

# A Review of the Characteristics and Treatment Progress of 45 Pregnant Opiate Addicts Attending the Irish National Drug Advisory and Treatment Centre Over a Two Year Period

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## Summary

THE increase in the number of parents presenting to the National Drug Advisory & Treatment Centre addicted to opiates has been accompanied by an increase in the number of pregnant opiate addicts attending for treatment<sup>1</sup>.

Studies published in January 1982<sup>2</sup> referred to the emergence of maternal addiction as a serious problem in Ireland. Since then the escalation of this specific problem has continued and a programme designed to meet the needs of the pregnant addict was initiated at the Clinic. This paper reviews the characteristics and treatment progress of 45 opiate addicts who were referred to the Clinic over a two year period.

## Introduction

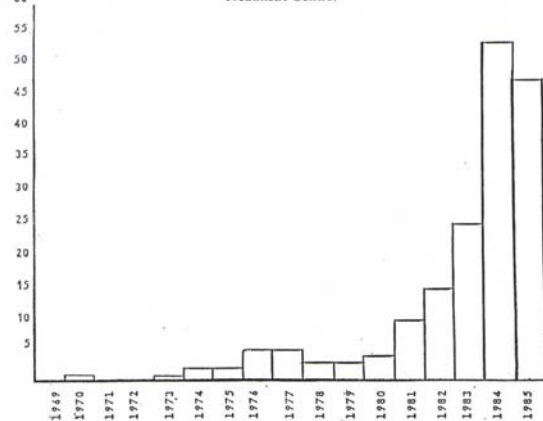
The past five years have seen a large increase in the number of pregnant drug abusers attending the National Drug Advisory & Treatment Centre (see Fig. 1). A study published in 1983<sup>3</sup> described this group as both damaged and desocialised — a young mother with a long history of abuse of illicit drugs, dependent on family or state for financial support and a place to live and with a partner who abuses drugs/alcohol. Recent research<sup>4</sup> has indicated that the integration of services is a prerequisite for the success of any programme to render improved pre-natal care to addicted mothers. Such a pre-natal programme should be developed by integrating the

services of obstetrics, psychiatry and social services into a comprehensive total care programme that will meet the needs of the mother and baby, both on a short-term basis (during the ante-natal and postpartum course) and on a long-term basis (which concerns the continued rehabilitation of mother and child). Perlmutter<sup>5</sup> has described some of the advantages of a methadone maintenance programme compared to other options of treatment available to the pregnant opiate addict. These include better participation in antenatal care, a shorter hospital stay for the new born infant and improved attention by the mother to her health needs and those of her child. It also facilitates the development of a more stable social environment for both mother and infant and the ability of health care workers to observe these mothers and infants on a long-term basis to evaluate outcome. It has been shown that the maintenance of a drug addicted woman using methadone under close supervision and ante-natal care is compatible with an uneventful pregnancy<sup>6</sup>. The object of maintenance is to decrease the morbidity associated with parenteral drug use. The duration of methadone maintenance following the birth, reflects the patient's own desires, her drug history and a positive response to participation in the programme.

## Patients and Methods

A special programme for pregnant opiate addicts was established at the National Drug Advisory & Treatment Centre in June, 1984 due to the large numbers of these patients attending the Clinic. The programme includes a low dose methadone maintenance (physeptone linctus — Well-come, methadone hydrochloride 2 mg per 5 ml) of approximately 20 mg

Fig. 1—Number of pregnant drug abusers attending the National Drug Advisory & Treatment Centre.



\* This figure represents numbers of addicts abusing a variety of drugs (cannabis, benzodiazepines, cough bottles). Only those patients abusing opiates were included in the present study.

daily throughout the course of the pregnancy. Obtaining methadone is conditional on the patient not abusing any other drug. This is monitored by daily supervised urinalysis. Attendance at a weekly group meeting, and the keeping of appointments for ante-natal visits are essential criteria to remaining on the programme. Individual counselling sessions on a once or twice weekly basis are also carried out. Participation in programmes outside the Clinic, e.g. day-rehabilitation programmes, daycare for mother and child, life-skill classes etc. are also encouraged where appropriate.

During the period of June 1, 1984 to May 31, 1986, all pregnant opiate addicts attending the National Drug & Treatment Centre were asked to take part in this study. Thirty-nine of the subjects were resident in the inner city, the remaining six were from the suburbs of Dublin. A questionnaire was formulated to gather standardised information on psychosocial characteristics and relevant medical data.

All questionnaires were completed by the authors during individual interviews with each patient. Information collected was validated by reference to the hospital charts where extensive records on social, medical and psychiatric aspects of each patient are contained.

#### **Questions covered included:**

1. Basic demographic details.
2. Full social history with details of family background, education and employment history, current living conditions and means of financial support, as well as a comprehensive history of criminal involvement where applicable.
3. A series of questions were designed to investigate indices of stress in the families of origin of each patient. Specific reference was made to any behaviour disorder in childhood, or prior to their involvement with drugs. A detailed analysis of alcohol/drug abuse and also psychiatric illnesses was included in relation to parents and siblings. Details of physical illness, marital

disharmony and criminal involvement were also studied. Similar information on the girls' husbands or boyfriends was included.

4. A full drug history was also taken with particular reference to age at initial use of alcohol or other drugs. Details of subsequent drug use were also elicited. The length of time on drugs before referral to the Clinic and the length of time attending the Clinic before becoming pregnant were also recorded. Further information elicited included number of previous attempts to remain drug-free.

Routine present mental state examination was carried out on each patient on a regular basis, with special reference to insight and motivation towards eventual rehabilitation.

#### **Results**

Forty-five pregnant opiate addicts were referred to the Clinic during the study period. Five subjects dropped out of the programme. Three of this sub-group returned to illicit drug use within a few days and one of these subsequently had a miscarriage. Two chose to attend a General Practitioner for methadone as they would not accept the ongoing monitoring of any illicit abuse required by the Clinic. The remaining forty patients participated in the programme for the duration of their pregnancies and for varying post-natal periods.

The average age of the subjects was 23.3 years (See Table I). Their

ages varied from 16-34 years inclusive with 80% falling within the 20 - 29 years of age range. Eighty per cent of the sample were single. 13.3% were separated and cohabiting with someone else, and the remaining 6.7% were married. All were in monogamous relationships.

The average leaving age was 14 years. Seventy per cent of subjects dropped out of school before the age of 15 years and only t) % passed any formal examination.

All the sample were unemployed at the time of contact with the Clinic, and the average length of unemployment was seven years. Only a third of the sample (35.5%) had ever been employed and only 15.5% had participated in any formal job training.

All members of the group abused heroin intravenously. The average age at first use was 16.5 years. Almost half the sample (46.6%) used opiates intravenously as their first illicit drug, the remainder initially used cannabis, minor tranquillisers or cough mixtures. All the group members were regular cigarette smokers — 20+ per day — and 10% admitted to episodic heavy drinking (Mental Disorders ICD—9; WHO, Geneva). The average length of time on drugs before referral to the Clinic was three years. Only six of the sample (13.3%) first attended the National Drug Advisory & Treatment Centre when pregnant. The remainder were patients at the Clinic for an average of 2½ years.

TABLE I

Social Profile of the Pregnant Opiate Addicts attending the National Drug Advisory and Treatment Centre		N = 45	
1.	Age range 16-34 years inclusive (mean 23.3 years)		%
2.	Single or separated from husbands	42	93.3
3.	Low educational attainment (No formal examinations)	40	89.0
4.	Unemployed	45	100.0
5.	Living in Public Housing	44	95.5
6.	Using heroin intravenously	45	100.0
7.	Criminal record (i.e. court conviction)	44	95.5
8.	Drug abusing and criminally involved partner	44	95.5

The early involvement with illicit drugs is reflected in the number of the group who have been convicted of various offences (95.5%). Over two-thirds of the sample (71.1%) have spent varying periods in prison. The majority (86.6%) of their partners had criminal records.

Analysis of the data reveals a high incidence of stress in the families of origin of the present sample (See Table II). Nearly half of the fathers suffered from alcoholism, while a third of their mothers suffered from alcoholism or depression. There was also a high incidence of drug abuse and crime among the siblings and fifty-five per cent (55.5%) reported severe family disharmony.

Of the 40 patients who accepted the conditions of the programme and attended as required, all received regular ante-natal care and none developed further complications associated with their addiction during the course of their pregnancies. For 17 of the patients it was their first pregnancy, and for 13 it was their second. To date 105 children have been born to the 45 members of the group. Nine of the group (22.5%) remain on the programme. Three (7.5%) have chosen to detoxify and complete further formal rehabilitation, while two (5%) are currently undergoing therapy. Three (7.5%) are now drug free. The remaining 22 members (55%) returned to their

pregnancy unless accomplished in a very controlled situation<sup>5</sup>. In general, "street heroin" in Dublin is 10% to 15% pure. As the dosage of methadone administered is titrated according to a patient's tolerance level most opiate addicts attending the Clinic are on a relatively low quantity methadone when compared to that prescribed to addicts in other countries. It has also been suggested elsewhere that the severity of the neonatal narcotic withdrawal syndrome may be related to the mother's maintenance dose<sup>7</sup>. It is obviously desirable therefore to prescribe the least amount of methadone on which a mother can be effectively stabilised.

It is clear from an analysis of the results that this is a very young and unstable group with a longitudinal history of addiction. Their youth, poor educational attainment, unemployment status, and criminal involvement makes active intervention very difficult. When evaluating possible treatment strategies, a realistic approach is essential, bearing in mind that almost half the group have made previous unsuccessful attempts at formal rehabilitation<sup>8</sup>. A further indication of the extent of their social and personal disintegration is the fact that almost half the sample (46.6%) used heroin intravenously as their first illicit drug. It is interesting to note that one-third of this group were included in the study carried out by the Medico Social Research Board in Dublin North Central which identified a large number of young intravenous opiate addicts in that particular area<sup>8</sup>. Although over half the group returned to illegal activity and drug abuse following their pregnancies, forty-five per cent had a positive response to the programme. This can be measured by their regular attendance, non-abuse of drugs as verified by urinalysis, discontinuation of criminal lifestyles, and improved awareness of their children's needs.

It is apparent from the literature that the child of a drug dependent mother faces a much higher risk of severe neglect and/or abuse<sup>9</sup>. However, all the patients in the present

**TABLE II**

Indices of Stress in Families of Origin of Pregnant Opiate Addicts attending the National Drug Advisory and Treatment Centre				
	N = 45			
	Alcohol dependence syndrome	Drug Abuse	Depression	Involvement with crime
Father	20 (44.4%)	1 (2.2%)	3 (6.6%)	6 (13.3%)
Mother	13 (28.8%)	3 (6.6%)	11 (24.4%)	4 (8.8%)
Sibling	5 (11.1%)	19 (42.2%)	2 (4.4%)	20 (44.4%)

The number of medical complications is also recorded in Table III-Forty-five point five per cent (45.5%) of the group were HIV antibody positive, and over half had a history of Hepatitis B. Eight were treated for some form of sexually transmitted disease during the period of their attendance. Although 82.2% of the sample had a history of repeated treatment of abscesses, only two received attention for this condition during the study period.

**TABLE III**

History of medical complications most frequently recorded among pregnant opiate addicts attending the National Drug Advisory and Treatment Centre		
	N	Positive
HIV Antibody	33	15 (45.5%)
HBsAg	43	2 (04.65%)
Anti-HBsAG	40	18 (45.0%)
Venereal Infections	40	8 (20.0%)
History of abscesses	45	37 (82.2%)

former lifestyles following pregnancy. Four of these (10%) subsequently became pregnant again. One has died as the result of an overdose. Over one-third of the group (37.5%) has served further periods in prison following detoxification.

**Discussion**

The emergence of maternal addiction in Ireland is a relatively recent phenomenon' for which there was no appropriate treatment regime. The establishment of a special programme at the National Drug Advisory & Treatment Centre was initiated as a response to this problem. Low dose methadone maintenance was seen as the only realistic treatment option for a number of reasons, e.g. length of involvement in serious opiate abuse, socio-medical complications and the unavailability of any long-term drug free programme appropriate to their special needs. It has been shown that detoxification is contraindicated in

sample perceived pregnancy as a positive experience. Densen-Gerber (at the 24th Annual Meeting of the American Academy of Forensic Science 1972) described the drive towards pregnancy as a restitution phenomenon. The positive impact of pregnancy on the psychological functioning of the present group can be seen in their effort to control their intake of illegal drugs during the course of their pregnancies. Previous research in Ireland has referred to the determination of most addicts to keep their babies and the resulting concern for the welfare of the children on the part of statutory authorities<sup>3</sup>. It is noticeable that as the children grow and become increasingly independent of their mothers they often adopt a pseudo adult manner as described by Barker<sup>10</sup>. Colten has found that the physical effects of exposure to heroin during pregnancy were not as important to the long-term developmental outcome for the child, as the social effects of having an addicted mother<sup>11</sup>.

While the present study group has many characteristics in common with similar groups studies in other countries, there are also differences of note<sup>12</sup>. The high incidence (45%) of those in the group with a history of Hepatitis B can be attributed to the reported epidemic among drug abusers in the Dublin area<sup>13</sup>. The unexpectedly low incidence (20%) of sexually transmitted disease<sup>12</sup> among this group may be related to their monogamous status, and little involvement with prostitution. The number of those in the group (45.5% of those tested) who were HIV antibody positive is a source of concern. To date all babies born to

in the group who were sero-positive when tested during their pregnancies, have all been reported to be positive when tested immediately post-partum. Both the immediate and long-term implications of these figures are still not clearly defined. However, the long-term consequences are thought to be serious<sup>14</sup>. A joint study with the Coombe Hospital and the National Drug Advisory & Treatment Centre focusing on the progress of the offspring of these patients has been undertaken and will be published in due course. Monitoring this group continues at the National Drug Advisory & Treatment Centre and further expansion is envisaged in view of the increasing number of HIV antibody positive mothers being referred during their pregnancies.

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