Heroin Use in Northern Ireland: A Qualitative Study into Heroin Users' Lifestyles, Experiences, and Risk Behaviours (1997-1999)

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PREFACE

The data from this study were collected between 1997 and 1999 and several changes have occurred locally since that time. For several years and at the time of the study, issues relating to drug misuse fell under the authority of the Northern Ireland Office. Since 2000, the Department of Health, Social Services and Public Safety (DHSSPS) has assumed much of this responsibility, and symbolically this change places greater emphasis on the health aspects, as opposed to the criminality of drug misuse. Under the direction of DHSSPS the first pharmacy-based needle exchange programmes were implemented in 2001. Evaluation data from these programmes will be viewed with great interest and will further our understanding of accessibility and utilisation of the schemes. The DHSSPS also established the Drug Information and Research Unit, where staff are engaged in the management of data and the dissemination of information relating to drug misuse. In particular, the Unit has primary responsibility for the management of the recently developed, Northern Ireland Drugs Misuse Database. Another important change has been the creation of the post, Northern Ireland Drug Strategy Co-ordinator, held by Ms. Jo Daykin. Prior to that appointment, she was extensively involved in work relating to drug treatment and that experience may influence the direction of drug policy in Northern Ireland. Additional research, conducted since the data for the present study were collected, will contribute to our knowledge of injection drug use in Northern Ireland. A qualitative study of heroin users in Ballymena has commenced (Kathryn Higgins, Centre for Child Care Research, Queen's University, Belfast), and the local Public Health Laboratory Service plans to examine seroprevalence for HIV and other infectious disease among injecting drug users seeking drug treatment. Additionally, the DHSSPS has provided funds for research that will 1) provide estimates of the number of heroin users in Northern Ireland, and 2) examine the need for substitute prescribing in Northern Ireland. Results from these studies will further our understanding of heroin and injecting drug use in Northern Ireland.

Note:

An article on risk behaviours, drawn from this study, will be published in a forthcoming issue (2001) of the journal, *Substance Use and Misuse*.

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INTRODUCTION

Self-report studies based on samples of youth or young adults in Northern Ireland generally find lifetime prevalence rates for heroin use to be quite low, i.e., two percent or less (Craig, 1996; Health Promotion Agency for Northern Ireland, 1995; Miller and Plant, 1996; Northern Health and Social Services Board, 1996). Surveys of adults in Northern Ireland also show low rates of heroin use (Northern Ireland Office, 1998). These lifetime prevalence rates are fairly consistent with figures reported in Britain (e.g., Ramsay and Spiller, 1997) and in the United States (National Institute on Drug Abuse, 1996).

Official health indicators of heroin use in Northern Ireland include notification data and information pertaining to Hepatitis B, Hepatitis C, and Human Immunodeficiency Virus (HIV). Physicians are required to notify the Chief Medical Officer of the Northern Ireland Department of Health and Social Services when they attend a patient whom they consider to be or have reasonable grounds to suspect that s/he is addicted to cocaine or one of 13 opiates (heroin included). Although the overall number of notifications for these drugs has increased in Northern Ireland since 1995, the inadequacies of notification data have been documented (Hay and McKeganey, 1996). For instance, notification data are affected by the subjective decisions (Strang and Shah, 1985) and by regulatory compliance among physicians (Mott, 1994). Data reported by the Public Health Laboratory Service in Northern Ireland show low rates of Hepatitis B and C, and HIV transmitted through injecting drug use. These data, however, are limited in that they only include cases in which persons have been tested for disease. Additionally, individuals who test positive in other countries for these diseases, but who live currently in Northern Ireland, may not be included in the data.

With respect to other drug indicators, data indicate that seizures of heroin by police have increased since 1995. Drug seizures, however, are often a poor indicator of *drug use* (South, 1995), and may more accurately reflect a change in the reallocation of police resources (Hollywood, 1997).

Although self-report studies and official indicators of drug use can provide useful information about various phenomena, they reveal little about the context of drug use, or the behaviours, lifestyles and experiences of drug users. Qualitative research can contribute greatly to our understanding of illicit drug use and can also provide insight into the development and implementation of effective interventions (Fountain and Griffiths, 1999). The present study utilised a qualitative approach whereby in-depth interviews were conducted with persons who had injected or chased heroin in Northern Ireland. The study represents one of the first research investigations into heroin use in Northern Ireland.[1] In the absence of needle exchange and methadone maintenance it is important to learn how heroin users manage their drug careers and the findings presented herein shed some light with regard to this issue.

The purpose of the study was to examine patterns of drug taking, health issues (e.g., Hepatitis C), risk behaviours associated with injection practices (e.g., sharing injection equipment), experiences with drug treatment and related issues. The report includes a description of the methodology, selected findings and recommendations.

[1] Previous studies that addressed heroin or injection drug use in Northern Ireland include O'Neill (n.d.) and Carney et al. (n.d.).

METHODOLOGY

Sample and Recruitment

The sample included 43 current or former users of heroin who had used heroin (injected or chased) in Northern Ireland. Given the exploratory nature of the study and the limited research into heroin use in the region, 'any use of heroin in Northern Ireland' was the only criterion for study participation.[2]

The study commenced in September 1997, although the majority of interviews were conducted in 1998 and 1999. Several strategies were undertaken in order to recruit potential candidates for the study. A description of the study was prepared and distributed to various contact persons after initial correspondence was conducted by telephone. Persons with whom the researcher made contact included selected community workers (e.g., persons working with youth, within large estates), general practitioners (GPs), treatment providers (statutory and voluntary) and other agencies that provided counselling in the areas of drugs or HIV/AIDS. Multiple contacts were made with treatment and other agency 'gatekeepers' throughout the study period, reminding them of the need for study participants. Copies of the study description also were placed near chemist venues, in selected GP offices and related sites and in news and entertainment sources. Additionally, a 'snowball sampling' strategy was used whereby persons who completed an interview were asked to refer other persons (e.g., friends, acquaintances, partners) who had used heroin. In all, 22 respondents were recruited through 'snowball sampling.' Other sources of referral included: persons that had knowledge of or informal access to the local drug scene (N=9), GPs and their offices (N=3), interviewers employed with a research project on Ecstasy use (N=3), one community addiction service (N=2), adverts posted adjacent to chemist shops (N=2), a local entertainment guide (N=1)[3], and an unknown source of referral.[4]

Demographic Characteristics of the Sample

Demographic data of the sample were as follows: Most respondents were male (N=36) and respondents' ages ranged from 18 to 48 (mean=30 years; median=29). Social class was defined by respondents. Thirteen persons were uncomfortable with this question; of the remainder, one identified herself as being 'poor,' 11 identified themselves as working class, four reported being 'between' working and middle class, ten were middle class, one reported being 'between' middle and upper class and two identified themselves as being from upper income backgrounds. In response to the 'social class' question, one respondent reported that he was

[2] Interviews were conducted with two persons who were born and raised in Northern Ireland but had never used heroin here. One had a lengthy history of heroin injection in two other countries, and had returned to Northern Ireland approximately two years before the interview date. The second respondent had chased heroin on a number of occasions but had never injected. He had returned to Northern Ireland a few months before the interview. The decision to interview these respondents despite their never having used heroin in Northern Ireland, was based primarily on the fact that both males believed that it was necessary for them to leave the heroin scene in which they were familiar so that they might abstain from heroin, hence their return to Northern Ireland.

[3] An advertisement that described the study appeared for a two-week period in one issue of 'That's Entertainment'.

[4] One respondent was so paranoid about protecting his anonymity, I purposely avoided asking him where or from whom he had learned about the study.

homeless. Twenty-six percent (N=11) of the respondents were employed in part- or full-time work at the time of the interview, 7% were students and 61% of the sample were unemployed (information was missing for three respondents).

Comparing these demographic data with findings reported from other studies is problematic in that studies differ greatly with respect to recruitment sources (e.g., treatment versus street sources), sampling strategies, and method and year of data collection. Nevertheless, the gender and age distribution of the sample are consistent with findings reported elsewhere. For example, a multi-city study of injecting drug users and HIV conducted by the World Health Organization (WHO, 1994) found that IDUs tend to be largely male (e.g., Berlin=55%; Bangkok=95%) and between 20 and 34 years of age. A multi-site National AIDS Demonstration Research Program, based on interviews with approximately 60,000 drug injectors and their sex partners in the United States, found that males comprised 75% of the 38,561 heroin users (Inciardi et al., 1998). Similarly, male IDUs comprised 72% of the sample in an Edinburgh survey conducted over a three year period (Peters, Davies and Richardson, 1998). The median age of IDUs in the Edinburgh study was 27 years. Prevalence estimates drawn from a capture-recapture study in Dublin found that of several gender/age groups, males, aged 15 to 24 included more opiate users than other gender/age combinations (Comiskey, 2000). Because Comiskey's study focused on prevalence, means and medians, were not reported.

The present study includes a smaller proportion of unemployed persons (N=61%) compared to studies conducted elsewhere. For example, Maher and Dixon (1999) conducted an ethnographic study of 143 heroin users in Australia in which 84% were unemployed at the time of the interview. Similarly, a survey conducted on the Wirral in 1985-1986 found that 83% of the opiate users were unemployed (Parker et al., 1988).

A majority of respondents (N=35) lived in County Antrim at the time of the interview, 32 of whom resided in Belfast. Seven respondents lived in various parts of County Down and one respondent resided in the south of Ireland but visited his partner in Northern Ireland on a regular basis. Although some of the respondents were born and raised in areas outside Belfast, most resided in Belfast at the time of the interview, thus, the sample is based largely on persons who resided in an urban setting during some or most of the heroin career. Their experiences may differ substantially from heroin users who live elsewhere in Northern Ireland. For example, a study conducted in Australia found that rural and urban injecting drug users differed in terms of their injecting practices, needle sharing, and prevalence and incidence of Hepatitis C (Aitken, Brough and Crofts, 1999). Haw and Higgins (1998) found fewer differences between rural and urban injectors in Scotland although urban injecting drug users (IDUs) had higher rates of HIV and were more likely to share injection equipment with persons outside their immediate social network.

Interview Guide

The interview guide consisted of a number of items relating to patterns of heroin use (e.g., frequency, dosage, age at onset, method of administration), risk behaviours associated with injection practices, descriptions of first, last and heaviest use of heroin, treatment experiences (including 'self-help' strategies), interactions with medical staff regarding heroin use, and related lifestyle and attitudinal issues. Historical information on other drug use as well as demographic data were collected at the conclusion of the interview. Interviews were conducted in various settings, including a university office (N=29), respondents' homes (N=7), treatment sites (N=1), community drop-in centres (N=3) and public venues (N=3). Interviews were

conducted within a one- to three-hour time frame. Tape recordings were not used with this sample; rather, the researcher took notes during each interview. This decision was based on the assumption that heroin users represent a marginalised sub-culture in Northern Ireland, whose behaviour is highly stigmatised. The researcher believed that respondents might be concerned about voice identification from taped interviews; field notes removed this threat. Respondents were assured of anonymity and confidentiality and paid £15-20 for their participation in the study.[5]

[5] Several ethical protocols were followed in the study. For example, with few exceptions, the interview site was determined by the respondent who was provided with several options and asked to choose the interview setting in which s/he was most comfortable. Also, respondents were reminded that they could end the interview at any time, and without consequence. Efforts were made to ensure that the interview questions did not cause psychological or emotional harm to the subjects.

FINDINGS

Initiation

Geographic Location and Age

The majority of respondents (i.e., 61%; N=26) initiated heroin use in other countries; the remainder initiated in Northern Ireland. The average age of initiation into heroin use was very similar in both groups (persons who first used in Northern Ireland=19 years; elsewhere=20 years). Persons who initiated use in Northern Ireland did so an average of 4 to 4½ years later (average year = 1990-1991) than persons who initiated heroin use elsewhere (average year = 1986). The data are summarised by decade in Table 1:

Table 1. Place of Initiation into Heroin Use (raw numbers)

Decade	Northern Ireland	Elsewhere
1970s	----	4[a]
1980s	7	13
1990s	10	9

Note: [a] This figure includes one respondent who initiated heroin use in 1969.

These data indicate that more than half of the respondents who initiated use in Northern Ireland did so in the 1990s. Comparatively, half of the respondents who initiated heroin use elsewhere, did so in the 1980s. The earliest year during which initiation occurred in Northern Ireland was 1981 (data not shown in tabular form).

It should also be noted that one may initiate heroin use through chasing in one country, but first inject in another. In fact, five respondents who initiated heroin elsewhere, subsequently injected the substance for the first time in Northern Ireland. One respondent initiated heroin use through sniffing in Canada, first chased heroin in London, but injected first in Northern Ireland.

Reasons for Initiating Heroin Use

Curiosity is an important factor in the decision to initiate heroin use (Stephens and McBride, 1976; Waldorf, 1973) and several respondents in the present study mentioned curiosity as a motivating reason using heroin initially. However, this factor also has been identified as a reason for trying various drugs (Solowij, Hall and Lee, 1992; Spruit, 1997). Parker et al. (1988: 47) suggested that curiosity to use heroin is often 'aroused by the previous use of other drugs.' A qualitative component of a Dublin study of heroin users supported this claim in that use of other drugs 'was already an accepted feature of young people's lives' (Coveney et al., 1999: 33). Findings from the present study are consistent with these results:

> ‘I was chasing a high. I had tried everything. I was curious’ (009, first chased heroin at age 18, injected at age 19-20).
>
> ‘I’d do this [heroin] and see what it was like. I had had other drugs in Belfast’ (051, initiated in Denmark in 1969).
>
> ‘I wanted to be part of it…I’d done everything – glue sniffing – you name it’ (010, first injected brown heroin in Northern Ireland, 1983).

The opportunity to use heroin also has been identified as an important factor in initiation (Stephens and McBride, 1976). People generally do not seek heroin for initial use; rather, most individuals ‘stumble upon [situations conducive to use] quite accidentally’ (Stephens, 1991: 76). A male respondent in the present study reported being with a female friend and a male supplier. The respondent and the female friend had used acid and cannabis but neither had used heroin. The respondent recalled that the female friend had stated, ‘So and so is coming to the house – want to try smack?’ The respondent reported that he was ‘dubious, but curious’ and tried the drug at that time (007).

Parker et al. (1988) interviewed five persons who reported trying heroin when their preferred drug was not available. The ready availability of heroin contributed, albeit passively, to initiation. In the present study, four respondents reported that they had not intended to use heroin but did so after their drug of choice was not available. One respondent had hoped to buy amphetamine but his regular supplier could not get the substance. The supplier did have heroin available for sale which the respondent then purchased (041). Another respondent reported being a regular user of crack cocaine. On a day when he could not find crack, a supplier ‘found heroin for me’ (002). Two respondents reported that they had intended to buy cannabis but that none was available. One of these persons indicated that the dealer had mentioned the availability of heroin instead (032, snorted heroin initially in Dublin). The second reported that his suppliers were injecting when he called to buy cannabis. He snorted the heroin, but did not use it again until the following year (074).

Some respondents, however, reported that they had declined to use heroin when they first were presented with an opportunity to use. One male described an event that occurred in Northern Ireland in 1993, before he had ever used heroin. He was party to a setting within which two acquaintances were about to inject heroin. ‘I freaked – chickened out – I [literally] ran away [from the scene]’ (009). Another respondent had friends/acquaintances in his company at various times who were injecting heroin. He had injected amphetamine in their company from time to time, but he did not use heroin until three years later, when initiation occurred through chasing (004).

Friends’ use of heroin also has been identified as a factor that contributes to initiation into heroin use (Waldorf, 1973). Only a few respondents in the present study alluded to the importance of friends’ use. A male respondent’s good friend and house mates were chasing regularly and the respondent described them as ‘very intelligent’ persons who were graduates of a prestigious university in England, and who had ‘everything going for them’ (050, first chased at age 22). Another reported being influenced by her boyfriend, whom she had dated for four months prior to her initiation:

> ‘…He had used before and he wanted me to appreciate it’ (003, age 19).

Other reasons for initiation were provided as well. For example, a male reported that his drug of choice was amphetamine, a substance that he eventually injected because he 'no longer got the effect from just snorting it.' (004). He believed, however, that the amphetamine eventually produced some powerful and 'terrible hallucinations.' He lists this factor as the major reason why he first used heroin, chased for two years and then progressed to injection. Heroin helped 'to keep myself normal. [When using heroin] I felt normal' (004).

Route of Administration

Maher and Dixon (1999) found that 52% of the heroin users in their Australian study had initiated heroin use through injection. A substantially lower percentage was found in the present study whereby 30% (N=13) of the respondents had initiated heroin use through injection. About one-half (N=21) of the present study's sample had initiated through chasing; 12% (N=5) initiated through snorting/sniffing, and 7% (N=3) through smoking (non-chasing).[6,7] Persons who had initiated in Northern Ireland were just as likely to do so through injection (29%) as were persons who initiated elsewhere (32%).

As discussed above, 29 of the 43 respondents had initiated heroin use through means other than injection. Of this group, all but four persons subsequently progressed to injection. Further, most respondents injected heroin within one to two years of initiation through chasing, smoking or snorting although this time period varied from one week to 11 years.

Injection generally is more difficult to master than swallowing, sniffing, snorting or smoking a drug, thus, most people must be taught how to inject (and to a lesser extent, how to chase). 'Teachers' often play a crucial role in the initiation of others into heroin use (Waldorf, 1973). Indeed, most respondents in the present study reported that other IDUs either injected them or showed them how to inject heroin or another substance. 'Teachers' were largely male although in four instances, female IDUs played the role of teacher for male initiates. 'Teachers' also are important when initiation occurs through chasing. In this setting, 'teachers' have been known to heat the foil in which the heroin is placed, and hold it, allowing the beginner to inhale the vapours (Griffiths, Gossop, and Strang, 1994).

Drug use history and polydrug use

Heroin was the preferred drug of choice for most of the respondents. Others preferred a second drug in addition to heroin. For example, when asked about their 'drug of choice' three persons listed both heroin and cocaine (014, 042, 074), one listed heroin and crack cocaine (075), one listed heroin and amphetamine (080), and two listed heroin and Morphine Sulphate Tablets (MSTs) (002, 009). The remainder did not consider heroin to be their drug of choice, preferring cannabis (032, 033, 034), amphetamine (031), hallucinogens (013), cocaine (072), crack cocaine (005, 071), and Ecstasy (024).

[6] Data were missing for one respondent.

[7] Purity levels represent one factor that can influence the desire to inject rather than to chase heroin. Injecting is the most efficient method to administer low purity heroin. Alternatively, chasing high purity heroin can produce significant effects for the user. Heroin users have been known to adapt to drug market changes. For example, as heroin becomes less available and purity decreases, injection of the substance may increase (Grund et al., 1992).

Ninety-eight percent of respondents had consumed cannabis at some stage, and 35% of the sample (N=15) had used cannabis daily during the six-month period prior to the interview. These figures are similar to those found in a Northern Ireland study of Ecstasy users (McElrath and McEvoy, 1999). Ninety-three percent of the respondents in the present study had used hallucinogens (LSD or magic mushrooms). Ninety-eight percent had used amphetamine and 35% had injected the substance. The vast majority (95%) had consumed Ecstasy, and some had injected the substance. One-half of the sample (N=17) had used Ecstasy in the six months preceding the interview, but only seven persons had used Ecstasy at least once a month during that time period. Further, about half the sample (N=21) initiated Ecstasy use *after* heroin initiation, a finding that might reflect drug preferences, differences in drug markets, or the historical availability of Ecstasy in Northern Ireland.

Ninety percent had snorted cocaine, and 63% of the sample had injected cocaine. Research in New York City has shown that use of crack cocaine is fairly common among heroin users (Brunswick and Titus, 1998). Indeed, the majority of respondents (80%) in the present study had used crack cocaine. Several persons had injected crack cocaine, a finding that reportedly has been increasing in London (Hunter et al. 1995).

With the exception of cannabis, most respondents did not use these other drugs on a 'regular basis.**'** For example, 12 persons had used cocaine (through snorting or injecting) during the six-month period prior to the interview, three of whom had used the substance once a month or more. Only two persons reported using crack cocaine at least once a month during the six-month period prior to the interview.

Respondents who had tried crack cocaine held mixed opinions of the drug. Some described it in negative terms, e.g., a 'horrible experience' (009). Another stated that his use of heroin was 'manageable,' despite chasing ½ gram of heroin per day during his heaviest period of use. He reports that his life changed drastically when he began using crack cocaine:

> 'I hit rock bottom. I stole, lied and manipulated. With heroin – no – I got far worse once I used crack' (050, age 28).

A female had injected cocaine but preferred crack, and on one occasion she and another person consumed several grams of crack cocaine in one night (005). A male respondent reported using crack cocaine nearly everyday for a period of two years (046). He also consumed between one and two grams of heroin during his heaviest use of that drug.

Most respondents had at some stage used another drug to 'substitute' for heroin when that drug was not available. For example, 92% of the sample had used Temazepam, a drug which has been linked with overdose among injectors (Hammersley, Cassidy and Oliver, 1995). Several respondents had injected Temazepam, although frequency of use through this method was quite low. Respondents' use of other drugs included: Diconal, Dihydrocodeine (DFs), Morphine, Morphine Sulphate Tablets (MSTs), Palfium, Pethidene, and Temgesic.

Patterns of Heroin Use

Current and former users

For this study, 'current users' included those respondents who had used heroin within the two-month period prior to the interview. This definition is consistent with that used by the World Health Organization (WHO) in its multi-site study of injecting drug users (WHO Collaborative Study Group, 1993). Using this definition, most of the respondents (N=25) were categorised as current users of heroin. About one-third (N=14) of the sample were former users, i.e., had purposely abstained from heroin for at least two months prior to the interview (range = two months to four years). The remaining number of respondents (N=4) did not fit neatly into these categories. Two respondents, for example, had stopped using heroin about one month prior to the interview but were determined that abstinence would be permanent. A third respondent had used heroin one time only and he had never injected. A fourth respondent had chased three times, events which had occurred well before the two-month cut-off period. He was fairly certain, however, that he would use heroin again. Additionally, some of the 'former users' who had abstained from heroin continued to use other drugs, such as cannabis, or DFs and diazepam to assist with anxiety and other symptoms.

Fluctuations in heroin use

Several respondents indicated that they had experienced periods of daily use of heroin, but for various reasons would at times abstain temporarily or use less frequently. A male respondent reported that he had snorted or injected heroin nearly everyday from age 21 to 27 (032, age 39). Since that time, he had 'dabbled' a bit but had never again used as frequently. Another respondent had injected ½ to 1 gram of heroin per day during a two-year period in her early 20s (048). She abstained altogether for approximately nine years. During the interview she noted that:

> 'I've been dabbling [with heroin and MSTs] for three to four months. I've injected ½ dozen times in [the last] three to four months' (048).

Some respondents reported that their 'heaviest' use of heroin consisted of using daily whenever possible over a period of 28 years (050), once or twice a day for a six-month period (034), injecting one to two grams per day for several months (044, 046), and injecting ½ gram of heroin per day and spending £1,000 per month on heroin (021). Others reported using greater amounts. For example, one male respondent reported that he had used approximately 3 ½ grams of heroin per day, early on in his heroin career. He confided this amount to treatment staff but recalled: 'No one believed I was using that much but I was' (041).[8] This peak usage was followed by a 16-month period when the respondent used on a few occasions only. The peak usage coincided with his parent being ill, and the respondent believes that this illness triggered his heavy use. Similarly, another respondent claimed that he never used heroin to 'celebrate' some event or happy occasion; rather heroin was used only when things were going badly (074).

Switching between injecting and chasing

Several respondents noted that they switched from injecting to chasing at times. Some did so because they perceived chasing to be 'more sociable' (015, 075). A

[8] This amount is entirely possible; higher amounts with daily use have been documented (Gossop, 1998: 137-138).

male respondent had injected heroin, often on a daily basis, over a period of 14-15 years. His last injection occurred four months before the interview although he had chased on several occasions during that time: 'I'm trying to get off it – so I'm chasing.' (014), thus, self-regulation was used in an effort to get clean. Others preferred to inject but at times would chase because 'I'd no needle on me' (047). Although one person mentioned that he preferred to chase because 'needles frighten me' (034), no one suggested that they chased because of the risks associated with injection.[9]

Risk Behaviours

The majority of respondents reported great difficulties in obtaining new needles/ syringes to be used for injecting heroin and other drugs. The limited supply of needles as well as the cost of purchasing needles, contributed to a number of behaviours that pose risk for HIV and other infectious diseases, and contribute to other health consequences.

Obtaining needles/syringes

A number of difficulties were reported by respondents who tried to purchase needles from chemists in Ballymena, Bangor, and other areas outside Belfast (e.g., 029, 030).

> 'One chemist sold out of decency. Another chemist stopped selling when the deaths occurred…[A third chemist required you] to sign your name' [for needles but not for prescription or over-the-counter drugs] (004, male).

The respondent reported that his group would not buy needles from chemists very often because 'too many people, going back too often would spoil it for us.' (004). A respondent who lives in a town/city in County Down reported that he never has purchased needles from a chemist there because, 'They all know my family' (034).

A male respondent lived in Belfast at the time of the interview and recalled an occasion in which he attempted to buy needles from a chemist in Ballymena. The employee had refused the sale and at the time, he was quite 'sick' [withdrawal].

> 'I asked for a pen and paper and said, "I want your name and [the name of this chemist" ' (080, age 27).

The employee then provided him with one needle. On several occasions, this respondent had made great attempts to obtain new needles. He admitted that he had stolen needles from hospitals but had also obtained them from Merchant Quay in Dublin when he scored in that city.

Although he chases more than he injects, a respondent reported that he has purchased needles from dealers in Ballymena because chemists in Ballymena will not sell them to him (030). A few Belfast respondents reported that Belfast users have 'swapped needles for gear [heroin] in Ballymena' (001). Indeed when this researcher asked a few users how she could recruit other respondents from Ballymena, one suggested that she offer new needles/syringes as opposed to money as an incentive for study participation.

[9] Chasing heroin through inhalation of vapours has its own health risks. For example, studies conducted in Amsterdam (Wolters et al., 1982) and in New York City (Wren, 1996) have documented several cases of leukoencephalopathy – a neurological disorder – among chasers.

Most of the Belfast users reported that chemists had refused to sell needles/syringes to them at various times. For some persons, refusals occurred frequently. Some perceived that a successful purchase depended on the 'way you looked' (006), or never visiting the same chemist twice (048). The interview data clearly suggested that most respondents had made several attempts to purchase new needles but faced with structural barriers, were forced to use various negotiation skills in order to obtain.

Multiple injections

Needles are intended to be used one time only. However, the lack of available needles contributed greatly to multiple injections with the same needle. One respondent noted that he often uses the same needle several times per day over a period of a few weeks (041). Another reported:

> I've used one needle 14 times over a few days' (053, male, age 29).

Some estimated that they have used one needle to inject as many as 30 times (045, 080) and one reported that his 'jugular's messed as well' (045). Others were less precise, noting that 'we'd use 'til they got blunt' (004) and using blunt works was described as 'reversing a double decker into your arm' (071).

Cleaning injection equipment

Bleach is an extremely effective way to clean drug injection equipment and when used properly can inactivate the HIV found on such equipment (Shapshak et al., 1993). To their credit, some respondents reported that they used bleach to disinfect needles (008) and other injection equipment. One respondent made specific reference to bleach, and the sterilising of spoons and other injection equipment (009). He also reported that when injecting within a group of IDUs he 'would make sure it [the needle and syringe] would be clean for everyone.'

A few respondents had never heard that bleach should be used to clean equipment (e.g., 003). Some used other, less effective means to clean needles, e.g., cold water (027), vodka (003). Younger IDUs with shorter injection careers have been found to engage in more risk behaviours than older IDUs (Friedman et al., 1989). A male respondent in the present study noted that 'long term users would use bleach' but as for less experienced injectors, he recalled that:

> 'Nobody had a clue. We got no information – only from other junkies. We just mimicked what we saw [other users do]' (004, initiated heroin use at age 25).

Data collected from respondents, however, indicated that more experienced injectors also engage in considerable risk behaviours for infectious disease**.** A respondent who had initiated heroin use in 1981 reported that he uses a steriliser to disinfect needles, but only when he prepares to inject at home (041). Another admitted that it is 'difficult' to use bleach when he injects in the middle of the night (043, initiated heroin use nine years before the interview).

'Sharing' needles and other injection equipment

Koester (1994: 289) argues that the term, 'needle sharing' is a misnomer in that it suggests that the behaviour represents 'an act of reciprocity' based on the altruistic beliefs of the loaner. In fact, he suggests, the lending and borrowing of needles is

influenced greatly by their lack of availability. Nearly all of the injectors in the present study had at some point used another injector's needle/syringe. Some noted that they were less likely to borrow injection equipment in places where new needles/syringes were available, e.g., Dublin, Glasgow, and London. The scarcity of new needles/syringes in Northern Ireland contributed greatly to the loaning and borrowing of this equipment:

> 'People use another's syringe if there's no option. I don't think they [health officials, government] understand that. It's the height of stupidity, to make it difficult to get syringes…We've no choice…people are driven by their desire to obtain' (051, has tested positive for Hepatitis C)

For some, the urgency to use heroin took precedence over a search for a new needle:

> 'When you're sick enough, you'd use somebody else's' (041, male, age 32).

Consistent with research findings reported elsewhere (McKeganey and Barnard, 1992), the data drawn from the present study indicate that some respondents define 'sharing' in terms of their relationship with the loaner/borrower. That is, sex partners do not necessarily view the use of the partner's needle as a behaviour that constitutes 'sharing' (001, 002, 003). A female respondent reported that she has never 'shared' needles, but later in the interview she noted that she and her boyfriend used the same needle/syringe on every occasion that they injected together (021). A female reported that she and her boyfriend always shared needles and for the most part she appeared to be unconcerned about loaning their equipment: 'It's up to anyone else if they wanted to use our needle' (035). A male respondent reported that he and his girlfriend always 'shared' needles:

> '[We were having] unprotected sex, so why not?' (071, age 26).

Others noted the distinct possibility of 'accidental' use of another's needle/syringe, despite attempts not to do so:

> 'I may have accidentally shared. I'd wake up – we'd both wake up and there'd be two [sets of works] on the table. [We couldn't recall] which one was whose.' (074, male, age 43).

> 'At first, there's no way that we'd share [with one another]. He set his here…and then after awhile we wouldn't know whose needle was whose.' (005, female)

> '[At times] I can't remember which is my own' (073, female).

A few respondents acknowledged the importance of sterile needles but appeared lackadaisical about 'borrowing' from others, even when they believed that the loaner was positive for HIV-antibodies. A female respondent reported that she does not often use bleach but did so during the last injection episode while in the company of two other IDUs. Prior to that event she had heard that one of the IDUs was HIV-antibody positive. She made no attempt to clean the needle during the injection episode, although one of the IDUs who was present did so for her (073).

Another respondent described a situation in which he was in the company of two other injectors, both of whom were HIV-antibody positive. The two IDUs injected first and the respondent recalled that he was hesitant to use the needle. One of the other

IDUs showed him that they had placed plastic lining (from a carry/grocer bag) within the syringe and that this technique would protect the respondent when he injected with the same needle. The respondent injected at that time and recalled that the other IDU had learned the 'lining' technique while incarcerated in Mountjoy Prison. (080).

The data suggest that some respondents are unaware that other injection equipment (e.g., spoons, containers, water, cotton) and practises (separating drugs for use by two or more people) can serve as conduits for the spread of infectious diseases. In fact, some researchers have suggested that these methods might be responsible for the high incidence of Hepatitis C among injecting drug users (Coutinho, 1998). A male respondent described his most recent injection experience. Heroin or other drugs were not available so he injected the MST residue from another injector's filter:

> 'I know that person didn't have AIDS' (053, age 29).

Similarly, respondents noted the apparent lack of knowledge among other injectors:

> 'People [in NI] share spoons, etc. Hep C can live for some time on a spoon' (051, age 48).

> 'They thought they'd use my water…they're careless' (009, age 25).

Infectious Diseases

The 'sharing' (i.e., loaning or borrowing) of needles and other injection equipment can involve blood-borne contact which places injection drug users at risk for exposure to Human Immunodeficiency Virus (HIV), Hepatitis B, and Hepatitis C (British Medical Association, 1997). HIV among IDUs in New York spread very quickly, and during that time sterile needles for use by IDUs were not widely available (Des Jarlais, 1997). It has also been noted that the rapid spread of HIV occurred in part because IDUs were sharing 'with large numbers of other IDUs' (Des Jarlais, 1997: 90).

For ethical reasons, respondents were not asked about their HIV serostatus. The issue was discussed only during those few interviews when respondents raised the issue. Midway into the data collection this writer was encouraged by a health professional to inquire about respondents' knowledge of Hepatitis C. In all, 20 respondents were asked about this issue.

Six persons had tested negative for Hepatitis C although the date of testing in relation to the injection history was not ascertained. One of these persons recalled that he had never heard of the disease until he was in recovery when treatment staff offered to test him. Initially, this respondent refused to be tested after his GP advised him: 'If you do [test positive for Hepatitis C] you might not get insurance.' (006).

Seven of the 20 persons confided that they were positive for the Hepatitis C virus. Of those who were tested in Northern Ireland, none reported having had received pre- and post-test counseling for Hepatitis C although some had received information sheets and leaflets. One female recalled that she 'started to feel unwell' about six weeks after she had first injected a substance (cocaine). She underwent testing at the time (early 1990s) and the results were returned, 'non A and non B Hepatitis' . She was tested again in 1997 and the Hepatitis C was confirmed.

A male respondent learned that he was positive for Hepatitis C six months after he had quit using heroin. He learned of his status by observing a letter addressed to his GP that had been placed in his patient file. The letter was written by staff at a Northern Ireland treatment facility and the content of the letter indicated that he was positive for Hepatitis C. He was never notified of the infection before that time. Nor did he ever receive pre- or post-test counselling for the infection. He recalled the day he discovered this information:

> 'I was crushed. I got clean – now they're telling me I'm going to die' (075, male)

Two other respondents reported that they had been tested for Hepatitis C, but did not share the results with the interviewer.

Three persons had no knowledge at all of Hepatitis C (015, 003, 006) and a fourth respondent reported that he had 'No need to be tested' (010) because ' I've never used a set of works more than one time.' Others had heard of the disease but lacked specific knowledge about, for example, the methods of transmission:

> 'I'd share [needles] with Hep C people' (045, age 32).

A female respondent (never tested) reported that her male partner (also an injector) tested negative for Hepatitis C and that for this reason, she would test negative as well (001).

Treatment and Related Support

Treatment History

As discussed previously, 14 persons were categorised as 'former users,' i.e., had purposely chosen to abstain from heroin and had been clean for at least two months prior to the interview. Of this group, two had completed a residential or out-patient treatment program (004, 008). The other 12 respondents had used various informal strategies that assisted them with quitting. Six persons who had not completed formal treatment, had attended Narcotics Anonymous (NA) meetings on a regular basis. Some attended meetings everyday for several months and then attended less frequently over time. The meetings provided contact with other former users and friendships developed that contributed to respondents' involvement in non-drug activities. These social interactions helped to fill the void that was created when respondents removed themselves from the heroin lifestyle. A few respondents noted, however, that Narcotics Anonymous, is virtually non-existent in small towns and rural areas in Northern Ireland.

Other former users reported that methadone (020,031, 035), a positive partner (032), the combined help from DFs, Valium and a supportive community worker (034) were instrumental in promoting their abstinence. One respondent was unable to credit any source except sheer determination (072).

Some current and former users had never had any contact at all with a drug treatment service. A male respondent who initiated heroin use nine years before the date of the interview, reported that he had never received treatment for heroin use. His longest period during which he abstained from heroin lasted three to four weeks:

> 'I've done my last hit 100,000 times – I've cried when I've burned gear in the fire' (042, age 25).

The reasons varied as to why respondents chose to avoid drug treatment. Some feared that work or relationships with family would be threatened because treatment entry implies a semi-public acknowledgement of heroin use:

> 'I'd be afraid of being a marked person. It would affect jobs, etc.' (048, female).

A female respondent had abstained from heroin and other drugs during the two-month period prior to the interview. She was hesitant to seek treatment in a residential setting because of concerns over the placement of her children:

> 'I wouldn't put my kids anywhere. That's out of the question.' (005).

She was hoping to receive drug treatment as part of a 'day release' program but at the time of the interview her name still was on the waiting list for the scheme. Another female was in residential treatment at the time of the interview and had not used heroin in one month. She stated that she avoided drug treatment for a long period of time:

> 'I thought Social Services would be at my door to take [my daughter]' (021).

The perception that parenting rights would be relinquished upon treatment entry was voiced by a third female respondent who described her experience upon entering a Northern Ireland treatment facility. Staff there inquired about her children and she perceived their response to be threatening:

> 'They said they'd send a social worker at any time' (001).

The majority of respondents had at one time sought treatment for heroin use but either opted out when they inquired about the program, or left the program after they had been admitted. Respondents noted that program regulations were too restrictive. Some claimed, for example that a statutory agency required abstinence from all drugs before they could be admitted to treatment. This regulation posed difficulties for respondents who were attempting to abstain from heroin but were using other drugs to ease withdrawal and anxiety:

> 'They told me to come off the benzodiazepines myself, and I'd get Britlofex' (053, age 29).

Another respondent was given Britlofex every day by a local agency until he tested positive for benzodiazepine:

> '[They] took me off it. I walked out, back on heroin, robbin' again' (080).

Others reported that they failed to comply with treatment regulations because they perceived staff to have little knowledge about heroin or other drug of choice or were put off by sharing treatment space with alcoholics with whom they had little in common. The general perception among respondents was that treatment in Northern Ireland focused on 'drink, drink, drink' (034).

> 'How can you get clean when there are people partying all around you? At night you hear people partying. They know alcoholics are in there. They're shouting up, "Want a drink?" I just packed it in and went home and watched videos' (009, age 25).

A respondent completed detoxification for heroin use on one occasion in Northern Ireland. He described his interaction with a staff person:

> 'I had a key worker but I never went back. I didn't like the woman. She thought I was moaning for the sake of moaning. There were hardly any heroin users there before me. I didn't think they believed me when I told them how much I was using' (074, age 43).

This perception was voiced by other respondents:

> '[The counsellor was] 'a great guy but the agency was out of touch – they had no mechanism for dealing with junkies' (023, male, age 34).
>
> 'They can't relate to heroin here. They know alcohol. I asked them about drug clients and they said they don't see too many. I told them in a few years they are going to have a big massive problem' (021, female).
>
> 'She didn't even know what a wrap of speed was' (047, describing her encounter with a staff member of a voluntary organisation that deals with addiction, circa 1990).

Respondents reported that the choice of treatment modalities for heroin use was extremely limited in Northern Ireland:

> 'I wanted help with meditation and relaxation – it's not available here. I wanted detox here, but there's a waiting list…I wanted it here and now' (053, age 29).
>
> '[Staff there] treat you like cattle. Individual needs are totally different' (009, age 25).
>
> [Staff name] is interested in promoting Britlofex [only]' (027, age 26).
>
> 'GPs are terrorised by Shaftesbury Square' (051, age 48).
>
> '[It's the] poorest drug service I've ever come across – very little discussion – a hurried service…a drug service should be merciful…it should have the quality of compassion' (053, age 29).

Services for persons with HIV or AIDS in Northern Ireland also were criticised:

> 'Agencies here cater to gay males not IDUs' (032, positive for HIV antibodies)

Interactions with GPs

During the course of this study this researcher spoke with a few general practitioners who were quite helpful with regards to questions and issues relating to heroin use. Five respondents noted that they had maintained excellent and trustful relationships with their GPs. Physicians are in a position to assist users but may be hindered by a lack of knowledge about heroin and addiction[10]:

[10] One respondent reported that he had told his family dentist that he was positive for Hepatitis C. In turn, the dentist contacted the respondent's mother and told her about

> ‘I took 60 DFs once, went to the hospital. I told the doctor I was sick [withdrawal]. He wrote ‘overdose’ [on the form]. He lacked the understanding…wrote overdose when I had withdrawal” (008, age 25)

> ‘You can’t smoke heroin’ Northern Ireland GP to Respondent (050).

A male respondent had Hepatitis C with major symptoms. He described his experience with hospital staff:

> ‘They insisted it was withdrawal but I had gear in my pocket. If it was withdrawal I would have used. A lot of times they see a junkie and don’t look further’ (051, age 48).

Similar to the notification system, a few respondents were hesitant to inform their GP about their drug use:

> ‘Being on record…you never know who is going to see it despite what they say’ (048).

One respondent had regretted that he had confided in his doctor:

> ‘He asks me questions sometimes, like who I get it from…He smirks when you’re telling him things…puts me straight off…Every doctor in the office knows. He discussed my business with the other doctors’ (034, age 31).

The respondent recalled one occasion during which a second doctor in the office had refused to provide his prescription of Valium and DFs. The respondent reported that the second doctor had told him that he ‘was on too many things’ in full hearing distance of other staff and patients.

A second respondent also recalled somewhat judgmental behaviour on the part of his doctor. Upon learning that the respondent was positive for Hepatitis C:

> ‘She [the doctor] backed away. She has never touched me since that day. Never examined me’ (075, male).

Getting Clean

Several respondents reported that they had purposely abstained from heroin at some point, although most of this group eventually relapsed. Respondents tended to use their own ‘self-help’ strategies in their quest to abstain from heroin or other drugs. A female respondent suggested that her children represented the real motivator to quit using drugs. Just prior to quitting, she had smoked 3 ½ grams of ‘pure rock’ over a three-day period:

> ‘I knew this was it for me…I didn’t want to be doing it. I have kids’ (005).

Other respondents mentioned the influence of a non-using partner:

> ‘[She] saved my life. She never used beyond the occasional joint. She detested needles.’ (032).

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the respondent’s status. Contact with the mother was made by the dentist without the consent of the respondent, an act which breaches confidentiality.

A male respondent recalled that he had stopped using heroin for 3 ½ years and without formal treatment. His girlfriend had smoked heroin on one occasion only. The drug had made her ill and she never used it again. She eventually threatened to leave him because of his heroin use. He reported that this ultimatum was his motivator to quit (080, has since relapsed). The female partner of another male respondent (020) described her feelings:

> 'It made me sick. Just the thought of sticking a needle in your arm…I had children, I didn't have time to go about high all day. I gave him an ultimatum. The needles go or I go. He was even ankle shooting at the time. Two days later he came by and said he wanted me'.

She and her IDU partner then proceeded to search the house for the needles that the respondent had hidden in 'food cupboards, under the sink, under the fridge, in the bath, under pillows, you wouldn't believe it. We found every needle and broke 'em.'

Two males reported that they had stopped using heroin when their partners became pregnant (009, 071). Other positive life changes also appeared to contribute to cessation. A male recalled that although several of his injecting friends had overdosed and died:

> 'It didn't really fizz on me…Then a number of things happened in [the period of] one year' (023, age 34).

Within that short period of time, the respondent had learned a language, attended University, sought and obtained valuable employment. Another respondent confirmed that his job was a primary motivator to get clean:

> '[Work] it's a protective thing…work is hard to come by' (006, age 29).

He noted also that a non-using workmate encouraged and supported him to get clean. Others mentioned 'determination' and the opportunity for an alternative lifestyle:

> 'I hate to use the cliché but I literally woke up one morning and thought, "I have to get out of this lifestyle"…We had a nice flat and it was squalid. We were sleeping in the living room because we couldn't heat the other rooms. We'd wake up in the morning and whoever was most together would get the hits together. The toilet was blocked….' (048).

In order to quit using, this respondent reported that 'I had to get out of that environment to do that.' She left the flat and stayed clean for about nine years. She mentioned that it was very difficult to give up heroin without formal treatment, but acknowledged that, 'I was lucky…I had somewhere else to go [to live]' (048, 'dabbling' at the time of the interview).

Relapse

Relapse is a common but not an absolute feature in the heroin career (Powell et al., 1993). Data drawn from the present study suggest that relapse into heroin use was associated with the continued connection to the heroin user lifestyle. Obtaining funds to purchase heroin, locating suppliers, negotiating the 'score,' anticipating the withdrawal, were all considered to be important lifestyle aspects:

> ‘The whole thing’s a ritual – a social thing. A big mission going up the road. I feel it in my stomach – the anticipation. You see each point on the motorway and you know you’re getting closer. The anticipation…’ (009, age 25).

> ‘All of their daytime activities focus on smack – you’re asking people to make a major change in their lives…they expect you to stop the cycle of scoring and getting money and do it overnight’ (053, age 29).

Several years prior to the interview, another male respondent recalled that he had relapsed after he abstained from heroin for six months:

> ‘I wasn’t prepared to give up the people, places, things [associated with heroin use]’ (008, subsequently quit using heroin again and had been clean for four years at the time of the interview).

The data suggest that rituals surrounding needle use and injection must be addressed in programs that seek to treat heroin addiction through injection. Some respondents, for example, have injected vodka, water, tequila, and other substances, ‘just to inject something’ (047). Some enjoy watching the needle ‘go in’:

> ‘I’m addicted to needles’ (080, male, age 27).

Another recalled the overwhelming sense of boredom while in a detoxification setting, where he often locked himself in the loo and pretended to inject:

> ‘My head would even nod’ (006).

Distancing one’s self from the lifestyle requires the substitution of other non-drug activities. A male respondent in the present study had injected heroin for 13 years when he got clean the first time. Prior to that event, he recalled that he was ‘exhausted…I was 31 and had done nothing with my life’ (007). At that point he started to attend Narcotics Anonymous (NA) meetings where he was able to observe and communicate with a number of people who had stopped using heroin. He relapsed shortly after he had stopped attending NA meetings, an outcome that he believes resulted because he had ‘lost contact with abstainers.’

Aftercare interventions that follow formal treatment are important for preventing relapse. The limited availability of aftercare programs in Northern Ireland made it difficult for heroin users who were attempting to abstain:

> ‘[There is] no support after detox except once every couple of weeks and by that time you are using [heroin] again’ (075, age 39).

Two respondents had completed treatment in Northern Ireland, in locations far from their homes. Commenting on this experience, they recalled:

> ‘It removed me from the situation. I was scared to return [to Belfast]. On the drive home I thought about heroin. I was safe there [in treatment]. You knew you didn’t use there’ (008, male).

> ‘I feel secure but I’m scared to leave – scared to go home…in case I start thinking about it [heroin]…I’m petrified about leaving here. There’s no pressure here’ (021, female).

Aftercare is particularly important when users have been exposed to treatment in settings far removed from their home environment and away from the heroin lifestyle. Most of these persons return to the home environment and are faced with continuous reminders about heroin, yet without the security of a controlled environment.

Experiences with and attitudes towards methadone

Most respondents had tried methadone, although considerably fewer had taken methadone under the care of a physician or through a methadone program. Attitudes about methadone were mixed with some reporting that methadone helped them a great deal. One respondent reported being clean from heroin for five weeks while taking methadone in the south of Ireland (015). Methadone helped other respondents stay clean for three months (045), twenty months (074), two years (044, 075). A male respondent was taking prescribed methadone in England, but upon moving to Northern Ireland, the prescription was discontinued by medical staff from a local statutory agency. At that time, the respondent had not used heroin in two years but relapsed when the prescription was refused. Another respondent had been taking prescribed methadone for three years, noting that the drug 'saved me' (020). His non-using female partner confirmed that methadone had helped the respondent. Other respondents reported that:

> 'I had my best marks [at University while] on methadone' (023, male).
>
> 'They must change the health policy here. It's a naïve policy based on negative findings about methadone' (053, male, age 29).
>
> 'I spend millions on street drugs – it's only £1,000 a year to keep you on methadone' (044).

Negative views, however, also were reported with some respondents noting that methadone is just as addictive as heroin (021, 046, 080). Still others maintained that although they personally did not care for methadone, the drug should be available for other users who might benefit from it (074).

Respondents also acknowledged that methadone might work best under a medically-supervised reduction regime (053, 075) and in the short-term (051). One male respondent reported that: 'The whole junkie lifestyle is taken away' (023) when persons use methadone and abstain from heroin.

Notifications

Thirty-three respondents were asked whether they believed that they had been officially registered as a 'drug addict' in Northern Ireland.[11] Of this group, ten respondents indicated that they were registered as 'addicts' at the time of the interview. Eight indicated that they had never been registered, and the remainder (N=15) were uncertain. Some respondents had no knowledge at all of the notification system and most persons were unaware that their names can be removed from the notification data:

> 'I've been clean for four years, but you're forever listed [in the Addicts' Index]' (008, age 25).

[11] This item was not included in the first draft of the Interview Guide but was added later.

From the interview data of the Wirral study, Parker et al. (1988: 56) briefly discussed the 'myths' that relate to the concepts of 'notification' and 'registration.' While the present study does not intend to distinguish between myth and fact, a number of respondents described their beliefs with regards to being notified as a 'drug addict.' For example, one respondent indicated that his GP informed him that that medical authorities would alert the RUC Drug Squad if he were to be registered (023). One respondent specifically requested of his doctor to not provide his/her name to the Register, 'I can't trust where that information is going' (027). Another reported that after he had completed a drug history form for a local drug service, he was dropped by his GP because the agency had provided his name to the Register (032). He described feeling 'tricked' because he was registered without his consent or knowledge and because he never received any formal treatment. Others expressed related concerns:

> 'It's a black mark on your name. It doesn't help with anything' (009, age 25).

> 'It hurts you with [trying to get] mortgages' (044, age 30).

Two persons suggested that being registered has its advantages, believing that the police will not 'hassle' or confiscate needles/syringes from registered 'addicts' (047, 071).

CONCLUSIONS AND RECOMMENDATIONS

(1) Increase the availability of needles/syringes and develop methods to enhance the accessibility and utilisation of needle/syringe provision

Official drug policies in various cultures have at times contributed to the spread of HIV (Wodak, 1992). For example, in the late 1980s, laws that prohibited the possession of needles/syringes without prescription were not enforced in Glasgow, wherein the rate of HIV infection among injectors was 5 percent. Alternatively, the rate of HIV was 50 percent among injectors in Edinburgh, where needle possession laws were rigorously enforced **(**Conviser and Rutledge, 1989). Citing other research, McKeganey and Barnard (1992) noted the possibility that HIV can spread more quickly when sharing occurs among large numbers of IDUs within particular groups. HIV among injectors spread very quickly, i.e., within two years, in Edinburgh (Robertson, 1994) largely because of 'the restricted availability of injecting equipment' (Gossop, 1998: 142). Escalating HIV incidence rates within brief time periods also have been reported in other countries (Des Jarlais et al., 1997). For example, HIV among IDUs in Manipur, North India was virtually non-existent in 1989 but within one year the rate among IDUs had escalated to 54% (Naik et al., 1991).

Research has shown that prevalence rates for injecting drug use are similar in Australia and the United States. The rate of HIV among injecting drug users in the United States, however, is more than double the rate among Australian injectors. Wodak and Lurie (1996) have examined these data in greater detail and have concluded that HIV did not reach epidemic proportions in Australia, largely because of the early implementation of several harm reduction policies (e.g., methadone, needle exchange, education for injectors).

The British Medical Association (1997: 148) has recommended that:

> 'Sterile injecting equipment should be comprehensively available in the NHS along with health advice and promotion, to reduce the spread of bloodborne disease and to improve general health among injecting drug users.'

Research has shown that needle/syringe exchange programs have affected the HIV seroprevalence rate (i.e., the rate per capita of persons testing positive for HIV antibodies). For example, an international survey that included several cities (most located within the United States) found that seroprevalence declined by 5.8% per year in those cities that had offered needle exchange but had increased in those cities that did not offer needle exchange (Hurley, 1997). However, needle exchange programs must be accessible to and utilised by injectors for there to be any substantial decrease in risky injection practises. Schemes that provide limited hours of operation (e.g., daytime hours only) might be under-utilised by injectors. Location and proximity to injectors also are important.

The provision of needles can be made through exchange programmes, pharmacies, hospitals, and street outreach. Used alone, each of these options has its limitations, particularly in certain areas. Injectors who wish to obtain needles in Ballymena, Bangor and other areas outside Belfast may be unwilling to obtain needles from chemists or needle exchange programs in these sites because of the perceived risk that others (customers, staff) will learn of their drug injection history. In this scenario, needle provision that is visible to the public might be less likely to be utilised by injectors for fear of stigma and reprisal. Street outreach or local community workers under the legal guise of confidentiality might represent a better source of needle provision in these areas.

The establishment of *multiple* sources of needle/syringe provision, however, is most likely to increase availability, accessibility and utilisation. Moreover, all of these strategies can serve as important referral sources for other services, e.g., drug treatment and counselling, Narcotics Anonymous, testing for HIV and other infectious diseases.

There is no evidence at all to suggest that increasing needle availability through legitimate means contributes to an increase in drug use (Des Jarlais and Friedman, 1992). When implemented appropriately, needle provision can lead to a reduction in the loaning and borrowing of needles/syringes. Grund et al. (1992: 387) report that sterile needles and syringes are widely available to injectors in Rotterdam. Absent a 'structural scarcity' of needles, injectors now view sharing needles as '*a deviant act*' [emphasis in original].

Even when sterile needles are available, however, research has found that injectors often are hesitant to carry needles on their person, so as to avoid arrest (Bourgois et al., 1997; Maher and Dixon, 1999). For this reason, injectors at times do not have needles in their possession when they are ready to use heroin (Koester, 1994), and this factor has been found to significantly increase the likelihood that injectors will share needles (Bluthenthal et al., 1999). Similarly, police intervention practises that involve the confiscation and destruction of needles/syringes, also has been found to contribute to risky behaviours among injectors (Maher and Dixon, 1999). These studies suggest the importance of resolving the often contradictory goals between health promotion and law enforcement.

A number of IDUs in the present study initiated use in other countries, and in places that have (reportedly) higher rates of HIV infection among injectors than in Northern Ireland. Places of initiation in the present study included Amsterdam, Dublin, Glasgow, Liverpool, London, and Manchester. Moreover, regardless of place of initiation, several respondents had injected in other countries, and at various points in the heroin career. Travel between countries among the IDU population and during the injection career, has been identified as a major factor in introducing the virus to the home country (Des Jarlais et al., 1997). The geographic proximity of Northern Ireland to other high injecting areas should not be ignored. For example, the United Nations International Drug Control Programme (1997: 90) has identified six 'factors' that 'appear to facilitate the emergence of injection as a pattern of drug abuse,' of which 'geographical proximity to a country or region wherein injecting is commonplace' is included.

Based on the relevant research and the findings reported in this study, the recommendations for needle/syringe policy are as follows:

- Increase the availability of free needles/syringes as quickly as possible.
- Provide multiple sources for obtaining needles/syringes, e.g., pharmacies, needle exchange sites, drop-in centres, street outreach, hospitals.
- Develop and implement periodic monitoring of the accessibility to and utilisation of sources of needles/syringes, to include qualtiative research with injectors.

(2) Expand and Improve Treatment and Support Services

This study included a number of persons who had never been exposed to or had never completed formal treatment for heroin use. Drug users who are not in contact with treatment or support agencies are at greater risk for disease than drug users who are (Grund et al., 1992). Treatment for heroin use must be expanded, both conceptually and geographically in Northern Ireland. A variety of treatment modalities (e.g., counsellors whose speciality area is heroin addiction, therapeutic communities, methadone) should be implemented as quickly as possible but based on careful planning, reviews of relevant research, and the use of consultants from other regions. General practitioners should have the option of prescribing methadone, and should receive training in the area of methadone, and heroin addiction, generally. The 'Glasgow Model' (see Gruer et al., 1997) should be strongly considered.

Treatment modalities should include staff who are specialised in issues relating to heroin and injection. Several respondents in the present study mentioned the drug lifestyle as being a component that must be addressed in treatment. Some reported their 'fixation' with needles and injecting. These issues should be addressed in any treatment component in which injectors partake.

Methods for improving treatment entry and treatment retention in Northern Ireland sites must be implemented. Treatment programs are often ideologically-based whereby staff view the program's treatment philosophy as the only way forward. This view fails to consider the individual needs of drug users. A better approach would be to offer a range of treatment services and attempt to match the needs of the individual with the services available. A co-ordinated approach whereby program staff liase with staff from other programs is likely to be beneficial to clients.

Drug treatment services that are specifically designed for women should be introduced, despite the belief that their numbers are too low to justify funding for such programs. Treatment programs for women might address issues relating to abuse, domestic violence, co-dependency, and parenting issues. Services must include crèche facilities and foster an environment whereby women do not feel threatened that children will be placed outside their care.

A number of respondents held positive attitudes about Narcotics Anonymous. In light of the benefits to which respondents referred, there is a need to expand the number of meetings in Northern Ireland, particularly in settings outside the Greater Belfast area. Also, drawing from the recent trend of some Alcoholics Anonymous programs (Johnson and Chappel, 1994, Kaskutas, 1994), there may also be a need to establish NA groups that cater to specific populations, e.g., women, gay males, etc.

With regards to heroin use, general practitioners were the first point of contact for many of the respondents and this finding suggests the importance of the GP as an important source of intervention. However, a 1987 study of British medical curricula noted the limitations of undergraduate training in the area of illicit drug use (Glass, 1989) and inadequacies in substance use training still were noted nine years later (Crome, 1999). This study did not examine GPs' level and extent of knowledge about heroin use and its appropriate treatments. It is recommended that this knowledge base be investigated, and where appropriate, that strategies be devised to improve the level of knowledge among GPs.

Injection drug use is a major factor in the transmission of Hepatitis C (Alter and Moyer, 1998). This study demonstrated that some respondents were unaware of the

disease or had little knowledge about prevention. Moreover, the lack of pre- and post-test counseling for persons who underwent testing for Hepatitis C is of great concern. Regardless of test outcome, this absence represents a missed opportunity to teach injectors about risk factors. In light of the finding that some persons who had tested positive for Hepatitis C were still using heroin at the time of the interview, the importance of establishing post-test counselling is imperative and should include information about the physical effects of continued use of heroin and other drugs (including alcohol) among persons infected.

Methadone

Several studies have demonstrated that methadone maintenance can reduce heroin injection (Ward et al., 1992), criminal activity (Longshore, Hsieh and Anglin, 1994) as well as the rate of HIV transmission among injecting drug users (Caplehorn and Ross, 1995). Although some research has disputed these findings, a meta-analysis that examined the effect of methadone maintenance on illegal opiate use, criminal activity, and risk behaviours associated with HIV, found that the treatment did indeed lower the rate at which these outcomes occurred (Marsch, 1998). In particular, the author noted that methadone maintenance had its greatest effect on drug-related crime.

Methadone treatment generates considerable debate among health officials and drug workers and the present study acknowledges this controversy. Respondents also voiced diverse views on the subject. These attitudes are important, however, for some respondents methadone appeared to be an effective way to reduce heroin consumption. Further, there is concern that the absence of methadone provision can create significant health problems for users. Pant and Soellner (1996: 15) described the situation in Germany in the 1980s when the professional medical agencies in Germany 'refused' to offer methadone as a treatment option to heroin injectors. A number of physicians in that country who prescribed the drug faced prosecution, and several responded by prescribing various drugs to treat withdrawal among heroin-using patients. Major problems with polydrug use began to surface, followed by a number of overdoses.

Based on the findings reported in the present study and from the relevant literature, it is recommended that a methadone reduction scheme be offered in Northern Ireland. Appropriate implementation based on additional research and careful planning is crucial if heroin consumption and associated problems are to be reduced. Inappropriate methadone dosages and detoxification that occurs too early can result in fewer successes (Wodak and Lurie, 1996). Also, it is important to disseminate knowledge to methadone clients so that they can avoid health risks associated with methadone (e.g., polydrug use, overdose, see for example, Carolan, 1999). Also, methadone might work best when combined with other support services, e.g., counselling, Narcotics Anonymous.

(3) Develop and Implement Effective Street Outreach Initiatives

IDUs in Northern Ireland represent a distinctly marginalized group which creates difficulties for the implementation of intervention strategies to reduce their risk behaviours that are associated with injection practices. Clearly, innovative strategies are required, and '…the only possible way to reach this population is to enter its own territory' (Grund et al., 1992: 338).

Funded street outreach is lacking in Northern Ireland. Street outreach represents an extremely effective method for assisting IDUs and can include multiple components,

e.g., teaching IDUs about the appropriate way to clean injection equipment and the implications that can result from risky injection practises, distributing knowledge about the sources of needle provision and the ways to reduce the likelihood of overdose, providing referrals to drug treatment, Narcotics Anonymous, and related services, distributing information about testing for HIV and other infectious diseases. The level of knowledge of Hepatitis C and the modes for transmission, in particular, were strikingly low among respondents. A good street outreach service could rectify this problem.

It is recommended that outreach services be implemented immediately. Outreach components that are poorly conceived or implemented inappropriately are likely to fail, thus, the components of any outreach program must reflect careful planning and involve a thorough review of relevant research literature in this regard. Models that can be used as guidelines for establishing local outreach include the Harm Reduction Team (Edinburgh), and the Lifeline Manchester Outreach Project (Manchester).

LIMITATIONS OF THE STUDY

Heroin users in Northern Ireland represent a hidden population. The sampling strategy (largely snowball) and data collection procedure (in-depth interviews) were the most appropriate methods for studying members of this subculture. By relying on a non-random sample of heroin users, the extent to which the views expressed by respondents reflect the experiences of the population of heroin users in Northern Ireland is unknown. Therefore, drawing inferences to the general population of heroin users in Northern Ireland is inappropriate.

A second potential limitation focuses on one characteristic of the sample. Most studies of heroin users have relied on treatment sites and related agencies for recruitment of respondents. As a consequence, we have little information about heroin users who are not in contact with support services (Robson and Bruce, 1997). In a sense, the present study filled this void to some extent in that the majority of respondents had never completed a treatment program and others had no exposure to treatment at all. Alternatively, the present study provides little information about persons who have completed drug treatment in Northern Ireland and who have abstained from heroin for long periods of time.

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