

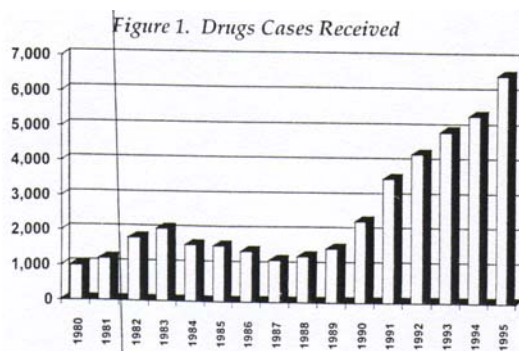
Changes in Drug Abuse in Ireland

Dr. M.J. Fox, Forensic Science Laboratory, Dublin.

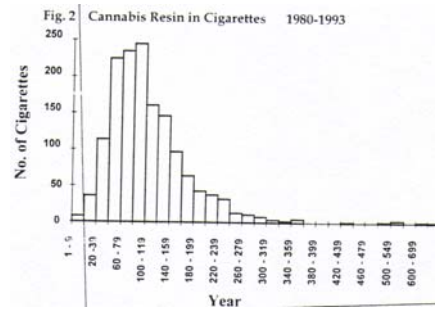
The cannabis plant and its main product cannabis resin, have contributed by far the major number of cases to the laboratory over the last fifteen years. Cannabis is normally imported in compressed bales and is used as herbal material mixed with tobacco and smoked in cigarettes. Cannabis resin is imported as slabs and is commonly examined in one gram deals wrapped in tinfoil. It is used mixed with tobacco in cigarettes.

Dr. Des Corrigan and Mr. Christopher O'Connor from the Department of Pharmacy in Trinity College provided a service to the Gardai between 1968 and 1979 in the analysis of drugs. The main item they dealt with was cannabis resin. There was some narcotic abuse at the time but this mainly consisted of tablet preparations such as those containing pethedine and in particular "Diconal" which contains dipipanone as the active ingredient. A very small amount of diamorphine (heroin) was also encountered and as this period spanned the 70's ie. the end of the flower power era, a number of cases of LSD were also encountered.

The Forensic Science Laboratory itself was established in 1975 and Dr. Donovan was the first Forensic Scientist appointed by the Department of Justice. Dr. Donovan operated in those early days from the IIRS, as it was known then, and in 1978 the Forensic Science Laboratory opened in Garda Headquarters where it is situated at present. In the latter end of 1979 the laboratory took over drug analysis and the bar chart in figure 1 shows the number of cases received in the intervening years, ie. from 1980 to 1995. There is a peak around 1983 with the laboratory dealing with approximately 2,000 cases. These included a large number of diamorphine cases, which reflected the dramatic increase in heroin abuse during the early eighties. Case numbers dropped somewhat to 1988 but clearly there has been a sustained increase from 1988 onwards and presently the laboratory is dealing with six and a half thousand cases a year.



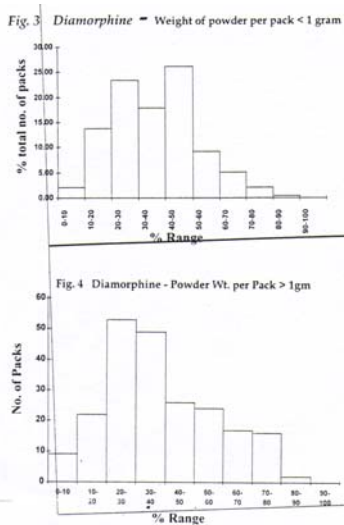
In 1985 drug analysis was organised into a separate unit and Mrs. Mary O'Connor was appointed to head this section. The laboratory examines a wide variety of materials but again cannabis products ie. cannabis herb and cannabis resin are the main items examined. The majority of cannabis resin cases are single exhibit samples of cannabis resin wrapped in foil. In the early days only small amounts of the material were received. As time moved on samples became larger and quantities became larger. In 1993 a boat called 'Brime' was apprehended and approximately two thousand kilos of cannabis resin were recovered making it one of the major seizures in the country. The largest seizure in 1995 consisted of some 12.9 metric tonnes, that is twelve thousand nine hundred kilograms. For this country that is a massive amount, but of course for some other countries this can actually be quite a small seizure.



A cannabis resin reefer cigarette is typical of smaller exhibits received by the laboratory. The quantity of cannabis resin recovered from unused cigarettes seized by the Gardai over the last fifteen years has been recorded and the average cannabis resin content has been found to be approximately 0.1 grams per cigarette (fig.2). This information is provided to the courts to help the court assess whether the amount of cannabis resin seized is for immediate personal use (ie. possession) or is of such a quantity that it is for supply to another (ie. dealing).

Opiates

Diamorphine (heroin) is the main opiate that the laboratory deals with. In 1983 there was a fairly large increase in the number of diamorphine cases. Diamorphine is a brown powder which is usually packed in plastic wraps. In the early '80's all the diamorphine was wrapped in paper packs but in the mid '80's the wrapping changed completely to plastic. This change was brought about by users wanting to transport packs around with them. They carry them in the mouth and if they are stopped by a Garda they then swallow the packs and retrieve them later intact.



The plastic wrapping protects the powder from gastric juices and consequent degradation.

The percentage of diamorphine in large packs ie. packs associated with dealing has been catalogued and the distribution of percentages of diamorphine in these large packs is very similar to that found in smaller end user packs (figs. 3 & 4). This fact may have some significance in relation to the estimation of the value of large seizures as it is always constructed a possibility that the powder in large packs may be increased in bulk thus increasing the value by weight of the item. The above facts do not exclude the possibility of powder being increased in bulk but does point to the fact that some high percentage diamorphine powders are distributed in user packs without prior dilution.

When diamorphine is in short supply addicts will turn to anything else that is available and the laboratory often encounters synthetic narcotics, such as methadone, which is the main active ingredient in the preparation “Physeptone” which can be presented in tablet or in liquid (linctus) form.

Morphine in “MST Continus” tablets has also been used as a diamorphine substitute over the period. Around the late ‘80’s there was a large increase in the number of morphine tablets in circulation allied to the number of pharmaceutical warehouse break-ins that occurred at that time.

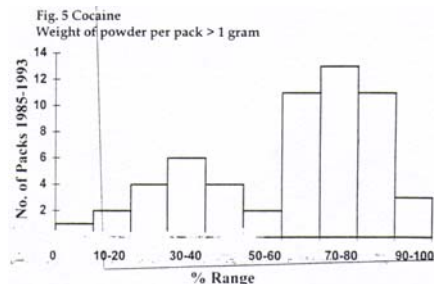
Buprenorphine was very popular around 1985 to ‘86 but completely disappeared from the scene in 1987 when the active ingredient was placed on the controlled list.

Benzodiazepines (tranquillisers) are fairly widely abused and a substantial part of their abuse can be associated with diamorphine addiction particularly when supply is short. Benzodiazepines are controlled for the purpose of supply, but most are not controlled for the purpose of possession. However, there are two notable exceptions. Flunitrazepam in “Rohypnol tablets and temazepam in capsule form are the two most potent hypnotic benzodiazepines and both are controlled for the purpose of possession. Flunitrazepam is the most often abuse on the part in this country.

Stimulants

Cocaine is one of the main stimulants the laboratory has encountered. It is usually a white powder which comes in plastic wraps. It is snorted into the nasal passages where it is quickly absorbed into the blood stream. It is the experience in the laboratory that the cocaine powder seized in this country is almost exclusively the hydrochloride salt. There is essentially very little cocaine base or crack cocaine found in the country. In the small number of cases of crack cocaine that have been examined it is usually the end user who has converted the hydrochloride to crack cocaine for personal use. There is no evidence from cases in the laboratory that there is any wide distribution of crack cocaine.

The laboratory has looked at the concentration of cocaine powders in large packs and finds it different to diamorphine powders (fig. 5). It falls into two neat categories. One of these has its maximum around seventy to eighty percent and the other around



thirty to forty percent. These figures show that there is a likelihood of a dilution by a factor of two with these large packs. There is insufficient data on smaller end user packs to make any comparison with the large (dealer) packs.

Amphetamine is another stimulant that is often received in the laboratory. This is presented in paper wraps and kilograms of powder have been recovered in individual seizures. Glucose powder has also been seized with many of these kilogram seizures indicating that substantial dilution of the material was taking place. Over the years the percentage amphetamine in powders examined has dropped dramatically. In the mid ‘80’s the amphetamine powder ranged between twenty to thirty percent active ingredient, but in the recent years this has dropped substantially and is now less than five percent.

Ecstasy is the new drug of the moment. It is generally presented in tablet form. The three main ecstasy type materials that are encountered are methylenedioxyamphetamines (MDMA), methylenedioxyamphetamine (MDA) and methylenedioxyethylamphetamine (MDEA). Ecstasy in Ireland is used as a general term to describe any of the MDA analogues. Ecstasy tablets are presented with many different designs imprinted on them and any one of these tablets can contain any of the ecstasy type compounds, so the design on a tablet may bear no relation to the content. Indeed many other drugs such as ephedrine are encountered in tablets which are presented as ecstasy preparations. There has been one death at least due to an internal concealment where the packing broke in the stomach. Ecstasy seizures really started in Ireland in 1991 and have increased rapidly over the recent years. In 1995 approximately one hundred and forty thousand tablets were seized by the Gardai.

Lysergide (LSD) is the main hallucinogen encountered. LSD is impregnated onto card. The card is usually divided into squares by perforations and each square represents a dose. LSD has never accounted for more than 3% of the total cases submitted in any year over the last 15 years.

Fig.6 Drugs Offences – Persons Charged

	1983	1990	1995
Cannabis products	57%	73%	67%
Heroin (synthetic Narcotics)	28%	8%	8%
Cocaine	1%	1%	1%
Amphetamine	1%	<1%	3.6%
Ecstasy	–	–	17%
LSD	<1%	<1%	2%

If one looks at the number of persons charged with the various types of drugs offences, it is interesting to see that cannabis products represent by far the major item dealt with (fig. 6).

Diamorphine in the mid '80's was quite high at twenty eight percent but has dropped off to an average of eight percent in intervening years. Cocaine has always been a small part of the overall case load. It is only of the order of one percent of total case numbers. The notable item is ecstasy. In the recent years it has increased dramatically and in 1995 represented about seventeen percent of the number of people charged. Regardless of type of drug there is a relentless increase in the number of cases received. The very recent increase in cocaine case numbers may suggest that this is going to be the drug to look out for in the future.

One can examine the distribution round the country of people charged with drug offences and see how it has changed (fig. 7). In 1983 Dublin contributed the largest proportion, 76% of people charged but this has dropped dramatically and in 1993 fifty four percent of people charged were from Dublin.

In 1995 that figure has dropped even lower and is now at thirty four percent while the Cork figure has risen from 10% in 1983 to 32% presently. In these two geographical areas drug abuse has changed quite dramatically. One of the reasons for this is possibly that diamorphine has been exclusively a Dublin drug. It has never really spread outside of the Dublin area whereas ecstasy has spread right across the country and is contributing to cases in all the urban areas around the country with Cork contributing many of the major ecstasy cases.

Fig. 7 Drug Offences

Percentage Persons Charged

	1983	1990	1995
Dublin	76	74	34
Cork	10	18	32
Galway	1	0.5	3
Limerick	3	2	8
Waterford/KILKENNY/ WEXFORD	2	2	8