

## Original Papers

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# Follow up of a cohort of intravenous heroin users in north and south central Dublin and in Dun Laoghaire

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### Abstract

Three studies of intravenous heroin abusers, in electoral wards in the north and south of central Dublin and in Dun Laoghaire, were undertaken in 1982-84. One hundred and one out of the 203 intravenous injectors in these three studies are known to have been tested in Dublin for infection by the Human Immunodeficiency Virus (HIV) and 87 of the 101, or 86% are HIV Positive. Ninety two had also been tested for Hepatitis B infection (Hab) and 76 of the 92 were positive for the hepatitis antigen. The majority of those at present known to be HIV Positive in the Republic of Ireland are, or were, intravenous drug users.

### Introduction

In the late 1970's and early 1980's a major increase occurred in the abuse of heroin in Dublin, particularly in the impoverished central city north and south of the River Liffey. Many young people were injecting heroin daily and in order to buy the drug, which could cost as much as £100 per day, they resorted to crime, in particular robbery. This epidemic of heroin abuse caused considerable concern to the police (the Gardai), the general public and the government.

In 1982 a study was therefore undertaken by the Medico-Social Research Board, with the help of a local committee of concerned people and a local Parish Priest (PL) to ascertain the size and nature of the problem in a north-central Dublin electoral ward. In this ward, 85 heroin abusers were found who injected heroin regularly, generally daily, of whom 35 were aged 15-19; 40 aged 20-4 and 10 aged over 25. The prevalence of heroin abuse in the area among those aged 15-24 was found to be 10% of the ward's population. In those aged 15-19, it was 12% in males and 13% in females.<sup>1</sup> At this time there was no thought of infection by the Human Immunodeficiency Virus.

A second study was then undertaken in an inner city electoral ward south of the River, with the assistance of a local general practitioner (FDO'K). A target group of 100 heroin injectors were identified. Of these six refused to be interviewed and 12 had left the area. Eighty-two regular heroin users were left; 63 males, 19 females with a permanent address in the ward. They were all interviewed and a questionnaire was completed. The heroin usage was confirmed through medical records.

The extent of heroin use was greatest in the 1979-81 period and was concentrated as in the north central Dublin ward in the age group 15-24, particularly for those aged 15-19. In 1981, 8.5% of the population at risk in the age group 15-24 were injecting heroin regularly. 14.4% of males and 8.5% of females. During the period of the study, 10% of those aged 15-24 were abusing heroin by injection. The profile of the heroin user was similar to that found in the study in the north-central Dublin ward.<sup>2</sup>

A third study was then undertaken outside of Dublin city in a ward in the neighbouring Borough of Dun Laoghaire, in collaboration with the local Parish Priest whose special interest was social research (BP). Twenty nine of the 36 regular heroin users were found in a population of 1,327 young people aged 15-24, 2.7% of the males and 1.7% of the females in this age group. Eleven of the 29 heroin users lived in a flats complex with a population of 42 aged 15-24, (26%).

In contrast, only 18 out of the remaining 1,285 population aged 15-24 were using heroin in the other housing areas in the ward.

The first study in the ward north of the River in central Dublin was undertaken in collaboration with a local Parish Priest (PL) and members of a committee of local people in the ward who knew the drug takers well. Many of the heroin users had a prison record, generally for stealing. They were visited by one of two doctors (GD & JB) and a sociologist (AO'H). They were remarkably honest and straightforward in their accounts of how frequently they injected heroin, generally daily or more than once daily, how much they paid for the drug, how they obtained the money etc. In the south-central Dublin ward a local practitioner (FDO'K) knew many of those injecting heroin through his practice and he has kept in contact with most of them since the original study. There were 82, (63 males and 19 females) from 63 families living in the south-central Dublin ward included in the study and 81 of the 82 lived, or had lived, in the same flats complex.

## Method

The names and dates of birth of the heroin users in the studies undertaken in the north and south-central Dublin wards and in Dun Laoghaire were kept and the Virus Reference Laboratory at University College Belfield noted those that had been tested for Human Immunodeficiency Virus (HIV). (The ELISA Screening test confirmed by Western Blot). It is now possible to report what proportion of the heroin users in the three earlier studies who are known to have been tested are now HIV Positive. We also ascertained who in the study had had blood examined in the past for antibodies for the surface antigen of Hepatitis B (Hbsab). All personal information from the study has been kept strictly confidential.

## Results

Among the 85 who were injecting heroin eight years ago in the north-central Dublin ward, 31 out of the 35 who are known to have been tested were HIV Positive and four were HIV Negative at the time of the test As far as is known 50 out of the 85 have not been tested for HIV infection in Ireland although some of them may have been in England. (Table 1)

In south-central Dublin, 56 out of the 82 in the original study have had their blood examined for HIV infection. Pony-seven were HIV Positive and nine were HIV Negative that is 84% of those tested were HIV Positive. Twenty-six have not requested HIV tests in Ireland. Seven out of the 26 are now living in the United Kingdom. Of those whose blood

**Table 1 - Human Immunodeficiency Virus Tests in two wards of Dublin and in Dun Laoghaire**

	HIV+			HIV-			Not Tested			Total		
	M	F	T	M	F	T	M	F	T	M	F	T
North Central Dublin Ward	22	9	31	3	1	4	32	18	50	57	28	85
South Central Dublin Ward	37	10	47	4	5	9	21	5	26	62	20	82
Dun Laoghaire Ward	5	4	9	-	1	1	19	7	26	24	12	36
<b>TOTAL</b>	<b>64</b>	<b>23</b>	<b>87</b>	<b>7</b>	<b>7</b>	<b>14</b>	<b>72</b>	<b>30</b>	<b>102</b>	<b>143</b>	<b>60</b>	<b>203</b>

is known to have been treated for HIV infection in the two wards of north and south-central Dublin, 78 are HIV Positive and 13 are HIV Negative, that is 85.7% are HIV Positive. No doubt many of those that have not yet requested HIV tests are also HIV Positive.

In the Dun Laoghaire ward that had been studied the heroin usage was much less than in the central Dublin area. Thirty-six were included in the original study, 24 males and 12 females. Of these ten have had their blood examined for HIV infection, nine were positive and one negative at the time of testing. Taking the three areas together, 87 of the 203 are known to be HIV Positive (43%). Of those known to be tested 86% are HIV Positive. Five have died from AIDS and four have died from drug overdose or suicide.

Ninety-two of the 203 heroin abusers in the three studies have been tested, generally in the early 1980's, for Hepatitis B infection and the blood of 76 was Positive for Hepatitis B antigens, 82.6%.

**Table 2-Persons with HIV Antibodies In October 1991**

Risk Group	Positive Individuals
Intravenous drug abusers	616
<i>Males</i>	458
<i>Female</i>	150
<i>Sex not known</i>	8
Children at risk	76
Homosexual/Bisexuals	181
Haemophiliacs	112
Hospital staff/occupational hazard/needlestick	0
Transfusion	1
Blood donors	15
Organ transplant	0
Visa requests	1
Insurance	0
Prisoners	13
Heterosexual or unspecified	123
<b>TOTAL</b>	<b>1138</b>

## Discussion

Three studies were originally undertaken in 1982-4 to ascertain the prevalence of heroin and other drug usage in north and south central Dublin and in Dun Laoghaire, at a time when HIV infection was not under consideration. The major concern was the risk of hepatitis and of drug over-dosage among the heroin users. There was also concern about the increase in crime that resulted from the need to find the money to pay for the drug. The north and south-central Dublin areas studied were areas of poor education, very high unemployment, lack of job opportunities, overcrowding and general deprivation. The characteristics of these underprivileged young people were studied and reported upon by the Medico-Social Research Board.<sup>4</sup> Unfortunately, there has been little improvement in living conditions in central Dublin since these studies.

By October 1991 intravenous drug abusers constituted the largest group who were HIV Positive in the Republic of Ireland. (Table 2) Six hundred and sixteen of the 1,138 HIV Positive are, or had been, intravenous drug abusers, that is 54% of the total who are known to be HIV Positive. Intravenous drug abusers are also, no doubt, responsible for HIV infection among many of the infected children, of 'Prisoners' in the table and of a number of heterosexual partners of the drug abusers. Fortunately heterosexual spread of HIV infection in the general population of Ireland has been much slower than was previously feared.

The present report shows that there was a much greater danger than Hepatitis B infection threatening the subculture of young people who were injecting heroin and sharing their 'gear' (needles and syringes). They and the rest of the community were then unaware of the much greater risk of infection by the virus responsible for AIDS which can result in ill-health, psychological misery and premature death. Also, the HIV infection is then likely to be spread to the sexual partners of the heroin abusers and their babies. Since 1983, there has been a fall-off in the new usage of heroin<sup>5,6</sup> but recently an increase in the oral use of the amphetamine derivative 'Ecstasy'\* is perhaps the beginning of a new era of drug usage in Ireland.

Not enough is being done in our affluent society to improve living conditions, educational standards and work opportunities in central Dublin. Nor is the message yet accepted by many young people that to experiment with drugs, particularly heroin and other drugs by injection, is very dangerous. The majority of those infected by HIV, the AIDS virus, in Ireland are still those who injected heroin and shared their needles and syringes although the infection will, no doubt, slowly spread. In our opinion, not enough is being done to attract present and past injecting drug users to use the available medical and social resources.

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\* Ecstasy - MDMA, 3,4 methylene-dioxy methamphetamine.

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