. Some general practitioners might decide not to prescribe opiates and refer to specialist agencies for prescribing, but offer counselling, support and liaison. Others might prescribe for suitable patients and refer to specialist services for in-patient detoxification or rehabilitation. These doctors would expect to attract greater numbers of drug misusers and would need to agree treatment policies within the practice. Between these two approaches would be prescribing on a more limited basis within a shared care model, working closely with other agencies such as a Community Drug Team. Irrespective of the issues concerning general practitioners' attitudes to drug misusers, their high workloads and the need for specialist support and training, drug misusers will continue to attend general practice. The 'drugs scene' is continually changing, requiring a range of treatment models and services. There should be room for different management and prescribing policies in general practice, so that general practitioners can work in a way that is commensurate with their own circumstances and expertise.

## **Tables 1 - 6**

### **Chapter 7**

**A survey of drug misusers' views of their general practitioners:**

**Table 1**  
**Demographic Characteristics**

	<b>Four treatment centres</b>	<b>Specialist general practice</b>
Mean age	33.4 years (SD 6.6 years; range 18-53)	31.6 years (range 21-43)
Sex : Men Women	114 (79%) 31 (21%)	29 (83%) 6 (17%)
Country of birth	UK 133 (92%) Europe 7 (5%) Non Europe 5 (3%)	UK 28 (80%) Europe 5 (14.%) Non Europe 2 (6%)
Ethnic group (interviewer's perception)	White 143 (98%) Non-white 2 (2%)	White 35 (97%) Non-white 1 (3%)
Civil status	Single 86 (59%) Living with partner 59 (41%)	Single 27 (77%) Living with partner 8 (23%)
Type of accommodation	Flat 96 (66%)    Hostel 3 (2%) House 25 (17%)    With friend 3 (2%) Bed&B. 4 (3%)    Squat 4 (3%) Rough 5 (3%)    Hotel 3 (2%) Room 2 (2%)	Flat 18 (52%)    Rough } House 4 (11%)    With friend } Bed&B. 4 (11%)    Squat } 9 Hotel } (26%) Room } Hostel }
Ownership of accommodation	Local Authority 93 (64%) Private/owned/rented 31 (22%) Other 21 (14%)	Local Authority 20 (57%) Private/owned/rented 6 (17%) Other 9 (26%)
Age at which education ended	mean 16 years (range 10-35 years)	mean 15.6 years (range 11-19 years)
Employment	unemployed 105 (72%) employed 40 (28%)	unemployed 25 (71%) employed 10 (29%)
HIV antibody status	91 (63%) tested - 2 positive 54 (37%) not tested	26 (74%) tested - 1 positive 9 (26%) not tested
Social class based on: (a) subject's training after school (b) current employment	I (a) 3 (2%) (b) 1 (1%) II 18 (12%) 12 (8%) III 61 (42%) 13 (9%) IV 15 (10%) 10 (7%) V 2 (1%) 4 (3%) no train/occ.46 (32%) 105 (72%)	I (a) 1 (3%) (b) 0 (0%) II 4 (11%) 0 (0%) III 16 (46%) 3 (9%) IV 7 (20%) 4 (11%) V 1 (3%) 3 (9%) no train/occ.6 (17%) 25 (71%)
Lifetime criminality*	126 (87%) trouble with police 123 (85%) charged /arrested 115 (79%) fined /probation 68 (47%) imprisoned	30 (86%) trouble with police 30 (86%) charged /arrested 30 (86%) fined /probation 17 (49%) imprisoned
Sickness benefit	receiving 40 (28%) not receiving 105 (72%)	receiving 12 (34%) not receiving 23 (66%)

\* subjects could give more than one reply (choice)

Key: Bed&B. - bed and breakfast accommodation

train - training

occ. - occupation

**Table 2****Comparison between drug misusers attending the four treatment services****Percentage of drug misusers attending:**

	<b>Private drug clinic (n = 46)</b>	<b>Community drug team (n = 35)</b>	<b>Drug dependence unit (n = 46)</b>	<b>Street agency (n = 18)</b>	<b>Overall (n = 145)</b>
<b>In employment</b>	56.5	25.7	8.7	5.6	27.6
<b>Receiving sickness benefit</b>	13.0	22.9	43.5	33.3	27.6
<b>Used illicit drugs:</b>					
<b>in past month*</b>	4.3	2.9	4.3	5.6	4.1
<b>in past week</b>	8.7	40.0	52.2	61.1	36.6
<b>On own reduction programme</b>	21.7	2.9	2.2	27.8	11.7
<b>Registered temporarily with a GP to obtain drugs at some time</b>	45.7	60.0	28.3	44.4	43.4
<b>Informed GP of their habit**</b>	87.2	65.5	100	100	87.5
<b>Received prescriptions for opiates</b>	13.0	14.3	34.8	33.3	22.8

n = number of drug misusers attending the treatment service

\* question asked was if patients had not used illicit drugs in the past week, had they used in the past month

\*\* percentages based on numbers of drug misusers registered with a GP: n = 39,29,44,16,128.

**Table 3**  
**Drug Misuser profile**

	<b>Four treatment centres</b>	<b>Specialist general practice</b>
Age of first use of illicit drugs	mean 15.5 years (range 8 - 29 years)	mean 15.9 years (range 7 - 31 years)
Illicit drugs first used, in order of frequency	1. Cannabis 2. Amphetamines	1. Cannabis 2. Amphetamines
Age of first use of opiates	mean 19.5 years (range 12 - 35 years)	mean 20 years (range 13 - 33 years)
Age of first injection	mean 20.7 years (range 12 - 40 years)	mean 21 years (range 13 - 35 years)
Ever injected drugs	Yes 135 (93%) No 10 (7%)	Yes 32 (91.4%) No 3 (8.6%)
Drugs most commonly used over past week*	1. Methadone 113 (78%) 2. Benzodiazepines 56 (39%) 3. Heroin 53 (37%) 4. Cannabis 41 (28%) 5. Cocaine / Crack 15 (10%)	1. Methadone 30 (86%) 2. Benzodiazepines 21 (60%) 3. Heroin 11 (31.4%) 4. Cannabis 4 (11.4%) 5. Cocaine / Crack 5 (14.2%)
Currently on prescribed detoxification/maintenance programme	Yes 128 (88%) No 17 (12%)	Yes 29 (83%) No 6 (17%)
Currently on own reduction/detoxification programme	Yes 17 (12%) No 128 (88%)	Yes 0 (0%) No 35 (100%)

\* subjects could give more than one reply (choice)

**Table 4**  
**Sexual Practice**

	Four treatment centres	Specialist treatment centres
Sexually active in the past 12 months	Yes 109 (75%) No 36 (25%)	Yes 30 (86%) No 5 (14%)
Sexuality	Heterosexual 134 (94%) Bisexual 3 (2%) Homosexual 5 (4%) No comment 3	Heterosexual 29 (83%) Bisexual 4 (11%) Homosexual 1 (3%) No comment 1
Use of condoms by drug misuser or partner	Never 71 (61%) Occasionally 5 (4%) Sometimes 14 (12%) Usually 5 (4%) Always 22 (19%) No comment 28	Never 9 (26%) Occasionally 3 (9%) Sometimes 6 (17%) Usually 1 (3%) Always 12 (34%) No comment 4
Rationale for use of condoms	Birth control only 8 (18%) Concern about HIV 17 (38%) Birth control and HIV 20 (44%) No comment 100	Birth control only 2 (6%) Concern about HIV 9 (26%) Birth control and HIV 11 (31%) No comment 13
Use of other forms of contraception (women)	Yes 9 (30%) Sometimes 2 (7%) No 19 (63%)	Yes 3 (9%) Sometimes 2 (6%) No 3 (9%)

**Table 5**  
**Care provided in General Practice**

	<b>Four treatment centres</b>	<b>Specialist general practice</b>
Registration with GP	128 (88%) registered 17 (12%) not registered	35 (100%) registered
of those drug misusers registered:	12 (8%) just registered 8 (6%) registered <6 months 16 (11%) registered 6 - 12 months 34 (23%) registered 1 - 5 years 58 (41%) registered >5 years  113 (88%) permanently registered 10 (8%) temporarily registered 5 (4%) unsure about registration status  12 (8%) registered with >1 GP	5 (14.3%) just registered 8 (22.9%) registered <6 months 3 (8.6%) registered 6 - 12 months 16 (45.7%) registered 1 - 5 years 3 (8.6%) registered >5 years  21 (60%) permanently registered 13 (37%) temporarily registered 1 (3%) unsure about registration status  7 (20%) registered with >1 GP
Temporary registration with GP to obtain drugs	Ever: yes 63 (43%) In past 6 months: yes 13 (9%)	Ever: yes 18 (51%) In past 6 months: yes 5 (14%)
GP knowledge of subject's drug dependence	112 (88%) aware Of these, 80 (71%) misuser informed doctor directly 20 (18%) GP informed by hospital/clinic 12 (11%) GP found out from other sources	35 (100%) aware Of these, 30 (86%) misuser informed doctor directly 5 (14%) GP informed by hospital/clinic 0 (0%) GP found out from other sources
Prescribing by GPs, aware of subject's drug habit	55 (49%) were providing prescriptions	33 (94%) were providing prescriptions
Main drugs prescribed by GPs	Opiates 33 (60%) Benzodiazepines 21 (38%)	Opiates 30 (86%) Benzodiazepines 17 (49%)
GP treatment other than prescriptions*	74 (66%) GPs provided no other assistance 22 (20%) referred to other agencies 16 (14%) provided counselling / education	9 (26%) GPs provided no other assistance 19 (54%) referred to other agencies 15 (43%) provided counselling / education
Physical problems	33 (23%) current major illness/injury 51 (38%) past major illness/injury	7 (20%) current major illness/injury 10 (29%) past major illness/injury
Perceived attitudes of GPs to drug misusers*	39 (40%) positive outlook 44 (44%) overtly negative 16 (16%) neutral	34 (97%) positive outlook 0 (0%) overtly negative 1 (3%) neutral
Drug misusers' views why GPs not prescribing	1. GPs not prepared to treat drug misusers 25 (45%) 2. Drug misusers not requesting prescriptions 21 (37%)	GPs do not trust drug misusers 2 (6%)

- results obtained on content analysis of open ended questions



**Table 6**

**Drug Misusers' expectations of their general practitioners**

	Four treatment centres	Specialist general practice
Should GPs prescribe for drug misusers	Yes 131 (90%) No 14 (10%)	Yes 35 (100%) No 0 (0%)
GP services endorsed as useful by drug misusers*	135 (93%) detoxification programme 126 (87%) maintenance prescriptions 125 (86%) improved general medical care 119 (82%) counselling service	35 (100%) detoxification programme 30 (86%) counselling service 32 (91%) improved general medical care 33 (94%) maintenance prescriptions
GP preferred over hospital for: (i) detoxification/reduction (ii) maintenance prescription	Yes 121 (83%)      No 24 (17%) Yes 121 (83%)      No 24 (17%)	Yes 33 (94%)      No 2 (6%) Yes 34 (97%)      No 1 (3%)
Drugs preferred by drug misusers to detoxify/reduce*	71 (49%) Methadone mixture 64 (44%) Benzodiazepines 27 (19%) Heroin amps 19 (13%) Methadone amps	22 (63%) Methadone mixture 17 (49%) Benzodiazepines 4 (11%) Heroin amps 6 (17%) Methadone amps
Drugs preferred by drug misusers to maintain*	62 (43%) Methadone mixture 44 (30%) Benzodiazepines 40 (28%) Heroin amps 29 (20%) Methadone amps	20 (57%) Methadone mixture 18 (51%) Benzodiazepines 6 (17%) Heroin amps 8 (23%) Methadone amps
Non-GP services utilised in the past month*	52 (36%) Community drug team 51 (35%) Private doctor 47 (32%) Drug dependence unit 41 (28%) Needle exchange 7 (4%) Casualty /Hospital OPD 2 (1%) FPC, ANC, PCC	16 (46%) Community drug team 1 (3%) Private doctor 5 (14%) Drug dependence unit 7 (20%) Needle exchange 5 (14%) Casualty /Hospital OPD 1 (3%) FPC, ANC,CC
Drug misusers' preference for approach to methadone reduction	Contract 25 (17%) Flexible 120 (83%)	Contract 12 (34%) Flexible 23 (66%)

\* Respondents were allowed to give more than one reply

Key: OPD - Outpatient department  
FPC - Family planning clinic  
ANC - Antenatal clinic  
CC - Child clinic

## **Tables 7 - 16**

### **Chapter 8**

**A controlled evaluation of small group education of general practitioners in the  
management of drug misusers:**

**Table 7**

**Number of general practitioners interested in the training**  
**from each Family Health Service Authority**

F.H.S.A *	TOTAL NUMBER	AGREED TO PARTICIPATE	REFUSED TO PARTICIPATE	NO REPLY
CITY & HACKNEY	131	23 (18%)	17 (13%)	91 (69%)
TOWER HAMLETS	107	28 (26%)	10 (9%)	69 (65%)
NEWHAM	146	27 (18.5%)	22 (15%)	97 (66.5%)
CAMDEN & ISLINGTON	196	29 (15%)	25 (13%)	142 (72%)
ENFIELD & HARINGEY	281	35 (13%)	32 (11%)	214 (76%)
TOTALS	861	142 (16.5%)	106 (12.3%)	613 (71.2%)

\* Family Health Service Authority

**Table 8**

**Demographic characteristics of general practitioners from the initial set of  
Drug Training Questionnaires**

<b>Demographic characteristics</b>	<b>Trained</b>	<b>Control group 1</b>	<b>Control group 2</b>
<b>Sex: male</b>	20	14	24
<b>female</b>	19	14	6
<b>No. of partners (mean)</b>	3.8	3.6	3.3
<b>Training practice</b>	13/39 (33%)	8/27 (30%)	9/30 (30%)
<b>Year of qualification (mean)</b>	1975	1975	1967
<b>Previously attended talk on drug use in last year</b>	6/39 (15%)	8/28 (29%)	6/30 (20%)
<b>One or more heroin misusers seen over past month</b>	24/39 (62%)	13/28 (46%)	11/30 (37%)
<b>One or more other opiate misusers seen over past month</b>	15/39 (38%)	11/28 (39%)	8/30 (27%)
<b>One or more amphetamine misusers seen over past month</b>	10/39 (26%)	6/28 (21%)	6/30 (20%)
<b>One or more cocaine misusers seen over past month</b>	9/39 (23%)	6/28 (21%)	6/30 (20%)
<b>One or more injecting misusers seen over past month</b>	19/39 (49%)	10/28 (36%)	9/30 (30%)
<b>No. of first time attenders with a drug problem over past month</b>	11/39 (28%)	9/28 (32%)	5/30 (17%)
<b>No. of female drug misusers seen over past month</b>	22/39 (56%)	10/28 (36%)	10/30 (32%)
<b>No. of drug misusers &lt; 21 years seen over past month</b>	11/39 (28%)	7/28 (25%)	2/30 (7%)
<b>No. of first time attenders requesting prescription for withdrawal</b>	15/39 (38%)	10/28 (36%)	5/30 (17%)
<b>No. of first time attenders requesting prescription for maintenance</b>	9/39 (23%)	8/28 (29%)	3/30 (10%)
<b>No. of first time attenders requiring treatment of physical problems</b>	6/39 (15%)	8/28 (29%)	3/30 (10%)
<b>No. of first time attenders consulting re HIV</b>	5/39 (13%)	1/28 (4%)	2/30 (7%)

Key: No. = number

**Table 9**

**Numbers of drug misusers seen by each group of general practitioners over the previous month: at outset of and nine months after training**

GROUP	HEROIN	OPIATES	AMPHET'S	COCAINE	OVERALL TOTAL
TRAINED - outset	105	74	11	17	207
TRAINED - 9 months	131	38	14	10	193
COMPARISON 1 - outset	67	19	7	16	109
COMPARISON 1 - 9 months	45	6	1	3	55
COMPARISON 2 - outset	44	26	7	7	84
COMPARISON 2 - 9 months	33	17	4	10	64

Key: Amphet's = Amphetamines

**Table 10**

**Total scores on general practitioners' attitudes and management of drug misusers**  
**at entry to the study**

GROUP	MEAN	SD	NUMBER OF DRS
Trained	34.1	6.7	39
Comparison group one	36.5	9.2	28
Comparison group two	43.4	8.6	30

Lower scores indicate more positive attitudes

ANOVA: 2 df,  $F=11.67$ ,  $p<0.0001$

**Table 11**

**Cost appraisal of training the general practitioners**

**Administration Costs**

1. Secretarial time: £9.25 per hour for 50 hours	462.00
2. Initial mailshot to 861 general practitioners:	
1 page letter (photocopied)	17.22
861 envelopes	8.61
Reply paid envelope x 1000	12.91
Stamps x 1000 x 18p	180.00
3. Response to 142 general practitioners replying in the affirmative. Reminder letter to 45 general practitioners.	
3 page letter (including programme of training) x 142 = 426 pages	
1 page reminder letter x 45 = 45 pages	
6 pages of Drug Training Questionnaire x 45 = 270 pages	
Total copies = 741	14.82
Envelopes: 142 + 45 = 187	1.87
Stamps: 142 x 18p	25.56
45 x 18p	8.10
4. Telephone calls to 80 general practitioners @ 10p per call	8.00
5. Reminder telephone calls to 25 general practitioners @ 10p	2.50
TOTAL	<u>741.59</u>

**Training Costs**

1. Post-Graduate Education Allowance: £10 per hour for 8 hours	80.00
2. Cost of rooms @ £50 for each half day, x 2	100.00
3. Catering of lunch, tea and biscuits x 2 days including cost of caterer: £14 per head x 20 doctors x 2 days	560.00
4. Cost of locums of participating general practitioners: £52 per session x 2 sessions x 20 doctors	2080.00
5. Cost of teachers' time (including expenses): £50 per hour x 20 hours (over 2 days)	1000.00
6. Cost of cleaner: £10 per day x 2 days	20.00
7. Follow-up groups - two groups of 4 x 1 hour sessions:	
Teachers' time of 8 hours @ £50 per hour	400.00
Teachers' travel costs	20.00
Room @ £10 per hour x 8 hours	80.00
TOTAL	<u>4340.00</u>

**GRAND TOTAL £5081.59**

**Table 12**

**Total scores on general practitioners' attitudes and management of drug misusers at follow-up**

GROUP	MEAN	SD	NUMBER OF DRS
Trained	34.2	7.6	35
Comparison group one	34.6	9.6	24
Comparison group two	44.9	10.1	28

Lower scores indicate more positive attitude

ANCOVA main effects, 2 df,  $F=2.6$ ,  $p=0.80$ .



**Table 13**

**Notifications to Home Office and North Thames Regional Database**  
(notifications refer to first-time presenting drug misusers)

Dates	Total	Trained n=40	Comparison Group 1 n=28	Comparison Group 2 n=30	Combined Comparison Groups 1 & 2 n=58
<b>Home Office</b>					
01.11.92 —		61	32	10	42
30.06.93					
01.07.93 —		67	29	29	58
28.02.94					
01.03.94 —		55	6	13	19
31.10.94					
<b>North Thames Regional Database</b>					
01.11.92 —	327	56 (17%)	25 (8%)	19 (6%)	44 (13%)
30.06.93					
01.07.93 —	269	24 (9%)	19 (7%)	14 (5%)	33 (12%)
28.02.94					
01.03.94 —	205	31 (15%)	4 (2%)	13 (6%)	17 (8%)
31.10.94					

% figures represent % of total number of notifications to the North Thames Regional Database

**Table 14**

**Drug Misusers Currently Injecting and Sharing Needles**

(refers to first-time presenting drug misusers)

Dates		Trained	Comparison Group 1	Comparison Group 2	Combined Comparison Groups 1 & 2
<b><i>Proportions of drug misusers reported to the NTRD to be injecting currently</i></b>					
01.11.92	—	32/52 (62%)	13/22 (59%)	12/18 (67%)	25/40 (63%)
30.06.93					
01.07.93	—	10/23 (43%)	9/19 (47%)	5/12 (42%)	14/31 (45%)
28.02.94					
01.03.94	—	10/29 (34%)	2/3 (67%)	4/13 (31%)	6/16 (38%)
31.10.94					
<b><i>Proportions of drug misusers reported to the NTRD to be sharing needles</i></b>					
01.11.92	—	5/51 (8%)	3/18 (17%)	1/17 (6%)	4/35 (11%)
30.06.93					
01.07.93	—	2/21 (10%)	1/19 (5%)	0/12 (0%)	1/31 (3%)
28.02.94					
01.03.94	—	1/29 (3%)	0/3 (0%)	3/13 (23%)	3/16 (19%)
31.10.94					

Key: NTRD - North Thames Regional Database

Note: Compared to the total number of notifications to the NTRD (table 5), inconsistent reporting sometimes resulted in fewer drug misusers notified as currently injecting or sharing needles.

**Table 15**

**Methadone Prescribing**

Proportions of drug misusers prescribed methadone at initial interview by  
general practitioners as reported to the North Thames Regional Database

Dates		Trained	Comparison Group One	Comparison Group Two	Combined Comparison Groups 1 & 2
01.11.92	—	4/53 (7%)	6/24 (25%)	0/18 (0%)	6/24 (25%)
30.06.93					
01.07.93	—	9/29 (31%)	9/24 (38%)	9/14 (64%)	18/38 (47%)
28.02.94					
01.03.94	—	29/31 (94%)	3/4 (75%)	11/13 (85%)	14/17 (82%)
31.10.94					

**Table 16**

**Logistic Analyses**

This table represents a summary of log-linear and linear logistic analyses (for proportions) to examine the interaction between the Trained and Combined Comparison Groups.

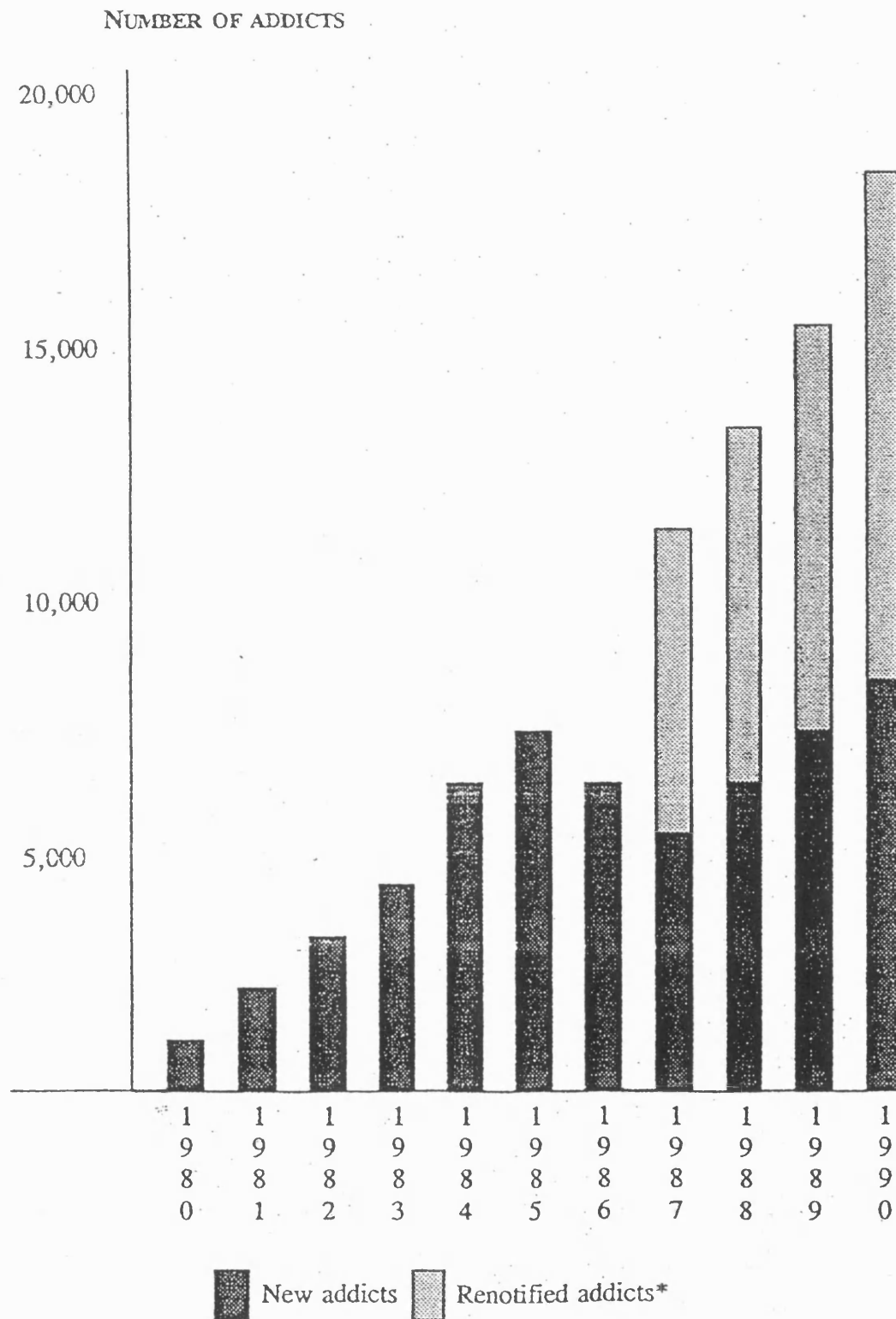
	<b>Effects</b>	<b>d.f.</b>	<b>Deviance (G<sup>2</sup>)</b>	<b>Significance</b>
<b>Home Office Notifications</b>	Time	2	13.30	p <0.010
	Group	1	13.67	p <0.005
	Interaction	2	8.79	p <0.025
<b>NTRD Notifications</b>	Time	2	11.40	p <0.010
	Group	1	0.76	N/S
	Interaction	2	5.39	N/S
<b>NTRD Current Injecting</b>	Time	2	7.48	p <0.025
	Group	1	1.24	N/S
	Interaction	2	0.20	N/S
<b>NTRD Needle Sharing</b>	Time	2	0.73	N/S
	Group	1	0.35	N/S
	Interaction	2	3.42	N/S
<b>NTRD Methadone Prescribing</b>	Time	2	13.02	p <0.010
	Group	1	2.34	N/S
	Interaction	2	8.72	p <0.025

Key: d.f. Degrees of Freedom  
NTRD North Thames Regional Database  
N/S Not Significant

Figure 1

Drug users notified to the Home Office Addicts Index

United Kingdom 1980 -1990



\* NO COMPARABLE FIGURES ARE AVAILABLE BEFORE 1987

Figure taken from: Drug Misuse & Dependence. Guidelines on Clinical Management. Department of Health. London HMSO 1991 p.5

## **APPENDIX 1**

### **The Misuse of Drugs Act 1971**

1. Restriction of supply such that the drugs are confined for genuine medical use, hence, practitioners are permitted prescribe, administer, manufacture and supply most controlled drugs provided that certain record keeping and safe custody requirements are observed. A special licence is required to produce, possess or supply those drugs including cannabis and LSD, which have no established therapeutic use and a similar licence is required for heroin and cocaine.
2. If a doctor or other practitioner has committed an offence under the Misuse of Drugs Act or been found by a Tribunal to have been prescribing irresponsibly, the Home Secretary has the power to direct the withdrawal of authority to prescribe, administer, manufacture, compound or supply specified controlled drugs.
3. There are provisions designed to restrict the supply of controlled drugs which are enforced by the Drugs Branch of the Home Office, the police and officers of the Board of Customs and Excise.
4. There are specific penalties for any infringement of the control of supply of the controlled drugs.

## **APPENDIX 2**

### **Semi-structured interview**

#### **used in the Survey of Drug Misusers' views of their General Practitioners**

## PATIENT'S INTERVIEW

Place of Interview:

Date of interview:



PERSONAL DETAILS

Age: \_\_\_\_\_ yr Date of birth: Month Year

MALE/FEMALE

Age at finishing full time education: \_\_\_\_\_ yrs

Country of birth \_\_\_\_\_

Ethnic group (interviewer's perception)

- |                    |                      |
|--------------------|----------------------|
| (1) Afro-Caribbean | (5) Indian           |
| (2) Black          | (6) Pakistani        |
| (3) White          | (7) Bangladeshi      |
| (4) Chinese        | (8) Mixed            |
|                    | (9) Others (specify) |

What ethnic group do you consider yourself to be?

- |                    |                      |
|--------------------|----------------------|
| (1) Afro-Caribbean | (5) Indian           |
| (2) Black          | (6) Pakistani        |
| (3) White          | (7) Bangladeshi      |
| (4) Chinese        | (8) Mixed            |
|                    | (9) Others (specify) |

Employed? YES/NO

Receiving sickness benefit at present? YES/NO

Occupation \_\_\_\_\_

Type of present employment? \_\_\_\_\_

Father's Occupation \_\_\_\_\_

Marital Status:

- |                               |              |
|-------------------------------|--------------|
| (1) Single                    | (5) Divorced |
| (2) Co-habiting               | (6) Widowed  |
| (3) Married - living together | (7) Others   |
| (4) Married - living apart    |              |

Type of accommodation:

- |           |            |
|-----------|------------|
| (1) Flat  | (2) House  |
| (3) Hotel | (4) B&B    |
| (5) Rough | (6) Others |

Ownership of accommodation:

- |             |             |
|-------------|-------------|
| (1) Council | (3) Private |
| (2) Rented  | (4) Owned   |
| (5) Rough   | (6) Others  |

GENERAL PRACTITIONER

- 1) Are you currently registered with more than one GP? YES/NO

If YES, how many?

- Have you ever registered TEMPorarily with a G.P. in order to obtain drugs? YES/NO

If YES, how often in the past 6 months?

If patient has no GP, go on to question 14

With respect to the doctor(s) whom you consider as your main GP(s),

- 2) Are you registered as a temporary or permanent patient?

(A) Temporary patient ..... ☐ ☐

(B) Permanent patient ..... ☐ ☐

(C) Registered with GP but moved out area ..... ☐ ☐

(D) Don't know ..... ☐ ☐

- 3) Can you remember how long have you been with this GP?

(A) Just registered ..... ☐ ☐

(B) Less than 6 months ..... ☐ ☐

(C) 6 months - 1 year ..... ☐ ☐

(D) 1-5 years ..... ☐ ☐

(E) Over 5 years ..... ☐ ☐

- 4) Is your GP: male/female/Don't know (1) (2)  
m f m f  
☐ ☐ ☐ ☐

- 5) What sort of practice does your GP work in?

(A) A single handed practice ..... ☐ ☐

(B) A group practice ..... ☐ ☐

(C) Others (specify) ..... ☐ ☐

(D) Don't Know ..... ☐ ☐

6) Why did you choose your GP?

- (A) Nearest doctor .. . . . ☐ ☐
- (B) Treats a lot of patients with HIV infection ☐ ☐
- (C) Known to treat drug users .. . . . ☐ ☐
- (D) A good choice of doctors in practice .. . ☐ ☐
- (E) Allocated by FHSA .. . . . ☐ ☐
- (F) Known personally .. . . . ☐ ☐
- (G) Recommended by a friend .. . . . ☐ ☐
- (H) Private doctor .. . . . ☐ ☐
- (I) Recommended by clinic/ .. . . . ☐ ☐
- (J) Needle Exchange/DDU/HIV/ .. . . . ☐ ☐
- (K) Comm Drug Team .. . . . ☐ ☐
- (L) No reason .. . . . ☐ ☐
- (M) Other (eg male/female: Young/older) .. . ☐ ☐

7) Does your GP know about your drug use (1) (2)  
YES/NO ☐ ☐

If your GP does not know about your drug use go to question 18

8) How did your GP find out about your drug use?

- (A) Patient volunteered information .. . . . ☐ ☐
- (B) Referring clinic informed GP .. . . . ☐ ☐
- (C) GP asked directly .. . . . ☐ ☐
- (D) GP informed by another doctor .. . . . ☐ ☐
- (E) GP informed by social services .. . . . ☐ ☐
- (F) GP found out from addicts index .. . . . ☐ ☐
- (G) GP found out from another patient .. . . . ☐ ☐
- (H) Don't know .. . . . ☐ ☐
- (I) Other .. . . . ☐ ☐

9) Has your GP agreed to prescribe for you? (1) (2)  
YES/NO ☐ ☐

10) (If yes) Which drug(s) in particular does he/she prescribe?  
(specify)

- |                     | (1)                      | (2)                      |
|---------------------|--------------------------|--------------------------|
| (A) Benzodiazepines | <input type="checkbox"/> | <input type="checkbox"/> |
| (B) Opiate drugs    | <input type="checkbox"/> | <input type="checkbox"/> |
| (C) Antidepressants | <input type="checkbox"/> | <input type="checkbox"/> |
| (D) Other           | <input type="checkbox"/> | <input type="checkbox"/> |

11) (If no) do you know why not?

(1) (2)

- |  |                          |                          |
|--|--------------------------|--------------------------|
| (A) Will only prescribe non-dependent drugs<br>(eg antibiotics)  | <input type="checkbox"/> | <input type="checkbox"/> |
| (B) Has asked me to return after he/she<br>gets more information | <input type="checkbox"/> | <input type="checkbox"/> |
| (C) I have not asked for a prescription                          | <input type="checkbox"/> | <input type="checkbox"/> |
| (D) I don't need a script<br>(eg I get my drugs from the clinic) | <input type="checkbox"/> | <input type="checkbox"/> |
| (E) My GP doesn't feel happy/confident<br>in giving me a detox   | <input type="checkbox"/> | <input type="checkbox"/> |
| (F) My GP doesn't trust me                                       | <input type="checkbox"/> | <input type="checkbox"/> |
| (G) My GP doesn't treat drug users                               | <input type="checkbox"/> | <input type="checkbox"/> |
| (H) Don't know   | <input type="checkbox"/> | <input type="checkbox"/> |
| (I) Other  | <input type="checkbox"/> | <input type="checkbox"/> |

12) (Apart from prescribing) What else has your GP done to help  
you with your drug problem?

(1) (2)

- |  |                          |                          |
|--|--------------------------|--------------------------|
| (A) None   | <input type="checkbox"/> | <input type="checkbox"/> |
| (B) Referral to drug agency                            | <input type="checkbox"/> | <input type="checkbox"/> |
| (C) Referral to street agency                          | <input type="checkbox"/> | <input type="checkbox"/> |
| (D) Help in contacting NA                              | <input type="checkbox"/> | <input type="checkbox"/> |
| (E) Help with physical complications                   | <input type="checkbox"/> | <input type="checkbox"/> |
| (F) Help to abstain                                    | <input type="checkbox"/> | <input type="checkbox"/> |
| (G) Counselling  | <input type="checkbox"/> | <input type="checkbox"/> |
| (H) Education  | <input type="checkbox"/> | <input type="checkbox"/> |
| (I) Referral to other speciality<br>(eg. psychiatrist) | <input type="checkbox"/> | <input type="checkbox"/> |
| (J) Other  | <input type="checkbox"/> | <input type="checkbox"/> |

Give details

13) What sort of attitude does your current GP have regarding your drug taking? (1) (2)

- |   |                          |                          |
|---|--------------------------|--------------------------|
| (A) Refused permanent registration            | <input type="checkbox"/> | <input type="checkbox"/> |
| (B) Refused temporary registration            | <input type="checkbox"/> | <input type="checkbox"/> |
| (C) Refused to see                            | <input type="checkbox"/> | <input type="checkbox"/> |
| (D) Threatened to remove me from the list     | <input type="checkbox"/> | <input type="checkbox"/> |
| (E) Refused to prescribe                      | <input type="checkbox"/> | <input type="checkbox"/> |
| (F) Refused to deal with my non drug problems | <input type="checkbox"/> | <input type="checkbox"/> |
| (G) Breach of confidentiality                 | <input type="checkbox"/> | <input type="checkbox"/> |
| (H) Hostile, unfriendly manner                | <input type="checkbox"/> | <input type="checkbox"/> |
| (I) Sympathetic                               | <input type="checkbox"/> | <input type="checkbox"/> |
| (J) More willing to help me                   | <input type="checkbox"/> | <input type="checkbox"/> |
| (K) More concerned about me                   | <input type="checkbox"/> | <input type="checkbox"/> |
| (L) Franker and more open minded towards me   | <input type="checkbox"/> | <input type="checkbox"/> |
| (M) Happy to prescribe for me                 | <input type="checkbox"/> | <input type="checkbox"/> |
| (N) Other                                     | <input type="checkbox"/> | <input type="checkbox"/> |

Give details

If the patient is registered with a GP, move on to question 18

14) Why are you NOT REGISTERED with a GP at the moment?

- |   |                          |
|---|--------------------------|
| (A) Afraid to register  | <input type="checkbox"/> |
| (B) Reluctant to register as I don't think I'll find a doctor willing to take me on | <input type="checkbox"/> |
| (C) No confidence in doctors  | <input type="checkbox"/> |
| (D) Use casualty instead  | <input type="checkbox"/> |
| (E) Use DDU instead   | <input type="checkbox"/> |
| (F) Doctors will take my children away if they find out about my habit              | <input type="checkbox"/> |
| (G) Rejection by previous GP  | <input type="checkbox"/> |
| (H) Never stay in one place long enough   | <input type="checkbox"/> |
| (I) Other (specify)   | <input type="checkbox"/> |

15) Have you ever been registered with a GP since leaving home? (1) YES (2) NO (3) PVT DOCTOR

16) (If YES) How long ago were you last registered (or considered yourself registered)?

years..... months.....

(If NO) Why have you never been registered with a GP since leaving home?

- (A) No confidence in doctors ☐
- (B) Never bothered to register ☐
- (C) Never bothered to register as I don't think I will find a doctor willing to take me on. ☐
- (D) Use casualty instead ☐
- (E) Use DDU instead ☐
- (F) Doctors will take my children away if they find out about my habit ☐
- (G) Others (specify) ☐

17) What have been the attitudes of your previous GPs in relation to your drug taking? Can you describe your experiences?

- (A) Not applicable, I have never had a GP ☐
- (B) Refused to see ☐
- (C) Refused registration Temp/Permanent ☐
- (D) Threatened to remove me from the list ☐
- (E) Refused to prescribe ☐
- (F) Refused to deal with my non drug problems ☐
- (G) Breach of confidentiality ☐
- (H) Hostile, unfriendly manner ☐
- (I) Friendly, co-operative ☐
- (J) Prescribed for me ☐
- (K) Dealt with my non drug problems ☐
- (L) Became more concerned about me ☐
- (M) Has made efforts to help me ☐
- (N) Has agreed to prescribe for me ☐

EXPECTATIONS OF GENERAL PRACTITIONER

- 18) Do you think GPs should prescribe for drug users?

YES\NO

Elaborate:

- 19) What sort of help do you think a GP should provide a drug user? (run through prompts)

- |                            |                          |
|----------------------------|--------------------------|
| (A) Counselling/support    | <input type="checkbox"/> |
| (B) An empathetic approach | <input type="checkbox"/> |
| (C) Ordinary medical care  | <input type="checkbox"/> |
| (D) Detoxification         | <input type="checkbox"/> |
| (E) Maintenance            | <input type="checkbox"/> |
| (F) None                   | <input type="checkbox"/> |
| (G) Other                  | <input type="checkbox"/> |

- 20) (If the patient suggests detoxification or/and maintenance then ask) Which drugs would you like your GP to prescribe?

- |   | Detox                    |                          | Maintain                 |                          |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
|   | (1)                      | (2)                      | (1)                      | (2)                      |
| (A) Methadone Mixture (Linctus)                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (B) Methadone Amps                                  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (C) Heroin Amps                                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (D) Temgesic  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (E) DF118   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (F) Benzos  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (G) Other (eg clondine, naltrexone<br>amphetamines) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

- 21) Do you prefer your GP rather than hospital (e.g. DDU) drug services to prescribe a detox or maintenance?

Detox: YES/NO

- 22) (if YES) Why do you prefer this arrangement?
- (A) Difficult to get to Drug services ☐
  - (B) DDU's inflexible ☐
  - (C) Better rapport with GPs ☐
  - (D) Long waiting lists for drug services ☐
  - (E) Others ☐
- 23) How often would you like your GP to prescribe for you?
- (1) Daily
  - (2) Weekly
  - (3) 2 Weekly
  - (4) Monthly
  - (5) Others
- 24) How often would you like to collect your drugs from the chemist/pharmacist?
- (1) Daily
  - (2) Weekly
  - (3) 2 Weekly
  - (4) Monthly
  - (5) Others
- 25) When you visit your G.P. for a script, would you prefer to have a clear agreement/contract on how your drug use is to be managed or would you be happier with a more flexible approach to the handing out of scripts?
- (1) Contract
  - (2) Flexible
- 26) If you placed yourself in the position of a G.P. who is seeing a drug user where a contract has been agreed, what would YOU do as a GP if a drug user does not stick to his/her contract? (run thru prompts)
- (A) Stop treating patient ☐
  - (B) Carry on as before if genuine reasons ☐
  - (C) Carry on as before even if no genuine reason ☐
  - (D) Ask patient to come back in a few weeks ☐
  - (E) Refer elsewhere ☐
  - (F) 1-3 chances then review ☐
  - (G) Others (specify) ☐





33) If you have stopped injecting how long ago was this?

34) How often were you injecting at this time?

- (1) More than once a day
- (2) Daily
- (3) Weekly or more
- (4) 1-3 times per month
- (5) Less than once per month

35) In the last week/month which of the following drugs have you used (tick one or more)

week    month

week    month

- |                   |                          |                          |                       |                          |                          |
|-------------------|--------------------------|--------------------------|-----------------------|--------------------------|--------------------------|
| (A) Methadone     | <input type="checkbox"/> | <input type="checkbox"/> | (F) Amphet/stimulants | <input type="checkbox"/> | <input type="checkbox"/> |
| (B) Heroin        | <input type="checkbox"/> | <input type="checkbox"/> | (G) Cocaine/Crack     | <input type="checkbox"/> | <input type="checkbox"/> |
| (C) Other Opiates | <input type="checkbox"/> | <input type="checkbox"/> | (H) Solvents          | <input type="checkbox"/> | <input type="checkbox"/> |
| (D) BZDs          | <input type="checkbox"/> | <input type="checkbox"/> | (I) Ecstasy           | <input type="checkbox"/> | <input type="checkbox"/> |
| (E) None          | <input type="checkbox"/> | <input type="checkbox"/> | (J) Others            | <input type="checkbox"/> | <input type="checkbox"/> |

36) Are you currently on a prescribed DETOX/maintenance PROGRAMme? YES\ NO

Or on your own REDUCTION programme YES\NO

37) How much ALCOHOL have you consumed in the past week? \_\_\_\_\_ UNITS

38) Do you suffer with any MAJOR ILLNESS or serious injury at the moment? YES\NO

If YES, What TYPE of ILLness:

- |     |     |
|-----|-----|
| (1) | (2) |
| (3) | (4) |
| (5) | (6) |

39) Have you suffered with any MAJOR ILLNESS or serious injury in the PAST? YES\NO

If YES, What TYPE of illness:

- |     |     |
|-----|-----|
| (1) | (2) |
| (3) | (4) |
| (5) | (6) |

CRIMINAL ACTIVITY

- 40) Have you had any trouble with the police or the law? YES/NO
- 41) Have you ever been CHARGED or arrested? YES/NO
- 42) Have you ever been FINED or on probation YES/NO
- 43) Have you ever been in PRISON? YES/NO

HIV CARE

- 44) Have you ever had an HIV TEST? YES/NO
- Do you know the result? (1) YES (2) NO (3) DONT KNOW
- Month & Year of last test:

If no or negative, go on to question 52

- 45) Do you have any health problems from HIV? YES/NO

If HIV NEGATIVE or not registered with a GP move on to question 52

## IF REGISTERED WITH GP AND HIV POSITIVE:

- 46) Does your GP know you are HIV positive? YES/NO (1) (2)  
☐ ☐
- 47) (If NO) Why does your GP not know you are HIV positive? (1)(2)
- (A) No chance yet to see GP since test results known ☐ ☐
- (B) Fear of negative reaction ☐ ☐
- (C) Fear of complete rejection ☐ ☐
- (D) Fears regarding confidentiality - partner/family ☐ ☐
- (E) Fears regarding confidentiality - reception/other staff ☐ ☐
- (F) Fears of GP records re insurance reports ☐ ☐
- (G) GP not experienced/knowledgeable enough ☐ ☐
- (H) Too embarrassed ☐ ☐
- (I) Fear of exposing IV drug use ☐ ☐
- 48A) Were you registered with your current GP before you knew you were HIV positive? YES/NO (1)(2)  
☐ ☐

48B) (if NO) Why did you register with him/her?

(A) First registered because HIV positive

(1)(2)

☐ ☐

(B) Changed doctor because changed area

☐ ☐

(C) Changed doctor because HIV positive

☐ ☐

(D) Others

☐ ☐

If GP does not know go on to question 52

49A) Did you actually tell your GP about  
your HIV status? YES/NO

(1)(2)

☐ ☐

49B) (If YES) Why did you do so?

(1)(2)

(A) Recommended to by HIV/STD clinic

☐ ☐

(B) Recommended to by partner or friend

☐ ☐

(C) Recommended to by family

☐ ☐

(D) Recommended to by other doctor

☐ ☐

(E) Wanted GPs help

☐ ☐

(F) Thought I had to

☐ ☐

(G) Others

49C) (If NO) How did he/she find out?

(A) Dr suggested test

☐ ☐

(B) Dr referred for test

☐ ☐

(C) Dr ordered test

☐ ☐

(D) Dr asked if positive

☐ ☐

(E) Dr informed by clinic

☐ ☐

(F) Dr informed by medical sources

☐ ☐

(G) Dr informed by patients on list

☐ ☐

(H) Others

☐ ☐

50A) Has your doctor given you any  
information on HIV? YES/NO (1)(2)  
☐ ☐

(50B) (If Yes) What sort of information did he provide (may require  
prompting)?

- |   | (1)                      | (2)                      |
|---|--------------------------|--------------------------|
| (A) Given information about AIDS in general                   | <input type="checkbox"/> | <input type="checkbox"/> |
| (B) Given information about the meaning<br>of a positive test | <input type="checkbox"/> | <input type="checkbox"/> |
| (C) Discussed the pros and cons of a positive test            | <input type="checkbox"/> | <input type="checkbox"/> |
| (D) Discussed how to inform partners                          | <input type="checkbox"/> | <input type="checkbox"/> |
| (E) Discussed how to inform family or friends                 | <input type="checkbox"/> | <input type="checkbox"/> |
| (F) Discussed safe drug use and needle hygiene                | <input type="checkbox"/> | <input type="checkbox"/> |
| (G) Discussed safe sexual practices                           | <input type="checkbox"/> | <input type="checkbox"/> |
| (H) Others (specify):   |                          |                          |

51A) Since your GP has known about your  
HIV status, has his attitude towards you  
changed in any way? YES/NO ☐ ☐

- 51B) (A) More approachable/helpful ☐ ☐
- (B) Less approachable/helpful ☐ ☐
- (C) Very hostile ☐ ☐
- (D) Removed from list ☐ ☐
- (E) Others ☐ ☐

Details: eg How has he been more approachable or hostile?

## SEXUAL PRACTICE

52) Have you been sexually active in the past year? YES/NO

53) If YES, would you describe yourself as:

- (1) Heterosexual
- (2) Bisexual
- (3) Gay

54A) (If applicable) In your sex life, do you/does your partner use condoms?

- (1) Never
- (2) Occasionally
- (3) Sometimes
- (4) Usually
- (5) Always

54B) If you/your partner do use condoms, is it for:

- (1) birth control purposes
- (2) because of a concern about HIV
- (3) both of the above
- (4) or other reasons

55A) (If applicable) Do you use contraception?

- (1) Yes
- (2) Sometimes
- (3) No

55B) If yes or sometimes, what sort of contraception are you currently using?

- (1) Pill (combined or mini)
- (2) Diaphragm
- (3) Injection (Depo-Provera)
- (4) Other
- (5) Rhythm (safe period) method
- (6) Coil
- (7) Sterilised

56A) Where do you obtain your contraceptive(s) from?

- (1) Not applicable (eg, sterilised years ago)
- (2) Well women clinic
- (3) Own G.P.
- (4) Other G.P.
- (5) Hospital D.D.U.
- (6) Friends
- (7) Other drug users
- (8) Chemist
- (9) Other

56B) Do you receive any contraceptive advice?

YES/NO

If YES from whom / where?

## PARENTING

57A) Do you have any children,

YES\NO

57B) If YES, how many do you have/had?

AGE	SEX	LIVES WITH PATIENT	IF NOT, WHERE? (OPTIONS BELOW)
a)		YES/NO	
b)		YES/NO	
c)		YES/NO	
d)		YES/NO	
e)		YES/NO	
f)		YES/NO	
g)		YES/NO	

- 1) Left home (grown up)
- 2) Live with another member of the family
- 3) Died
- 4) In care
- 5) Fostered
- 6) Adopted away
- 7) With other parent
- 8) Don't know
- 9) Other

If respondent is male go to Question 62 - otherwise continue

## FOR WOMEN ONLY

58A) Are you pregnant at the moment? YES ☐  
 NO ☐  
 DON'T KNOW ☐

58B) (If yes) Are you having antenatal care? YES/NO ☐ ☐

58C) Who is providing it?

- (1) GP (2) Hospital  
 (3) GP and hospital (shared care) (4) other(specify)

IF HAS GP:

59) Has your GPs attitude to your drug use (1)(2)  
 changed in view of your pregnancy? YES\NO ☐ ☐

If YES, in what way - Give examples:

60A) Have you ever had a cervical/PAP smear? YES\NO (1)(2)  
☐ ☐

60B) If YES when did you have your last cervical smear?

Day Month Year

61) If you have had a smear, where did you have it done?

- (1) your own GP  
 (2) other GP  
 (3) well women clinic (not in the GPs surgery)  
 (4) when pregnant  
 (5) STD clinic  
 (6) other (specify)

62) We have asked you a lot of questions and we value your cooperation, is there anything else you would like to add?

Cooperation  
 with  
 interview

0 1 2 3 4 5 6 7 8 9 10



## **APPENDIX 3**

### **SOCIAL FUNCTIONING QUESTIONNAIRE**

**(Tyrer, 1990)**

## QUESTIONNAIRE

Date:

Please look at the statements below and TICK the reply that comes closest to how you have been over the past two weeks.

I complete my tasks at work  
and at home satisfactorily:

Most of the time  
Quite often  
Sometimes  
Not at all

I find my tasks at work and  
at home very stressful:

Most of the time  
Quite often  
Sometimes  
Not at all

I have no money problems:

No problems at all  
Slight worries only  
Definite difficulties  
Very severe problems

I have difficulties in getting  
and keeping close relationships:

Severe difficulties  
Some problems  
Occasional problems  
No problems at all

I have problems with my sex  
life:

Severe problems  
Moderate problems  
Occasional problems  
None at all

I get on well with my family  
and other relatives:

Yes, definitely  
Yes, usually  
No, some problems  
No, severe problems

I feel lonely and isolated from  
other people:

Almost all the time  
Much of the time  
Not usually  
Not at all

I enjoy my spare time:

Very much  
Sometimes  
Not often  
Not at all

## **APPENDIX 4**

### **Course Programme**

### **of Small Group Education of General Practitioners**

**12.00 - 12.30 LUNCH**

**12.30 - 1.45 INTRODUCTION**

Basic information will be provided on drugs commonly misused and complications due to misuse with special reference to HIV. Treatment methods will be briefly covered and a special emphasis on the medicolegal aspects of the management of drug misuse in general practice will be discussed.

Dr Clare Gerada, General Practitioner and former Drugs Training Officer SE Thames London.

Dr Roger Farmer, Consultant Psychiatrist/Senior lecturer  
Drug Addiction Unit, St Georges Hospital  
London

**1.45- 2.00pm BREAK**

**2.00-2.30pm PATIENTS VIEWS ON GENERAL PRACTICE CARE**

Presentation of the results of a survey conducted in the last year in different Central London sites attended by drugs users for treatment of their problem.

Dr Charles Hindler, Research Fellow, Royal Free Hospital Medical School, London

**2.30-3.15 PATIENTS ACCOUNTS**

Interactive session: an informal question and answer session with drug users who are being actively treated in general practice.

**3.15-3.40 BREAK - TEA & BISCUITS**

**3.40-5.30 pm HOW DO DOCTORS MANAGE DRUG USERS**

Interactive session: question and answer session to discuss patient care and some specific management difficulties. The panel will be as follows:

Dr Matthew Johnson, General Practitioner, London

Dr John Cohen, General Practitioner, London

Dr Roger Farmer, Consultant Psychiatrist, London

Dr Clare Gerada, General Practitioner, London

**12.00 - 12.30 LUNCH**

**12.30 - 1.30 OTHER AGENCIES APPROACH**

Question and answer session with a group of non medical professionals involved in the day to day care of drug misuser. Information on other services and alternative approaches will be provided. The panel is composed of a group of professionals working in the community, needle exchange and street agencies.

Mr James Tighe, HIV and Drug Prevention  
Ms Sally Spurrell, Community Drug Manager  
Mr Eric Schneider, Angel Drugs Project, London

**1.30-1.45 BREAK - TEA & BISCUITS**

**1.45-3.00 SMALL GROUP DISCUSSION**

Group discussion of real cases presented by the participants OR in the absence of such clinical material, a discussion of case vignettes. This session will attempt to arrive at consensus management strategies.

**Facilitators**

- 1) Dr John Cohen, General Practitioner
- 2) Dr Roger Farmer, Psychiatrist
- 3) Dr Clare Gerada, General Practitioner
- 4) Dr Charles Hindler, Psychiatrist
- 5) Dr Irwin Nazareth, General Practitioner
- 6) Dr Matthew Johnson, General Practitioner

**3.00-3.30 FEEDBACK AND CONCLUSIONS**

Feedback of views expressed in discussion groups and a summary of conclusion by each of the participating groups. All course members will be allocated to 2 monthly follow up groups with details of dates and times to be discussed on the day.

## APPENDIX 5

### Likert Scales to evaluate Small Group Teaching Programme

#### Course Evaluation - Day 1

##### **1. Introduction: Drs. C. Gerada & R. Farmer**

0	1	2	3	4	5	6	7	8	9	10
Not at all useful										Useful
0	1	2	3	4	5	6	7	8	9	10
Uninteresting										Interesting

##### **2. Patients' accounts**

0	1	2	3	4	5	6	7	8	9	10
Not at all useful										Useful
0	1	2	3	4	5	6	7	8	9	10
Uninteresting										Interesting

##### **3. Patients' views on general practice: Dr. C. Hindler**

0	1	2	3	4	5	6	7	8	9	10
Not at all useful										Useful
0	1	2	3	4	5	6	7	8	9	10
Uninteresting										Interesting

##### **4. How do doctors manage drug misusers: Drs. C. Gerada, R. Farmer, J. Cohen**

0	1	2	3	4	5	6	7	8	9	10
Not at all useful										Useful
0	1	2	3	4	5	6	7	8	9	10
Uninteresting										Interesting

##### **5. Overall evaluation of Day 1**

0	1	2	3	4	5	6	7	8	9	10
Not at all useful										Useful
0	1	2	3	4	5	6	7	8	9	10
Uninteresting										Interesting

## Course Evaluation - Day 2

### **1. Other Agencies Approach: Mr. J. Tighe, Ms. S. Spurrell, Mr. E. Schneider**

0      1      2      3      4      5      6      7      8      9      10  
Not at all      Useful  
useful

0      1      2      3      4      5      6      7      8      9      10  
Uninteresting      Interesting

### **2. Small Group Discussion**

0      1      2      3      4      5      6      7      8      9      10  
Not at all      Useful  
useful

0      1      2      3      4      5      6      7      8      9      10  
Uninteresting      Interesting

### **3. Feedback and Conclusions**

0      1      2      3      4      5      6      7      8      9      10  
Not at all      Useful  
useful

0      1      2      3      4      5      6      7      8      9      10  
Uninteresting      Interesting

### **4. Overall evaluation of Day 2**

0      1      2      3      4      5      6      7      8      9      10  
Not at all      Useful  
useful

0      1      2      3      4      5      6      7      8      9      10  
Uninteresting      Interesting

## **APPENDIX 6**

### **Drug Training Questionnaire**

**used in the Small Group Education of General Practitioners Study**



QUESTIONNAIRE

NAME

--

SEX

--

PRACTICE ADDRESS


NUMBER OF PARTNERS/ASSISTANTS INCLUDING SELF	
---	--

TRAINING PRACTICES	YES	NO
--------------------	-----	----

TOTAL PRACTICE LIST SIZE	
--------------------------	--

YEAR OF QUALIFICATION	
-----------------------	--

HAVE YOU ATTENDED ANY TALKS OR SEMINARS ON DRUG USE IN THE LAST YEAR?	YES	NO
--	-----	----

## SECTION 1

*For the purposes of this questionnaire, the phrase drug user refers to a person taking heroin, other opiates (eg Codeine derivatives, Temgesic, Methadone), cocaine or amphetamines. It excludes patients taking these drugs for conditions other than drug dependence.*

If you have never seen a patient for use of any of the drugs listed above please proceed directly to Section 3.

If you have not seen a patient within the last four weeks please proceed directly to Section 2.

If you have treated such a patient in the last four weeks please complete the following:

1. Please state the number of patients you saw over the last 4 weeks who were dependent on/used the drugs listed below:

a) Heroin .....

b) Other opiates .....

c) Amphetamines .....

d) Cocaine/Crack .....

2. Please state to the best of your knowledge how many of the patients listed above were:

a) Injecting .....

b) Were attending for the first time with a drug problem ....

c) Were women .....

d) Were under 21 years .....

3. In your opinion how many of the first time attenders were seeking:

- a) A prescription or other help concerning withdrawal/rehabilitation ....
- b) A prescription for continued use of opiate drugs .....
- c) Treatment for physical complications of drug use .....
- d) Consultation regarding HIV/AIDS .....
- e) Other help (specify) .....

## SECTION TWO

*We would now like to know about your usual practice with heroin or other opiate users (eg Temgesic, Codeine derivatives).*

If you have never attended such a patient please proceed to Section 3.

Please think about any recent contact you have had with such patients - by recent contact we mean within the last six months. Please tick the appropriate box to indicate the course of action you tend to take in dealing with them.

Tick one box for each of the following:

	Always	Usually	Sometimes	Occasionally	Never
a. Assessment of patient by taking case history					
b. Physical examination of patient					
c. Treatment of medical complications of drug use					
d. Testing or arranging for testing of urine					
e. Prescribing of opiates for up to 6 weeks					
f. Prescribing of opiates for 6-12 weeks					
g. Prescribing of opiates for over 3 months					
h. Referral to hospital drug service					
i. Referral to voluntary agency in drugs field					
j. HIV Counselling					
k. HIV testing					
l. Notification to the Home Office					
m. Notification to North East Thames data base					

SECTION TWO/A

Please answer either yes or no, the following three questions:

- a. Do you routinely test the urine of drug users when:
  - (i) they first present to you    Yes / No
  - (ii) once they are in treatment?    Yes / No
- b. Would you be prepared to provide a maintenance prescription to an opiate user?    Yes / No
- c. Would you agree to consider continuing with a Methadone script if you discovered that the drug user had used "street" drugs on one occasion?    Yes / No

### SECTION 3

Whatever your previous experience, please indicate what your policy and practice are likely to be in responding to heroin or other opiate users who may consult you in the future. How likely would you be to take each of the following courses of action? TICK ONE BOX FOR EACH ITEM.

	highly likely	likely	unlikely	highly unlikely
1. Treat physical complications of injecting drug use				
2. Make a referral to hospital drug service				
3. Make a referral to voluntary drug agency				
4. Prescribe short term (up to 6 weeks) methadone linctus/tablets				
5. Prescribe longer term (over 6 weeks) methadone linctus/tablets				
6. Prescribe methadone ampoule to an injecting user				
7. Give advice on safer injecting practices				
8. Provide counselling on less harmful injecting practices				
9. Provide counselling on safer sex in the context of HIV/AIDS				
10. Undertake management of an opiate user currently registered with the practice				
11. Agree to take on a known opiate user not previously registered with the practice				
12. Treat an opiate user who also abuses alcohol				
13. Treat an opiate user who also abuses benzodiazepines				
14. Treat an opiate user who also abuses stimulants				

# SECTION 4

Please tick the appropriate column to indicate your view on the following statements.

	strongly agree	agree	d/know or n/a	disagree	strongly disagree
There is no clearly documented advice available to GPs on the management of drug users					
Drug users are likely to present more severe management problems for the GP than other types of patients with similar socioeconomic backgrounds					
Even when drug users are not prepared to come off their drugs, the GP still has a positive role to play in their treatment					
Treating drug users is likely to disrupt the functioning of the surgery					
Drug users are too time consuming to be treated in general practice					
I am prepared to undertake treatment of drug users as willingly as any other type of patient					
Local specialist drug services respond well when referrals are made to them					
Treatment of drug users by the GP is too time consuming					
I would play a more active role in the treatment of drug users if I was supported by specialist agencies					
The best I can offer the drug user is referral to a specialist agency					
A GP who is prepared to treat drug users will attract too many of them					
Drug users deserve all the help they can get					
Drug use is mainly a medical problem					
Most GPs are experienced enough to manage drug users					

## SECTION 5

Please answer these questions from you current knowledge without referring to text books. If you do not know the answer, simply leave blank.

1. Name three controlled drugs:
2. It is a statutory requirement to notify all individuals using Temgesic for other than medical reasons  True/False
3. Following identification of the drug user, Home Office Notification should be carried out within (please tick one below):  a) 7 days b) 14 days c) 28 days
4. Give four general hazards of injecting drugs:  a) b) c) d)
5. Only doctors with a special Home Office Licence can prescribe Methadone Linctus  True/False
6. Crack is a smokeable form of Heroin  True/False
7. Notification of a drug user gives legal protection to that individual against possession of nonprescribed heroin  True/False
8. Methadone Detoxification should normally be undertaken in hospital  Agree/Disagree



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