

# A Comparison of Attendance For Drug Misuse to Dublin Accident & Emergency Departments 1985 -1993

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## Abstract

We compared attendance by Drug Misusers to the Accident & Emergency Departments (A&E) in the greater Dublin area during September 1985 and April 1993. The study took the form of a questionnaire administered by the previously trained A&E staff to attenders who were currently (within the past six months): experimenting with drugs, abusing drugs or drug dependent. Seventy three drug misusers were identified in September 1985 and 68 in April 1993. Poly substance misuse was a major feature of the 1993 survey and Benzodiazepines replaced Heroin as the major drug of misuse. There was a significant increase in the misuse of prescribed opiates, in particular morphine sulphate, methadone and DF118. Physical problems associated with drug misuse were more common in 1993 because of the new trend of crushing and injecting the morphine sulphate tablet. Patients continue to inject drugs and are poor attenders at needle exchange programmes. We feel that all doctors should exercise caution in their prescribing habits in view of the alarming increase in the misuse of prescribed medication as indicated by our figures.

## Introduction

Figures available at the National Drug Treatment Centre for 1991 - 1992 indicate that the level of Opiate misuse both illicit and prescribed is again on the increase. Illicit Heroin misuse which had stabilised following the Opiate Epidemic in Dublin in 1985<sup>1</sup>; shows a marked increase in 1991 and 1992<sup>2</sup>.

In September 1985, O'Connor et al.<sup>3</sup>, analysed attendances at 13 Accident & Emergency (A&E) Departments in the greater Dublin area for a one month period to examine the incidence of drug misusers presenting to A&E Departments and to establish the characteristics of these attenders.

**Aim** – Our aim in the present study was twofold. Firstly to make a comparison between attenders at Accident & Emergency Departments in 1993 compared to 1985. Secondly in view of the recent increase in misuse of prescribed drugs (especially Morphine Sulphate and Benzodiazepines) among patients attending the Drug Treatment Centre we were interested in determining whether this was reflected in Accident & Emergency attenders.

## Methods

The survey identified patients with problems relating directly to their misuse of drugs who presented to the eight A&E Departments in the Dublin area, for a four week period, from midnight preceding 1 April 1993 until midnight of 28 April 1993. During the month prior to the commencement of the survey period, each A&E Department was visited and the aims and requirements of the study, and the notifications were discussed with the medical and nursing personnel.

Questionnaire forms using mainly “tick box” answer choices were filled in for each individual attending who was judged by the examining doctor to be currently (within the past six months):-

- (a) Experimenting with drugs;
- (b) Abusing drugs – defined as persistent or sporadic use of a drug, inconsistent with, or unrelated to, acceptable medical practice;
- (c) Drug dependent – defined as a state characterised by a compulsion to take a drug on a continuous or periodic basis in order to experience its psychic effects and sometimes to avoid the discomfort of its absence.

Information obtained included sociodemographic details, the names of drugs used, whether the parenteral route was used for any particular drug, and the status of the drug user, i.e. experimenter, abuser or drug dependent. The results for drugs misused were analysed using the

Chi-squared Test. The last part of the questionnaire concerned the patient's current or previous contact with the National Drug Treatment Centre, their reason for attendance at the A&E Department and the treatment administered, as in the original study. Additional questions in the 1993 survey included whether the drug misuser had shared needles, attended a needle exchange programme or attended one of the drug treatment clinics established by the Eastern Health Board over the previous year.

## Results

During the month of September 1985, 73 Drug Misusers, were identified by 13 A&E Departments, while in April 1993, 68 Drug Misusers were identified by 8 A&E Departments. There was only minor variation in the male/female ratio, the age distribution and the employment status of the drug misusers identified, as shown in Table I.

**Table I. Sociodemographic Details**

	<b>1985</b>	<b>1993</b>
Male	No. 44	No. 39
Female	No. 29	No. 24
Sex Unknown	No. 0	No. 5
Age Range	(14-50) years	(12-53) years
Average Age	(M) 26 years	(M) 25 years
Average Age	(F) 26 years	(F) 24 years.
Unemployed	63%	69%

**Reasons For Attendance** – During the 1985 survey, A&E Department attendance was as a result of drug overdose in the majority of cases (72.6%). The drug use was intentional in 85.7% of the females and in 37.5% of the males. The next most common reason for attendance was sepsis, 16.4% of the sample, leaving 11 % attending for other reasons.

By comparison, in April 1993 physical problem associated with drug misuse (Table II) was the most common reason for attendance (51.5%). This was followed by drug overdose and deliberate self harm, (38.2 %). The drug use was intentional in 66.7% of the females and in 50% of the males. Of the remainder 5.9% attended demanding drugs, leaving 4.4% attending for other reasons. Comparing the drugs misused in September 1985 & in April 1993, although the patient numbers were similar (73 as compared to 68) there was a much higher total number of drugs misused in 1993, 260 as compared to 140 in 1985. It should be noted that patients can be misusing more than one drug (Table III).

Heroin was the most commonly misused Opiate in both periods, however there has been a significant increase in the misuse of prescribed Opiates in 1993, in particular Methadone, Morphine Sulphate and DF 118.

**Table II. Reasons for attendance by Drug Misusers at A&E Departments – April 1993**

<b>A. Physical problems associated with Drug Misuse.</b>	51.5%	(35 cases)
(i) Sepsis	23.5%	(16 ceases)
(ii) Abdominal Pain	8.8%	(6 cases)
(iii) Respiratory Tract Problems	5.9%	(4 cases)
(iv) Falls (intoxicated)	5.9%	(4 cases)
(v) Other Physical Problems	7.4%	(5 cases)
<b>B. Overdose and deliberate self harm</b>	38.2%	(26 cases)
(i) Overdose	30.9%	(21 cases)
(ii) Deliberate self harm	7.4%	(5 cases)
<b>C. Demand for drugs</b>	5.9%	(4 cases)
<b>D. Other reasons.</b>	4.4%	(3 cases)

**Table III. Comparison of Drugs Misused in 1985 and in 1993**

Drug	N = 140		N = 260		a
	Patient No.	%	Patient No.	%	
Heroin	43	58.9	33	48.5	N.S
Methadone	11	15.1	25	36.8	< 0.0008
Morphine Sulphate	13	17.8	28	41.2	< 0.0005
DF118	2	2.7	10	14.7	< 0.007
Diconal	12	16.4	2	2.9	
Pallium	12	16.4	5	7.4	
Temgesic	-	-	6	8.8	
Benzodiazepines	25	34.0	38	55.9	< 0.003
Barbiturates	3	4.0	2	2.9	
Cocaine	2	2.7	6	8.8	
Amphetamines	3	4.0	12	17.6	
Ecstasy	-	-	8	11.8	
LSD	4	5.5	18	26.5	
Cannabis	3	4.0	28	41.2	
Solvents	-	-	1	1.5	
Magic Mushrooms	1	1.4	7	10.3	
Alcohol	5	6.8	26	38.2	
Cough Bottles	1	1.4	5	7.4	

**N = Total number of drugs misused by the patients on presentation (NB Each patient may be misusing more than one drug). a = Chi-squared Test**

In 1985, minor tranquillisers (benzodiazepines) were the second most commonly misused drug (50% of females and 25% males). However, in 1993 there was a significant increase in the number of patients misusing Benzodiazepines and there was a major increase in the percentage of males misusing them (59%). The percentage of females had increased to 62.5%.

Of particular note is the huge increase in the misuse of hallucinogens – LSD & Cannabis from 5.5% to 26.5% and from 4% to 41.2% respectively. Amphetamine misuse increased from 4% to 17.6% with a further 11.8% misusing Ecstasy (3,4 Methylene Dioxy Methamphetamine) a compound related to both hallucinogens and stimulants which has emerged as a drug of abuse in Ireland in the 1990's<sup>4</sup>. Alcohol misuse has also increased from 6.8% in 1985 to 38.5% in 1993.

**Table IV. Outcome of Attenders**

	1985		1993	
Admission to Hospital	40.5%	(28)	26.5%	(18)
Referred to General Psychiatric Service			16.2%	(11)
Referred to National Drug Treatment Centre	[	22.0% (16)	29%	(2)
Currently Attending The National Drug Treatment Centre	[	8.2% (6)	13.2%	(9)
Previously Attended The National Drug Treatment Centre		31.5% (23)	39.9%	(27)
Attending Other Centre		---	4.4%	(3)
R.I.P. in Casualty Department		---	1 Patient	

**Intravenous Use** – In 1985, 58.9% (43 subjects) admitted to injecting heroin, while in 1993, 55.9% (38 subjects) admitted to injecting a variety of drugs. Heroin was the most commonly injected drug 39.7% (27 subjects), closely followed by Morphine Sulphate 35.3% (24 subjects) and three subjects (4.4%) admitted to injecting Rohypnol (Flunitrazepam) in combination with

Morphine Sulphate. 29.4% (20 subjects) said that they had shared needles and 26.5% (18 subjects) had attended a Needle Exchange Programme.

**Dependence** – The dependence status of the patients was identified in 97% of 1993. Almost half of the patients (48.5%) were classified as drug dependent, 35.3% were judged to be drug abusers, leaving 13.2% of subjects identified as experimenters.

**Outcome** - More patients were admitted to hospital in 1985 as compared to 1993 (Table IV). This perhaps would be related to the greater number of overdose patients monitored overnight in 1985. Otherwise, the outcome was similar. There was missing data on 20.5% of subjects in 1985 and on 25% in 1993.

## Discussion

A number of important differences have emerged in the 1985-1993 survey comparison. The patients in 1993 report that they are using more drugs per person than those in 1985. Patient reporting has previously been shown to be a reliable method of identifying drugs of misuse<sup>5</sup>.

A very worrying trend is the increased misuse of prescribed drugs. Benzodiazepines have now become the major drug of misuse in both male and female attenders. These minor tranquillisers can lead to behavioural disinhibition and memory impairment<sup>6</sup>. Four out of five of the patients attending A&E Departments in April 1993 following an episode of deliberate self harm, were misusing them. The practice of injecting Rohypnol (Flunitrazepam) in combination with Opiates, in the belief that this causes a more prolonged euphoric state, is a further cause for concern. Intravenous misuse of Benzodiazepines has previously been reported<sup>7</sup>. If the present pattern of Benzodiazepine misuse continues, A&E Departments may have to contend with an increasing number of cases of deliberate self harm in view of the resultant risky behaviour<sup>8</sup>.

There has also been a significant increase in the misuse of prescribed Opiates i.e. Methadone, Morphine Sulphate and DF118. This is in keeping with figures from the National Drug Treatment Centre which show a dramatic increase in the overall number of patients presenting addicted to prescribed Opiates in 1992.

The higher percentage presenting with physical problems such as sepsis and respiratory tract problems in 1993 would appear to be as a result of the large number of drug misusers now injecting Morphine Sulphate (MST). When this compound is crushed and injected it can lead to serious medical problems including intravenous Talcosis (Talc lung) where injected particles cause talc granulomas in the lungs and can present classically with progressive dyspnoea and X-ray abnormalities such as a coin lesion<sup>8</sup>.

There was little difference in the figures for intravenous misuse in the survey comparison. In the 1993 study 29.4% admitted to sharing needles and only 26.5% had attended a needle exchange programme. This is despite an intensive drive over the last few years regarding the risks of needle sharing, in particular regarding HIV and Hepatitis transmission as outlined in the Government's "Strategy To Prevent Drug Misuse"<sup>9</sup>.

The most notable trends emerging in this survey are poly substance misuse and the increasing misuse of prescribed medication, especially Benzodiazepines and the Opiates, Morphine Sulphate, Methadone and DF118. This is very worrying in view of the Government's "Strategy to Prevent Drug Misuse"<sup>9</sup>. Due to the many problems associated with misuse of prescribed drugs, we feel that all doctors either within hospital or general practice should be aware of the above trends and exercise caution in their prescribing of these drugs.

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